

ELIGIBILITY FOR ELEMENTARY GIFTED EDUCATION SERVICES IN A GEORGIA  
ELEMENTARY SCHOOL: A STUDY PREDICTING MULTIPLE CRITERIA PATHWAYS  
BY RACE AND GENDER

by

SONJA STEMSLEY FOX

(Under the Direction of Tarek C. Grantham)

ABSTRACT

This study is a non-experimental descriptive analysis of historical data for 674 referred and evaluated students at Logwood Elementary, a Title I school. From 2004-2017, the researcher was directly involved in the referral, evaluation, identification processes and instruction of students. The study was designed, primarily, to examine the six pathways by which students can become eligible for gifted education services based on multiple criteria (mental ability, achievement, creativity, and motivation) of the Georgia State Board of Education Rule 160-4-2-.38. The goal of analysis was to reveal demographic profiles of eligible and non-eligible students and to identify patterns of performance of evaluated gifted students at Logwood. First, the demographic profiles of students eligible for gifted education were assessed by race and gender. Second, using Georgia's multiple criteria for identifying students for gifted education services, the pathways of students eligible for gifted education services was compared to students who were referred, but not eligible. Third, the students eligible for the gifted program who were referred in primary grades were compared to students who were referred in upper elementary grades. A series of cross tabulations were conducted in SPSS. Binomial logistic regression was

used to predict the probability that a student would become eligible for the school's gifted program. Predictors included gender, ethnicity (White, Black, Hispanic, and Asian), the referring teacher's ethnicity, and the grade range at the time students were evaluated (K-2 or 3-5). The results, presented in 38 Tables, establish baseline data on the pattern of eligibility at Logwood.

INDEX WORDS:      Gifted Eligibility Pathways, Race, Gender, Title I School, Elementary  
Gifted Identification, Gifted Education, Georgia Rule 160-4-2-.38,  
Multiple Criteria, Cross tabulation, Logistic Regression

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SONJA STEMSLEY FOX

BA, The University of Texas, 1981

MA, The University of Georgia, 2005

Ed. S., The University of Georgia, 2006

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial  
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SONJA STEMSLEY FOX

Major Professor:	Tarek C. Grantham
Committee:	Bonnie Cramond
	Margaret E. Hines
	Amanda Ferster

Electronic Version Approved:

Suzanne Barbour  
Dean of the Graduate School  
The University of Georgia  
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## DEDICATION

First, I dedicate this dissertation to my husband, Mark Fox, whose unmatched love and support made this study possible. Mark, I thank God every day for you. Second, my work is dedicated to our son, Tory, and daughters, Ashleigh and Mallory for inspiring me to complete this challenge. And finally, to my brother, Kenneth, and sister, Cynthia, who I can always count on, to Stephanie and Katrina my sisters-in-law, for your enthusiastic and sincere encouragement, and to my family near and far for knowing I could do this work.

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## CHAPTER 1

### INTRODUCTION

A continuing issue in gifted education is the underrepresentation of African-Americans, Hispanic-Americans and Native-Americans in school gifted programs (Ford, 2015; Ford, Grantham & Whiting, 2008; Naglieri & Ford, 2003). The disproportionately low incidence of identification and placement of Culturally and Linguistically Diverse (CLD) and low socio-economic students in school gifted programs has been well documented (Baldwin, 1987; Bernal, 2002; Borland, 2004, Ford, 2006; Frasier & Passow, 1995). For example, between 2010 and 2012 the National Research Center on the Gifted and Talented of the University of Virginia, conducted a national survey of district gifted coordinators to develop a national portrait of the current status of gifted programs at the elementary, middle, and high school levels (Callahan, Moon & Oh, 2014). Survey findings on representation of minority students in gifted programs revealed that only 50% of systems reported alignment in percentages of Black and Hispanic subgroups and percentages of enrollment in gifted programs at the elementary level, 34% at the middle school level and 50% at the high school level. Survey statistics on representation of students of poverty show even lower percentages than those for Black and Hispanic students. Greater than 50% of coordinators reported representation of students of poverty was not aligned with this subgroup's representation in district enrollment. The National Center for Education Statistics' *Digest of Education Statistics for 2015* presented data for Elementary and Secondary Education Participation in Public School Services, including the number of public school students enrolled in gifted and talented programs, by sex, race/ethnicity, and state for 2004, 2006, and 2011–12. This publication reported that in Georgia for enrollment year 2011-12, the

total number of students enrolled was 1,646,051. The percentage of White students enrolled in all schools in Georgia in the same year was 42.7%. Black students were 37.0% of all students enrolled, and Hispanic students were 13.3% of students enrolled. Asian students and students of Two or More Races were 3.5% and 3.1% respectively. Students in the Pacific Islander subgroup were 0.1% of students enrolled, and American Indian/Alaskan Native students represented 0.2 % of Georgia's student enrollment. In the same school year, the total number of students enrolled in gifted programs in 2011-12 in Georgia was 176,954. White enrollment in gifted programs in Georgia was 115,689 which were 65.4% of all gifted students enrolled. Enrollment of Black students in gifted programs was 31,062 or 17.5% of all students enrolled, Hispanic enrollment was 9,968 or 5.6% of all gifted students enrolled and Asian enrollment was 13,914 or 7.86% of all students enrolled. Students of Two or More Races made up 5,822 or 3.3% of gifted students.

### **Statement of the Problem**

The percentage of elementary students enrolled in gifted and talented programs for each subgroup listed should be closely aligned with each subgroup's percentage of students enrolled in the Georgia school population if access to gifted programming is equitable (Ford & King, 2014). Ford (2015) compared school districts that focus on equality in providing the same education for each student with districts that focus on equity in serving the individual needs of students in culturally responsive ways. Districts focused on equality generate inequities in representation in gifted programs. In districts with equity as the goal, student gifted program enrollment closely reflects each subgroups representation in the district student enrollment (Ford, 2015). Learning more about the relationship between students' ethnicity, gender, and grade level and the ability to qualify in each of the evaluation criteria areas of Georgia (citation) (mental

ability, achievement, creativity, motivation), can help educators: 1. understand why underrepresentation at the elementary level occurs, and 2. make relevant improvements in referral and evaluation policies and practices to reduce inequity in identification of culturally and linguistically diverse students.

### **Purpose of the Study**

Georgia is one of only four states, along with Florida, Iowa and Oklahoma where gifted education is fully funded (National Association for Gifted Children, 2014-15). In Georgia, students evaluated to determine giftedness can be declared eligible by two methods (Georgia Department of Education, 2018-19). The first method, called Option A, requires students to meet the criteria on a mental ability test and on a nationally-normed achievement test in the areas of reading or math. Option B, or multiple criteria, provides students with pathways to demonstrate giftedness in any three of four areas including mental ability, achievement, creativity and motivation. Even with the implementation of multiple criteria to determine eligibility for gifted programs, school systems continue to record discrepancies between the percentage of minority and low-socioeconomic status students in total system enrollments compared to percentages of these groups in the gifted program population (McBee, 2006). Holmes County Public Schools (HCPS) represents one of the largest school districts in Georgia. One area of improvement essential to reaching the school district's vision is preparing students for college and careers. This is being addressed by administrators and educators working to increase the percentage of under-represented groups of students identified for and served in the HCPS gifted program. Minority and disadvantaged populations are underrepresented in gifted programs (Ford, 2005; Frasier, Passow, et al., 1994).

Although elementary administrators and educators aim to improve identification practices, little is known about the relationships associated with patterns of referral, enrollment of students in the gifted program, pathways for how different groups of elementary students become eligible for gifted services, and assessment policies and practices that support and hinder access to gifted and advanced programs. In this study, one elementary school was examined to establish a baseline on school and gifted program enrollment data for an elementary school. Specifically, the purpose of the study was to determine the demographic profiles and eligibility pathways of students referred and evaluated for a Title I elementary school gifted program in Holmes County Public Schools. Examining existing assessment and gifted identification data can support educators' efforts to decrease discrepancy percentages between total student enrollment and gifted program enrollment of underrepresented students.

Logwood Elementary is a K-5 school located in a medium-sized city in Georgia. The school opened in the early 2000's and has been a Total Title I school since 2005. For five consecutive years, Logwood was recognized as a Georgia Title I Distinguished School and made Adequate Yearly Progress (AYP), during the years this designation was given, since opening in 2004. The school earned the 2008–09 Governor's Office of Student Achievement recognition for Making Greatest Gains in the Percentage of Students Meeting or Exceeding Academic Standards on the CRCT required annual state assessment of students in grades second through fifth. Of all elementary schools within the Holmes County Public Schools System, Logwood currently ranked 11<sup>th</sup> out of 79 in the most recent College and Career Ready Performance Index scores.

This is cause for great concern given the overrepresentation of Asian and White enrolled gifted students and the underrepresentation of African-American and Hispanic gifted students at



Logwood. Though 51 percent of students in the school are Hispanic, they only make up 19 percent of the school's identified gifted population. Currently, of the 72 gifted students, 20 percent of identified students are Black. The school's percentage of Black students in the total population is 30 percent. This study is not limited to these two ethnic groups, but as shown in the aforementioned statistics, these are the two groups for which the discrepancy between percentage of gifted enrollment and enrollment in the school-wide population is the greatest. The inequity in identification of gifted students from underrepresented populations must be addressed if our school and system are to meet the mission of helping each student reach their highest potential (Payne, 2011). One question, this study seeks to answer is: What is the likelihood of students of a particular gender, grade level, and ethnicity becoming eligible for the gifted program by any particular eligibility pathways?

### **Conceptual Framework**

There are a number of factors that affect representation of minority students in gifted program enrollment. Among them are the impact of federal and state legislation on state and local policy (Ford, Grantham, & Whiting, 2008; McBee, 2012), and the socio-economic status of students and the schools which they attend (Walberg & Paik, 1997). Of greater impact is how educators define giftedness, and how they perceive the behaviors of culturally diverse students in their classrooms (Ford & Grantham, 2003; Baldwin, 2000).

Social policy drives educational initiatives (Gallagher, 2002). The evidence is found in federal and state legislation initiated by shifts in social values. These include the Supreme Court decision striking down 'separate but equal' segregation in public education, as well as the

National School Lunch Act of 1946, the National Defense Education Act of 1957, the Civil Rights Act of 1964, the Individuals with Disabilities Education Act (IDEA) in 1975, the Jacob K. Javits Gifted and Talented Students Education Act in 1988, and No Child Left Behind (NCLB) in 2001-2002.

In 1957, all of America, including the science community was caught off guard by the launch of the Soviet satellite, Sputnik. In response, in 1958 the U.S. Congress passed the National Defense Education Act to stimulate funding for teacher training and the development of youth in mathematics, engineering and science, especially at the postsecondary level, to strengthen our national security. Funding for student scholarships and loans at the university level was matched at the state level through Title III of the NDEA Act. Title V. This law requires that any state, which wishes to receive funds to support gifted programs for identification of high-ability students, must establish a program for evaluating these students and for counseling for to ensure an appropriate, rigorous program of study

In 1958, in response to this policy, Georgia became the first state to pass legislation requiring districts to identify and serve gifted students. The energy behind referral and testing of high-ability students at this time was the government's desire to raise and maintain a competitive segment of the population with the knowledge and skills to produce superior defensive weapons and leaders of scientific discoveries (History, Art, and Archives, U.S. House of Representatives). One large segment of students with potential in Georgia however did not receive this attention.

Jim Crow laws were still entrenched in Georgia communities, though the state was under federal orders in 1958 to desegregate schools with "all deliberate speed". Black school children

did not have the same opportunity as White school children to receive special support and instruction to develop scientific and mathematical talent in 1958 (Galster & Santiago, 2017).

Not only have CLD students been less likely than White students to be referred and identified for enrollment in gifted programs in Georgia due to institutional racism, classism has been shown to play a significant role (McBee, 2010). When Mayer (2002) questioned how economic segregation affects children's educational attainment, he hypothesized that differences in income between families in school districts could negatively affect educational attainment of low-income children. He concluded that the wealthy are likely to become even more segregated as they increase their wealth, and as a result their children reach higher levels of achievement. Consequently, as the increase in segregation has a negative effect on the achievement gap between rich and poor children, economic segregation negatively affects economic status of generations that follow, and therefore impacts educational attainment in generations that follow (Mayer, 2002; Olzewski-Kubilius & Thompson, 2010).

There were school systems in Georgia that remained under court-ordered supervision in 2017, while others, due to de facto segregation (White flight), maintained predominately White school enrollment, creating majority-minority populations at schools. The ethnicity of the majority of students was Black, Hispanic, Asian, Two or More Races, Pacific Islander, Native American. If we only look at studies like Mayer's 2002 study, we might think that segregation of students in schools and neighborhoods is solely responsible for low achievement for CLD and low-SES students. Within the large metropolitan statistical area, seven counties (including Holmes) changed from having a nearly entirely White population to including 23% of residents being Black (Pooley, 2015). As Holmes County's population was diversifying, White residents

left integrated neighborhoods to purchase homes in neighborhoods priced above the means of Black and Hispanic families, thereby concentrating higher numbers of each ethnic group into greater isolation and maintaining segregation in schools (Pooley, 2015). Some literature points to segregated schools as a factor in reading and mathematics deficiencies for students who attend them; however, the consensus of researchers is that *the lack of targeted resources* in segregated schools is more likely the greatest factor in low achievement of Black and Hispanic students (Gamoran & An, 2016). The opportunity for contact with more advantaged students that creates a balance of ethnic groups within the student population is also a factor in decreasing the achievement gap and increasing the possibility of identifying gifted CLD and low SES students (Gamoran & An, 2016).

Logwood's two largest student ethnic populations, African American and Hispanic, face challenges at home and at school. These challenges generate physiological and psychological (deficiency needs) and self-fulfillment (growth) needs for the students. A high percentage of African American and Hispanic students come from households that qualify for the free and reduced-price lunch program. Some of the students from homes with limited income are identified by the counselors to receive a backpack of food and essential goods each Friday to ensure that their basic physiological needs are met away from school. Students come through the doors in 30-degree weather wearing short-sleeved shirts and hoodie sweaters stating that the hoodie is the only "jacket" they have. Teachers have to hold in memory the students who do not have a father living in the home, so as not to embarrass these children with references to "your father". Food, warmth, shelter, safety, and security are needs that may at times go unmet with our students. Students who do have their most basic needs met may be seeking love and a group

to belong to. If that need is not met at home, students will seek it at school or through neighborhood affiliations. Some students have even expressed concerns about the possibility of family members being deported. If these needs are present in the minds of students, they may have trouble focusing their attention on giving a strong academic performance in the classroom, which is the basis for many referrals for gifted evaluations and gifted programming in Georgia schools.

Fifty-five percent of all Logwood students are enrolled in the English as a Second Language Program (ESOL). About half of these students are 1st generation American English Language Learners, enrolled in the state-funded instructional program English to Speakers of Other Languages. At least fifty-four percent of Logwood students identify themselves as Hispanic. Logwood students speak with great affection about their family members and demonstrate genuine love and concern and interest for siblings or cousins who also attend the school. While our Hispanic students demonstrate pride in their family connections, they sometimes ask to be addressed by an Americanized version of their name. They want to fit in with students who have mastered American culture. If a student is a second-generation American citizen, they may not be fluent in the first language of their parents as their parents want them to assimilate into American culture, but parents still communicate to them in their first language.

In 2015, The Atlanta Regional Commission (ARC) published Holmes Trends: Key Findings and Supporting Data, a unified plan update. The ARC reported the following trends and projections for ethnicities in Holmes County and the Holmes County Public School enrollment.

As expected, ARC predicted that the population makeup will continue to shift to a more balanced distribution among various ethnicities (ARC's Plan 2040 update, 2014). This ARC estimate suggests that the Hispanic portion of the population will grow by over 50% between 2010 and 2040. The same projections suggest that the Black population will remain relatively constant during this time frame while the White portion of the population will drop by an estimated 27% from 2010 figures. The diversity that is seen in Holmes County is even more pronounced within the county's school system. Table 1 illustrates the composition by school district in 2012. As seen in the figure, just over 30% of Holmes County's students are white, another 30% are black, over 25% are Hispanic, and the remaining 10-12% are of Asian ethnicity.

Because of the rapid increase in the Hispanic population in the United States, there is a dearth in identification literature for this population. The Georgia definition for giftedness does not make mention of differences in cultural background. The policies and procedures for referral and evaluation do not provide guidance for identifying candidates who, while they may possess the very same abilities described below, cannot be identified because schools don't have access to more culturally appropriate assessment instruments or do not have the flexibility to make placement decisions in the best interests of students due to score limits.

In Georgia, a gifted education student is defined as one 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 ability(ies)" (Georgia Department of Education, Gifted Resource Manual for Gifted Education Services, 2015, p.23).

While this definition incorporates four different types of ability and creates the possibility for students from a variety of experiences to become identified as gifted, there are barriers which prevent Hispanic and African-American students from being referred for evaluation or from qualifying for placement. Because of the high percentage of Hispanic and African-American students, teachers at Logwood and similar schools need to expand their definitions of giftedness to include culturally-related traits.

ELL students have their academic performance compared to that of native English speakers. Irby and Lara-Alecio (1996) identified characteristics of Hispanic bilingual gifted students in an effort to inform educators who work with Hispanic students.

Teachers at Logwood untrained in multicultural education or who have not earned an ESOL endorsement may not recognize a student's "cultural sensitivity" as having an intense interest and knowledge in their culture. They may not see "strong familial connections" and "preference for collaboration" as characteristics of students exhibiting strong interpersonal skills that are transferrable to project-based learning. While students may be working slowly, taking time to think through problems, they may appear, to uninformed teachers, to be slow learners. If teachers understood just how difficult it is to learn a second language while those closest to you are speaking another, they would recognize the rapid acquisition and mastery of English as a sign of high motivation. These students are less likely to be referred for gifted evaluation by teachers (Barkan & Bernal, 1991). During the evaluation process, students may be observed working methodically through test items but often don't complete test sections, but whose completed responses within the section are accurate. Mental ability tests and some creativity tests administered to students are timed, limiting the opportunity for students to demonstrate their true

abilities though they possess strong problem-solving and reasoning skills. These tests also include vocabulary and images unfamiliar to African-American, ELL and Hispanic students and not a part of the students' culture, but of a more Eurocentric perspective (Ford, 1998). The analysis of data collected for referral and evaluation of students at Logwood shows by which tests and through which identification paths students are successful in gaining placement in the gifted program.

### **Theoretical Framework**

Successful learners embody optimal levels of motivation, social skills and confidence (Ball, 1994). Learners with a high need for achievement possess the motivation and confidence to work to achieve their desired goals no matter the incentives (Ames, 1990). Their need to achieve takes precedence over extrinsic sources of motivation and reward (McClelland, 1965). Atkinson theorized that how a person positions themselves to perform in a situation or to avoid failure by not performing is determined by (1) the need for achievement (2) the person's expectancy of success in performing the particular task; and (3) how much value the person assigns this task and rewards or feeling of satisfaction as a result of achieving a successful outcome, which also brings with it "pride and a sense of belonging and being warmly received by others, or the feeling of being in control and influential." (Atkinson, 1958, p. 324). The motive to avoid failure includes (1) the need to avoid failure (2) the person's estimate of the likelihood of failure at the particular task; and (3) how much value the person places on failure at that task, or put another way how much embarrassment the person believes they will experience if they fail (Atkinson, 1966).



Logwood’s students, for the most part, expect to do well and are ready to attempt challenging work, but there are students who have not experienced many opportunities to practice problem-solving or creative production before enrolling in school. Therefore, educators at Logwood must recognize that students need content areas to be supplemented with relevant problem-solving practice and time for creative production related to topics of study.

Table 1

*Holmes County Diversifying Statistics from 2000 to 2010*

	Number of Non-Hispanic Blacks		% Non-Hispanic Blacks		Change in Non-Hispanic Black Residents (2000-2010)	% of MSA's Black Population Growth
	2000	2010	2000	2010		
Holmes	76,837	184,122	13%	23%	107,285	23%
Seven-County Diversifying Subtotal	134,106	347,144	11%	22%	213,038	45%

Data Extracted from Pooley, 2015

“There is nothing wrong with Black students. If they are placed in an environment where they are challenged academically, they will meet or even exceed the highest of expectations,” argues Kunjufu in his book *There is Nothing Wrong with Black Students* (Kunjufu, 2012, p. viii). One actual example of this statement presented in the book is Mabou. Mabou is a five-year-old Black girl from Queens, New York, who scored at the 99<sup>th</sup> percentile on the city’s test for admission into the gifted and talented school. Mabou speaks seven languages and plays six musical instruments. She wants to be a doctor (Kunjufu, 2012, p. 1). There are an untold number of stories like Mabou’s about promising, gifted students across the state of Georgia and at Logwood Elementary. One concern that this study aims to address centers on the limited data on eligibility pathways to gifted education services for students at Logwood.

## Gifted Education and Federal Policy

The Elementary and Secondary Education Act of 1965 (ESEA) allocates federal funding for primary and secondary school education and for the establishment of a national curriculum. Beneficiaries of this act are students and families that are low-income, migrant and those in rural settings, as well as Native American families, English language limited families and homeless families, when improved schools and resources are available (No Child Left Behind Act, Title I, Statement of Purpose, Section 1001).

The NCLB law reauthorized ESEA, but also brought focus to low performance of American fourth and eighth grade students on the National Assessment of Educational Progress. Compared to performance of students in other nations, it was feared that American students would not be internationally competitive. The National Center for Education Statistics released results for the National Assessment of Education Progress (NAEP) for 2017. The results indicate that though the education policy in place lead to narrowing of the white-black and White-Hispanic achievement gap, this improvement is not reflected equally in the achievement gap for students who qualify for the National School Lunch Program. The results reflect the final year's implementation of NCLB law.

Reports designed to bring attention to issues in educating gifted students such as *Education of the Gifted and Talented*, also known as “The Marland Report” (Marland, 1972), Gardner’s *A Nation at Risk* (1983) or *National Excellence: A Case for Developing America’s Talent* (U.S. Department of Education, 1993) were unable to sway social policy. Not until the release of *Rising Above the Gathering Storm*, (Committee on Prospering in the Global Economy of the 21<sup>st</sup> Century, 2007), did policymakers take action, as this report described American

deficiencies in science and mathematics compared to other developed countries. The America COMPETES Act of 2007 created programs that fund current STEM programs.

Education policy reflects American society's values (Brown & Garland, 2016). Education in the United States is currently engaged in an equity vs. excellence conflict. This nation sees equity in education as a more urgent need, warranting the greatest dedication of resources, though excellence is an objective of U.S. society as well (Gallagher, 2015; Brown & Garland, 2015). There is a dichotomy that promotes equity at the expense of individual, economic, and societal growth. The failure to value and educate CLD students with the highest potential for innovation and leadership is a failure to develop and sustain human capital (Ford, Grantham, & Frazier-Trotman, 2007; Gallagher, 2015; Ornstein, 2015).

By the year 2030, one in five Americans will be 65 years of age or older. This ratio of Americans does not mean that 1 in 5 Americans will soon lack the capacity to be independent (U.S. Department of Commerce Economics and Statistics Administration U.S. Census Bureau, 2011). The idea of reaching and achieving maximum capacity is important in American culture. Apply this to the potential of gifted students and the development of possibilities. Helping students reach their highest academic and skills potential in order to reach maximum capacity to contribute to society, to innovate, to feel valued should be the goal of educators. American idea of ability and effort, Horatio Alger stories, is an un-relatable experience when African-Americans have concerns with identity (Ogbu, 1998) and involuntary immigration. Identifying and implementing effective practices for equitable identification of CLD students and placement in gifted programs may increase the number of students with access to the educational programming for reaching their maximum capacity.

Identification for enrollment in gifted programs and participation in gifted programming allows students to explore interests (Briggs, Reis, & Sullivan, 2008). Informed teachers help gifted students find mentors or experts in the field who can provide real-world experience in the area of interest and confidence for future endeavors. These experiences in areas of interest mean having the tools, resources, and knowledge for students to define themselves, not allow themselves to be defined by others. One particular factor has led to calls for new methods of assessment that challenge educators and learners to focus on knowledge that can be applied in real-world situations. The economic shift from a society that promotes industrialization to an economy that values innovation, the ability to immediately access, analyze and transfer information and, requires new skill sets developed in resource-based learning environments (Holloway, Doyle, & Lindsay, 1997). Holloway, et al, state that information literacy, the ability to retrieve, evaluate and use information includes basic reading skills, the mechanical skills for manipulating technology, critical thinking and problem solving. Students who gain competence in these skills have acquired life-long skills for achieving success in the Information Age (Holloway et al, 1997). The kinds of skills needed to be successful in today's classrooms were different from the classrooms of yesterday.

The changing economy of the United States puts workers in direct competition with highly qualified workers from other countries. Higher educational institutions are adapting instruction to prepare college graduates with new skills to meet the demand of employers and for solving the problems of today (Commission on the Future of Higher Education, 2006). Instructional strategies which mirror work-place dynamics such as team teaching, cooperative learning, integrated learning, work-based learning, service learning, and problem-based learning

which support contextual learning are already being used in classrooms. Sternberg's comparison of the current prevailing practices in assessing high-potential students for gifted programs using I.Q. Tests, is akin to a condition of unchanged advances in technology for 100 years. Sternberg states that the new intelligence is the ability to think analytically and to problem solve. (Sternberg, 2017).

### **Issues in Assessment**

The issue of underrepresentation of African-American, Hispanic, and Native American students in gifted education programs in United States public schools has generated much discussion and research related to causes and underlying issues in identifying gifted students (Ford & Harris, 1990; Frasier & Passow, 1994; Brown, Renzulli, Gubbins, Siegle, Zhang, & Chen, 2005). Ford, Grantham, & Whiting, (2008) reported that White students, at 59% of the student population, make up 72% of students in gifted and talented programs (Ford, et al., 2008). Researchers have identified the administration of traditional standardized tests to culturally linguistically diverse students as one major cause for the discrepancies in their underrepresentation in gifted programs (Hadaway & Marek-Schroer, 1992).

If we begin to unpack assessment, measurement and evaluation, we can see there is a difference between the three terms, but may not distinguish between these terms with accuracy. These terms are behaviors that educators incorporate into daily practice, and must apply judiciously, with the ultimate goal of matching the assessment to the actual learning target. It is the use of measurement to assign numbers to the degree that a person exhibits a characteristic that may be problematic. When students are evaluated for gifted programs in Holmes County

Public Schools, the assessment may not always be a good fit. More students might be identified in HCPS if there were at least two assessment choices in each criteria area.

Hilliard (1994) expressed his arguments on the ability of tests to measure intelligence:

“To summarize at the moment, psychology has yet to demonstrate its ability to measure the capacity of any children, let alone the capacity to measure children situated in different cultural and low socio-economic contexts, using the medium of a standard language and cultural material in a set of pluralistic cultural contexts. Second, psychometrics cannot be developed by quantifying things that are not quantifiable. Third, IQ psychometry cannot validate the treatment categories to which mental measurement sentences schoolchildren, for example the “educable mentally retarded” category and the learning “disabilities category” (Hilliard, 1994, p. 235)

When Renzulli describes the multi-criteria approach to identification as “a smoke screen” (Renzulli, 2004), he goes further to explain that although many factors, including teacher ratings, only “served the purpose of earning the student a ticket to take an individual intelligence test”, (p.25) and that it is the student's achievement of reaching a “cut-off level” that determines identification as gifted or not gifted; (it is ironic) that creative productive giftedness, divergent thinking, and non-entrenchment are the types of giftedness most valued by society (keyword ‘valued’) and that basing giftedness on a single, one-hour cognitive ability test is as subjective as you can get.” (Renzulli, 2004)

A solid understanding of the importance of using an assessment with reliability and validity based on several types of evidence is crucial when assessment results determine high-stakes decisions. These are considered high stakes decisions because the trajectory of children’s

lives are established when they attain access to specialized challenging instruction (U.S. Department of Education, Office of Civil Rights, 2000).

One of the problems with not having a universal definition for giftedness, and universal criteria for placement and assessment instruments for evaluating gifted students no matter where students are enrolled, are that students who relocate from state to state must meet new criteria in order to gain access to gifted services. The intent of many gifted programs, specifically in Georgia are focused on the academic success of high potential students in core subject areas, more on intellectual abilities and not on the development of students in the area in which they are most gifted, yet the federal definition of giftedness reads as follows:

"children and youth 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." (Public Law 91-230, Section 806, 1998)

Researcher/advocates (Frasier, Martin, Garcia, Finley, Frank, Krisel & King, 1995) have insisted that educators look at giftedness in children within each child's socio-cultural and economic context. They further claim that giftedness will look different than when viewed through the traditionally established, Euro-centric psychometric lens offered by Terman (Frasier, et al., 1995).

Creativity also does not have an agreed upon definition. Educators will assess a student's level of creativity by observing student behaviors in the course of daily classroom activities and apply their personal concept of creativity as they interpret the student's behaviors. Trained evaluators of gifted candidates bring a more informed definition of creativity to the screening

and evaluation process, but even they cannot remain completely objective in the interpretation of traits exhibited by student candidates as they approach each assessment item. And while Torrance managed to develop a truer measurement of creativity, creativity itself is the victim of irony. We laude divergent thinking and innovation, but frown on the eccentric behavior of people who do not conform to societal expectations. As a society, we all value different traits in others. Creativity and motivation are in the eye of the beholder. Students only know that they are interested in expending time, energy and passion on the activities in which they feel confident, expert, and joyful. Those moments may not occur in the structured classroom setting, so the collection of observational data, by multiple adults in a student's life, gives the evaluation process more validity as more data collected means a truer picture of the creativity and motivation traits the student exhibits in different contexts. Achievement tests can only measure a student's exposure or lack thereof to concepts valued by the majority culture on instruments and not actual potential. This speaks to item bias on standardized tests used for gifted identification (Reynolds & Suzuki, 2012). The National Center for Education Statistics defines item bias as follows:

An item is biased if the probability of the student doing well on the item depends not only on:

- what the examinee knows and can do and
- the characteristics of the item as reflected in the item parameters, but also on
- a characteristic of the item that is unrelated to the construct being measured.

Maintaining student engagement can be difficult when the learning targets are prescribed by the state entity and not by student interests. The standardized assessments we present to students require them to reach the one conclusion deemed appropriate when in a more natural



learning environment, student choice and inquiry would lead to multiple outcomes and possibilities for further exploration. Feldhusen's description of a talent-oriented education would do better than giving lip service to the mandate of No Child Left Behind and differentiation practices (Feldhusen, 1996).

While time intensive, development of performance tasks and the accompanying authentic assessment required to measure students' demonstrated understanding of concepts, allows for actual observed mastery of performance task skills. This type of teacher-created assessment can reignite student interest in the curriculum though the topics are not of their choosing. When teachers plan tasks that require critical thinking and problem-solving skills in order to create a product or devise a solution, gifted students see the task as more of a challenge than the traditional worksheet, pencil and paper quiz, or multiple-choice test that requires one acceptable response per item.

The development of assessment instruments and methods that truly do what an educator intends for them to do takes time and much practice. Key behaviors in assuring fair, valid assessment is in establishing clear expectations, especially when creating descriptions of performance levels, monitoring student progress through the assessment event for problems in the assessment method, comparing self-created assessments to others and refining, refining, refining them, especially rubrics. Many educators believe in the importance of communication and collaboration with the appropriate stakeholders.

The research on giftedness reveals that gifted children are found in all cultural groups and at all socio-economic levels (Frasier, 1991) (Baldwin, 1987; Ford, Harris, Tyson & Trotman, 2002; Borland, 2004), Passow found that there are three factors which affect the identification of

gifted disadvantaged children: experiential deprivations, limited language development and socioeconomic or racial isolation (Passow, 1982). Since 84% of students at Logwood are participating in the school lunch program teachers must consider the impact of trying to meet basic needs on student learning and how that affects the ability to show potential.

yet the numbers of students from low SES and culturally and linguistically diverse homes enrolled in gifted programs is not reflective of this fact.

Iverson and Walberg's (1982) quantitative analysis indicates that "the curriculum of the home" or everyday events and interactions between family members accounts for three times more learning variance than does family socioeconomic status. (Walberg & Paik, 1997). Walberg & Paik (1997) found that from birth to age 18, children spend 92% of their time in the home environment, while time spent in school accounts for the remaining 8% (National Commission for Excellence in Education, 1983; Bloom, 1965). It is at home that students develop values and domain-specific skills when exposed to both formal and informal support during early stages of development, before they might be identified as gifted children (Bloom & Sosniak, 1981, Sosniak, 2003).

### **The Georgia Referral and Evaluation Process**

The current policy on referral and evaluation of gifted children is a result of the adoption of The Georgia Board of Education Rule 160-4-2-.38 (adopted February 12, 1998, effective March 9, 1998). Rule 160-4-.38 outlines the definition for gifted students, differentiated curriculum and for qualified evaluators. Georgia uses this definition for describing gifted students:

a gifted education student is defined as one 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 ability (ies). (GADOE, 2015)

Researchers have re-conceptualized Georgia's definition of giftedness as more multidimensional, focusing on a wider range of traits and behaviors that are more inclusive of culturally diverse, disadvantaged and all populations of students (Frasier & Passow, 1994). Georgia's definition used to be based on traditional standardized test scores from IQ and achievement tests, but it the shift emphasized multidimensional, dynamic methods of identification and assessment of these traits and behaviors (Cramond, 1997). However, The Georgia legislature removed the attributes "leadership" and "artistic" from the definition after the year 2000, as this was aligned with federal definitions.

By rule, there are two types of student referrals for gifted evaluations. Students may be referred by someone who is familiar with the student's abilities, including teachers, counselors, administrators, parents or guardians, peers, self or anyone in the community. Many of the persons with which the student has a relationship may not be aware that they can make a referral.

Students may also be automatically referred for consideration for gifted evaluation by achieving a specified percentile score on a norm-referenced test as outlined in the Appendix A of the Georgia Department of Education Resource Manual for Gifted Education Services, as decided by each local board.

“(i) Local boards of education shall establish the criterion score needed on these

norm-referenced tests for automatic consideration for further assessment.

- (ii) Local boards of education shall ensure that any tests or procedures used in the referral process and to determine eligibility for gifted education services meet standards of validity and reliability for the purpose of identifying gifted students, and shall be nondiscriminatory with respect to race, religion, national origin, sex, disabilities or economic background.” (Georgia Department of Education Resource Manual for Gifted Education, 2012)

The directives above give local school boards the authority to determine “the criterion score needed on norm-referenced tests for automatic consideration for further assessment” and to select tests and procedures to determine eligibility for gifted education service. Those charged with establishing the floor for whether a child is referred for evaluation carry a great deal of responsibility. They become the gatekeepers (Ford & Whiting, 2008). Whether the procedures for referral and evaluation, or tests themselves meet standards of validity and reliability for identifying gifted students from all cultures and economic backgrounds depends on the decisions made and how policies are implemented by each system’s local school agencies (Callahan et al., 1995). It is not students who refer themselves for evaluation for the gifted program; it is most often their teachers. If certain groups of children are underrepresented, they may be under-referred due to teacher beliefs of the student abilities (Ford, 2011) or teachers being uninformed about the referral and evaluation process.

### **Georgia’s Multiple Criteria Policy and Local Implementation**

The Georgia Department of Gifted Education under GABOE Rule 160-4-.38 requires that all mental ability and achievement tests be the most current editions, nationally normed by race,

religion, national origin, gender, disability and economic background within 10 years of the test being administered (Georgia Department of Education, Gifted Education Handbook, 2018-19). The department currently approves six mental ability tests including two non-verbal tests that may be administered by gifted-endorsed school personnel (See Table 2). Additionally, there are nine mental abilities tests that can only be administered by a licensed psychologist. Most tests used for identification of students for the gifted program are administered by gifted-endorsed educators who are not licensed psychologists, but having been trained, have authority to administer certain assessments. There are 22 approved achievement tests for students in kindergarten through twelfth grades, three creativity tests and five teacher rating scales, one motivation student self-report and three motivation teacher rating scales (See Table 2).

Table 2

*A Comparison of State and System-Approved Gifted Evaluation Assessments*

Category	Georgia Department of Gifted Education Approved Assessments for administration	Holmes County Public Schools Assessments Available for administration
Mental Ability	8 by gifted-endorsed educator	1- system-wide Gr 1,2,5,8
	9 by licensed psychologist	1-non-verbal by gifted-endorsed educator
Achievement	22	1-system-wide Gr 2,5,8
		1-by gifted-endorsed educator
Creativity	8	3
Motivation	4	1- grades K-3
		1- grades 4—8
		GPA or NGSA 6-12
		Portfolio Option available for Achievement, Creativity, and Motivation

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## **Mental Ability**

In Holmes County Public Schools (2018-19 Georgia Gifted Resource Manual), the Cognitive Abilities Test is administered to every student in first, second, fifth and eighth grades (See Table 2). Each first, second, fifth and eighth grader takes the Cognitive Test of Abilities (CogAT) in late September. The Iowa Assessments are administered to all second, fifth and eighth graders. Teachers and members of gifted referral committees have access to student scores on the three component tests. This affords members of the gifted referral team an opportunity to review mental ability data for every student tested. Included in the system's published information on assessment is a guide to the Cognitive Abilities Test. This system-wide administration of this assessment allows students in these grade levels to demonstrate abilities of which their teachers may not be aware. This is especially true for African-American and Hispanic students (Wright, Ford & Young, 2017), (Card & Giuliano, 2016). Within the guide appears the following description of the abilities the CogAT measures:

The Cognitive Abilities Test measures developed abilities, not innate abilities.

The development of these abilities begins at birth and continues through early adulthood. It is influenced by both in-school and out-of-school experiences.

Because these abilities are closely related to an individual's success in school in virtually all subjects, test results may be used in planning effective instructional programs. In combination with other relevant information about a student, scores can be used to adapt instruction in ways that enhance the student's chances of success in learning (HCPS Assessment Information).

If a student is disadvantaged, experientially deprived, and/or limited in language, is it fair to evaluate their performance against that of advantaged students on Verbal and Quantitative components of the CogAT?

Also within the guide is a summary of each test component including the Non-Verbal component:

The questions in this battery involve neither words nor numbers, and the shapes or figures used bear little direct relationship to the formal school curriculum. Despite the lack of overlap with formal schooling, non-verbal reasoning tests have been found to relate significantly to school achievement, providing a useful addition to verbal tests. Among students with similar levels of verbal ability, the level of non-verbal ability may well identify those with the greater aptitude for the visual-spatial academic disciplines, such as mathematics, physics, art and design and technology. Tests of spatial ability are used in employment settings to identify those with aptitude for such careers as design, engineering and architecture. The Non-verbal Battery measures what has been termed 'fluid intelligence': that is, an ability to reason that is not strongly influenced by cultural and educational background. Where performance on this battery is superior to that on the other two batteries, it may suggest potential that is not fully expressed in performance on school-related tasks, for one reason or another. Scores on this battery may be particularly valuable in assessing the reasoning ability of students with poor English

language skills; students with specific problems with language who may have failed to achieve in academic work for motivational reasons

(HCPS CogAT Guide for Parents, 2018)

Though this summary clearly states that the Non-verbal Battery “measures what has been termed 'fluid intelligence': that is, an ability to reason that is not strongly influenced by cultural and educational background.”, Non-verbal component scores were not accepted during the years 2004 through 2016 in Holmes County for identification and placement of students who earn the highest scores.

Of the Verbal, Quantitative and Non-Verbal components of the CogAT administered to HCPS first, second, fifth and eighth graders, only Verbal and Quantitative scores at the 96<sup>th</sup> percentile or above as well as the Composite of the three scores are part of the qualification criteria for the gifted program in HCPS. Atlanta Public Schools, DeKalb County Schools, Marietta City Schools, and Walton County Schools, do accept and use the CogAT Non-verbal component score to identify students for gifted placement (APS, DCPS, Marietta City Schools, and WCPS Georgia's Eligibility Rule

State Board of Education Rule 160-4-2-.38) if students' CogAT Non-Verbal assessment scores at or above the 96<sup>th</sup> percentile were considered for placement more students would qualify for placement. A student could earn a 95.6 percent on the NNAT, but not qualify in the area of mental ability as rounding up goes directly against system policy. Scores from The Naglieri Nonverbal Ability Test (NNAT), that meet the criteria of 96<sup>th</sup> percentile or above, are accepted toward qualification. As computers have become



the method for administration of the NNAT, fewer Logwood students seem to achieve the 96<sup>th</sup> percentile on this assessment than in years when the test was given in booklet form.

System-wide test scores are the most common method of referral for gifted evaluation in HCPS and at Logwood. When a student achieves a high score on a mental ability component or total score on the achievement test, it is the referral committee (a gifted program teacher, an administrator, one additional gifted certified teacher and the student's classroom teacher), that make the final determination whether students are referred for testing. Frasier, Hunsaker, Lee, Finley, Frank, Garcia & Martin, (1995), surveyed over 750 educators, the majority of which were classroom teachers, to determine perceptions of major, moderate and minor barriers to the identification of CLD and economically disadvantaged students. Major barriers perceived by over 60% of respondents were (a) biased standardized tests against children from economically disadvantaged and limited English proficient backgrounds (70%), and (b) teachers' inability to recognize indicators of potential giftedness (62%). Perceived as moderate barriers were (a) non-standard English and limited English proficiency (57%), (b) differences in language experiences (55%), (c) lack of a stimulating environment (54%), (d) use of narrow screening/selection process (48%), and (e) prejudicial attitudes held by teachers (43%). So, if tests are administered to every student on selected grade levels every year, there is a greater likelihood that students with well-above normal abilities of whom their teachers are not aware, will be discovered, referred and evaluated. These students can then receive differentiated instruction commensurate with their academic and developmental needs. As state above, teachers do not always recognize indicators of giftedness, nor their own prejudicial attitudes which will hinder gifted students from reaching their highest potential. This is a waste of human capital.

Conventional tests may not necessarily be an accurate prediction of a student's future potential. Tests are static and measure convergent thinking, as items require one correct answer (Sternberg, 2016). The Georgia DOE definition of giftedness describes a gifted student as having at least one exceptional ability, but additionally must show evidence of high ability in other criteria areas to qualify for gifted services. As students approach each test in the gifted evaluation process, they are not always able to exhibit the unique characteristics for which they were referred. Student performance on each test is a one-shot, moment in time.

Some students judge themselves as being smart when they can easily master the work teachers assign. Seeing test items unlike any question or problem they have ever encountered can be intimidating and frustrating to students who believe their intelligence is fixed (Dweck & Liggett, 1988). Their belief in fixed intelligence limits their ability to achieve qualifying scores on tests that measure elements of giftedness. Until teachers provide direct instruction on the flexibility of intelligence as part of the curriculum, there are some students who will doubt their ability to successfully complete the types of items created for tests of mental ability, achievement and creativity. Typically, Logwood's culturally and linguistically diverse population achieves higher scores on the quantitative and non-verbal components of the CogAT.

## **Achievement**

The Iowa Assessments are administered to all second, fifth, and eighth graders to collect achievement information to inform decisions that improve instruction. This nationally-normed standardized test allows those with an interest to evaluate achievement performance of HCPS students compared to students nationally. For the purposes of referrals scores at the 80<sup>th</sup> percentile and above are reviewed. For gifted identification, reading, math or composite Iowa

scores at or above the 90<sup>th</sup> percentile are required. The Measure of Academic Progress is an alternative achievement assessment adopted by HCPS which is computer-adaptive and adjusts the level of difficulty of items throughout the assessment based on the student responses.

## Creativity

The instrument listed as choice one for assessing creativity in HCPS is the Gifted Evaluation Scale

Table 3

2016-2017 Holmes Co. Public Schools Gifted Education - Evaluation Chart

Level: Elementary School		Updated: March 2016		
	Mental Abilities	Achievement	Creativity	Motivation
System Administration	Cognitive Abilities Test (CogAT) (Gr. 1,2,5)	Iowa Assessment (Gr. 2,5)		
Choice #1	Naglieri Nonverbal Abilities <b>Online</b> Test-2 (NNAT2 Online)	MAP <b>Online</b> Assessment	Gifted Evaluation Scale (GES) All scales must be completed by 2 teachers. Use one scale per student evaluation.	CAIMI (4-8) any two areas at the 90%ile.
Choice #2		Portfolio (See Comm. Center)	Torrance Test of Creative Thinking (TTCT)  OR  PCA>>>SPELL OUT THE NAME	Gifted Evaluation Scale (GES) All scales must be completed by 2 teachers. Use one scale per student evaluation.
Choice #3			Portfolio (See Comm. Center)	Portfolio (See Comm. Center)
Choice #4				Acceleration: Grade Skip or Subject Skip

This Likert scale, completed by two teachers who have taught the student, and observed high levels of ability and behavior in intellectual, specific academic aptitude, leadership, creativity, and performing and visual arts. Point totals from specific GES items are used to calculate creativity or motivation percentiles. The average of two percentiles is used to determine if creativity or motivation criteria has been met.

The Profile of Creative Abilities (PCA) assesses student creativity according to J.P. Guilford's (1959) Structure of Intellect Model (Sensitivity to Problems, Fluency, Flexibility, Originality, Redefinition, and Penetration) in the Drawing subtest. The basis for the second subtest, Amabile's (1996) Componential Model of Creativity includes the components for Domain-Relevant Skills, Creativity-Relevant Processes, and Intrinsic-Task Motivation. Students at Logwood earn a qualifying score on the PCA at a rate of 98%. The two percent who don't perform well on this test exhibit difficulty approaching a type of activity they have never been asked to complete before. These students frequently make minimal attempts to use the stimuli, and some leave most if not all of the eight items blank. They may find it difficult to create multiple responses when their learning experiences include providing one correct answer.

The Torrance Test of Creative Talent has long been used to determine student potential for creativity, but without the same high success rate as the PCA. This may be in part due to the structure of the test administration. The drawing subtest is untimed, though most students complete the activity within the suggested 45 minutes. The Figural subtest of the TTCT in comparison consists of three ten-minute timed 'drawing' sections. and though the Torrance Test of Creativity provides opportunities to observe and analyze student-generated products, why must a demonstration of creativity be bound by time limits? Scientists, artists, composers, software developers do not create in a race against the clock.

On self-report inventories like the GIFT students interpret a set of statements based on a variety of personal experiences or lack thereof, so students with limited opportunity for experiences outside of their neighborhood and school might have difficulty assessing their own like or dislike for an activity when they have no prior knowledge or experience of that activity.

The Profile of Creative Abilities (PCA) notably includes a dynamic component on the Categories subtest. Students have the opportunity to observe the test administrator modeling the activity, then practice creating groups by finding something in common between given images. Students are not told that the objective is to demonstrate fluency and flexibility (many different categories). The test administrator can repeat directions after students' first attempt at creating groups. Proponents for dynamic testing argue that static (more traditional) tests are not as effective in assessing learning potential, and may even underestimate potential in CLD and low SES students (Lidz & Macrine, 2001; Stevenson, Heiser, Resing, & Wilma 2016).

For educators to maximize the number of students who are identified as gifted, access to several different instruments for each criteria area must be standard practice.

**Motivation.** For grades four and five, our school system uses a normed state-approved instrument to measure student motivation. The Children's Academic Intrinsic Motivation Inventory (CAIMI) is a student self-report instrument which "measures intrinsic motivation for school learning. CAIMI items are based on theories of intrinsic motivation measuring enjoyment of learning; an orientation toward mastery; curiosity; persistence; and the learning of challenging, difficult, and novel tasks." This instrument is administered to many fourth and fifth grade students who are evaluated for gifted placement.

If we apply Achievement goal theory to the practice of administering the CAIMI, several issues arise. Students bring with them their achievement goal orientation, attributional beliefs, learning strategies, self-regulating processes, self-worth and self-efficacy beliefs to every situation including each test session (Ames, 1992) Students with mastery-goal orientation approach this self-report instrument as an opportunity for a learning experience. They possess the

stamina to stay engaged, addressing each survey item, while applying strategies they believe will result in positive outcomes upon completion of the assessment instrument. Some students even perceive that those who review this instrument are looking for a particular type of response based on their accumulated experiences in classrooms where normative performance is the desired outcome. These students select the responses that may not reflect their true feelings, but how they believe they can achieve maximum results or outcomes desired by the survey administrator. Though the directions assure students that they should respond the way they feel, and that it is their opinion that matters each Likert-type student response is assigned a value and a total for each sub-category is calculated to determine whether a students' perceptions of their behavior and interest in the four core subjects and in school in general demonstrates adequate motivation for learning for participation in gifted programming. Achieving the 90th percentile or above in at least two of the five sub-categories is required.

If we attempt to determine the reasons some students qualify for the program in part based on motivation scores, achievement goal theory cannot account for the low number of African-American and Hispanic students who do not achieve a high enough score on the CAIMI. These candidates were for the most part referred with the enthusiastic endorsement of their teachers, based on academic performance and high motivation in the classroom. It does not account for the cultural differences in the way students express their abilities to their teachers (adults) and their community. Though the attribution and self-efficacy elements of this theory help describe the positive and negative motivation patterns related to student performance, it does not account for the impact of accumulated individual experiences on student attitude toward the evaluation process. Black and Hispanic students may fear they lack the capacity to perform at the same level as their Asian and White peers, and subsequently a greater fear that they will confirm long-

standing, negative stereotypes (Steele, 1999). A fear of failure can generate a reluctance to approach challenging work (Martin, 2004). Students hold all experiences within long-term memory including all successful and unsuccessful attempts at tasks and the emotions accompanying the results of these attempts (Wigfield & Eccles, 2016).

With 85% of Logwood students participating in the Federal Meals program (breakfast and lunch), the concentration of students of low socio-economic status may be a factor in the level of achievement, motivation and need for belonging of students (Speirs-Neumeister et. al, 2007). If student performance and motivation is affected by the socio-economic composition of classrooms, teacher evaluation of students' performance and motivation will also be affected. The Gifted Evaluation Scale – 3rd Edition, (used with all grade levels K-5) is a rating scale to be completed by the classroom teacher, clinical personnel or other school personnel “developed to aid in the identification and program planning for children and adolescents in our schools. The scale consists of 48 items related to teacher- observed student behavior in the classroom. Each subscale is associated with one of the five characteristics identified in federal and state regulations, including the Gifted and Talented Children’s Act of 1978 and the Jacob K. Javits Gifted and Talented Students Education Act of 1988.”

The GES-3 subscales are: Intellectual, Creativity, Specific Academic Aptitude, Leadership Ability, and Performing and Visual Arts. This instrument includes an optional subscale which contains items related to motivation. This subscale was developed to accommodate those states which require documentation of student motivation in the identification process of gifted/talented students.

Score results for the GES are dependent on individual educators' perceptions of student behavior or performance and is affected by their level of knowledge of student motivational patterns and their development within the context of the classroom (Ames, 1990, p. 418). Ames offers recommendations to teachers for instructional planning which takes into consideration how "motivational constructs relate to each other, to developmental changes, to individual and culturally related differences, and to the context or structure of the classroom itself when we apply motivation theory and research to practice." (Ames, 1990, p. 418).

**Alternate Identification Plans.** Missouri's Gifted Program Guidelines includes specific language to increase referral and identification of students from underrepresented groups. Missouri systems level agencies are advised to "identify methods that will be effective in selecting hard-to-identify and traditionally underrepresented students. Districts should establish their own criteria so as to allow for approximately 10 to 20% of the population to be considered for further evaluation." (Missouri Department of Elementary and Secondary Education Gifted Program Guidelines, 2017, p. 6). Guidelines include a section titled "Alternate Identification Plans" referencing work by Passow and Frasier (1996) on CLD, low- SES children from rural, inner-city, barrios or reservations. Systems are advised to consider giftedness in cultural context when determining candidates for evaluation and placement. And, instead of focusing on perceived negative behaviors, educators should create instructional opportunities in line with "students' socio-cultural context "during which students may exhibit gifted behaviors (Passow & Frasier, 1996)

The Missouri DOE requires all systems to use three out of four of the multiple criteria areas for evaluation and placement, which include mental ability, academic ability, creativity



reasoning and problem-solving ability and other evidence of excellent performance. The statewide required mental ability percentile for placement is the 95<sup>th</sup> percentile. The Missouri DOE allows local systems to submit alternate plans that include alternate criteria for placement if it will ensure identification that is more equitable and placement of students.

One concern about using a one-time score achieved on a measure of mental ability or achievement. On any given day, a child may perform well, or lose motivation to focus on the instrument. Since multiple criteria are used for evaluation and placement, a low score on one of these tests may mean the difference between placing in the program or not.

It is worth noting that 26 of 50 states have specific policies for identifying culturally diverse students, including Georgia. Eighteen of 50 states, Georgia being one of them, use specific scores for selections and identification of gifted students. Ten out of 18 states that require cut-off scores in mental ability have specified scores somewhere between the 90<sup>th</sup> to the 95<sup>th</sup> percentiles, allowing for some consideration of students who may fall within the margin of error, Georgia not being one of them. Fifty percent of states require policies and procedures that will increase the number of CLD and low-SES students placed in gifted programs.

If the margin of error on standardized tests were to be considered in the evaluation process, many more students from underrepresented groups would be referred and would qualify for placement.

### **Teacher Definitions of Giftedness**

Underrepresentation of CLD students begins with under-referral of these students. Teachers have their own conceptions of what a gifted student looks like in the classroom (Beghetto & Kaufman, 2010). Teachers need to be trained in recognizing traits of giftedness in CLD children (Frasier et al., 1995). Developing more informed teachers will create the mindset

needed to increase recognition of traits of giftedness within the classroom environment, and so increase identification and representation of students from different experiences. A clearer understanding of the multi-dimensional nature of giftedness is essential to how teachers develop relationships with their students, and for planning appropriate instruction.

The characteristics that educators use most often to describe gifted students include: self-motivated and independent learner, works well alone, learns quickly in one or more areas, understands above the average level, creative and bored (Speirs Neumeister, Adams, Pierce, Cassidy, Dixon, 2007). Characteristics commonly observed in gifted minority students include communalism, strong oral tradition, high levels of movement and verve (Ford, 2002; Frasier, Passow, 1995). Uninformed teachers may not see hyperactivity (movement, behavior problems or underachievement as indicators of boredom, and so will be less likely to refer students for evaluation for the gifted program (Speirs Neumeister et. al, 2007).

E. Paul Torrance (1973) developed a list of Creative Positives he observed in disadvantaged children with characteristics such as expressiveness in drama and storytelling, high-levels of idea production in groups, and demonstrating creativity through the visual and performing arts. (Torrance, 1973). The Gifted Evaluation Scale incorporates most of these student characteristics or behaviors for teachers to rate. While this teacher rating scale may seem ideal for identifying students who are culturally and linguistically different, only two of fourteen item numbers used to calculate motivation relate to creativity. Four of fourteen items are related to leadership. Three items in the motivation subscale describe more that highlight collaborative behavior as observed in African-American and Hispanic students. The authors of the test have valued motivation behaviors they believe to be less culturally significant making it more difficult

for teachers at Logwood to rate students highly on items in this subscale. Prioritizing other items within the instrument may result in identification of more African-American and Hispanic students for gifted programs.

A discrepancy exists between teacher perceptions of how students, from cultures not their own, exhibit gifted characteristics, and the traits, attitudes and behaviors students actually exhibit in and out of the school context (Bernal 2002; Ladson-Billings, 1994). Motivation theory cannot explain the number of students not referred by teachers, who may not fit a teacher's particular gifted profile of performance.

Given that CLD students face the challenges of assimilating into a culture different from their home culture, face the necessity of developing a growth mindset and maintaining the motivation to succeed in spite of having their culture being undervalued by uninformed teachers, and the challenge of assessment instruments that assess ability for a culture not their own, we must take a closer look at the profiles CLD students who *have* managed to qualify for the gifted program at Logwood.

### **Research Questions**

With underrepresentation of African-American and Hispanic students in gifted programs being a major concern, it is important that an analysis of the eligibility pathways within the evaluation process takes place. The research questions addressed during this study were:

- *What are the demographic profiles of students assessed for gifted education programs in one elementary school in one county in Georgia?*
- *How do the demographic profiles and patterns of performance of students eligible for the gifted program compare to those of students who are referred, but not identified?*

- *How do the demographic profiles and multiple criteria indicators of students eligible for the gifted program who were referred in primary grades compare to students who were referred in upper elementary?*

### **Definitions of Important Terms**

*Culturally and Linguistically Diverse (CLD) Students* - an individual who comes from a home environment where a language other than standard English is spoken and whose cultural values and background may differ from the mainstream White culture. This may include Black, White, Asian, Native American, Hispanic or other racial/ethnic group. Today, CLD students may also be referred to and labeled by different terms, such as limited English proficient (LEP), language minority student, or English-language learner (ELL).

*Demographic Profile* – the characteristics of the members of the sample in this research study, including gender, ethnicity, and grade range (lower elementary, K-2, or upper elementary, 3-5).

*Pattern of Performance* – describes an eligibility outcome of the gifted evaluation process over time by the six eligibility pathways (see below) for members of the sample according to gender, ethnicity, grade range, or teacher ethnicity, or any combination of the four demographic characteristics.

*Underrepresented* – insufficient or inadequate representation of a subgroup, as labeled by the U.S. Department of Education and the Georgia Board of Education, in an instructional program; represent in numbers that are disproportionately low.

*Gifted* - In Georgia, a gifted education student is defined as one 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 ability(ies).

*Gifted Program* - Gifted education programs provide academic challenges by extending the curriculum and learning standards. Students are identified and placed in gifted education based on criteria established by the Georgia General Assembly and the Georgia Board of Education. Students who meet the criteria participating in the program in grades K-5 may receive instruction in resource, cluster and/or advanced content classes.

*Referred/referral* – a nomination of a student for evaluation to determine eligibility for gifted services. The referral process is the first step for entrance into the gifted program. A referral may come from teachers, parents, peers, or as the result of system wide testing scores. Referrals are reviewed by each school's local gifted referral team. This team determines which students will be evaluated for gifted education placement.

*Evaluation* – Following parental consent, the local school evaluates the student's mental ability, achievement, creativity and motivation through the use of nationally normed group tests, performance assessments, and survey checklists.

### **Definition of Variables**

The definitions for variables included in this study are specific to this study and the study subjects.

*Eligible* – having met the criteria established by the Georgia General Assembly and the Georgia Board of Education for placement in a gifted program.

*Not Eligible* – having not met the criteria established by the Georgia General Assembly and the Georgia Board of Education for placement in a gifted program.

*Identified* – the status of students who have been referred and evaluated and have met the definition of a gifted student and the criteria for placement in the gifted program.

### ***Dependent variables***

*Pathway I* – a pathway by which students, evaluated for the gifted program in the State of Georgia, meet the criteria in all four of the criteria areas including mental ability, achievement, creativity and motivation to become eligible for placement in the gifted program. Students are only required to meet criteria for any three of the four areas.

*Pathway II* – a pathway by which students, evaluated for the gifted program in the State of Georgia, meet the criteria for mental ability, achievement and creativity areas to become eligible for placement in the gifted program.

*Pathway III* – a pathway by which students, evaluated for the gifted program in the State of Georgia, meet the criteria for mental ability, creativity and motivation areas to become eligible for placement in the gifted program.

*Pathway IV* - a pathway by which students, evaluated for the gifted program in the State of Georgia, meet the criteria for achievement, creativity and motivation areas to become eligible for placement in the gifted program.

*Pathway V* – a pathway by which students, evaluated for the gifted program in the State of Georgia, meet the criteria for mental ability, achievement and motivation areas to become eligible for placement in the gifted program.

*Pathway VI* – a pathway by which students, evaluated for the gifted program in the State of Georgia, meet the criteria for mental ability and achievement areas to become eligible for placement in the gifted program. Between the years 1957 and 1986, students must achieve this pathway is also known as the psychometric method of qualification, established in 1986 when meeting the criteria for achievement was added as the criteria in mental ability.

### **Independent Variables**

*Gender* – the classification of a student as male or female as recorded in students' academic records.

*Ethnicity* – the classification of a student by Ethnicity/Race as defined by the Georgia Board of Education in compliance with the 2007 U.S. Department of Education guidelines for the collection and reporting of racial and ethnic data of students. Classifications of race include: Asian, Black, White, or Two or More Races. The classification for Hispanic or Latino students is considered to be an Ethnicity. For this study, the term “ethnicity” is used in place of race, to reflect the race or ethnic group with which the parents of students identified.

*Black - Black or African American*

A person having origins in any of the original peoples of the Black racial groups of Africa.

*Hispanic* - A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term “Spanish Origin” can be used in addition to “Hispanic/Latino or Latino.”

*Asian* - A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam

*White* - A person having origins in any of the original peoples of Europe, the Middle East, or North Africa

*Teacher Ethnicity* – the self-reported race or ethnicity with which a teacher identified.

*Grade Range* – K-2 – students evaluated for the gifted program at Logwood Elementary enrolled in grades kindergarten, first or second, also referred to as primary grades.

*Grade Range* – 3-5 – students evaluated for the gifted program at Logwood Elementary enrolled in grades third, fourth, or fifth.

*HCPS* - Holmes County Public Schools, Holmes County, Georgia

*Multiple Criteria* - Multiple eligibility criteria includes: (A) Evidence of student work product or performance; (B) Data from teacher, parent, or peer observation; and (C) Evidence of student performance on nationally normed standardized tests of mental ability, achievement, and creativity.

### **Significance of Research**

Though the State of Georgia and Holmes County Public Schools collect data on student enrollment in gifted programs by ethnicity, there is no state or system-level process for collecting



local school statistics on the level of equitable representation for each gender or ethnic group. As Hispanic and African-American students have constituted the great majority of students at Logwood since its opening in 2004, and consistent representation in the gifted program has not been achieved, students now and in the future deserve an honest analysis of the gifted referral process, administration of assessment instruments, and placement of CLD students in the gifted program. Through an examination of student eligibility reports at the school level, patterns which support the identification of CLD students will be highlighted and educator and evaluation practices which interfere with identification and placement of high-performing CLD students will be revealed as inequitable, and require change to provide students with access to gifted programming. Creating an effective, replicable methodology for analyzing student gifted eligibility data will allow educators to do more than hope that they are meeting the instructional needs of their students.

### **Assumptions**

An assumption about the students from which the data for this study were gathered is that students from low-socioeconomic status families have not had the same access or level of opportunity to acquire prerequisite knowledge and skills (Olszewski-Kubilius, & Clarenbach, 2012). Black and Hispanic students are more likely to be enrolled in school of poverty than White or Asian students (National Center for Education, 2007). This knowledge might strengthen their performance on gifted evaluation assessment instruments.

We can assume that within Logwood's population, gifted students will be identified in every ethnic subgroup (Frasier, Garcia & Passow, 1995). Treffinger (1982) argued that the incidence of gifted students among school-age children in a school will not meet an expected established percentage, but that variability in school enrollment could mean the school identifies

more or less than any specific percentage of students expected. Another assumption is that the eligibility pathways for gifted identified CLD students will be significantly different from that of White and Asian students.

## **CHAPTER 2**

### **REVIEW OF THE LITERATURE**

#### **Intelligence Testing**

Francis Galton, scientist and mathematician, is believed to have conducted the first scientific study on high ability and achievement. His book *Hereditary Genius* (1869) describes his beliefs on evolution and inheritance of traits. He coined the phrase “nature vs nurture”, argued that individuals were born with intellectual ability inherited from their parents, and that the most desirable mental and physical traits would survive.

Binet & Simon (1905) two French psychologists believed that intelligence was learned. They developed a standardized test with a scale to measure intellectual abilities according to the chronological age of children ages 3-12, at the present time, as a means to determine the need for special education. The test included several subtests resulting in a composite score. Children would then be classified in one of three categories. Simon did not believe that decisions concerning children’s intelligence could be made by one score on a single test.

Terman (1916) an educational psychologist at Stanford University, developed and published the Stanford-Binet IQ test from the Binet-Simon test in 1916 which became widely used by educators in the United States. In his autobiography, Terman outlined his positions on psychological issues and movements including the following: “That the major differences between children of high and low IQ, and the major differences in the intelligence test scores of certain races, as Negroes and whites, will never be fully accounted for on the environmental

hypothesis;" (Murchison, 1930). Terman's belief that environmental influences and experiences could not account for inferiority of the performance of non-whites on intelligence tests and that education could not compensate for the difference, that had long-term, negative effects on the perceptions of psychologists, educators.

A low level of intelligence is very, very common among Spanish-Indians and Mexican families of the Southwest and also among Negroes. Their dullness seems to be racial, or at least inherent in the family stocks from which they come. The fact that one meets this type with such extraordinary frequency among Indians, Mexicans, and Negroes suggests quite forcibly that the whole question of racial differences in mental traits will have to be taken up anew and by experimental methods. The writer predicts that when this is done there will be discovered enormously significant racial differences in general intelligence, differences which cannot be wiped out by any scheme of mental culture (Terman, 1916).

In their book *The Development of Intelligence in Children: (The Binet-Simon Scale)*, (1908), French psychologists Alfred Binet and Theodore Simon reveal their plan for examining the intelligence of children:

We set for ourselves the following program: to determine the law of the intellectual development of children and to devise a method of measuring their intelligence; and second, study the diversity of their intellectual aptitudes (1908, p.182).

The Binet-Simon Scale was developed at the request of a commission initiated by the French Minister of Public Instruction. The aim of this commission was the development of a pedagogical method for certifying and labeling a child's state of intelligence more precisely,

when their school performance, after receiving instruction, was deemed inferior and the child, “subnormal”. The outcomes from the examination would determine the child’s intelligence level to ensure the best instructional placement (Binet & Simon, 1908, pp. 9-10).

As Binet gathered information on the factors influencing the labeling of children and their level of intelligence, he surveyed the teachers of primary school children. He was curious to know teachers’ perceptions of their own ability to recognize intelligence in their students, and their ability to identify their proportion of error in estimates of student intelligence. Within the responses received was that of a teacher who stated, “the intelligence of a child can be judged indirectly by heredity. Intelligent parents have intelligent children, especially when they are young” (Binet & Simon, 1911, p. 301). Binet and Simon had reservations about this response, noting that there was not much known about intelligence and heredity:

...we could object that one encounters backward children in families where brothers and sisters are normal; and with still stronger reason, one may expect to find families where intelligence varies; if the observation of teachers corresponds to a general rule, which is possible, how many exceptions! It seems that in reality, teachers are attached to the idea of the influence of heredity. (Binet & Simon, 1911, p. 301)

Binet and Simon did not agree with this teacher’s opinion that intelligence was hereditary.

“Intelligence marks itself by the best possible adaptation of the individual to his environment.” (Binet & Simon, 1911)

The original intent of the Binet-Simon Scale, to more scientifically measure intelligence in children of low aptitude for appropriate instructional placement, is absent in the development of the modified Binet-Simon Scale. Louis Terman adapted this instrument to quantify intelligence

in order to identify inherited intelligence and more easily separate groups of children from different economic, social and ethnic backgrounds. Unlike Binet who worked to measure a child's abilities at that moment in time, Terman sought to measure the person's intellectual capacity that they were born with, inherited from their family. He did this in the service of creating a White, wealthy American aristocracy of high moral fiber and intelligence. Terman was a member of the Human Betterment Association, while also serving as President of the American Psychological Association. The Human Betterment Association was a eugenics organization which promoted legislation for compulsory sterilization of people of color, the poor, people with criminal records, and especially people with mental deficiencies as they defined them. Enforcement of this legislation continued in several states into the 1970's. The aim of these eugenics organization world-wide was to eliminate reproduction of undesirables who they believed would pass down genes related to criminal or immoral behavior and low intelligence. Members of eugenics groups successfully pushed for legislation that prompted stricter immigration laws and policy in the early 1900's. They encouraged greater rates of reproduction in people of Northern European descent.

Terman's influence on intelligence testing broadened with his involvement in psychological testing of Army recruits, during World War I, for enlisted duties or officer training. After the war, Terman and his colleagues in psychology promoted the use of intelligence testing in the public schools in order to categorize the capabilities of children for guidance toward work suitable for their ability and station in life.

In his article "Intelligence Tests and Propaganda" (1924, p. 63), Horace Bond decries Terman's revision of the Binet-Simon Scale, and Terman's application of the instrument and prejudicial interpretation of results to reflect unfavorable results for children of color. Bond

criticizes how psychologist Carl Brigham uses results of Alpha Army testing of Army recruits to propagandize intellectual inferiority of Negroes and the superiority of Northern European and 100% native-born Whites.

- 1) Negroes of all racial groups possess the least intelligence.
- 2) Negroes from Northern states possess larger increments of intelligence than Negroes from Southern states.
- 3) Northern Europeans possess greater intelligence than whites from Southern Europe.

Bond responded to Brigham's assertions using material from Brigham's own conclusions to reason that Negroes from the North had performed better on intelligence tests than Negroes from the South, because only the more intelligent Negroes had moved up North, and that the true explanation for the difference was the difference in living, community and educational conditions. Bonds described how Northern Negroes had also performed at higher levels than Southern Whites to emphasize this point (Bond, 1923).

Bonds removed the comparisons between races and convincingly demonstrated the positive effect on Northern White's intelligence of better living conditions, higher quality schooling, and greater opportunities over their Southern White counterparts. Bond countered the untruthful generalizations of eugenicists by outlining environmental factors and the negative effect of low expenditures per capita on the quality of education no matter the population or location.

Between the years 1920 and 1935, Black researchers conducted 15 studies to document the incidence and characteristics of Black school children that achieved an Intelligence Quotient score of 120 or higher on one of seven intelligence tests. Nine of 13 administrators selected the Stanford-Binet test to administer to participants (Jenkins, 1936).

Lillian Proctor conducted an unpublished study titled "'A Case Study of Thirty Superior Colored Children in Washington, D.C.'" (Proctor, 1929), Proctor selected 30 Negro children with I.Q. scores in the range between 129 and 175, from 26 segregated elementary schools in Washington D. C., who were administered the Stanford-Binet test (Jenkins, 1936). These 30 children achieved scores between 129 and 175; more importantly, this study strengthened the evidence of Negro children of superior intelligence that "conform to the general pattern of superior children at most points" (Jenkins, 1936).

Proctor created detailed case histories including developmental history, family environment, personality traits as well as how each student related socially to others. She also made recommendations for the social and emotional needs of the children for home and school. Unlike other similar studies, Proctor surveyed the children for their level of racial awareness and their perceptions on racial issues. She brought attention to the lack of material resources for children of color, including lack of access to educational alternatives, cultural performances and artistic instruction, as well as limited options for participating in competitions except among children of their own ethnic group (Kearny & LeBlanc, 1993).

In 1934, Janet Terwilliger presented "A Study of Negro Children of IQ Above 125". Terwilliger's work stood out from other studies identifying gifted children of color when she focused on children's self-reported career aspirations for which their profiles would show they were intellectually fit. Study subjects were 10 Negro children from 3 public schools in Harlem, New York with IQ's ranging from 125-157 and one control child of the same age from the same neighborhood. Terwilliger's methodology mirrored that of her mentor, Leta Stetter Hollingworth, who coined the word "gifted", and whose work in educational psychology included working with



profoundly gifted children. Terwilliger administered the Stanford Achievement Test Form B to study participants to be able to make direct comparisons with children studied by Hollingworth (Kearney & Leblanc, 1993). One of Terwilliger's conclusions was in direct contrast with Proctor's conclusion on the negative psychological effects of racial discrimination. Children studied by Terwilliger once aware of their superior intelligence, are not concerned about racial differences.

The locations and conditions under which the 15 studies were conducted were not similar, so the findings were not generalizable for all populations of Negro children, but Jenkins points out that the proportion of Negro children performing at this level were similar to or exceeded the normal proportion found within White children (Kearney & LeBlanc, 1993).

Paul Witty approached the differences in achievement between Negro and White children from different perspectives. Witty and Decker presented "A Comparative Study of the Educational Attainment of Negro and White Children", comparing the differences in educational age in months between 1723 White children and 220 Negro children, ages 7-13 in elementary schools in Coffeyville, Kansas (Witty & Decker, 1927). The Stanford Achievement Test was administered with results showing that there is the least difference in attainment in the youngest Negro and White students, especially in history and literature, and that the differences in various subject areas increase as student age, especially in reading and language usage.

Witty and his mentee, Martin Jenkins challenged the assertions that Whites possessed superior intelligence to Negroes due to innate, inherited traits. Witty argued that the conclusions of Terman and Hollingworth, that standardized tests was the method by which mental capacity could best be measured, did not take into consideration environmental factors in children's

development. Witty believed that giftedness was more than something that could be found by measurement through testing and developed when opportunity and drive are present. In their opening statements in a well-known case study, Witty and Jenkins observe that tasks on intelligence tests do not reflect the “common factors in the life activities of every child to be tested.”

...If this condition were fulfilled the test might indirectly reveal differences traceable to inherited nature or to biological determiners. However, many critics have pointed out that the present stock of intelligence tests fails even to approximate this essential condition, and that, therefore, comparisons of groups having different backgrounds are spurious and futile. Particularly invidious have "race" comparisons proven, since tests have never sampled adequately common "functions" from the life experiences of the children in the different "racial" groups (Witty & Jenkins, 1935).

In 1935, Witty and Jenkins presented *The Case of “B” – A Gifted Negro Girl*. This exceptionally intelligent nine-year-old girl, discovered through a “systematic search for gifted Negro children” in elementary schools in Chicago, achieved an IQ score of 200 on the Stanford Binet Test and uncommonly high scores on additional tests of intelligence and achievement. In this case study the authors professed that proponents of hereditarian and environmental views on the origins of superior intelligence could find supportive evidence for their arguments; however, they argued, that if they were able to find a Negro child whose IQ is at the highest levels confirms that hereditarian arguments of the limitations of intelligence due to Negro blood are not supported. Furthermore, that

Negro children clearly performing well above the standard deviation, can be found in any school population, where students were denied educational resources and instructional opportunities for intellectual development, is significant.

Paul Witty contradicted the ability of intelligence tests to accurately measure intelligence in identifying giftedness. He supported creativity and drive as integral factors of giftedness. In 1945, Witty published work debunking the view that negro soldiers were incapable of scoring high on the Army General Classification Test. Witty described his study of Black and White soldiers who scored similarly based on their level of education or lack thereof and that Blacks possessed as equal an ability to learn as Whites during an eight-week course to develop basic fourth-grade skills (Witty, 1943).

Martin Jenkins disproved the claims of the superiority of White intelligence over Black intelligence by bringing to the attention of psychologists the intelligence test scores of variability of Blacks as an ethnic group. He also proved that highly intelligent Black individuals, when given opportunities for development, existed at the same rates as intelligent White individuals and the effects of environment and experience are a factor in lower or higher intelligence test scores (Jenkins, 1943).

E. Paul Torrance proved that creativity is found in all cultures and socio-economic groups. Torrance described creativity as a process that occurs as problems requiring solutions, or when elements are missing from the whole, and that tension to create or remedy is not relieved until solutions or results are shared with others (Torrance, 1993). Robert Sternberg (1985) formulated his Triarchic Theory of Intelligence, a new perspective on how intelligence could be

defined. Three sub-theories describe how individuals process experiences and information and how they respond: componential intelligence (includes abstract thinking, reasoning, verbal and mathematical skills), experiential intelligence (divergent thinking ability) and contextual intelligence (ability to apply and use knowledge in new situations). Sternberg also recognized that intelligence in one culture would be viewed and valued differently in another. The ability to adapt within the context of a situation or cultural experience (Sternberg, 1999).

In spite of changes over time in how psychologists describe the gifted construct in more inclusive terms, and the recognition that different cultures express giftedness differently, evaluation and identification of gifted CLD students remains problematic.

Quality assessment includes student goal setting, performance, creation, higher-level thinking and or problem-solving skills, completing tasks which provide measures of metacognitive, collaborative, intrapersonal skills, often contextualized in real-world applications, which are then scored according to specified, known criteria (Dietal, Herman, & Knuth, 1991).

In this age of information, the ability to interpret, analyze and use the information for problem solving and decision making is paramount. It was once believed by theorists that mastering large amounts of concrete knowledge would lead the learner to analyze, synthesize and gain deeper insight. It is now believed that learning is more constructive (Donovan, Larson, Stechschulte, & Taft, 2000).

### **Georgia Gifted Education and Multiple Criteria**

Georgia Department of Education rule 160-4-2-.08, which outlines the criteria students must meet to be identified as gifted, was first adopted by the State Board of Education in 1958.

Candidates for gifted evaluation were required to achieve a mental ability score at the 99th percentile (K-2), and 96th percentile or above (3-12) on a nationally age-normed test. This is the rule most educators know as Option A, the psychometric method used for many years as the sole method for identifying and placing gifted students. What many may not know is the history behind the development and passing of the succeeding rule, HB 160-4-2-.38, which changed how students from all backgrounds would have an alternative option to demonstrate their potential.

In 1991, The National Research Center on the Gifted and Talented (NRC/GT) conducted a research study titled *Multiple Criteria Identification of Gifted Students from Economically Disadvantaged and Limited English Proficiency Populations*, in six Georgia school systems under the leadership of Mary Frasier. Krisel and Cowan (1997) have explained that two additional systems, Pleasant City Schools and Holmes County Public Schools received Javits Grants specifically to support identification of higher numbers of students from underrepresented populations. The successful efforts of educators in these eight systems in implementing multiple criteria produced results that would benefit students from all backgrounds. The Georgia Association for Gifted Children Council members, including Sally Krisel and Ruth Cowan, convinced state legislators Holmes County Brooks Coleman (Republican Rep. Holmes County) and Charles Smith (Democratic Rep. Camden County) to introduce a bill requiring multiple criteria to increase identification of historically underrepresented students and provide excellent programming for all gifted students. The bill was introduced the same day. Cowan remarked, “We wanted bi-partisan support. This was not a political issue. On this both of them would be sponsors for that bill that became a part of that legislative session and was approved in that legislative session. That is very rare. It usually is visited in one legislative session and doesn’t get

to rules. Our legislation started in January and was approved in February; that's how quickly it moved." (From an Interview with Ruth Cowan/Interviewer: Sonja S. Fox, GAGC Annual Conference, March 14, 2014). The Georgia Board of Education (GBOE) held hearings and discussions on the draft of the eligibility rule over a six-month period. Educators felt mental ability tests and scores were precise with no ambiguity. Parents and educators felt that "eligibility and programming standards would be lowered" (Krisel & Cowan, 1997). During this time, the Office of Civil Rights (OCR) had been monitoring the lack of Black students in the system where the new GAGC President was the gifted coordinator. Supporters of the multiple criteria rule documented the success of implementation of multiple criteria during the NRC/GT research study and the positive effect the new rule would have on all gifted students. The GBOE considered challenges to elements of the rule and tasked the Department of Education and all other stakeholders to revise the rule once more. Ruth Cowan, former GAGC President recalled:

During this time, the National Research Center for Gifted and Talented (NRC/GT), under the leadership of Dr. Mary Frasier, was also working on a major Javits grant to assist in the development of criteria for identifying under-represented populations in five of Georgia's school districts. With the support of Dr. Frasier working closely with the GAGC leadership, the requested changes were made. Multiple criteria were out of the gate and GAGC was running with it (Cowan, 2014)

The GBOE adopted the new rule in December of 1995, which was implemented in January of 1997 to allow for teacher professional development.

With the adoption of Rule 160-4-2-.38 requiring evaluation of students in mental ability, achievement, creativity and motivation, educators were given a mandate to use assessment practices that document traits exhibited by students in each of these areas. This part of the rule

provides greater opportunity for students to demonstrate giftedness on a variety of instruments, products and performances, including self-reporting and teacher input in the form of evaluation scales.

The Georgia Department of Education outlines the requirements for how students must qualify for the gifted program. The Psychometric method of qualifying requires students in Kindergarten through Second Grade to earn a score at the 99<sup>th</sup> percentile, and students in grades Third through Fifth must earn a mental ability score at the 96<sup>th</sup> percentile or above on a state-approved Mental Ability measure, along with a qualifying Achievement score in Reading or Math, at the 90<sup>th</sup> percentile or above. This is called Option A on the Georgia Department of

Table 4

**Georgia Department of Education  
Rule 160-4-2-.38 Education Programs for Gifted Students  
Evaluation and Eligibility Chart**

<ul style="list-style-type: none"> <li>• In option A and B, information shall be gathered in each of the four categories.</li> <li>• At least one of the criteria must be met by a score on a GaDOE approved nationally normed reference test.</li> <li>• Any data used to establish eligibility in one category shall not be used to establish eligibility in another category.</li> <li>• If a rating scale is used to evaluate creativity, a rating scale shall not be used to evaluate motivation. If a rating scale is used to evaluate motivation, a rating scale shall not be used to evaluate creativity.</li> <li>• Any piece of information used to establish eligibility shall be current within two years.</li> <li>• Local school systems must establish policies in regards to the use of data gathered and analyzed by private entities.</li> </ul>
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Category	Option A	Option B
	Student must have a qualifying score in the mental ability AND achievement categories.	Student must qualify in <u>three of the four</u> categories.
<b>Mental Ability</b>	<ul style="list-style-type: none"> <li>➤ Grades K-2 ≥ 99<sup>th</sup> percentile composite score on a nationally age normed mental ability test</li> <li>➤ Grades 3-12 ≥ 96<sup>th</sup> percentile composite score on a nationally age normed mental ability test</li> </ul>	<ul style="list-style-type: none"> <li>➤ Grades K-12 ≥ 96<sup>th</sup> percentile composite on a nationally age normed mental ability tests OR 96<sup>th</sup> percentile on a component score on a nationally age normed mental ability tests (see pg. 27 of manual for add'l information)</li> </ul>
<b>Achievement</b>	<ul style="list-style-type: none"> <li>➤ Grades K-12 ≥ 90<sup>th</sup> percentile Total Reading, Total Math, or Complete Battery on a nationally normed achievement test</li> </ul>	<ul style="list-style-type: none"> <li>➤ Grades K-12 ≥ 90<sup>th</sup> percentile Total Reading, Total Math, or Complete Battery on a nationally normed achievement test</li> <li>➤ Grades K-12 Superior product/performance with a score ≥ 90 on a scale of 1-100, as evaluated by a panel of three or more qualified evaluators</li> </ul>
<b>Creativity</b>	<ul style="list-style-type: none"> <li>➤ Evaluation data required</li> </ul>	<ul style="list-style-type: none"> <li>➤ Grades K-12 ≥ 90<sup>th</sup> percentile on composite score on a nationally normed creativity test</li> <li>➤ Grades K-12 Rating scales used to qualify student creativity must equate to the 90<sup>th</sup> percentile</li> <li>➤ Grades K-12 Superior product/performance with a score ≥ 90 on a scale of 1-100, as evaluated by a panel of three or more qualified evaluators</li> </ul>
<b>Motivation</b>	<ul style="list-style-type: none"> <li>➤ Evaluation data required</li> </ul>	<ul style="list-style-type: none"> <li>➤ Grades 6-12 Two-year average of a 3.5 GPA on a 4.0 scale in regular core subject of mathematics, English/language arts, social studies, science, and full year world languages (see page 30 of manual for add'l info.)</li> <li>➤ Grades K-12 Rating scales used to qualify student motivation must equate to the 90<sup>th</sup> percentile</li> <li>➤ Grades K-12 Superior product/performance with a score ≥ 90 on a scale of 1-100, as evaluated by a panel of three or more qualified evaluators</li> </ul>

Identification of gifted students shall be nondiscriminatory with respect to race, religion, national origin, sex, disabilities or economic background.

7/8/2013

Georgia Department of Education  
Dr. John D. Barge State School Superintendent  
July 8, 2013  
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Education Rule 160-4-2-.38 Education Programs for Gifted Students Evaluation and Eligibility Chart. For Option B, students earn a qualifying score as stated in any combination of three of the four criteria areas thus the reason this method of qualification is called multiple criteria.

### **The Effect of Multiple Criteria on Gifted Program Enrollment in Georgia**

Since the adoption of the Multiple Criteria rule, the GADOE and the OCR continue to collect ethnicity and gender data for students identified and served in Georgia system gifted programs. Gifted program evaluators are responsible for documenting the test name and score of each assessment students complete.

The Renzulli Center for Creativity, Gifted Education, and Talent Development in the NEAG School of Education at the University of Connecticut published data for Georgia gifted enrollment from 2000-2006. Data collected from January of 1997, when Rule 160-4-2-.38 was implemented, to October of 2005 showed increases in African-American and Hispanic student enrollment in Georgia's gifted (Renzulli Center for Creativity, Gifted Education, and Talent Development, 2006). During this nearly nine-year span, the number of African-Americans participating in gifted programs increased by over 200%; the number of Hispanic gifted students increased by 570%. During this initial 6-year time period in which multiple criteria was implemented, it is important to note that nationally, the rate of Hispanic population growth was increasing significantly. Between 2000 and 2010 people identifying as Hispanic on the 2010 Federal Census accounted for more than half of the growth in the total population of the United States. Between 2000 and 2010, the Hispanic population rose by 43% from 35.3 million (13%) in 2000, percent of the total population to 50.5 million or 16 percent of the total United States population (Humes, Jones & Ramirez, 2011, p. 3). This increase of Hispanic 15.2 million people

between represents over half of the 27.3 million increase in the total U.S. population in that decade.

The impact of the implementation of the multiple criteria rule on the entire state program was evident with increases of gifted enrollment in *all* ethnic groups. Caucasian enrollment increased by 65%, Asian enrollment by 227%, Native American enrollment by 129%, and Multi-Racial enrollment by 600%.

Table 5

Georgia Gifted Program Participation by Ethnic Group Since Implementation of Multiple-Criteria Rule			
Ethnicity	Enrollment 1996	Enrollment 2005 (% increase)	
White	51,022	83,988	+65%
Black	5,813	17,786	+206%
Asian	2,093	6,852	+227%
Hispanic	432	2,895	+500%
Native American	80	183	+129%
Multi-Racial	366	2,561	+600%

Georgia Department of Education, 2006

The impact beyond increased participation was more informed teachers, trained to collect multiple types of data on talented students, and as elementary students matriculated to middle and high school, a greater need for rigorous coursework, especially in the form of Advanced Placement courses.

From 2002-2006 alone, there was a 71% increase in the number of African-American students enrolled in Advanced Placement (AP) courses. Hispanic participation in AP courses increased 180% in the same time period. (The Renzulli Center for Creativity, Gifted Education, and Talent Development, 2006).

While overall numbers of White and Asian students participating in programs continued to over-represent the percentage of their numbers in overall Georgia school enrollment, the gains for

African-American and Hispanic students affirmed the belief in multiple criteria evaluation as equitable practice. Unfortunately, the data published in the National Education Statistics in 2015 confirms that underrepresentation of African-American and Hispanic students continues to be an issue of equity in Georgia schools. This publication reported that in Georgia for 2011-12 the percentage of White students enrolled in all schools in Georgia in the same year was 42.7%. Black students were 37.0% of all students enrolled, Hispanic students were 13.3% of students enrolled. Asian students and students of Two or More Races were 3.5% and 3.1% respectively. Students in the Pacific Islander subgroup were 0.1% of students enrolled and American Indian/Alaskan Native students represented 0.2. % of Georgia's student enrollment. In the same school year, White enrollment in gifted programs in Georgia was 115,689 which are 15.5% of all gifted students enrolled. Enrollment of Black students in gifted programs was 31,062 or 4.9% of all students enrolled, Hispanic enrollment was 9,968 or 4.9% of all students enrolled and Asian enrollment was 13,914 or 24.3% of all students enrolled. Students of Two or More Races was 11.4 %. American Indian/Alaskan Native was 9.6 of gifted students, and Pacific Islander students were 6.8% of students enrolled in gifted and talented programs in Georgia.

### **The Effect of Multiple Criteria Evaluation on One Population of Gifted Students**

One specific example of how the assessment of creativity and the implementation of multiple criteria evaluation process have impacted identification of CLD and low-SES students in a Georgia public school system is Logwood Elementary. At Logwood Elementary in Holmes County Public Schools, an urban/suburban Title I school, as reflected in research, students are affected by experiential deprivations, limited language development and socioeconomic or racial isolation (Passow, 1982). The current total student enrollment for the 2016-17 year at Logwood

Elementary is 1,234 students. Twelve percent of students are of Asian heritage, 26% are African-American, 54.5% identify themselves as Hispanic, and 5% of students are White. Of 1,234 students enrolled, 1,106 (89.63%) were born in the United States while 128 (10.37%) were born in 30 other countries. White and Black enrollment increased one percent from the previous year. Hispanic enrollment increased the most at 3.5%. All other ethnic groups saw no change in their percentage of school enrollment. Fifty-five percent of students are second language learners and receive some level of support in the English to Speakers of Other Languages Program (ESOL), a state-funded instructional program for eligible English Learners (ELs) in grades K-12 (Georgia School Law Code 1981, § 20-2-156, enacted in 1985). The ESOL program is a standards-based curriculum emphasizing academic and social language development (Georgia Department of Education, 2015).

Eighty-five percent of Logwood students qualify for the Federal Meals program. It is estimated that an additional 6% may qualify, but do not participate in the lunch program. At this point in the school year, 144 students (11.6%) are enrolled in the gifted program. At the end of the previous year, there were 123 students (8%) enrolled in the gifted program, 30 of which were fifth graders. Enrollment in the gifted program increases each year on average by 50 students after mid-year evaluations, then decreasing by about 30 (the loss of rising 6<sup>th</sup> graders) the following school year.

The ethnic enrollment of students in the gifted program is not generally proportional to the overall ethnic enrollment of the school. While Hispanic students make up 54.5% of Logwood's population, there are only 30.4% of Hispanic students enrolled in the gifted program, though this was an increase of 4.4% over the previous year. African American students are 25%

of total enrollment, but only 21% of gifted identified students. Asian students are represented disproportionately in the gifted program with 32.6% of all identified students, while they only represent 12% of total enrollment. White students represent 4% of total school enrollment and 12% of gifted student enrollment. Multi-racial (Students of two or more ethnic groups) enrollment increased from .016% to .3% with gifted enrollment of Multi-racial students increasing to 3.26%. All other groups maintained their percentages from the previous year.

In a comparison of gifted enrollment data and total school enrollment data from the Office of Civil Rights (OCR) for the years 2011 to 2013, the percentage of Black students in the program dropped from 26% to 20%. This is unusual as previous years show slight increases. The most dramatic change was a decrease in White enrollment from 21.3% to 6.3%. The greatest increase in gifted student enrollment was for Asian students from 36.1% to 44.4%. Hispanic gifted enrollment changed from 16.4% to 25.4%, an impressive increase of 9%, but is still an indication of underrepresentation in the gifted program at Logwood.

In 2009, evaluators of gifted program candidates at Logwood piloted the Profile of Creative Abilities (PCA, Pro-Ed) to enhance options in creativity assessment instruments. Prior to 2009, evaluators used the Group Inventory for Finding Talent (GIFT) and the Torrance Test of Creative Thinking (*TTCT*) to assess student creativity. During this time, evaluators were requesting a greater choice in assessment instruments for measuring student achievement, creativity and motivation. In 2010, HCPS promoted the PCA to first choice as an assessment instrument for students. Any gifted program teacher within the system could attend the two-session training. In the first session, teachers were shown the instrument, copies of student completed samples, and practice in analyzing and scoring the Drawing and Categories sections.

After Session 1, teachers were expected to return to their schools and administer and score actual tests for their own school's gifted candidates. Session 2 was for sharing student work and confirming the scoring accuracy of teacher evaluators.

From the time Logwood evaluators began administering the PCA, more students from all ethnic groups have been able to obtain a qualifying score for creativity than with the GIFT or the TTCT. Black and Hispanic students in particular have been able to qualify for placement most often with a creativity score, math achievement, and motivation. Students readily displayed their enthusiasm for expressing original ideas and elaborating in both the Drawing and Categories sections of the PCA.

A Pilot Study was conducted on the Logwood 2014 gifted eligibility data (Fox, 2016). The study was a descriptive analysis of the demographic information (grade level, gender and ethnicity) for each student evaluated and the pathway in which these students became eligible

On the *Multiple Criteria Eligibility Pathways* table (See Table 3), there are six pathways for students to obtain gifted eligibility. On the table titled *2014 Logwood ES Gifted Eligibility Pathways for Candidates by Ethnicity & Gender*, the data represents the various pathways in which 44 Logwood students qualified for placement in 2014.

Table 6

Multiple Criteria Eligibility Pathways for Gifted Identification

Eligibility Path	Mental Ability	Achievement	Creativity	Motivation
I	Yes	Yes	Yes	Yes
II	Yes	Yes	Yes	No
III	Yes	No	Yes	Yes
IV	No	Yes	Yes	Yes
V	Yes	Yes	No	Yes
VI	Yes	Yes	No	No

Notably, Pathway IV (Achievement, Creativity and Motivation) was the method with which students (19/44) were most successful in qualifying for the program. Pathway II (Mental Ability, Achievement, and Creativity) shows the second highest number of qualifiers with ten, and then Pathway I with eight students qualifying by this method (All Criteria Areas met). The pathway for the least number of student qualifiers (1 student) was Pathway V (Mental Ability, Achievement and Motivation). The highest single number of students by ethnicity and gender that achieved a qualifying creativity assessment score in 2014 was Black Females (5) by Pathway II. There were 4 Black Males who qualified for placement by Pathway IV, and four Hispanic Females who qualified by Pathway IV. The Pathway with which Hispanic Males (3) were most successful was Pathway I though Hispanic Females (3) qualified more often by Pathway IV. Black Females (9) were the highest number of qualifying students in total, followed by seven Black Males and seven Hispanic Females. Six Asian Males, Asian Females and six Hispanic Females qualified in 2014. Eight Males and Females qualified by Pathway I, ten males and females qualified by Pathway II, and 19 Males and Females qualified by Pathway IV; a total of 40 of 44 qualified by multiple criteria with creativity. Only one student of the 44 evaluated or identified in 2014, (a Hispanic Male), qualified without meeting creativity criteria. This data reinforces the importance of recognizing and developing the creative attributes of students of all ethnic and disadvantaged groups, but especially for historically under-referred and underrepresented Black and Hispanic gifted and talented students.

Table 7.

## 2014 Logwood ES Gifted Eligibility Pathways for Evaluation Candidates by Race

Eligibility Pathway	Asian		Black		Hispanic		Two or More Ethnicities		White		All Groups
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
1	3	0	1	2	0	0	0	0	2	0	8
2	0	2	1	5	0	2	0	0	0	0	10
3	0	1	1	0	0	1	0	0	0	0	3
4	2	3	4	2	3	4	1	0	0	0	19
5	0	0	0	0	1	0	0	0	0	0	1
6	1	0	0	0	2	0	0	0	0	0	3
Total	6	6	7	9	6	7	1	0	2	0	44

In a follow up gifted assessment report, Fox (2017) found that of 107 students tested, 23 of 27 first graders achieved a qualifying score on the PCA (Fox, 2017). Of these 23 students, 15 qualified for placement in the program. Of the 15, five qualified by Pathway I (all criteria areas), four qualified with Pathway III (Mental Ability, Creativity, Motivation), and 6 qualified by Pathway IV.

Second graders evaluated showed similar results with 54 of 60 students evaluated achieving a qualifying score on the PCA test. Of these 54 students, 38 qualified for placement with creativity as one of the criteria areas met. Two students qualified by Pathway I, two qualified by Pathway II, two qualified by Pathway III, and 32 students qualified for placement by Pathway IV.

Of twenty-one fifth graders evaluated, six qualified for the program, while 13 earned two qualifying scores and needing one additional score to qualify. No fifth-grader achieved this



without a creativity score of 90% or above. One fifth grader qualified by Pathway I, and three by Pathway IV.

In collecting evidence of student giftedness using multiple criteria, each year, the Holmes County Public School system requires all first, second, fifth and eighth grade students to complete the Cognitive Abilities Test, and all second, fifth and eighth grades students to take the Iowa Test to assess HCPS achievement compared with same-level students nationally. For the purposes of referrals, scores at the 80<sup>th</sup> percentile and above are reviewed. The Measure of Academic Progress is an alternative achievement assessment adopted by HCPS, which is computer-adaptive and adjusts the level of difficulty of items throughout the assessment based on the student responses. In the two years the test has been administered, about 10% of evaluated students at Logwood have scored at the 90<sup>th</sup> percentile or above in either reading or math.

As the Georgia rule for gifted identification requires that a student must qualify for placement with at least one standardized test, this provides students with an opportunity to demonstrate academic ability on a standardized test, and gifted evaluators with a score which can be used to meet the criteria in the identification process. Though the Gifted Evaluation Scale (GES), used to assess creativity or motivation, is said to have been standardized with a national sample, it is a subjective teacher rating scale, not a standardized test. The GES is used in Kindergarten through twelfth grades to assess either creativity or motivation, but cannot be used for both areas for identification. The Children's Academic Intrinsic Motivation Instrument (fourth through eighth grades) is a student survey used to assess student motivation. Both measures are used at Logwood with the GES with the CAIMI listed as choice number one for fourth through eighth graders.

Another major challenge in assessment of student creativity is determining whether the assessments that educators administer have the reliability and validity to be trustworthy. It is content validity that makes us examine whether the test of creativity we use produces the results that live up to our definitions of creativity. These are the assessment instruments currently approved by the GABOE for assessing student creativity, and are listed in the Georgia Gifted Education Resource Manual:

Creativity Assessment Packet (CAP)

Profile of Creative Abilities (PCA)

Torrance Test of Creative Thinking (TTCT)

**Scales:**

Gifted Evaluation Scale (GES) – Creativity Scale

Gifted and Talented Education Scale (GATES)

Gifted Rating Scales (GRS P for Kindergarten, GRS S for grades 1-5)

Scales for Rating the Behavioral Characteristics of Superior Students (Renzulli/Hartman)

Williams Scale – part of the Creativity Assessment Packet (CAP)

Product, Performance or Structured Observation

On the HCPS Gifted Education Evaluation Chart for 2016-17, the only tests of creativity available for administration by evaluators are the PCA, the TTCT and the GES. In the 2017-18 school year, the PCA will no longer be available, as it has reached the end of a ten-year period and no longer meets norming standards. This is unfortunate as a great number of students at Logwood were successful in demonstrating fluency and flexibility with this instrument. The drawing subtest allowed students to exhibit originality and elaboration. Even with the performance success of Logwood students on the PCA, there have been concerns of the instruments reliability and validity. Pfeiffer and Wakefield (2010) contrast the PCA's inclusion of authentic divergent thinking tasks with the instruments lack of predictive validity, and cautions against making assumptions of diagnostic and construct validity considering the

instrument's newness and the limited definition of creativity by the authors of the instrument. Pfeiffer describes the inadequate composition of the sample group with low percentages of African-American and Asian- American/Pacific Islander students, as well as the lack of inclusion of Native American and Hispanic students goes as far to say there is not enough evidence to support the use of the instrument in the identification of gifted students, but might be used as a research tool. Wakefield expresses similar concerns about construct validity and interrater reliability (Pfeiffer & Wakefield, 2010).

We must now choose to assess creativity through the Torrance Test of Creative Thinking, a students' product/performance, or teacher rating scales of student characteristics, and whether we want the *student* to complete an assessment or have the educators who know the student well complete the assessment. Educators must think about all of these variables, and then consider what each student brings to the assessment experience.

Students may only exhibit creativity within a particular subject, and educators must consider whether a definition of creativity should be thought of as exclusive to particular areas or observable and measureable in many contexts. The implementation of the Multiple Criteria Rule has had a positive impact on enrollment of all gifted students and especially gifted Black and Hispanic students. Evaluators must consider the multi-dimensional definition of giftedness, specifically creative expression in collecting data for students who may be identified as gifted. Gifted programs are providing opportunities for students to demonstrate their unique abilities and the support needed for reaching their highest potential and contributing to our society with innovation and imagination.

### **Issues in Identification of CLD Students**

Ford, Grantham, and Whiting (2008) argue that the consequent behaviors of a deficit orientation “include a heavy reliance on tests with little consideration of biases, low referral rates of culturally and linguistically diverse students for gifted education services, and the adoption of policies and procedures that have a disparate impact on diverse students” (p.293).

**Characteristics of Gifted Black and Hispanic Children.** One challenge educators face in effectively assessing students' creativity is in reflecting on their own understanding of creativity (Torrance, 1969). Educators have personally developed their own definitions of creativity, which are based on familial and educational experiences and impacted by societal values. Initially, educators will assess a student's level of creativity by observing student behaviors in the course of daily classroom activities and apply their personal concept of creativity as they interpret the student's behaviors. Trained evaluators of gifted candidates bring a more informed definition of creativity to the screening and evaluation process, but cannot remain completely objective in the interpretation of traits exhibited by student candidates as they approach each assessment item. We see giftedness in student behaviors often in unplanned, unguarded moments, but occasionally, it is precisely because of the activating strategies and tasks planned by educators that creativity in students is released.

**The Impact of Teachers on Identification.** The inclusion of creativity as an area of assessment in gifted evaluations requires more culturally aware educators with training in how Black, Hispanic and Native American students display creativity. Frasier, Hunsaker, Lee, Finley, Frank, Garcia & Martin, (1995), surveyed 750 educators who described barriers they perceived were barriers to identification of CLD and low-SES students for gifted programs. Sixty-two

percent indicated that teacher inability to recognize indicators of potential giftedness was a major barrier. The perception that students' non-standard English and limited English proficiency (57%), differences in language experiences (55%), lack of a stimulating environment (54%), and prejudicial attitudes held by teachers (43%).

To maximize the opportunity to refer and identify students in part because of their creativity and motivation, teachers and evaluators must become knowledgeable in what each ethnic group values.

Patton (1996) observed the following characteristics in gifted African-American learners:

- embrace a holistic view of reality;
- incorporate a concern for contextual factors in all interpretations of knowledge;
- recognize the functional connectedness of the whole and its parts;
- place importance on the unity of ideas and unity of people in African-American culture;
- have advanced knowledge through a union of seemingly opposite realities;
- do not make distinctions are not made between beliefs and actions and intelligence and doing;
- believe that intelligence must be applied for some purpose;
- have the ability to use skills in interpersonal relations in the development of leadership gifts and talents, and this is strongly valued in this belief system.

Patton (1996) has asserted that Sternberg's triarchic view of intelligence and Gardener's theory of multiple intelligences "recognize the interrelationship of the culture, language, worldview, values, and behaviors of African-Americans" (p.153). Assessing creativity in African American learners must consider a holistic approach that closely fits their worldview.

African-American children may be highly motoric, have strong memories, and a high awareness of details, often providing very descriptive accounts of events a characteristic common to gifted children. African-American students spontaneously categorize and classify spatial items. These gifted students use language rich in imagery and exhibit high fluency and flexibility skills (Baldwin, 1985).

Hispanic bilingual students may express their creativity in non-traditional acquisition of new vocabulary or in thinking about how aspects of American culture relate to their own (Colangelo, Assouline & Nicpon, 2007). They might even present a silly or surprisingly abstract idea related to the topic of discussion. They have high fluency and flexibility skills and the ability to function and communicate with fluency in two cultures. Because they have respect for authority and like to please (Bernal, 1974), Hispanic students may sit quietly, not revealing their ability to produce original ideas. They may be trying to please their teacher who responds positively to quiet, cooperative students (Irby & Lara-Alecio, 1996). Hispanics are familial, and are described as having a collective mindset in contrast to the more individualistic society to which many Americans belong. Hispanic students often prefer to work with other students with whom they are comfortable. If a Non-English Proficient (NEP) student enrolls in school, high-achieving Hispanic students are the first to step forward to translate and to help the student adjust to a new environment. This is a demonstration of leadership that can be documented by the teacher. Creativity may be exhibited through the arts (music and dance), and also in storytelling and writing (Irby & Lara-Alecio, 1996).

What is important to consider in reviewing or applying any description of cultural characteristics is the question of who perceives these characteristics? Are they non-Hispanic teachers who work

with LEP students; Black or Hispanic educators who grew up in the culture? How much training in gifted education have they received? Are they Black or Hispanic researchers or not? How much actual contact have they had with Black and Hispanic children?

Under a grant with the Javits Act Program, researchers at the University of Georgia conducted a review of the literature on core attributes of giftedness as and how these might be demonstrated by African American, Hispanic and Native American and economically disadvantaged children (Frasier, Hunsaker, Lee, Mitchell, Cramond Krisel, Garcia, Martin, Frank, Finley, (1995). Hagen discussed her desire to develop methods for measuring above-average mental ability in students from “limited backgrounds” (Silverman, 1986).

I’ve been concerned about having tests that would give all children opportunities to show a wide range of abilities. Intelligence tests are assessments of different kinds of reasoning using information collected through experiences of various kinds. I have tried to create a wide scope of items that call for different types of informational backgrounds.  
(Silverman, 1986, p. 168).

Frasier et al. synthesized the data collected, identifying “ten core attributes associated with the giftedness construct” and for providing “a better basis for establishing procedures to recognize, identify, and plan educational experiences for gifted students from minority or economically disadvantaged families and areas” (Frasier et al., 1995). Now, educators may use the *Traits, Aptitudes and Behaviors (TABs)* (Frasier, et al., 1995) for documenting observed traits and behaviors of high potential students.

The literature reviewed for this study was selected to highlight how societal and institutional norms have influenced the development of intelligence tests, and the administration

and interpretation of intelligence test results in children and adults. The work of psychologists such as Terman (Terman, 1916), intentionally denigrated the intelligence of people of color for the express purpose of maintaining power and caste. This literature exposes how an assessment tool in the wrong hands, when wielded with disingenuous motive, advance the objectives of an immoral movement, and deprive children of their fundamental right to success



## CHAPTER 3

### METHODS

#### Research Design

This study is a non-experimental descriptive analysis of historical data for 674 referred and evaluated students at one Title I elementary school between the Fall of 2004 and the Spring of 2017. During the 13 years, I have been directly involved in the referral, evaluation, identification processes and instruction of students at the school. The study was designed to assess the relationship between the six gifted eligibility pathways by which students can achieve eligibility and student demographic information. Referral, evaluation and eligibility data were collected from the records of students in grades Kindergarten through fifth grade for each school year from 2004 to 2017.

#### Research Questions

As we face the challenges of identifying CLD students to establish equitable access to gifted programming, answers to the following questions will serve to guide efforts in identifying and eliminating unintentional discriminatory practices:

- *What are the demographic profiles of students assessed for gifted education programs in one elementary school in one county in Georgia?*
- *How do the demographic profiles and patterns of performance of students eligible for the gifted program compare to those of students who are referred, but not identified?*
- *How do the demographic profiles and multiple criteria indicators of students eligible for the gifted program who were referred in primary grades compare to students who were referred in upper elementary?*

One hypothesis for this study is that students of color will exhibit giftedness through high scores in multiple criteria areas while White students will exhibit giftedness through paths to eligibility that include mental ability criteria. Another hypothesis posed to the data was that the likelihood that a Black or Hispanic student becomes eligible for placement in the gifted program is related to his/her ethnicity, grade level and gender. Another hypothesis was that a majority of students of the same ethnic group, (either Asian, Black, Hispanic, White), will be identified as gifted through common eligibility pathways. What about SES?

**Description of Logwood Students.** Logwood Elementary School is located in a suburban neighborhood in the metropolitan region of Atlanta, Georgia. Logwood families live in both apartments and single-family dwellings, though each year, an ever-changing number of families are considered to be homeless. The current total student enrollment at Logwood Elementary in HCPS is 1,234 students. Twelve percent of students are of Asian heritage, 26% are African-American, 54.5% identify themselves as Hispanic, and 5% of students are White. Of 1,234 students enrolled, 1,106 (89.63%) were born in the United States while 128 (10.37%) were born in a total of 30 other countries. Fifty-five percent of students are second language learners and receive some level of support in the English to Speakers of Other Languages Program (ESOL), a state-funded instructional program for eligible English Learners (ELs) in grades K-12 (Georgia School Law Code 1981, § 20-2-156, enacted in 1985). The ESOL program is a standards-based curriculum emphasizing academic and social language development (Georgia Department of Education, 2015).

Eighty-five percent of students qualify for the Federal Meals program. It is estimated that an additional 6% may qualify, but do not participate in the lunch program. At this point in the school year, 129 students (10.45%) are enrolled in the gifted program. At the end of the previous

year, there were 123 students (8%) enrolled in the gifted program, 30 of which were fifth graders. Enrollment in the gifted program increases each year on average by 40 students after mid-year evaluations.

The ethnic enrollment of students in the gifted program is not generally proportional to the overall ethnic enrollment of the school. While Hispanic students make up 54.5% of Logwood's population, they are only 26% of students enrolled in the gifted program. African American students are 25% of total enrollment, but only 21% of gifted identified students. Asian students are represented disproportionately in the gifted program with 30% of all identified students, while they only represent 12% of total enrollment. White students represent 4% of total school enrollment and 12% of gifted student enrollment.

The research on giftedness reveals that gifted children are found in all cultural groups and at all socio-economic levels (Frasier, 1991). Passow found that there are three factors which affect the identification of gifted disadvantaged children: experiential deprivations, limited language development and socioeconomic or racial isolation (Passow, 1982). Since 84% of students at Logwood are participating in the school lunch program teachers must consider the impact of trying to meet basic needs on student learning and how that affects the ability to show potential.

During the 2017 Spring evaluation cycle, 107 students were evaluated for identification for the gifted program. Of 27 first graders, 15 qualified for placement. One female and six Asian male students qualified as well as one Hispanic Female, one Hispanic Male, two White Females, One White Male, one Black Female and two Black Males.

Second grade qualified 38 students of 60 evaluated. Ten students had been evaluated as first graders, but only three *qualified* on this second attempt. By ethnicity, twelve Hispanic females, nine Hispanic Males, six Black Females, four Black males, four Asian Females, one White Female, and one Female of Two or More Races qualified for placement in the 2016-17 school year.

Five of 21 fifth-grade students qualified for the program. Five had previously been evaluated as third graders. Two Hispanic females, one Hispanic Male, one Black Male, One Asian female and one White Female placed in the program.

These students qualify by a variety of Eligibility Pathways, because each student brings different cultural, academic, and socio-emotional experiences to the testing environment.

**Description of Data.** The data for this study is the existing student demographic and assessment data for one HCPS elementary school for school years 2004 through the spring of 2017. Demographic data for each student referred and assessed in the gifted evaluation process is compiled by school registrars in a database with the capability to report data to the state agency. The demographic data includes gender, grade level, and ethnicity, which were used in this study. The HCPS Gifted Eligibility Database is maintained at the system level, by the director of Accelerated Programs and Gifted Education. The school's gifted contact teacher, also the researcher, has the responsibility for overseeing evaluation procedures for identifying and serving students in the gifted program, and for reporting referral and evaluation actions and results to the HCPS gifted programs director. The data for these procedures include student referrals, student performance on tests and measures used to determine eligibility, criteria areas

in which student scores on assessments are recorded, and eligibility decisions for each calendar year.

Data was collected from the Gifted Eligibility Database at Logwood Elementary, which was only accessible through a computer connected to the system network. Non-identifiable information including demographic information (grade level, gender, ethnicity) was collected for analysis of patterns and trends in identification of students for the gifted program.

The Logwood Elementary Gifted Eligibility database contains eligibility reports for each student referred and for students who complete the evaluation process. Each Eligibility report serves as a working document that is completed by one of the school's gifted program teachers and includes 13 separate data sets. Each school year, student referral, evaluation and eligibility data are entered during each referral and evaluation cycle. At year's end, all eligibility reports are archived.

An analysis of one of these data samples alone (one year of student evaluations) was not possible, as there were not enough students evaluated in any given enrollment year (save 2016-17 with 106 students) to maintain statistical power for the number of predictors included in this analysis. Student eligibility data from three-year blocks of evaluations were used to ensure a large enough sample group for the number of predictors (13). The goal of analysis was to reveal demographic profiles of eligible and non-eligible students and to identify patterns of performance of evaluated gifted students at Logwood. The state of Georgia mandates that every student evaluated complete an assessment in all four criteria areas of evaluation including mental ability, achievement, creativity and motivation. These criteria areas serve as the first four predictors in the model. Only the researcher viewed data synthesized from the actual eligibility reports. Collected data was recorded in Excel spreadsheets, then exported to SPSS Statistics

Program to assist in the determination of relationships between evaluation and eligibility predictors.

The data for 674 elementary school children in grades kindergarten through fifth consisted of demographic information including grade level, gender, and ethnicity, and gifted evaluation information including dates of referral and eligibility, eligibility and the test codes and scores achieved in each of four criteria areas (Georgia Board Rule 160-4-2-.38). Of these children, 476 (66.76%) were identified as gifted and qualified to receive gifted services, while 237 (33.24%) were not. One research hypothesis posed to the data was that “the likelihood that a Black or Hispanic student becomes eligible for placement in the gifted program is related to his/her ethnicity, grade level and gender.” Another hypothesis concerned the likelihood that a majority of students of the same ethnic group, (either Asian, Black, Hispanic, White), will be identified as gifted through common eligibility pathways. Thus, the outcome variable, the six eligibility pathways, were coded (1 = Eligible, 0 = Not Eligible), and the six predictors were Black, Hispanic, White), Grade Range (K-2 and 3-5), and gender (Male, Female). A six-predictor logistic regression model was fitted to the data to test the research hypothesis regarding the relationship between demographic predictors and the outcome, six eligibility pathways.

The result is the impact of each variable on the odds ratio of each observed event. The main advantage of using a logistic regression model is that it provides a quantified value for the strength of the effect, adjusting for other variables and avoiding confounding effects.

The central question in this study is: What is the likelihood of students of a particular gender, a grade level, or an ethnicity becoming eligible for the gifted program by one of six eligibility pathways?

### **Logistic Regression Analysis**

In this model, the six-predictor variables were entered simultaneously to the model and each of the six pathways to be analyzed for their effect on gifted eligibility for this population of elementary students.

One purpose of this study is to determine the demographic profiles of Culturally and Linguistically Diverse students referred for gifted evaluation, and their relationship to gifted eligibility status by the multiple pathways by which students become eligible for the gifted program. Georgia State Board of Education (SBOE) 160-4-2-.38 establishes the six pathways by which students become eligible. Binomial logistic regression was used for this study to predict the probability that a student would become eligible for the schools' gifted program. Gifted eligibility is categorical with six possible outcomes (the six possible pathways to eligibility). Predictors included gender, ethnicity including White, Black, Hispanic, and Asian labels, the referring teachers' ethnicity, and the grade range at the time students were evaluated (K-2 or 3-5). Predictors coded with "1" indicate the student is a member of the group and "0" indicate non-membership.

A series of cross tabulations were conducted using the descriptives and cross tabulations features in IBM SPSS software, to examine relationships between predictors within the data that are not evident in frequency tables.

The output from this analysis provided the subgroup and total counts, and subgroup and total percentages for interactions between gender, ethnicity and grade range representation and gifted eligibility status within eligibility Pathways I through VI. This analysis enabled a more informed discussion of the data for eligible and non-eligible students in this sample.

Logistic regression was selected to explore the relationships between student gender, ethnicity, grade range and six gifted eligibility pathways, and to evaluate the statistical significance of the interactions. This data represents only a sample from the population of all students enrolled in Logwood Elementary, (approximately 700-1100 students in any one-year group) for the school years beginning in 2004 through 2016. This study strives to determine if the effects in the sample are acceptably large relative to their standard errors and applicable in the population.

By entering only one eligibility pathway at a time as the outcome, we can determine the odds of eligibility by each particular pathway when considering gender, ethnic group and grade range. With all predictors selected as factors, the entry method was 'Enter'.

There were 674 student cases in the data with no cases missing. Cases included a nearly evenly distributed number of males and females with 51.2% and 48.8% respectively. Students fall under four ethnic groups. Asian students represent 30.3% of evaluated students with 204, Hispanic students represent 30.1% (203), Black students represent 24.8% of students (167), and White students represent 14.8% of students evaluated.

Individual elementary grade levels kindergarten through fifth were combined to create two levels; K-2 incorporating kindergarten, first and second grades (385 students), and 3-5 incorporating third, fourth and fifth grades (289 students).

The analysis without the predictors, the null model, shows that 442 students are predicted to be eligible and 232 are predicted to be ineligible.

Logistic regression was the method selected to analyze gifted eligibility in CLD students, because the research question seeks to determine the odds that students become eligible for the gifted program, by each of six eligibility pathways, compared to the odds for ineligible students,



when based on students' demographic profiles. In this study, gifted eligibility is the categorical outcome with six levels. The six levels are six eligibility pathways, which are the combinations of criteria met in four areas based on student success on assessments as required by the Georgia State Board of Education (SBOE 160-4-2-.38).

This is a study on the demographic profiles of Culturally and Linguistically Diverse students referred for gifted evaluation, and their relationship to gifted eligibility status by the multiple pathways by which students become eligible for the gifted program. The six pathways by which students become eligible, are established by Georgia State Board of Education (SBOE) 160-4-2-.38. This study was designed to predict the probability that a student would become eligible for the schools' gifted program. Gifted eligibility is categorical with six possible outcomes (the six possible pathways to eligibility). Predictors included gender, ethnicity including White, Black, Hispanic, and Asian labels, the referring teachers' ethnicity, and the grade range at the time students were evaluated (K-2 or 3-5). Predictors coded with "1" indicate the student is a member of the group and "0" indicate non-membership.

## **CHAPTER 4**

### **RESULTS**

#### **Cross Tabulations of Gifted Evaluation Candidates and Six Gifted Eligibility Pathways**

A series of cross tabulations was conducted, using the Descriptives and Cross Tabulations features in IBM SPSS software, to examine relationships between predictors within the data that are not evident in frequency tables. There were six different cross tabulations with each one of the four ethnic groups entered in the Rows window during each run. The predictors entered in Columns were gender, White, Black, Hispanic, Asian and grade range (K-2, 3-5). In Layer was entered one of the six eligibility pathways, then Grade Range. No statistics were selected, but in the Crosstabs: Cell Display, Observed Counts, and Rows and Totals in Percentages were selected as well as Round Cell Counts under Non-Integer Weights.

The output from this analysis provided the subgroup and total counts, and subgroup and total percentages for interactions between gender, ethnicity and grade range representation and gifted eligibility status within eligibility Pathways I through VI. This analysis enabled a more informed discussion of the data for eligible and non-eligible students in this sample.

#### **Gifted Eligibility Pathway I Cross Tabulation Analysis**

Pathway I requires qualifying scores in all of the four criteria areas; mental ability, achievement, creativity and motivation. Below are the findings by race for Pathway I.

**Black Students by Pathway I.** In grades K-2, of 195 males tested 153 were Not Black, and 42 were Black. Three (6.4%) of the 42 Black male students became eligible for the gifted program by Eligibility Pathway I. Of the 27 males in grades K-2 that qualified for the gifted

program, 6.4% were Black while 51.1% were NOT Black. Though 42 Black males were referred, 39 did not qualify. In grades K-2, of the 190 females evaluated, 143 were Not Black, 47 were black. Four of the 43 Black females qualified for the gifted program by Pathway I. Black males made up 42.9% of qualifying Black students while Black females made up 57.1% of qualifying Black students. Black females were 47 of 190 (24.7%) female K-2 students evaluated, and four became eligible. Black eligible K-2 females were 57.1% of all Black K-2 eligible students and 8.5% of all female eligible students by Pathway I.

In grades 3-5, there were fewer students than the K-2 group with 150 males and 139 females evaluated. The ratio of Black Males to all other males evaluated in grades 3-5 was 38/112. Three Black males (13.6%) and 4 of 36 Black females (11.1%) qualified in grades 3-5 by Pathway I.

**Hispanic Students by Pathway I.** In grades K-2, of 195 males tested, 61 were Hispanic. Though 61 Hispanic males were referred, four became eligible for the gifted program by Eligibility Pathway I. In grades K-2, of the 190 females evaluated, 68 were Hispanic. Five of the 68 Hispanic females qualified for the gifted program by Pathway I. Hispanic males made up 44.4% of qualifying Hispanic students while Hispanic females were 55.6% of qualifying Hispanic students. Of the 27 males in grades K-2 that qualified for the gifted program, 8.5% were Hispanic while 48.9% of eligible males were Not Hispanic. Eligible K-2 Hispanic females were five of the 68 Hispanic females evaluated, 25% of all eligible females, and 10.6% of all eligible students by Pathway I. Females were 42.6% of all eligible students by Pathway I. Hispanic females in grades K-2 that qualified for the gifted program were 10.6 of all students that qualified for the program.

Fifty Hispanic and 100 non-Hispanic males were evaluated in grades 3-5. One of 50 male Hispanic students evaluated (2%) became eligible by Pathway I. Hispanic females were 13 of 55 females evaluated. Three of the 24 Hispanic females (13.6% of all females) in grades 3-5 qualified for the gifted program by Pathway I. Overall, the four Hispanic students were 18.2 percent of all students that qualified for the gifted program by Pathway I

**Asian Students by Pathway I.** In grades K-2, of 195 males tested, 64 were Asian. Fifteen (23.4%) of the 64 Asian male students became eligible for the gifted program by Eligibility Pathway I. In grades K-2, of the 190 females evaluated, 52 were Asian. Six of the 52 Asian K-2 females qualified for the gifted program by Pathway I. Asian males made up 71.4% of qualifying Asian students while Asian females made up 28.6% of qualifying Asian students. Of the 27 males in grades K-2 that qualified for the gifted program, 31.9% were Asian while 25.5% were not Asian. Forty-nine of 64 Asian males were referred did not qualify. Asian females were 52 of 190 (27.3%) female K-2 students evaluated, and six became eligible. Asian eligible K-2 females were 28.6% of all Asian K-2 eligible students and 12.8% of all female eligible students by Pathway I.

In grades 3-5, there were fewer students than the K-2 group with 150 males and 139 females evaluated. The ratio of Asian Males to all other males evaluated in grades 3-5 was 43 to 107. Of all students evaluated, one Asian male (4.5%) and two of 45 Asian females (9.1%) qualified in grades 3-5 by Pathway I.

**White Students by Pathway I.** In grades K-2, of 195 males tested, 28 were White. Five (23.4%) of the 28 White male students became eligible for the gifted program by Eligibility Pathway I. In grades K-2, of the 190 females evaluated, 30 were White. Six of the 30 White K-2

females qualified for the gifted program by Pathway I. White males made up 41.5% of qualifying while White females made up 58.5% of qualifying White students. Of the 27 males in grades K-2 that qualified for the gifted program, 10.6% were White while 46.8% were not White. Twenty-three of 28 White males referred did not qualify.

White females were 23 of 190 (15.7%) female K-2 students evaluated, and five became eligible. White eligible K-2 females were 50% of all White K-2 eligible students and 10.6% of all female eligible students by Pathway I. In grades 3-5, there were fewer students than the K-2 group with 150 males and 139 females evaluated. The ratio of White Males to all other males evaluated in grades 3-5 was 19 to 131. Of all students evaluated, two White males (9.1%) and six of 30 White females (27.3%) qualified in grades 3-5 by Pathway I.

Table 8

*Black Eligible and Non-Eligible Students by Pathway I by Grade Range*

		Male			Female			Total			
Grade	Eligibility		Not Black	Black	Total	Not Black	Black	Total	Not Black	Black	Total
K-2	Not Eligible	Count	55	15	70	51	13	64	106	28	134
		% within B	51.9%	53.6%	52.2%	48.1%	46.4%	47.8%	100.0%	100.0%	100.0%
		% of Total	41.0%	11.2%	52.2%	38.1%	9.7%	47.8%	79.1%	20.9%	100.0%
	Eligible	Count	24	3	27	16	4	20	40	7	47
		% within B	60.0%	42.9%	57.4%	40.0%	57.1%	42.6%	100.0%	100.0%	100.0%
		% of Total	51.1%	6.4%	57.4%	34.0%	8.5%	42.6%	85.1%	14.9%	100.0%
	Total	Count	79	18	97	67	17	84	146	35	181
		% within B	54.1%	51.4%	53.6%	45.9%	48.6%	46.4%	100.0%	100.0%	100.0%
		% of Total	43.6%	9.9%	53.6%	37.0%	9.4%	46.4%	80.7%	19.3%	100.0%
3-5	Not Eligible	Count	41	17	58	28	12	40	69	29	98
		% within B	59.4%	58.6%	59.2%	40.6%	41.4%	40.8%	100.0%	100.0%	100.0%
		% of Total	41.8%	17.3%	59.2%	28.6%	12.2%	40.8%	70.4%	29.6%	100.0%
	Eligible	Count	4	3	7	11	4	15	15	7	22
		% within B	26.7%	42.9%	31.8%	73.3%	57.1%	68.2%	100.0%	100.0%	100.0%
		% of Total	18.2%	13.6%	31.8%	50.0%	18.2%	68.2%	68.2%	31.8%	100.0%
	Total	Count	45	20	65	39	16	55	84	36	120
		% within B	53.6%	55.6%	54.2%	46.4%	44.4%	45.8%	100.0%	100.0%	100.0%
		% of Total	37.5%	16.7%	54.2%	32.5%	13.3%	45.8%	70.0%	30.0%	100.0%
Total	Not Eligible	Count	96	32	128	79	25	104	175	57	232
		% within B	54.9%	56.1%	55.2%	45.1%	43.9%	44.8%	100.0%	100.0%	100.0%
		% of Total	41.4%	13.8%	55.2%	34.1%	10.8%	44.8%	75.4%	24.6%	100.0%
	Eligible	Count	28	6	34	27	8	35	55	14	69
		% within B	50.9%	42.9%	49.3%	49.1%	57.1%	50.7%	100.0%	100.0%	100.0%
		% of Total	40.6%	8.7%	49.3%	39.1%	11.6%	50.7%	79.7%	20.3%	100.0%
	Total	Count	124	38	162	106	33	139	230	71	301
		% within B	53.9%	53.5%	53.8%	46.1%	46.5%	46.2%	100.0%	100.0%	100.0%
		% of Total	41.2%	12.6%	53.8%	35.2%	11.0%	46.2%	76.4%	23.6%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

Table 9

*Hispanic Eligible and Non-Eligible Students by Pathway I by Grade Range*

Grade	Eligibility		Male			Female			Total		
			Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total
K-2	Not Eligible	Count	40	30	70	39	25	64	79	55	134
		% within Hispanic	50.6%	54.5%	52.2%	49.4%	45.5%	47.8%	100.0%	100.0%	100.0%
	Eligible	% of Total	29.9%	22.4%	52.2%	29.1%	18.7%	47.8%	59.0%	41.0%	100.0%
		Count	23	4	27	15	5	20	38	9	47
		% within Hispanic	60.5%	44.4%	57.4%	39.5%	55.6%	42.6%	100.0%	100.0%	100.0%
		% of Total	48.9%	8.5%	57.4%	31.9%	10.6%	42.6%	80.9%	19.1%	100.0%
	Total	Count	63	34	97	54	30	84	117	64	181
		% within Hispanic	53.8%	53.1%	53.6%	46.2%	46.9%	46.4%	100.0%	100.0%	100.0%
3-5	Not Eligible	% of Total	34.8%	18.8%	53.6%	29.8%	16.6%	46.4%	64.6%	35.4%	100.0%
		Count	34	24	58	30	10	40	64	34	98
	Eligible	% within Hispanic	53.1%	70.6%	59.2%	46.9%	29.4%	40.8%	100.0%	100.0%	100.0%
		% of Total	34.7%	24.5%	59.2%	30.6%	10.2%	40.8%	65.3%	34.7%	100.0%
	Eligible	Count	6	1	7	12	3	15	18	4	22
		% within Hispanic	33.3%	25.0%	31.8%	66.7%	75.0%	68.2%	100.0%	100.0%	100.0%
		% of Total	27.3%	4.5%	31.8%	54.5%	13.6%	68.2%	81.8%	18.2%	100.0%
		Count	40	25	65	42	13	55	82	38	120
Total	Not Eligible	% within Hispanic	48.8%	65.8%	54.2%	51.2%	34.2%	45.8%	100.0%	100.0%	100.0%
		% of Total	33.3%	20.8%	54.2%	35.0%	10.8%	45.8%	68.3%	31.7%	100.0%
	Eligible	Count	74	54	128	69	35	104	143	89	232
		% within Hispanic	51.7%	60.7%	55.2%	48.3%	39.3%	44.8%	100.0%	100.0%	100.0%
		% of Total	31.9%	23.3%	55.2%	29.7%	15.1%	44.8%	61.6%	38.4%	100.0%
		Count	29	5	34	27	8	35	56	13	69
	Eligible	% within Hispanic	51.8%	38.5%	49.3%	48.2%	61.5%	50.7%	100.0%	100.0%	100.0%
		% of Total	42.0%	7.2%	49.3%	39.1%	11.6%	50.7%	81.2%	18.8%	100.0%
Total	Total	Count	103	59	162	96	43	139	199	102	301
		% within Hispanic	51.8%	57.8%	53.8%	48.2%	42.2%	46.2%	100.0%	100.0%	100.0%
		% of Total	34.2%	19.6%	53.8%	31.9%	14.3%	46.2%	66.1%	33.9%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI - Mental Ability, Achievement (Psychometric Method)

Table 10

*Asian Eligible and Non-Eligible Students by Pathway I by Grade Range*

Grade	Eligible		Male			Female			Total		
			Not Asian	Asian	Total	Not Asian	Asian	Total	Not Asian	Asian	Total
K-2	Not Eligible	Count	56	14	70	46	18	64	102	32	134
		% within Asian	54.9%	43.8%	52.2%	45.1%	56.3%	47.8%	100.0%	100.0%	100.0%
		% of Total	41.8%	10.4%	52.2%	34.3%	13.4%	47.8%	76.1%	23.9%	100.0%
	Eligible	Count	12	15	27	14	6	20	26	21	47
		% within Asian	46.2%	71.4%	57.4%	53.8%	28.6%	42.6%	100.0%	100.0%	100.0%
		% of Total	25.5%	31.9%	57.4%	29.8%	12.8%	42.6%	55.3%	44.7%	100.0%
	Total	Count	68	29	97	60	24	84	128	53	181
		% within Asian	53.1%	54.7%	53.6%	46.9%	45.3%	46.4%	100.0%	100.0%	100.0%
		% of Total	37.6%	16.0%	53.6%	33.1%	13.3%	46.4%	70.7%	29.3%	100.0%
3-5	Not Eligible	Count	47	11	58	29	11	40	76	22	98
		% within Asian	61.8%	50.0%	59.2%	38.2%	50.0%	40.8%	100.0%	100.0%	100.0%
		% of Total	48.0%	11.2%	59.2%	29.6%	11.2%	40.8%	77.6%	22.4%	100.0%
	Eligible	Count	6	1	7	13	2	15	19	3	22
		% within Asian	31.6%	33.3%	31.8%	68.4%	66.7%	68.2%	100.0%	100.0%	100.0%
		% of Total	27.3%	4.5%	31.8%	59.1%	9.1%	68.2%	86.4%	13.6%	100.0%
	Total	Count	53	12	65	42	13	55	95	25	120
		% within Asian	55.8%	48.0%	54.2%	44.2%	52.0%	45.8%	100.0%	100.0%	100.0%
		% of Total	44.2%	10.0%	54.2%	35.0%	10.8%	45.8%	79.2%	20.8%	100.0%
Total	Not Eligible	Count	103	25	128	75	29	104	178	54	232
		% within Asian	57.9%	46.3%	55.2%	42.1%	53.7%	44.8%	100.0%	100.0%	100.0%
		% of Total	44.4%	10.8%	55.2%	32.3%	12.5%	44.8%	76.7%	23.3%	100.0%
	Eligible	Count	18	16	34	27	8	35	45	24	69
		% within Asian	40.0%	66.7%	49.3%	60.0%	33.3%	50.7%	100.0%	100.0%	100.0%
		% of Total	26.1%	23.2%	49.3%	39.1%	11.6%	50.7%	65.2%	34.8%	100.0%
	Total	Count	121	41	162	102	37	139	223	78	301
		% within Asian	54.3%	52.6%	53.8%	45.7%	47.4%	46.2%	100.0%	100.0%	100.0%
		% of Total	40.2%	13.6%	53.8%	33.9%	12.3%	46.2%	74.1%	25.9%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)



Table 11

*White Eligible and Non-Eligible Students by Pathway I by Grade Range*

Grade			Male			Female			Total		
			Not White	White	Total	Not White	White	Total	Not White	White	Total
K-2	Not Eligible	Count	59	11	70	56	8	64	115	19	134
		% within White	51.3%	57.9%	52.2%	48.7%	42.1%	47.8%	100.0%	100.0%	100.0%
		% of Total	44.0%	8.2%	52.2%	41.8%	6.0%	47.8%	85.8%	14.2%	100.0%
	Eligible	Count	22	5	27	15	5	20	37	10	47
		% within White	59.5%	50.0%	57.4%	40.5%	50.0%	42.6%	100.0%	100.0%	100.0%
		% of Total	46.8%	10.6%	57.4%	31.9%	10.6%	42.6%	78.7%	21.3%	100.0%
	Total	Count	81	16	97	71	13	84	152	29	181
		% within White	53.3%	55.2%	53.6%	46.7%	44.8%	46.4%	100.0%	100.0%	100.0%
		% of Total	44.8%	8.8%	53.6%	39.2%	7.2%	46.4%	84.0%	16.0%	100.0%
3-5	Not Eligible	Count	52	6	58	33	7	40	85	13	98
		% within White	61.2%	46.2%	59.2%	38.8%	53.8%	40.8%	100.0%	100.0%	100.0%
		% of Total	53.1%	6.1%	59.2%	33.7%	7.1%	40.8%	86.7%	13.3%	100.0%
	Eligible	Count	5	2	7	9	6	15	14	8	22
		% within White	35.7%	25.0%	31.8%	64.3%	75.0%	68.2%	100.0%	100.0%	100.0%
		% of Total	22.7%	9.1%	31.8%	40.9%	27.3%	68.2%	63.6%	36.4%	100.0%
	Total	Count	57	8	65	42	13	55	99	21	120
		% within White	57.6%	38.1%	54.2%	42.4%	61.9%	45.8%	100.0%	100.0%	100.0%
		% of Total	47.5%	6.7%	54.2%	35.0%	10.8%	45.8%	82.5%	17.5%	100.0%
Total	Not Eligible	Count	111	17	128	89	15	104	200	32	232
		% within White	55.5%	53.1%	55.2%	44.5%	46.9%	44.8%	100.0%	100.0%	100.0%
		% of Total	47.8%	7.3%	55.2%	38.4%	6.5%	44.8%	86.2%	13.8%	100.0%
	Eligible	Count	27	7	34	24	11	35	51	18	69
		% within White	52.9%	38.9%	49.3%	47.1%	61.1%	50.7%	100.0%	100.0%	100.0%
		% of Total	39.1%	10.1%	49.3%	34.8%	15.9%	50.7%	73.9%	26.1%	100.0%
	Total	Count	138	24	162	113	26	139	251	50	301
		% within White	55.0%	48.0%	53.8%	45.0%	52.0%	46.2%	100.0%	100.0%	100.0%
		% of Total	45.8%	8.0%	53.8%	37.5%	8.6%	46.2%	83.4%	16.6%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI - Mental Ability, Achievement (Psychometric Method)

### **Gifted Eligibility Pathway II Cross Tabulation Analysis**

Eligibility Pathway II requires students to achieve a qualifying score on a Mental Ability test, an Achievement test, and a Creativity test but not in Motivation. Below are the findings by race for Pathway II.

**Black Students by Pathway II.** In grades K-2, of 195 males tested 153 were Not Black, and 42 were Black. By Pathway II, six (14.28%), of the 42 Black male students became eligible for the gifted program, and 36 did not qualify.

In grades K-2, of the 190 females evaluated, 143 were Not Black, 47 were black. Six of the 43 Black females qualified for the gifted program by Pathway II. Black males and females each made up 50% of qualifying Black students. Of the 27 males in grades K-2 that qualified for the gifted program by Pathway II, 14.6% were Black while 41.5% were not Black. Black females were 47 of 190 (24.7%) female K-2 students evaluated, and six became eligible by Pathway II. Black eligible K-2 females were 50.0% of all Black K-2 eligible students and 33.3% of all female eligible students by Pathway II.

In grades 3-5, Two Black males (10.5% of all students), and three of 36 Black females (15.8% of all students) qualified in grades 3-5 by Pathway II.

**Hispanic Students by Pathway II.** In grades K-2, of 195 males tested 134 were Not Hispanic, and 61 were Hispanic. By Pathway II 2 (6.5%) of the 61 Hispanic male students became eligible for the gifted program. In grades K-2, of the 190 females evaluated, 122 were Not Hispanic, 68 were Hispanic. Five of the 68 K-2 Hispanic females qualified for the gifted program by Pathway II. Hispanic males made up 28.6% of qualifying Hispanic students, while Hispanic females were 71.4% of Hispanic students qualifying by Pathway II. Hispanic males were only 4.9% of all students in grades K-2 that qualified for the gifted program by Pathway II.

Hispanic females were 12.2% of all students qualifying by Pathway II. Of 61 Hispanic males referred, 59 Hispanic males did not qualify. Sixty-three Hispanic females in grades K-2 did not qualify by Pathway II. There were 109 of 122 non-Hispanic K-2 female students did not qualify by this pathway. Two Hispanic males (10.5% of all males), and zero of 24 Hispanic females (0.0% of all females) qualified by Pathway II in grades 3-5. Eligible Non-Hispanic males were 36.8%, and eligible Non-Hispanic females were 52.6% of all students that qualified by Pathway II. There were 41 students in grades K-2 and 19 students in grades 3-5 eligible by Pathway II.

**Asian Students by Pathway II.** In grades K-2, of 195 males tested 131 were Not Asian, and 64 were Asian. By Pathway II 13 (20.13%) of the 64 Asian male students became eligible for the gifted program. In grades K-2, of the 190 females evaluated, 138 were Not Asian, 52 were Asian. Five of the 52 K-2 Asian females qualified for the gifted program by Pathway II. Asian males made up 72.2% of qualifying Asian students, while Asian females were 27.8% of Asian students qualifying by Pathway II. Asian males were 31.7% of all students in grades K-2 that qualified for the gifted program by Pathway II. Asian females were 12.2% of all K-2 students qualifying by Pathway II. Though 64 were referred, 51 Asian males did not qualify. Forty-seven of 52 Asian females (90.3%) in grades K-2 did not qualify by Pathway II. For Non-Asian female students, that percentage was 90.5% that did not qualify by Pathway II.

Five Asian males (26.3% of all eligible males), and four of 45 Asian females (21.1% of all eligible females) qualified by Pathway II in grades 3-5. Eligible Non-Asian males were 21.1% of all students qualifying by Pathway II. Eligible Non-Asian females were 31.6% of all students qualifying by Pathway II. There were 41 total students in grades K-2 and 19 students in grades 3-5 eligible by Pathway II.

**White Students by Pathway II.** There were 28 White males evaluated in grades K-2. Two White males became eligible by Pathway II in grades K-2. Two of the 21 White females qualified for the gifted program by Pathway II. There were also two White males, which were 50% of qualifying White students. For females evaluated, 151 were Not White, 23 were White. White females were also 50% of White students qualifying by Pathway II. The percentage for White males and females within all students in grades K-2 that qualified was 4.9% in each of these subgroups. Though there were 28 White males referred, 26 White males did not qualify. Twenty-one of 23 White females (91.3%) in grades K-2 did not qualify by Pathway II. For Non-White female students, the percentage qualifying by Pathway II was 90.4%, almost equal to White females. No White males qualified by Pathway II. Three of 30 evaluated White females qualified by Pathway II in grades 3-5. Eligible White females were 100% of all White students in grades 3-5 that qualified by Pathway II. Eligible Non-White males were 56.3% of all non-white students qualifying by Pathway II. Eligible Non-White females were 43.8% of all Non-White students qualifying by Pathway II. Eligible White males at both grade levels were 3.3% of all students by Pathway II. Eligible White females were 8.3%. The 60 White and Non-White students qualifying by Pathway II were 6.94% of students evaluated.

Table 12

*Black Eligible and Non-Eligible Students by Pathway II by Grade Range*

Grade			Male			Female			Total		
			Not Black	Black	Total	Not Black	Black	Total	Not Black	Black	Total
K-2	Not Eligible	Count	55	15	70	51	13	64	106	28	134
		% within Black	51.9%	53.6%	52.2%	48.1%	46.4%	47.8%	100.0%	100.0%	100.0%
		% of Total	41.0%	11.2%	52.2%	38.1%	9.7%	47.8%	79.1%	20.9%	100.0%
	Eligible	Count	17	6	23	12	6	18	29	12	41
		% within Black	58.6%	50.0%	56.1%	41.4%	50.0%	43.9%	100.0%	100.0%	100.0%
		% of Total	41.5%	14.6%	56.1%	29.3%	14.6%	43.9%	70.7%	29.3%	100.0%
	Total	Count	72	21	93	63	19	82	135	40	175
		% within Black	53.3%	52.5%	53.1%	46.7%	47.5%	46.9%	100.0%	100.0%	100.0%
		% of Total	41.1%	12.0%	53.1%	36.0%	10.9%	46.9%	77.1%	22.9%	100.0%
3-5	Not Eligible	Count	41	17	58	28	12	40	69	29	98
		% within Black	59.4%	58.6%	59.2%	40.6%	41.4%	40.8%	100.0%	100.0%	100.0%
		% of Total	41.8%	17.3%	59.2%	28.6%	12.2%	40.8%	70.4%	29.6%	100.0%
	Eligible	Count	7	2	9	7	3	10	14	5	19
		% within Black	50.0%	40.0%	47.4%	50.0%	60.0%	52.6%	100.0%	100.0%	100.0%
		% of Total	36.8%	10.5%	47.4%	36.8%	15.8%	52.6%	73.7%	26.3%	100.0%
	Total	Count	48	19	67	35	15	50	83	34	117
		% within Black	57.8%	55.9%	57.3%	42.2%	44.1%	42.7%	100.0%	100.0%	100.0%
		% of Total	41.0%	16.2%	57.3%	29.9%	12.8%	42.7%	70.9%	29.1%	100.0%
Total	Not Eligible	Count	96	32	128	79	25	104	175	57	232
		% within Black	54.9%	56.1%	55.2%	45.1%	43.9%	44.8%	100.0%	100.0%	100.0%
		% of Total	41.4%	13.8%	55.2%	34.1%	10.8%	44.8%	75.4%	24.6%	100.0%
	Eligible	Count	24	8	32	19	9	28	43	17	60
		% within Black	55.8%	47.1%	53.3%	44.2%	52.9%	46.7%	100.0%	100.0%	100.0%
		% of Total	40.0%	13.3%	53.3%	31.7%	15.0%	46.7%	71.7%	28.3%	100.0%
	Total	Count	120	40	160	98	34	132	218	74	292
		% within Black	55.0%	54.1%	54.8%	45.0%	45.9%	45.2%	100.0%	100.0%	100.0%
		% of Total	41.1%	13.7%	54.8%	33.6%	11.6%	45.2%	74.7%	25.3%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI - Mental Ability, Achievement (Psychometric Method)



Table 13

*Hispanic Eligible and Non-Eligible Students by Pathway II by Grade Range*

Grade	Eligible		Male			Female			Total		
			Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total
K-2	0	Count	40	30	70	39	25	64	79	55	134
		% within Hispanic	50.6%	54.5%	52.2%	49.4%	45.5%	47.8%	100.0%	100.0%	100.0%
		% of Total	29.9%	22.4%	52.2%	29.1%	18.7%	47.8%	59.0%	41.0%	100.0%
	1	Count	21	2	23	13	5	18	34	7	41
		% within Hispanic	61.8%	28.6%	56.1%	38.2%	71.4%	43.9%	100.0%	100.0%	100.0%
		% of Total	51.2%	4.9%	56.1%	31.7%	12.2%	43.9%	82.9%	17.1%	100.0%
	Total	Count	61	32	93	52	30	82	113	62	175
		% within Hispanic	54.0%	51.6%	53.1%	46.0%	48.4%	46.9%	100.0%	100.0%	100.0%
		% of Total	34.9%	18.3%	53.1%	29.7%	17.1%	46.9%	64.6%	35.4%	100.0%
3-5	0	Count	34	24	58	30	10	40	64	34	98
		% within Hispanic	53.1%	70.6%	59.2%	46.9%	29.4%	40.8%	100.0%	100.0%	100.0%
		% of Total	34.7%	24.5%	59.2%	30.6%	10.2%	40.8%	65.3%	34.7%	100.0%
	1	Count	7	2	9	10	0	10	17	2	19
		% within Hispanic	41.2%	100.0%	47.4%	58.8%	0.0%	52.6%	100.0%	100.0%	100.0%
		% of Total	36.8%	10.5%	47.4%	52.6%	0.0%	52.6%	89.5%	10.5%	100.0%
	Total	Count	41	26	67	40	10	50	81	36	117
		% within Hispanic	50.6%	72.2%	57.3%	49.4%	27.8%	42.7%	100.0%	100.0%	100.0%
		% of Total	35.0%	22.2%	57.3%	34.2%	8.5%	42.7%	69.2%	30.8%	100.0%
Total	0	Count	74	54	128	69	35	104	143	89	232
		% within Hispanic	51.7%	60.7%	55.2%	48.3%	39.3%	44.8%	100.0%	100.0%	100.0%
		% of Total	31.9%	23.3%	55.2%	29.7%	15.1%	44.8%	61.6%	38.4%	100.0%
	1	Count	28	4	32	23	5	28	51	9	60
		% within Hispanic	54.9%	44.4%	53.3%	45.1%	55.6%	46.7%	100.0%	100.0%	100.0%
		% of Total	46.7%	6.7%	53.3%	38.3%	8.3%	46.7%	85.0%	15.0%	100.0%
	Total	Count	102	58	160	92	40	132	194	98	292
		% within Hispanic	52.6%	59.2%	54.8%	47.4%	40.8%	45.2%	100.0%	100.0%	100.0%
		% of Total	34.9%	19.9%	54.8%	31.5%	13.7%	45.2%	66.4%	33.6%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Mental Ability, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

Table 14

*Asian Eligible and Non-Eligible Students by Pathway II by Grade Range*

Grade	Eligible		Male			Female			Total		
			Not Asian	Asian	Total	Not Asian	Asian	Total	Not Asian	Asian	Total
K-2	0	Count	56	14	70	46	18	64	102	32	134
		% within	54.9%	43.8%	52.2%	45.1%	56.3%	47.8%	100.0%	100.0%	100.0%
		% of Total	41.8%	10.4%	52.2%	34.3%	13.4%	47.8%	76.1%	23.9%	100.0%
	1	Count	10	13	23	13	5	18	23	18	41
		% within	43.5%	72.2%	56.1%	56.5%	27.8%	43.9%	100.0%	100.0%	100.0%
		% of Total	24.4%	31.7%	56.1%	31.7%	12.2%	43.9%	56.1%	43.9%	100.0%
	Total	Count	66	27	93	59	23	82	125	50	175
		% within	52.8%	54.0%	53.1%	47.2%	46.0%	46.9%	100.0%	100.0%	100.0%
		% of Total	37.7%	15.4%	53.1%	33.7%	13.1%	46.9%	71.4%	28.6%	100.0%
3-5	0	Count	47	11	58	29	11	40	76	22	98
		% within	61.8%	50.0%	59.2%	38.2%	50.0%	40.8%	100.0%	100.0%	100.0%
		% of Total	48.0%	11.2%	59.2%	29.6%	11.2%	40.8%	77.6%	22.4%	100.0%
	1	Count	4	5	9	6	4	10	10	9	19
		% within	40.0%	55.6%	47.4%	60.0%	44.4%	52.6%	100.0%	100.0%	100.0%
		% of Total	21.1%	26.3%	47.4%	31.6%	21.1%	52.6%	52.6%	47.4%	100.0%
	Total	Count	51	16	67	35	15	50	86	31	117
		% within	59.3%	51.6%	57.3%	40.7%	48.4%	42.7%	100.0%	100.0%	100.0%
		% of Total	43.6%	13.7%	57.3%	29.9%	12.8%	42.7%	73.5%	26.5%	100.0%
Total	0	Count	103	25	128	75	29	104	178	54	232
		% within	57.9%	46.3%	55.2%	42.1%	53.7%	44.8%	100.0%	100.0%	100.0%
		% of Total	44.4%	10.8%	55.2%	32.3%	12.5%	44.8%	76.7%	23.3%	100.0%
	1	Count	14	18	32	19	9	28	33	27	60
		% within	42.4%	66.7%	53.3%	57.6%	33.3%	46.7%	100.0%	100.0%	100.0%
		% of Total	23.3%	30.0%	53.3%	31.7%	15.0%	46.7%	55.0%	45.0%	100.0%
	Total	Count	117	43	160	94	38	132	211	81	292
		% within	55.5%	53.1%	54.8%	44.5%	46.9%	45.2%	100.0%	100.0%	100.0%
		% of Total	40.1%	14.7%	54.8%	32.2%	13.0%	45.2%	72.3%	27.7%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI - Mental Ability, Achievement (Psychometric Method)



Table 15

*White Eligible and Non-Eligible Students by Pathway II by Grade Range*

Grade	Eligible		Male			Female			Not White	White	Total
			Not White	White	Total	Not White	White	Total			
K-2	0	Count	59	11	70	56	8	64	115	19	134
		% within White	51.3%	57.9%	52.2%	48.7%	42.1%	47.8%	100.0%	100.0%	100.0%
		% of Total	44.0%	8.2%	52.2%	41.8%	6.0%	47.8%	85.8%	14.2%	100.0%
	1	Count	21	2	23	16	2	18	37	4	41
		% within White	56.8%	50.0%	56.1%	43.2%	50.0%	43.9%	100.0%	100.0%	100.0%
		% of Total	51.2%	4.9%	56.1%	39.0%	4.9%	43.9%	90.2%	9.8%	100.0%
	Total	Count	80	13	93	72	10	82	152	23	175
		% within White	52.6%	56.5%	53.1%	47.4%	43.5%	46.9%	100.0%	100.0%	100.0%
		% of Total	45.7%	7.4%	53.1%	41.1%	5.7%	46.9%	86.9%	13.1%	100.0%
3-5	0	Count	52	6	58	33	7	40	85	13	98
		% within White	61.2%	46.2%	59.2%	38.8%	53.8%	40.8%	100.0%	100.0%	100.0%
		% of Total	53.1%	6.1%	59.2%	33.7%	7.1%	40.8%	86.7%	13.3%	100.0%
	1	Count	9	0	9	7	3	10	16	3	19
		% within White	56.3%	0.0%	47.4%	43.8%	100.0%	52.6%	100.0%	100.0%	100.0%
		% of Total	47.4%	0.0%	47.4%	36.8%	15.8%	52.6%	84.2%	15.8%	100.0%
	Total	Count	61	6	67	40	10	50	101	16	117
		% within White	60.4%	37.5%	57.3%	39.6%	62.5%	42.7%	100.0%	100.0%	100.0%
		% of Total	52.1%	5.1%	57.3%	34.2%	8.5%	42.7%	86.3%	13.7%	100.0%
Total	0	Count	111	17	128	89	15	104	200	32	232
		% within White	55.5%	53.1%	55.2%	44.5%	46.9%	44.8%	100.0%	100.0%	100.0%
		% of Total	47.8%	7.3%	55.2%	38.4%	6.5%	44.8%	86.2%	13.8%	100.0%
	1	Count	30	2	32	23	5	28	53	7	60
		% within White	56.6%	28.6%	53.3%	43.4%	71.4%	46.7%	100.0%	100.0%	100.0%
		% of Total	50.0%	3.3%	53.3%	38.3%	8.3%	46.7%	88.3%	11.7%	100.0%
	Total	Count	141	19	160	112	20	132	253	39	292
		% within White	55.7%	48.7%	54.8%	44.3%	51.3%	45.2%	100.0%	100.0%	100.0%
		% of Total	48.3%	6.5%	54.8%	38.4%	6.8%	45.2%	86.6%	13.4%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

### **Gifted Eligibility Pathway III Cross Tabulation Analysis**

Eligibility Pathway III requires students to achieve a qualifying score on a Mental Ability test, a Creativity test and a Motivation assessment. Below are the findings by race for Pathway III.

**Black Students by Pathway III.** There were 42 Black males evaluated in grades K-2. Four Black males became eligible by Pathway III in grades K-2. Two of the 47 Black females qualified for the gifted program by Pathway III. The four Black males were 66.7% of qualifying Black students. For females evaluated, 151 were Not Black, 47 were Black. Black females were 33.3% of Black K-2 students qualifying by Pathway III. The percentage for Black males and females within all students in grades K-2 that qualified was 17.4% and 8.7 respectively. Though 42 Black males were referred, 38 Black males did not qualify by Pathway III. Forty-five of 47 Black females (95.7% of Black females) in grades K-2 did not qualify by Pathway III. For Non-Black female students, the percentage not qualifying by Pathway III was 47.3% of all females.

In grades 3-5, three of 38 Black males qualified by Pathway III. In contrast, two of 112 Non-Black males qualified by Pathway III. Two of 40 evaluated Black females qualified by Pathway III in grades 3-5. Eligible Black females were 40%, and eligible Black males were 60% of all Black students in grades 3-5 that qualified by Pathway III. Eligible Non-Black males were 18.2% of all students qualifying by Pathway III. Eligible Non-Black females were 36.4% of all students qualifying by Pathway III. Eligible Black males at both grade levels were 27.3% of all

students by Pathway III. Eligible Black females were 18.2%. The 60 Black and Non-Black students qualifying by Pathway III were 6.94% of all students evaluated.

**Hispanic Students by Pathway III.** There were 61 Hispanic males evaluated in grades K-2. Two Hispanic males became eligible by Pathway III in grades K-2. Seven of the 68 Hispanic females qualified for the gifted program by Pathway III. The two Hispanic males in grades K-2 were 22.2% of qualifying Hispanic students. For females evaluated, 122 were Not Hispanic, and 68 were Hispanic. Hispanic females were 77.8% of Hispanic students qualifying by Pathway III. The percentage for Hispanic males and females within all students in grades K-2 that qualified was 34.8% and 30.4 respectively. Though 61 Hispanic males were referred, 59 (16.3%) of all students did not qualify by Pathway III. Sixty-one of 68 Hispanic females (89.7% of Hispanic females) in grades K-2 did not qualify by Pathway III. For Non-Hispanic female students, the percentage not qualifying by Pathway III was 32% of all females. In grades 3-5, none of the 50 Hispanic males qualified by Pathway III. In contrast, five of 100 Non-Hispanic males qualified by Pathway III. None of the 24 evaluated Hispanic females qualified by Pathway III in grades 3-5. Eligible Non-Hispanic males were 45.5% of all students qualifying by Pathway III. Eligible Non-Hispanic females were 54.5% of all students qualifying by Pathway III. Eligible Hispanic males at both grade levels were 5.9% of all students eligible by Pathway III. Eligible Hispanic females were 20.6%. The 34 Hispanic and Non-Hispanic students qualifying by Pathway III were 5.04% of all students evaluated.

**Asian Students by Pathway III.** There were 64 Asian males evaluated in grades K-2. Four Asian males became eligible by Pathway III in grades K-2. Three of the 52 Asian females

qualified for the gifted program by Pathway III. The four Asian males in grades K-2 were 57.1% of qualifying Asian students. For females evaluated, 138 were Not Asian, and 52 were Asian. Asian females were 42.9% of Asian students qualifying by Pathway III. The percentage for Asian males and females within all students in grades K-2 that qualified was 17.4% and 13% respectively. Though 64 Asian males were referred, 60 (16.6% of all students) who did not qualify by Pathway III. Forty-nine of 52 Asian females (13.5% of all students evaluated) in grades K-2 did not qualify by Pathway III. For Non-Asian female students, the percentage not qualifying by Pathway III was 35.4% of all students.

In grades 3-5, two of the 43 Asian males qualified by Pathway III. Three of 107 Non-Asian males qualified by Pathway III. Three of the 24 evaluated Asian females qualified by Pathway III in grades 3-5. Eligible Non-Asian males were 27.3% of all students qualifying by Pathway III. Eligible Non-Asian females were also 27.3% of all students qualifying by Pathway III. Eligible Asian males at both grade levels were 18.2% of all students eligible by Pathway III. Eligible Asian females were 27.3% of all eligible students by this pathway. The 34 Asian and Non-Asian students qualifying by Pathway III were 5.04% of all students evaluated.

**White Students by Pathway III.** There were 28 White males evaluated in grades K-2. No White males became eligible by Pathway III in grades K-2. One of the 23 White females qualified for the gifted program by Pathway III. Of the females evaluated, 167 were Not White, and 23 were White. White females were 4.3% of students qualifying by Pathway III. Twenty-two of 23 White females (95.65% of all white females evaluated) in grades, K-2 did not qualify by Pathway III. For Non-White female students, the percentage not qualifying by Pathway III was 42.8% of all students.

In grades 3-5, none of the 19 White males evaluated qualified by Pathway III. One of the 30 evaluated White females qualified by Pathway III in grades 3-5. Eligible Non-White males were 45.5% of all students qualifying by Pathway III. Eligible Non-White females were also 45.5% of all students qualifying by Pathway III. Eligible White males at both grade levels were 0.0% of all students eligible by Pathway III. Eligible White females were 9.1% of all students eligible by this pathway.

Table 16

*Black Eligible and Non-Eligible Students by Pathway III by Grade Range*

Grade	Eligible		Male			Female			Total		
			Not Black	Black	Total	Not Black	Black	Total	Not Black	Black	Total
K-2	Not Eligible	Count	55	15	70	51	13	64	106	28	134
		% within Black	51.9%	53.6%	52.2%	48.1%	46.4%	47.8%	100.0%	100.0%	100.0%
		% of Total	41.0%	11.2%	52.2%	38.1%	9.7%	47.8%	79.1%	20.9%	100.0%
	Eligible	Count	6	4	10	11	2	13	17	6	23
		% within Black	35.3%	66.7%	43.5%	64.7%	33.3%	56.5%	100.0%	100.0%	100.0%
		% of Total	26.1%	17.4%	43.5%	47.8%	8.7%	56.5%	73.9%	26.1%	100.0%
	Total	Count	61	19	80	62	15	77	123	34	157
		% within Black	49.6%	55.9%	51.0%	50.4%	44.1%	49.0%	100.0%	100.0%	100.0%
		% of Total	38.9%	12.1%	51.0%	39.5%	9.6%	49.0%	78.3%	21.7%	100.0%
3-5	Eligible	Count	41	17	58	28	12	40	69	29	98
		% within Black	59.4%	58.6%	59.2%	40.6%	41.4%	40.8%	100.0%	100.0%	100.0%
		% of Total	41.8%	17.3%	59.2%	28.6%	12.2%	40.8%	70.4%	29.6%	100.0%
	Not Eligible	Count	2	3	5	4	2	6	6	5	11
		% within Black	33.3%	60.0%	45.5%	66.7%	40.0%	54.5%	100.0%	100.0%	100.0%
		% of Total	18.2%	27.3%	45.5%	36.4%	18.2%	54.5%	54.5%	45.5%	100.0%
	Total	Count	43	20	63	32	14	46	75	34	109
		% within Black	57.3%	58.8%	57.8%	42.7%	41.2%	42.2%	100.0%	100.0%	100.0%
		% of Total	39.4%	18.3%	57.8%	29.4%	12.8%	42.2%	68.8%	31.2%	100.0%
Total	Eligible	Count	96	32	128	79	25	104	175	57	232
		% within Black	54.9%	56.1%	55.2%	45.1%	43.9%	44.8%	100.0%	100.0%	100.0%
		% of Total	41.4%	13.8%	55.2%	34.1%	10.8%	44.8%	75.4%	24.6%	100.0%
	Not Eligible	Count	8	7	15	15	4	19	23	11	34
		% within Black	34.8%	63.6%	44.1%	65.2%	36.4%	55.9%	100.0%	100.0%	100.0%
		% of Total	23.5%	20.6%	44.1%	44.1%	11.8%	55.9%	67.6%	32.4%	100.0%
	Total	Count	104	39	143	94	29	123	198	68	266
		% within Black	52.5%	57.4%	53.8%	47.5%	42.6%	46.2%	100.0%	100.0%	100.0%
		% of Total	39.1%	14.7%	53.8%	35.3%	10.9%	46.2%	74.4%	25.6%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

Table 17

*Hispanic Eligible and Non-Eligible Students by Pathway III by Grade Range*

			Male			Female			Total		
Grade	Eligible		Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total
K-2	Not	Count	40	30	70	39	25	64	79	55	134
	Eligible	% within Hispanic	50.6%	54.5%	52.2%	49.4%	45.5%	47.8%	100.0%	100.0%	100.0%
		% of Total	29.9%	22.4%	52.2%	29.1%	18.7%	47.8%	59.0%	41.0%	100.0%
	Eligible	Count	8	2	10	6	7	13	14	9	23
		% within Hispanic	57.1%	22.2%	43.5%	42.9%	77.8%	56.5%	100.0%	100.0%	100.0%
		% of Total	34.8%	8.7%	43.5%	26.1%	30.4%	56.5%	60.9%	39.1%	100.0%
	Total	Count	48	32	80	45	32	77	93	64	157
		% within Hispanic	51.6%	50.0%	51.0%	48.4%	50.0%	49.0%	100.0%	100.0%	100.0%
		% of Total	30.6%	20.4%	51.0%	28.7%	20.4%	49.0%	59.2%	40.8%	100.0%
3-5	Not	Count	34	24	58	30	10	40	64	34	98
	Eligible	% within Hispanic	53.1%	70.6%	59.2%	46.9%	29.4%	40.8%	100.0%	100.0%	100.0%
		% of Total	34.7%	24.5%	59.2%	30.6%	10.2%	40.8%	65.3%	34.7%	100.0%
	Eligible	Count	5	0	5	6	0	6	11	0	11
		% within Hispanic	45.5%	0.0%	45.5%	54.5%	0.0%	54.5%	100.0%	0.0%	100.0%
		% of Total	45.5%	0.0%	45.5%	54.5%	0.0%	54.5%	100.0%	0.0%	100.0%
	Total	Count	39	24	63	36	10	46	75	34	109
		% within Hispanic	52.0%	70.6%	57.8%	48.0%	29.4%	42.2%	100.0%	100.0%	100.0%
		% of Total	35.8%	22.0%	57.8%	33.0%	9.2%	42.2%	68.8%	31.2%	100.0%
Total	Not	Count	74	54	128	69	35	104	143	89	232
	Eligible	% within Hispanic	51.7%	60.7%	55.2%	48.3%	39.3%	44.8%	100.0%	100.0%	100.0%
		% of Total	31.9%	23.3%	55.2%	29.7%	15.1%	44.8%	61.6%	38.4%	100.0%
	Eligible	Count	13	2	15	12	7	19	25	9	34
		% within Hispanic	52.0%	22.2%	44.1%	48.0%	77.8%	55.9%	100.0%	100.0%	100.0%
		% of Total	38.2%	5.9%	44.1%	35.3%	20.6%	55.9%	73.5%	26.5%	100.0%
	Total	Count	87	56	143	81	42	123	168	98	266
		% within Hispanic	51.8%	57.1%	53.8%	48.2%	42.9%	46.2%	100.0%	100.0%	100.0%
		% of Total	32.7%	21.1%	53.8%	30.5%	15.8%	46.2%	63.2%	36.8%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

Table 18

*Asian Eligible and Non-Eligible Students by Pathway III by Grade Range*

Grade	Eligible		Male			Female			Total		
			Not Asian	Asian	Total	Not Asian	Asian	Total	Not Asian	Asian	Total
K-2	Not	Count	56	14	70	46	18	64	102	32	134
	Eligible	% within Asian	54.9%	43.8%	52.2%	45.1%	56.3%	47.8%	100.0%	100.0%	100.0%
		% of Total	41.8%	10.4%	52.2%	34.3%	13.4%	47.8%	76.1%	23.9%	100.0%
	Eligible	Count	6	4	10	10	3	13	16	7	23
		% within Asian	37.5%	57.1%	43.5%	62.5%	42.9%	56.5%	100.0%	100.0%	100.0%
		% of Total	26.1%	17.4%	43.5%	43.5%	13.0%	56.5%	69.6%	30.4%	100.0%
	Total	Count	62	18	80	56	21	77	118	39	157
		% within Asian	52.5%	46.2%	51.0%	47.5%	53.8%	49.0%	100.0%	100.0%	100.0%
		% of Total	39.5%	11.5%	51.0%	35.7%	13.4%	49.0%	75.2%	24.8%	100.0%
3-5	Not	Count	47	11	58	29	11	40	76	22	98
	Eligible	% within Asian	61.8%	50.0%	59.2%	38.2%	50.0%	40.8%	100.0%	100.0%	100.0%
		% of Total	48.0%	11.2%	59.2%	29.6%	11.2%	40.8%	77.6%	22.4%	100.0%
	Eligible	Count	3	2	5	3	3	6	6	5	11
		% within Asian	50.0%	40.0%	45.5%	50.0%	60.0%	54.5%	100.0%	100.0%	100.0%
		% of Total	27.3%	18.2%	45.5%	27.3%	27.3%	54.5%	54.5%	45.5%	100.0%
	Total	Count	50	13	63	32	14	46	82	27	109
		% within Asian	61.0%	48.1%	57.8%	39.0%	51.9%	42.2%	100.0%	100.0%	100.0%
		% of Total	45.9%	11.9%	57.8%	29.4%	12.8%	42.2%	75.2%	24.8%	100.0%
Total	Not	Count	103	25	128	75	29	104	178	54	232
	Eligible	% within Asian	57.9%	46.3%	55.2%	42.1%	53.7%	44.8%	100.0%	100.0%	100.0%
		% of Total	44.4%	10.8%	55.2%	32.3%	12.5%	44.8%	76.7%	23.3%	100.0%
	Eligible	Count	9	6	15	13	6	19	22	12	34
		% within Asian	40.9%	50.0%	44.1%	59.1%	50.0%	55.9%	100.0%	100.0%	100.0%
		% of Total	26.5%	17.6%	44.1%	38.2%	17.6%	55.9%	64.7%	35.3%	100.0%
	Total	Count	112	31	143	88	35	123	200	66	266
		% within Asian	56.0%	47.0%	53.8%	44.0%	53.0%	46.2%	100.0%	100.0%	100.0%
		% of Total	42.1%	11.7%	53.8%	33.1%	13.2%	46.2%	75.2%	24.8%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)



Table 19

*White Eligible and Non-Eligible Students by Pathway III by Grade Range*

Grade	Eligible		Male			Female			Total		
			Not White	White	Total	Not White	White	Total	Not White	White	Total
K-2	Not Eligible	Count	59	11	70	56	8	64	115	19	134
		% within White	51.3%	57.9%	52.2%	48.7%	42.1%	47.8%	100.0%	100.0%	100.0%
		% of Total	44.0%	8.2%	52.2%	41.8%	6.0%	47.8%	85.8%	14.2%	100.0%
	Eligible	Count	10	0	10	12	1	13	22	1	23
		% within White	45.5%	0.0%	43.5%	54.5%	100.0%	56.5%	100.0%	100.0%	100.0%
		% of Total	43.5%	0.0%	43.5%	52.2%	4.3%	56.5%	95.7%	4.3%	100.0%
	Total	Count	69	11	80	68	9	77	137	20	157
		% within White	50.4%	55.0%	51.0%	49.6%	45.0%	49.0%	100.0%	100.0%	100.0%
		% of Total	43.9%	7.0%	51.0%	43.3%	5.7%	49.0%	87.3%	12.7%	100.0%
3-5	Not Eligible	Count	52	6	58	33	7	40	85	13	98
		% within White	61.2%	46.2%	59.2%	38.8%	53.8%	40.8%	100.0%	100.0%	100.0%
		% of Total	53.1%	6.1%	59.2%	33.7%	7.1%	40.8%	86.7%	13.3%	100.0%
	Eligible	Count	5	0	5	5	1	6	10	1	11
		% within White	50.0%	0.0%	45.5%	50.0%	100.0%	54.5%	100.0%	100.0%	100.0%
		% of Total	45.5%	0.0%	45.5%	45.5%	9.1%	54.5%	90.9%	9.1%	100.0%
	Total	Count	57	6	63	38	8	46	95	14	109
		% within White	60.0%	42.9%	57.8%	40.0%	57.1%	42.2%	100.0%	100.0%	100.0%
		% of Total	52.3%	5.5%	57.8%	34.9%	7.3%	42.2%	87.2%	12.8%	100.0%
Total	Not Eligible	Count	111	17	128	89	15	104	200	32	232
		% within White	55.5%	53.1%	55.2%	44.5%	46.9%	44.8%	100.0%	100.0%	100.0%
		% of Total	47.8%	7.3%	55.2%	38.4%	6.5%	44.8%	86.2%	13.8%	100.0%
	Eligible	Count	15	0	15	17	2	19	32	2	34
		% within White	46.9%	0.0%	44.1%	53.1%	100.0%	55.9%	100.0%	100.0%	100.0%
		% of Total	44.1%	0.0%	44.1%	50.0%	5.9%	55.9%	94.1%	5.9%	100.0%
	Total	Count	126	17	143	106	17	123	232	34	266
		% within White	54.3%	50.0%	53.8%	45.7%	50.0%	46.2%	100.0%	100.0%	100.0%
		% of Total	47.4%	6.4%	53.8%	39.8%	6.4%	46.2%	87.2%	12.8%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI - Mental Ability, Achievement (Psychometric Method)

### **Gifted Eligibility Pathway IV Cross Tabulation Analysis**

Gifted Eligibility Pathway IV requires that students achieve a 90% or above on a standardized nationally-normed, Achievement Reading or Math Test. Students must also achieve a 90% or above on a standardized nationally-normed Creativity assessment, and 90% or above on a Motivation assessment.

**Black Students by Pathway IV.** There were 42 Black males evaluated in grades K-2. Thirteen Black males became eligible by Pathway IV in grades K-2. Twenty of the 47 Black females qualified for the gifted program by Pathway IV. Of the K-2 females evaluated, 143 were Not Black, and 47 were Black. Black females were 19.6% of K-2 students qualifying by Pathway IV. Twenty-seven of 47 Black females (57.4% of all Black females evaluated) in grades K-2 did not qualify by Pathway IV. For Non-Black female students, the percentage not qualifying by Pathway IV was 74.1%. The percentage of Black k-2 students that qualified by Pathway IV was 19.6% of all students. In grades K-2, 102 students qualified by Pathway IV.

In grades 3-5, Seven of the 38 Black males evaluated qualified by Pathway IV. Twelve of the 40 evaluated Black females (30%) qualified by Pathway IV in grades 3-5. Eligible Non-Black males were 27.5% of all students qualifying by Pathway IV. Eligible Non-Black females were also 44.9% of all students qualifying by Pathway IV. Eligible Black males at both grade levels were 10.1% of all students eligible by Pathway IV. Eligible Black females were 17.4% of all students eligible by this pathway. Twenty Black males and 32 Black females qualified for the gifted program by Pathway IV. In grades 3-5, sixty-nine students became eligible by this pathway. In all, 171 out of 674 students evaluated became eligible by Pathway IV.

**Hispanic Students by Pathway IV.** There were 61 Hispanic males evaluated in grades K-2. Seventeen Hispanic males became eligible by Pathway IV in grades K-2. Nineteen of the 68 Hispanic females qualified for the gifted program by Pathway IV. Of the K-2 females evaluated, 122 were Not Hispanic. Eligible Hispanic females were 27.9% of K-2 Hispanic female students qualifying by Pathway IV. Forty-nine of 68 Hispanic females (72% of all Hispanic females evaluated) in grades K-2 did not qualify by Pathway IV. For Non-Hispanic female students, the percentage not qualifying by Pathway IV was 68.85%. The percentage of Hispanic male and female K-2 students that qualified by Pathway IV was 16.7% and 18.6 respectively for all students evaluated. In grades K-2, 102 students qualified by Pathway IV.

In grades 3-5, 10 of the 50 Hispanic males evaluated qualified by Pathway IV. Nine of the 24 evaluated Hispanic females (37.5%) qualified by Pathway IV in grades 3-5. Eligible Hispanic Males students in grades 3-5 were 14.5% of all students eligible by Pathway IV. Eligible Hispanic females, 13.0%. Eligible Non-Hispanic males were 25.7% of all students qualifying by Pathway IV. Eligible Non-Hispanic females were also 42.1% of all students qualifying by Pathway IV. Eligible Hispanic males at both grade levels were 15.8% of all students eligible by Pathway IV. Eligible Hispanic females were 16.4% of all students eligible by this pathway. Twenty-seven Hispanic males and 28 Hispanic females qualified for the gifted program by Pathway IV. In grades 3-5, sixty-nine students became eligible by this pathway. In all 171 out of 674 students evaluated became eligible by Pathway IV.

**Asian Students by Pathway IV.** There were 64 Asian males evaluated in grades K-2. Ten Asian males became eligible by Pathway IV in grades K-2. Thirteen of the 52 Asian

females qualified for the gifted program by Pathway IV. Of the K-2 females evaluated, 138 were Not Asian. Asian females were 6.84% of all K-2 female students qualifying by Pathway IV. Thirty-nine of 52 Asian females (75% of all Asian females evaluated) in grades K-2 did not qualify by Pathway IV. For Non-Asian female students, the percentage not qualifying by Pathway IV was 68.11%. The percentage of Asian male and female K-2 students that qualified by Pathway IV was 9.8% and 12.7% respectively for all K-2 students evaluated. In grades K-2, 102 students qualified by Pathway IV.

In grades 3-5, 6 of the 43 Asian males evaluated qualified by Pathway IV. Twelve of the 45 evaluated Asian females (26.6%) qualified by Pathway IV in grades 3-5. Eligible Asian Males students in grades 3-5 were 8.7% of all students eligible by Pathway IV. Eligible Asian females were 17.4%. Eligible Non-Asian males were 29% of all students qualifying by Pathway IV. Eligible Non-Asian females were also 44.9% of all students qualifying by Pathway IV. Eligible Asian males at both grade levels were 9.4% of all students eligible by Pathway IV. Eligible Asian females were 14.6% of all students eligible by this pathway. Sixteen Asian males and 25 Asian females qualified for the gifted program by Pathway IV.

**White Students by Pathway IV.** There were 28 White males evaluated in grades K-2. Five White males became eligible by Pathway IV in grades K-2. Five of the 23 White females qualified for the gifted program by Pathway IV. Of the K-2 females evaluated, 167 were Not White. White females were 4.9% all of K-2 students qualifying by Pathway IV. One hundred fifteen of 167 White females (75% of all White females evaluated) in grades K-2 did not qualify by Pathway IV. For Non-White female students, the percentage not qualifying by Pathway IV

was 68.86%. The percentage of White male and White female K-2 students that qualified by Pathway IV was 4.9% for both subgroups within all K-2 students evaluated.

In grades 3-5, three of the 19 White males evaluated qualified by Pathway IV. Ten of the 30 White females (26.6%) evaluated, qualified by Pathway IV in grades 3-5. Eligible White Males students in grades 3-5 were 4.3% of all students eligible by Pathway IV. Eligible White females were 14.5%. Eligible Non-White males were 33.3% of all students qualifying by Pathway IV. Eligible Non-White females were also 47.8% of all students qualifying by Pathway IV. Eligible White males at both grade levels were 4.7% of all students eligible by Pathway IV. Eligible White females were 8.8% of all students eligible by this pathway. Eight White males and 15 White females qualified for the gifted program by Pathway IV.

Table 20

*Black Eligible and Non-Eligible Students by Pathway IV by Grade Range*

Grade	Eligible	Male			Female			Total		
		Not Black	Black	Total	Not Black	Black	Total	Not Black	Black	Total
K-2	Not Eligible	Count	55	15	70	51	13	64	106	134
		% within Black	51.9%	53.6%	52.2%	48.1%	46.4%	47.8%	100.0%	100.0%
		% of Total	41.0%	11.2%	52.2%	38.1%	9.7%	47.8%	79.1%	20.9%
	Eligible	Count	32	13	45	37	20	57	69	102
		% within Black	46.4%	39.4%	44.1%	53.6%	60.6%	55.9%	100.0%	100.0%
		% of Total	31.4%	12.7%	44.1%	36.3%	19.6%	55.9%	67.6%	32.4%
	Total	Count	87	28	115	88	33	121	175	236
		% within Black	49.7%	45.9%	48.7%	50.3%	54.1%	51.3%	100.0%	100.0%
		% of Total	36.9%	11.9%	48.7%	37.3%	14.0%	51.3%	74.2%	25.8%
3-5	Not Eligible	Count	41	17	58	28	12	40	69	98
		% within Black	59.4%	58.6%	59.2%	40.6%	41.4%	40.8%	100.0%	100.0%
		% of Total	41.8%	17.3%	59.2%	28.6%	12.2%	40.8%	70.4%	29.6%
	Eligible	Count	19	7	26	31	12	43	50	69
		% within Black	38.0%	36.8%	37.7%	62.0%	63.2%	62.3%	100.0%	100.0%
		% of Total	27.5%	10.1%	37.7%	44.9%	17.4%	62.3%	72.5%	27.5%
	Total	Count	60	24	84	59	24	83	119	167
		% within Black	50.4%	50.0%	50.3%	49.6%	50.0%	49.7%	100.0%	100.0%
		% of Total	35.9%	14.4%	50.3%	35.3%	14.4%	49.7%	71.3%	28.7%
Total	Not Eligible	Count	96	32	128	79	25	104	175	232
		% within Black	54.9%	56.1%	55.2%	45.1%	43.9%	44.8%	100.0%	100.0%
		% of Total	41.4%	13.8%	55.2%	34.1%	10.8%	44.8%	75.4%	24.6%
	Eligible	Count	51	20	71	68	32	100	119	171
		% within Black	42.9%	38.5%	41.5%	57.1%	61.5%	58.5%	100.0%	100.0%
		% of Total	29.8%	11.7%	41.5%	39.8%	18.7%	58.5%	69.6%	30.4%
	Total	Count	147	52	199	147	57	204	294	403
		% within Black	50.0%	47.7%	49.4%	50.0%	52.3%	50.6%	100.0%	100.0%
		% of Total	36.5%	12.9%	49.4%	36.5%	14.1%	50.6%	73.0%	27.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI - Mental Ability, Achievement (Psychometric Method)

Table 21

*Hispanic Eligible and Non-Eligible Students by Pathway IV by Grade Range*

Grade	Eligible	Male			Female					
		Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total
K-2	Not Eligible	Count	40	30	70	39	25	64	79	134
		% within Hispanic	50.6%	54.5%	52.2%	49.4%	45.5%	47.8%	100.0%	100.0%
		% of Total	29.9%	22.4%	52.2%	29.1%	18.7%	47.8%	59.0%	41.0%
	Eligible	Count	28	17	45	38	19	57	66	102
		% within Hispanic	42.4%	47.2%	44.1%	57.6%	52.8%	55.9%	100.0%	100.0%
		% of Total	27.5%	16.7%	44.1%	37.3%	18.6%	55.9%	64.7%	35.3%
	Total	Count	68	47	115	77	44	121	145	236
		% within Hispanic	46.9%	51.6%	48.7%	53.1%	48.4%	51.3%	100.0%	100.0%
3-5	Not Eligible	Count	34	24	58	30	10	40	64	98
		% within Hispanic	53.1%	70.6%	59.2%	46.9%	29.4%	40.8%	100.0%	100.0%
		% of Total	34.7%	24.5%	59.2%	30.6%	10.2%	40.8%	65.3%	34.7%
	Eligible	Count	16	10	26	34	9	43	50	69
		% within Hispanic	32.0%	52.6%	37.7%	68.0%	47.4%	62.3%	100.0%	100.0%
		% of Total	23.2%	14.5%	37.7%	49.3%	13.0%	62.3%	72.5%	27.5%
	Total	Count	50	34	84	64	19	83	114	167
		% within Hispanic	43.9%	64.2%	50.3%	56.1%	35.8%	49.7%	100.0%	100.0%
Total	Not Eligible	Count	74	54	128	69	35	104	143	232
		% within Hispanic	51.7%	60.7%	55.2%	48.3%	39.3%	44.8%	100.0%	100.0%
		% of Total	31.9%	23.3%	55.2%	29.7%	15.1%	44.8%	61.6%	38.4%
	Eligible	Count	44	27	71	72	28	100	116	171
		% within Hispanic	37.9%	49.1%	41.5%	62.1%	50.9%	58.5%	100.0%	100.0%
		% of Total	25.7%	15.8%	41.5%	42.1%	16.4%	58.5%	67.8%	32.2%
	Total	Count	118	81	199	141	63	204	259	403
		% within Hispanic	45.6%	56.3%	49.4%	54.4%	43.8%	50.6%	100.0%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI - Mental Ability, Achievement (Psychometric Method)

Table 22

*Asian Eligible and Non-Eligible Students by Pathway IV by Grade Range*

Grade	Eligible		Male			Female			Total		
			Not Asian	Asian	Total	Not Asian	Asian	Total	Not Asian	Asian	Total
K-2	Not Eligible	Count	56	14	70	46	18	64	102	32	134
		% within Asian	54.9%	43.8%	52.2%	45.1%	56.3%	47.8%	100.0%	100.0%	100.0%
		% of Total	41.8%	10.4%	52.2%	34.3%	13.4%	47.8%	76.1%	23.9%	100.0%
	Eligible	Count	35	10	45	44	13	57	79	23	102
		% within Asian	44.3%	43.5%	44.1%	55.7%	56.5%	55.9%	100.0%	100.0%	100.0%
		% of Total	34.3%	9.8%	44.1%	43.1%	12.7%	55.9%	77.5%	22.5%	100.0%
	Total	Count	91	24	115	90	31	121	181	55	236
		% within Asian	50.3%	43.6%	48.7%	49.7%	56.4%	51.3%	100.0%	100.0%	100.0%
		% of Total	38.6%	10.2%	48.7%	38.1%	13.1%	51.3%	76.7%	23.3%	100.0%
3-5	Not Eligible	Count	47	11	58	29	11	40	76	22	98
		% within Asian	61.8%	50.0%	59.2%	38.2%	50.0%	40.8%	100.0%	100.0%	100.0%
		% of Total	48.0%	11.2%	59.2%	29.6%	11.2%	40.8%	77.6%	22.4%	100.0%
	Eligible	Count	20	6	26	31	12	43	51	18	69
		% within Asian	39.2%	33.3%	37.7%	60.8%	66.7%	62.3%	100.0%	100.0%	100.0%
		% of Total	29.0%	8.7%	37.7%	44.9%	17.4%	62.3%	73.9%	26.1%	100.0%
	Total	Count	67	17	84	60	23	83	127	40	167
		% within Asian	52.8%	42.5%	50.3%	47.2%	57.5%	49.7%	100.0%	100.0%	100.0%
		% of Total	40.1%	10.2%	50.3%	35.9%	13.8%	49.7%	76.0%	24.0%	100.0%
Total	Not Eligible	Count	103	25	128	75	29	104	178	54	232
		% within Asian	57.9%	46.3%	55.2%	42.1%	53.7%	44.8%	100.0%	100.0%	100.0%
		% of Total	44.4%	10.8%	55.2%	32.3%	12.5%	44.8%	76.7%	23.3%	100.0%
	Eligible	Count	55	16	71	75	25	100	130	41	171
		% within Asian	42.3%	39.0%	41.5%	57.7%	61.0%	58.5%	100.0%	100.0%	100.0%
		% of Total	32.2%	9.4%	41.5%	43.9%	14.6%	58.5%	76.0%	24.0%	100.0%
	Total	Count	158	41	199	150	54	204	308	95	403
		% within Asian	51.3%	43.2%	49.4%	48.7%	56.8%	50.6%	100.0%	100.0%	100.0%
		% of Total	39.2%	10.2%	49.4%	37.2%	13.4%	50.6%	76.4%	23.6%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI - Mental Ability, Achievement (Psychometric Method)



Table 23

*White Eligible and Non-Eligible Students by Pathway IV by Grade Range*

			Male			Female					
Grade	Eligible		Not White	White	Total	Not White	White	Total	Not White	White	Total
K-2	Not Eligible	Count	59	11	70	56	8	64	115	19	134
		% within White	51.3%	57.9%	52.2%	48.7%	42.1%	47.8%	100.0%	100.0%	100.0%
	% of Total	44.0%	8.2%	52.2%	41.8%	6.0%	47.8%	85.8%	14.2%	100.0%	
	Eligible	Count	40	5	45	52	5	57	92	10	102
		% within White	43.5%	50.0%	44.1%	56.5%	50.0%	55.9%	100.0%	100.0%	100.0%
	% of Total	39.2%	4.9%	44.1%	51.0%	4.9%	55.9%	90.2%	9.8%	100.0%	
	Total	Count	99	16	115	108	13	121	207	29	236
		% within White	47.8%	55.2%	48.7%	52.2%	44.8%	51.3%	100.0%	100.0%	100.0%
% of Total	41.9%	6.8%	48.7%	45.8%	5.5%	51.3%	87.7%	12.3%	100.0%		
3-5	Not Eligible	Count	52	6	58	33	7	40	85	13	98
		% within White	61.2%	46.2%	59.2%	38.8%	53.8%	40.8%	100.0%	100.0%	100.0%
	% of Total	53.1%	6.1%	59.2%	33.7%	7.1%	40.8%	86.7%	13.3%	100.0%	
	Eligible	Count	23	3	26	33	10	43	56	13	69
		% within White	41.1%	23.1%	37.7%	58.9%	76.9%	62.3%	100.0%	100.0%	100.0%
	% of Total	33.3%	4.3%	37.7%	47.8%	14.5%	62.3%	81.2%	18.8%	100.0%	
	Total	Count	75	9	84	66	17	83	141	26	167
		% within White	53.2%	34.6%	50.3%	46.8%	65.4%	49.7%	100.0%	100.0%	100.0%
% of Total	44.9%	5.4%	50.3%	39.5%	10.2%	49.7%	84.4%	15.6%	100.0%		
Total	Not Eligible	Count	111	17	128	89	15	104	200	32	232
		% within White	55.5%	53.1%	55.2%	44.5%	46.9%	44.8%	100.0%	100.0%	100.0%
	% of Total	47.8%	7.3%	55.2%	38.4%	6.5%	44.8%	86.2%	13.8%	100.0%	
	Eligible	Count	63	8	71	85	15	100	148	23	171
		% within White	42.6%	34.8%	41.5%	57.4%	65.2%	58.5%	100.0%	100.0%	100.0%
	% of Total	36.8%	4.7%	41.5%	49.7%	8.8%	58.5%	86.5%	13.5%	100.0%	
	Total	Count	174	25	199	174	30	204	348	55	403
		% within White	50.0%	45.5%	49.4%	50.0%	54.5%	50.6%	100.0%	100.0%	100.0%
% of Total	43.2%	6.2%	49.4%	43.2%	7.4%	50.6%	86.4%	13.6%	100.0%		

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI - Mental Ability, Achievement (Psychometric Method)

### **Gifted Eligibility Pathway V Cross Tabulation Analysis**

Eligibility Pathway II requires students to achieve a qualifying score on a Mental Ability test, an Achievement test, and Motivation assessment.

**Black Students by Pathway V.** There were 42 Black males evaluated in grades K-2. One Black male became eligible by Pathway V in grades K-2. Two of the 47 Black females qualified for the gifted program by Pathway V. Of the K-2 females evaluated, 143 were Not Black. Black females were 1.05% of all K-2 Black female students qualifying by Pathway V and. There were 128 Non-Black females, who did not qualify by eligibility Pathway V. For Non-Black female students, the percentage not qualifying by Pathway V was 89.51%. The percentage of Black males within all students that qualified by Pathway V is 3.1%. Black female students in grades K-2 that qualified were 6.3% of all qualifying students.

In grades 3-5, four of the 38 Black males evaluated qualified by Pathway V. Five of the 40 Black females evaluated (12.5%), qualified by Pathway V in grades 3-5. Eligible Black Males students in grades 3-5 were 8.5% of all students eligible by Pathway V. Eligible Black females were 10.6%. Eligible Non-Black males were 57.4% of all students qualifying by Pathway V. Eligible Non-Black females were also 23.4% of all students qualifying by Pathway V. Five Black males and seven Black females qualified for the gifted program by Pathway V.

**Hispanic Students by Pathway V.** Of 61 K-2 Hispanic males eligible for the gifted program, five qualified through Pathway V. Seven of the 68 Hispanic females qualified for the gifted program by Pathway V. Of the K-2 females evaluated, 122 were Not Hispanic. Hispanic

females were 3.68% of all K-2 female students qualifying by Pathway V. There were 122 Non-Hispanic females, who did not qualify by eligibility Pathway V. For Non-Hispanic female students, the percentage not qualifying by Pathway V compared to all other females was 58.94%. The percentage of Hispanic males within all students that qualified by Pathway V is 15.6%. Hispanic female students in grades K-2 that qualified were 21.9% of all qualifying students.

In grades 3-5, Seven of the 50 Hispanic males evaluated qualified by Pathway V. One Hispanic female of 24 females qualified by Pathway V in grades 3-5. Eligible Hispanic Males students in grades 3-5 were 14.9% of all students eligible by Pathway V. Eligible Hispanic females were 2.1%. Eligible Non-Hispanic males were 51.1% of all students qualifying by Pathway V. Eligible Non-Hispanic females were also 31.9% of all students qualifying by Pathway V. Twelve Hispanic males and eight Hispanic females from all grade levels qualified for the gifted program by Pathway V.

**Asian Students by Pathway V.** There were eight eligible Asian males in grades K-2, that qualified through Pathway V. Six of the 52 Asian females qualified for the gifted program by Pathway V. Of the K-2 females evaluated, 138 were Not Asian. Asian females were 3.15% of all K-2 female students qualifying by Pathway V. There were 127 Non-Asian females, who did not qualify by eligibility Pathway V. For Non-Asian female students, the percentage not qualifying by Pathway V compared to all other females was 66.84%. The percentage of Asian males within all K-2 students that qualified by Pathway V is 21.9%. Asian female students in grades K-2 that qualified were 18.8% of all qualifying students.

In grades 3-5, 14 of the 43 Asian males evaluated qualified by Pathway V. Nine Asian females of 45 females qualified by Pathway V in grades 3-5.

Eligible Asian Males students in grades 3-5 were 29.8% of all students eligible by Pathway V. Eligible Asian females were 19.1%. Eligible Non-Asian males were 36.2% of all students qualifying by Pathway V. Eligible Non-Asian females were also 14.9% of all students qualifying by Pathway V. Twenty-two Asian males and 15 Asian females from all grade levels qualified for the gifted program by Pathway V.

**White Students by Pathway V.** There was one eligible White male in grades K-2, that qualified through Pathway V. Two of the 23 White females qualified for the gifted program by Pathway V. Of the K-2 females evaluated, 167 were Not White. White females were 8.69% of all K-2 female students qualifying by Pathway V. There were 152 Non-White females that did not qualify by eligibility Pathway V. For Non-White female students, the percentage not qualifying by Pathway V compared to all other females was 80%. The percentage of White males within all K-2 male students that qualified by Pathway V is 6.6%. White female students in grades K-2 that qualified were 6.3% of all K-2 qualifying students.

In grades 3-5, six of the 19 White males evaluated qualified by Pathway V. One White females of 30 females qualified by Pathway V in grades 3-5. Eligible White Males students in grades 3-5 were 12.8% of all students eligible by Pathway V. Eligible White females were 2.1%. Eligible Non-White males were 53.2% of all students qualifying by Pathway V. Eligible Non-White females were also 31.9% of all students qualifying by Pathway V. Seven White males and three White females from all grade levels qualified for the gifted program by Pathway V.

Table 24

*Black Eligible and Non-Eligible Students by Pathway V by Grade Range*

		Male			Female						
Grade	Eligible	Not Black	Black	Total	Not Black	Black	Total	Not Black	Black	Total	
K-2	Not Eligible	Count	55	15	70	51	13	64	106	28	134
		% within Black	51.9%	53.6%	52.2%	48.1%	46.4%	47.8%	100.0%	100.0%	100.0%
		% of Total	41.0%	11.2%	52.2%	38.1%	9.7%	47.8%	79.1%	20.9%	100.0%
	Eligible	Count	14	1	15	15	2	17	29	3	32
		% within Black	48.3%	33.3%	46.9%	51.7%	66.7%	53.1%	100.0%	100.0%	100.0%
		% of Total	43.8%	3.1%	46.9%	46.9%	6.3%	53.1%	90.6%	9.4%	100.0%
	Total	Count	69	16	85	66	15	81	135	31	166
		% within Black	51.1%	51.6%	51.2%	48.9%	48.4%	48.8%	100.0%	100.0%	100.0%
	% of Total	41.6%	9.6%	51.2%	39.8%	9.0%	48.8%	81.3%	18.7%	100.0%	
3-5	Not Eligible	Count	41	17	58	28	12	40	69	29	98
		% within Black	59.4%	58.6%	59.2%	40.6%	41.4%	40.8%	100.0%	100.0%	100.0%
		% of Total	41.8%	17.3%	59.2%	28.6%	12.2%	40.8%	70.4%	29.6%	100.0%
	Eligible	Count	27	4	31	11	5	16	38	9	47
		% within Black	71.1%	44.4%	66.0%	28.9%	55.6%	34.0%	100.0%	100.0%	100.0%
		% of Total	57.4%	8.5%	66.0%	23.4%	10.6%	34.0%	80.9%	19.1%	100.0%
	Total	Count	68	21	89	39	17	56	107	38	145
		% within Black	63.6%	55.3%	61.4%	36.4%	44.7%	38.6%	100.0%	100.0%	100.0%
	% of Total	46.9%	14.5%	61.4%	26.9%	11.7%	38.6%	73.8%	26.2%	100.0%	
Total	Not Eligible	Count	96	32	128	79	25	104	175	57	232
		% within Black	54.9%	56.1%	55.2%	45.1%	43.9%	44.8%	100.0%	100.0%	100.0%
		% of Total	41.4%	13.8%	55.2%	34.1%	10.8%	44.8%	75.4%	24.6%	100.0%
	Eligible	Count	41	5	46	26	7	33	67	12	79
		% within Black	61.2%	41.7%	58.2%	38.8%	58.3%	41.8%	100.0%	100.0%	100.0%
		% of Total	51.9%	6.3%	58.2%	32.9%	8.9%	41.8%	84.8%	15.2%	100.0%
	Total	Count	137	37	174	105	32	137	242	69	311
		% within Black	56.6%	53.6%	55.9%	43.4%	46.4%	44.1%	100.0%	100.0%	100.0%
	% of Total	44.1%	11.9%	55.9%	33.8%	10.3%	44.1%	77.8%	22.2%	100.0%	

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI - Mental Ability, Achievement (Psychometric Method)

Table 25

*Hispanic Eligible and Non-Eligible Students by Pathway V by Grade Range*

Grade	Eligible	Male			Female			Total		
		Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total
K-2	Not Eligible	Count	40	30	70	39	25	64	79	134
		% within Hispanic	50.6%	54.5%	52.2%	49.4%	45.5%	47.8%	100.0%	100.0%
		% of Total	29.9%	22.4%	52.2%	29.1%	18.7%	47.8%	59.0%	41.0%
	Eligible	Count	10	5	15	10	7	17	20	32
		% within Hispanic	50.0%	41.7%	46.9%	50.0%	58.3%	53.1%	100.0%	100.0%
		% of Total	31.3%	15.6%	46.9%	31.3%	21.9%	53.1%	62.5%	37.5%
	Total	Count	50	35	85	49	32	81	99	166
		% within Hispanic	50.5%	52.2%	51.2%	49.5%	47.8%	48.8%	100.0%	100.0%
		% of Total	30.1%	21.1%	51.2%	29.5%	19.3%	48.8%	59.6%	40.4%
3-5	Not Eligible	Count	34	24	58	30	10	40	64	98
		% within Hispanic	53.1%	70.6%	59.2%	46.9%	29.4%	40.8%	100.0%	100.0%
		% of Total	34.7%	24.5%	59.2%	30.6%	10.2%	40.8%	65.3%	34.7%
	Eligible	Count	24	7	31	15	1	16	39	47
		% within Hispanic	61.5%	87.5%	66.0%	38.5%	12.5%	34.0%	100.0%	100.0%
		% of Total	51.1%	14.9%	66.0%	31.9%	2.1%	34.0%	83.0%	17.0%
	Total	Count	58	31	89	45	11	56	103	145
		% within Hispanic	56.3%	73.8%	61.4%	43.7%	26.2%	38.6%	100.0%	100.0%
		% of Total	40.0%	21.4%	61.4%	31.0%	7.6%	38.6%	71.0%	29.0%
Total	Not Eligible	Count	74	54	128	69	35	104	143	232
		% within Hispanic	51.7%	60.7%	55.2%	48.3%	39.3%	44.8%	100.0%	100.0%
		% of Total	31.9%	23.3%	55.2%	29.7%	15.1%	44.8%	61.6%	38.4%
	Eligible	Count	34	12	46	25	8	33	59	79
		% within Hispanic	57.6%	60.0%	58.2%	42.4%	40.0%	41.8%	100.0%	100.0%
		% of Total	43.0%	15.2%	58.2%	31.6%	10.1%	41.8%	74.7%	25.3%
	Total	Count	108	66	174	94	43	137	202	311
		% within Hispanic	53.5%	60.6%	55.9%	46.5%	39.4%	44.1%	100.0%	100.0%
		% of Total	34.7%	21.2%	55.9%	30.2%	13.8%	44.1%	65.0%	35.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

Table 26

*Asian Eligible and Non-Eligible Students by Pathway V by Grade Range*

		Male			Female			Total			
Grade	Eligible	Not Asian	Asian	Total	Not Asian	Asian	Total	Not Asian	Asian	Total	
K-2	Not Eligible	Count	56	14	70	46	18	64	102	32	134
		% within Asian	54.9%	43.8%	52.2%	45.1%	56.3%	47.8%	100.0%	100.0%	100.0%
		% of Total	41.8%	10.4%	52.2%	34.3%	13.4%	47.8%	76.1%	23.9%	100.0%
	Eligible	Count	7	8	15	11	6	17	18	14	32
		% within Asian	38.9%	57.1%	46.9%	61.1%	42.9%	53.1%	100.0%	100.0%	100.0%
		% of Total	21.9%	25.0%	46.9%	34.4%	18.8%	53.1%	56.3%	43.8%	100.0%
	Total	Count	63	22	85	57	24	81	120	46	166
		% within Asian	52.5%	47.8%	51.2%	47.5%	52.2%	48.8%	100.0%	100.0%	100.0%
		% of Total	38.0%	13.3%	51.2%	34.3%	14.5%	48.8%	72.3%	27.7%	100.0%
3-5	Not Eligible	Count	47	11	58	29	11	40	76	22	98
		% within Asian	61.8%	50.0%	59.2%	38.2%	50.0%	40.8%	100.0%	100.0%	100.0%
		% of Total	48.0%	11.2%	59.2%	29.6%	11.2%	40.8%	77.6%	22.4%	100.0%
	Eligible	Count	17	14	31	7	9	16	24	23	47
		% within Asian	70.8%	60.9%	66.0%	29.2%	39.1%	34.0%	100.0%	100.0%	100.0%
		% of Total	36.2%	29.8%	66.0%	14.9%	19.1%	34.0%	51.1%	48.9%	100.0%
	Total	Count	64	25	89	36	20	56	100	45	145
		% within Asian	64.0%	55.6%	61.4%	36.0%	44.4%	38.6%	100.0%	100.0%	100.0%
		% of Total	44.1%	17.2%	61.4%	24.8%	13.8%	38.6%	69.0%	31.0%	100.0%
Total	Not Eligible	Count	103	25	128	75	29	104	178	54	232
		% within Asian	57.9%	46.3%	55.2%	42.1%	53.7%	44.8%	100.0%	100.0%	100.0%
		% of Total	44.4%	10.8%	55.2%	32.3%	12.5%	44.8%	76.7%	23.3%	100.0%
	Eligible	Count	24	22	46	18	15	33	42	37	79
		% within Asian	57.1%	59.5%	58.2%	42.9%	40.5%	41.8%	100.0%	100.0%	100.0%
		% of Total	30.4%	27.8%	58.2%	22.8%	19.0%	41.8%	53.2%	46.8%	100.0%
	Total	Count	127	47	174	93	44	137	220	91	311
		% within Asian	57.7%	51.6%	55.9%	42.3%	48.4%	44.1%	100.0%	100.0%	100.0%
		% of Total	40.8%	15.1%	55.9%	29.9%	14.1%	44.1%	70.7%	29.3%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI - Mental Ability, Achievement (Psychometric Method)

Table 27

*White Eligible and Non-Eligible Students by Pathway V by Grade Range*

White Eligible and Non Eligible Students by Race/ethnicity & by Grade Range											
		Male			Female			Total			
Grade	Eligible	Not White	White	Total	Not White	White	Total	Not White	White	Total	
K-2	Not Eligible	Count	59	11	70	56	8	64	115	19	134
		% within White	51.3%	57.9%	52.2%	48.7%	42.1%	47.8%	100.0%	100.0%	100.0%
		% of Total	44.0%	8.2%	52.2%	41.8%	6.0%	47.8%	85.8%	14.2%	100.0%
	Eligible	Count	14	1	15	15	2	17	29	3	32
		% within White	48.3%	33.3%	46.9%	51.7%	66.7%	53.1%	100.0%	100.0%	100.0%
		% of Total	43.8%	3.1%	46.9%	46.9%	6.3%	53.1%	90.6%	9.4%	100.0%
	Total	Count	73	12	85	71	10	81	144	22	166
		% within White	50.7%	54.5%	51.2%	49.3%	45.5%	48.8%	100.0%	100.0%	100.0%
		% of Total	44.0%	7.2%	51.2%	42.8%	6.0%	48.8%	86.7%	13.3%	100.0%
3-5	Not Eligible	Count	52	6	58	33	7	40	85	13	98
		% within White	61.2%	46.2%	59.2%	38.8%	53.8%	40.8%	100.0%	100.0%	100.0%
		% of Total	53.1%	6.1%	59.2%	33.7%	7.1%	40.8%	86.7%	13.3%	100.0%
	Eligible	Count	25	6	31	15	1	16	40	7	47
		% within White	62.5%	85.7%	66.0%	37.5%	14.3%	34.0%	100.0%	100.0%	100.0%
		% of Total	53.2%	12.8%	66.0%	31.9%	2.1%	34.0%	85.1%	14.9%	100.0%
	Total	Count	77	12	89	48	8	56	125	20	145
		% within White	61.6%	60.0%	61.4%	38.4%	40.0%	38.6%	100.0%	100.0%	100.0%
		% of Total	53.1%	8.3%	61.4%	33.1%	5.5%	38.6%	86.2%	13.8%	100.0%
Total	Not Eligible	Count	111	17	128	89	15	104	200	32	232
		% within White	55.5%	53.1%	55.2%	44.5%	46.9%	44.8%	100.0%	100.0%	100.0%
		% of Total	47.8%	7.3%	55.2%	38.4%	6.5%	44.8%	86.2%	13.8%	100.0%
	Eligible	Count	39	7	46	30	3	33	69	10	79
		% within White	56.5%	70.0%	58.2%	43.5%	30.0%	41.8%	100.0%	100.0%	100.0%
		% of Total	49.4%	8.9%	58.2%	38.0%	3.8%	41.8%	87.3%	12.7%	100.0%
	Total	Count	150	24	174	119	18	137	269	42	311
		% within White	55.8%	57.1%	55.9%	44.2%	42.9%	44.1%	100.0%	100.0%	100.0%
		% of Total	48.2%	7.7%	55.9%	38.3%	5.8%	44.1%	86.5%	13.5%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

### Gifted Eligibility Pathway VI Cross Tabulation Analysis

Pathway VI requires qualifying scores in two of the four criteria areas; mental ability and achievement. This pathway to eligibility is the Psychometric Method.



**Black Students by Pathway VI.** There were no Black males in grades K-2, that qualified through Pathway VI. Of the 190 females in grades K-2 evaluated for the gifted program, no Black females qualified for the gifted program by Pathway VI. Of 143 non-Black females evaluated, 142 non-Black females who did not qualify by eligibility Pathway VI.

In grades 3-5, two of the 38 Black males evaluated qualified by Pathway VI. Two Black females of 40 females qualified by Pathway VI in grades 3-5. Eligible Black Males students in grades 3-5 were 8.7% of all students eligible by Pathway VI. Eligible Black females also represented 8.7% of eligible 3-5 students. Eligible Non-Black males in grades 3-5 were 52.2% of all students qualifying by Pathway VI. Eligible Non-Black females were 30.4% of all students qualifying by Pathway VI. Two Black males and two Black females from all grade levels qualified for the gifted program by Pathway VI.

**Hispanic Students by Pathway VI.** One Hispanic male in grades K-2 qualified for the gifted program by Pathway VI. Of the 190 females in grades K-2 evaluated for the gifted program, no Hispanic females qualified for the gifted program by Pathway VI. Of 122 non-Hispanic females evaluated, 121 non-Hispanic females who did not qualify by eligibility Pathway VI. Non-Hispanic males in grades K-2 were 66.7% of all K-2 students that qualified. The one Hispanic male K-2 student, and one non-Hispanic student that qualified by Pathway VI each represent 16.7% of all K-2 eligible students.

In grades 3-5, six of the 50 Hispanic males evaluated qualified by Pathway VI. One Hispanic female within 24 Hispanic females and 139 non-Hispanic females, qualified by Pathway VI in grades 3-5. Eligible Hispanic Males students in grades 3-5 were 26.1% of all students eligible by Pathway VI. Eligible Hispanic females also represented 4.3% of eligible 3-5

students. Eligible Non-Hispanic males in grades 3-5 were 34.8% of all students qualifying by Pathway VI as were eligible non-Hispanic females. Seven Hispanic males and one Hispanic females from all grade levels qualified for the gifted program by Pathway VI.

**Asian Students by Pathway VI.** No Asian males in grades K-2 qualified for the gifted program by Pathway VI. Of the 190 females in grades K-2 evaluated for the gifted program, one Asian females qualified for the gifted program by Pathway VI. Of 138 non-Asian females evaluated, none qualified by eligibility Pathway VI. Five non-Asian males in grades K-2 were 83.3% of all K-2 students that qualified. The one K-2 Asian female student that qualified by Pathway VI each represent 16.7% of all K-2 eligible students.

In grades 3-5, four of the 43 Asian males evaluated qualified by Pathway VI. Four Asian female, within 45 Asian females and 94 non-Asian females, qualified by Pathway VI in grades 3-5. Eligible Asian Males students in grades 3-5 were 17.4% of all students eligible by Pathway VI. Eligible Asian females also represented 17.4% of eligible 3-5 students. Eligible Non-Asian males in grades 3-5 were 43.5% of all students qualifying by Pathway VI. There were five eligible 3-5 non-Asian female students, which was 21.7% of all eligible 3-5 students by Pathway VI. Four Asian males and five Asian females from all grade levels qualified for the gifted program by Pathway VI.

**White Students by Pathway VI.** Four White males in grades K-2 qualified for the gifted program by Pathway VI. Of the 190 females in grades K-2 evaluated for the gifted program, no White females qualified for the gifted program by Pathway VI. Of 167 non-White females evaluated, one qualified by eligibility Pathway VI. The four eligible White male students in K-2 represents 66.7% of all eligible students by Pathway VI. The one eligible non-White male in

grades K-2 represents 16.7% of all K-2 students that qualified. No K-2 White female student qualified by Pathway VI.

In grades 3-5, two of the 19 White males evaluated qualified by Pathway VI.

Two White female students within 30 White females and seven non-White females within 109 non-white females, qualified by Pathway VI in grades 3-5. Two eligible White Males students in grades 3-5 were 8.7% of all students eligible by Pathway VI. Two eligible White females also represent 8.7% of eligible 3-5 students. Twelve eligible Non-White males in grades 3-5 were 52.2% of all students qualifying by Pathway VI. There were seven eligible 3-5 non-White female students, which was 30.4% of all eligible 3-5 students by Pathway VI. Six White males and two White females from all grade levels qualified for the gifted program by Pathway VI.

Table 28

*Black Eligible and Non-Eligible Students by Pathway VI by Grade Range*

Grade	Eligible	Male			Female			Total		
		Not Black	Black	Total	Not Black	Black	Total	Not Black	Black	Total
K-2	Not Eligible	Count	55	15	70	51	13	64	106	134
		% within Black	51.9%	53.6%	52.2%	48.1%	46.4%	47.8%	100.0%	100.0%
		% of Total	41.0%	11.2%	52.2%	38.1%	9.7%	47.8%	79.1%	20.9%
	Eligible	Count	5	0	5	1	0	1	6	6
		% within Black	83.3%	0.0%	83.3%	16.7%	0.0%	16.7%	100.0%	0.0%
		% of Total	83.3%	0.0%	83.3%	16.7%	0.0%	16.7%	100.0%	0.0%
	Total	Count	60	15	75	52	13	65	112	140
		% within Black	53.6%	53.6%	53.6%	46.4%	46.4%	46.4%	100.0%	100.0%
		% of Total	42.9%	10.7%	53.6%	37.1%	9.3%	46.4%	80.0%	20.0%
3-5	Not Eligible	Count	41	17	58	28	12	40	69	98
		% within Black	59.4%	58.6%	59.2%	40.6%	41.4%	40.8%	100.0%	100.0%
		% of Total	41.8%	17.3%	59.2%	28.6%	12.2%	40.8%	70.4%	29.6%
	Eligible	Count	12	2	14	7	2	9	19	23
		% within Black	63.2%	50.0%	60.9%	36.8%	50.0%	39.1%	100.0%	100.0%
		% of Total	52.2%	8.7%	60.9%	30.4%	8.7%	39.1%	82.6%	17.4%
	Total	Count	53	19	72	35	14	49	88	121
		% within Black	60.2%	57.6%	59.5%	39.8%	42.4%	40.5%	100.0%	100.0%
		% of Total	43.8%	15.7%	59.5%	28.9%	11.6%	40.5%	72.7%	27.3%
Total	Not Eligible	Count	96	32	128	79	25	104	175	232
		% within Black	54.9%	56.1%	55.2%	45.1%	43.9%	44.8%	100.0%	100.0%
		% of Total	41.4%	13.8%	55.2%	34.1%	10.8%	44.8%	75.4%	24.6%
	Eligible	Count	17	2	19	8	2	10	25	29
		% within Black	68.0%	50.0%	65.5%	32.0%	50.0%	34.5%	100.0%	100.0%
		% of Total	58.6%	6.9%	65.5%	27.6%	6.9%	34.5%	86.2%	13.8%
	Total	Count	113	34	147	87	27	114	200	261
		% within Black	56.5%	55.7%	56.3%	43.5%	44.3%	43.7%	100.0%	100.0%
		% of Total	43.3%	13.0%	56.3%	33.3%	10.3%	43.7%	76.6%	23.4%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

Table 29

*Hispanic Eligible and Non-eligible Students by Pathway VI by Grade Range*

Grade	Eligible	Male				Female				Total	
			Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total
K-2	Not Eligible	Count	40	30	70	39	25	64	79	55	134
		% within Hispanic	50.6%	54.5%	52.2%	49.4%	45.5%	47.8%	100.0%	100.0%	100.0%
		% of Total	29.9%	22.4%	52.2%	29.1%	18.7%	47.8%	59.0%	41.0%	100.0%
	Eligible	Count	4	1	5	1	0	1	5	1	6
		% within Hispanic	80.0%	100.0%	83.3%	20.0%	0.0%	16.7%	100.0%	100.0%	100.0%
		% of Total	66.7%	16.7%	83.3%	16.7%	0.0%	16.7%	83.3%	16.7%	100.0%
	Total	Count	44	31	75	40	25	65	84	56	140
		% within Hispanic	52.4%	55.4%	53.6%	47.6%	44.6%	46.4%	100.0%	100.0%	100.0%
		% of Total	31.4%	22.1%	53.6%	28.6%	17.9%	46.4%	60.0%	40.0%	100.0%
3-5	Not Eligible	Count	34	24	58	30	10	40	64	34	98
		% within Hispanic	53.1%	70.6%	59.2%	46.9%	29.4%	40.8%	100.0%	100.0%	100.0%
		% of Total	34.7%	24.5%	59.2%	30.6%	10.2%	40.8%	65.3%	34.7%	100.0%
	Eligible	Count	8	6	14	8	1	9	16	7	23
		% within Hispanic	50.0%	85.7%	60.9%	50.0%	14.3%	39.1%	100.0%	100.0%	100.0%
		% of Total	34.8%	26.1%	60.9%	34.8%	4.3%	39.1%	69.6%	30.4%	100.0%
	Total	Count	42	30	72	38	11	49	80	41	121
		% within Hispanic	52.5%	73.2%	59.5%	47.5%	26.8%	40.5%	100.0%	100.0%	100.0%
		% of Total	34.7%	24.8%	59.5%	31.4%	9.1%	40.5%	66.1%	33.9%	100.0%
Total	Not Eligible	Count	74	54	128	69	35	104	143	89	232
		% within Hispanic	51.7%	60.7%	55.2%	48.3%	39.3%	44.8%	100.0%	100.0%	100.0%
		% of Total	31.9%	23.3%	55.2%	29.7%	15.1%	44.8%	61.6%	38.4%	100.0%
	Eligible	Count	12	7	19	9	1	10	21	8	29
		% within Hispanic	57.1%	87.5%	65.5%	42.9%	12.5%	34.5%	100.0%	100.0%	100.0%
		% of Total	41.4%	24.1%	65.5%	31.0%	3.4%	34.5%	72.4%	27.6%	100.0%
	Total	Count	86	61	147	78	36	114	164	97	261
		% within Hispanic	52.4%	62.9%	56.3%	47.6%	37.1%	43.7%	100.0%	100.0%	100.0%
		% of Total	33.0%	23.4%	56.3%	29.9%	13.8%	43.7%	62.8%	37.2%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

Table 30

*Asian Eligible and Non-Eligible Students by Pathway VI by Grade Range*

Grade	Eligible		Male			Female			Total		
			Not Asian	Asian	Total	Not Asian	Asian	Total	Not Asian	Asian	Total
K-2	Not Eligible	Count	56	14	70	46	18	64	102	32	134
		% within Asian	54.9%	43.8%	52.2%	45.1%	56.3%	47.8%	100.0%	100.0%	100.0%
		% of Total	41.8%	10.4%	52.2%	34.3%	13.4%	47.8%	76.1%	23.9%	100.0%
	Eligible	Count	5	0	5	0	1	1	5	1	6
		% within Asian	100.0%	0.0%	83.3%	0.0%	100.0%	16.7%	100.0%	100.0%	100.0%
		% of Total	83.3%	0.0%	83.3%	0.0%	16.7%	16.7%	83.3%	16.7%	100.0%
	Total	Count	61	14	75	46	19	65	107	33	140
		% within Asian	57.0%	42.4%	53.6%	43.0%	57.6%	46.4%	100.0%	100.0%	100.0%
		% of Total	43.6%	10.0%	53.6%	32.9%	13.6%	46.4%	76.4%	23.6%	100.0%
3-5	Not Eligible	Count	47	11	58	29	11	40	76	22	98
		% within Asian	61.8%	50.0%	59.2%	38.2%	50.0%	40.8%	100.0%	100.0%	100.0%
		% of Total	48.0%	11.2%	59.2%	29.6%	11.2%	40.8%	77.6%	22.4%	100.0%
	Eligible	Count	10	4	14	5	4	9	15	8	23
		% within Asian	66.7%	50.0%	60.9%	33.3%	50.0%	39.1%	100.0%	100.0%	100.0%
		% of Total	43.5%	17.4%	60.9%	21.7%	17.4%	39.1%	65.2%	34.8%	100.0%
	Total	Count	57	15	72	34	15	49	91	30	121
		% within Asian	62.6%	50.0%	59.5%	37.4%	50.0%	40.5%	100.0%	100.0%	100.0%
		% of Total	47.1%	12.4%	59.5%	28.1%	12.4%	40.5%	75.2%	24.8%	100.0%
Total	Not Eligible	Count	103	25	128	75	29	104	178	54	232
		% within Asian	57.9%	46.3%	55.2%	42.1%	53.7%	44.8%	100.0%	100.0%	100.0%
		% of Total	44.4%	10.8%	55.2%	32.3%	12.5%	44.8%	76.7%	23.3%	100.0%
	Eligible	Count	15	4	19	5	5	10	20	9	29
		% within Asian	75.0%	44.4%	65.5%	25.0%	55.6%	34.5%	100.0%	100.0%	100.0%
		% of Total	51.7%	13.8%	65.5%	17.2%	17.2%	34.5%	69.0%	31.0%	100.0%
	Total	Count	118	29	147	80	34	114	198	63	261
		% within Asian	59.6%	46.0%	56.3%	40.4%	54.0%	43.7%	100.0%	100.0%	100.0%
		% of Total	45.2%	11.1%	56.3%	30.7%	13.0%	43.7%	75.9%	24.1%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

Table 31

*White Eligible and Non-Eligible Students by Pathway VI by Grade Range*

Grade	Eligible		Male			Female			Total		
			Not White	White	Total	Not White	White	Total	Not White	White	Total
K-2	Not Eligible	Count	59	11	70	56	8	64	115	19	134
		% within White	51.3%	57.9%	52.2%	48.7%	42.1%	47.8%	100.0%	100.0%	100.0%
		% of Total	44.0%	8.2%	52.2%	41.8%	6.0%	47.8%	85.8%	14.2%	100.0%
	Eligible	Count	1	4	5	1	0	1	2	4	6
		% within White	50.0%	100.0%	83.3%	50.0%	0.0%	16.7%	100.0%	100.0%	100.0%
		% of Total	16.7%	66.7%	83.3%	16.7%	0.0%	16.7%	33.3%	66.7%	100.0%
	Total	Count	60	15	75	57	8	65	117	23	140
		% within White	51.3%	65.2%	53.6%	48.7%	34.8%	46.4%	100.0%	100.0%	100.0%
		% of Total	42.9%	10.7%	53.6%	40.7%	5.7%	46.4%	83.6%	16.4%	100.0%
3-5	Not Eligible	Count	52	6	58	33	7	40	85	13	98
		% within White	61.2%	46.2%	59.2%	38.8%	53.8%	40.8%	100.0%	100.0%	100.0%
		% of Total	53.1%	6.1%	59.2%	33.7%	7.1%	40.8%	86.7%	13.3%	100.0%
	Eligible	Count	12	2	14	7	2	9	19	4	23
		% within White	63.2%	50.0%	60.9%	36.8%	50.0%	39.1%	100.0%	100.0%	100.0%
		% of Total	52.2%	8.7%	60.9%	30.4%	8.7%	39.1%	82.6%	17.4%	100.0%
	Total	Count	64	8	72	40	9	49	104	17	121
		% within White	61.5%	47.1%	59.5%	38.5%	52.9%	40.5%	100.0%	100.0%	100.0%
		% of Total	52.9%	6.6%	59.5%	33.1%	7.4%	40.5%	86.0%	14.0%	100.0%
Total	Not Eligible	Count	111	17	128	89	15	104	200	32	232
		% within White	55.5%	53.1%	55.2%	44.5%	46.9%	44.8%	100.0%	100.0%	100.0%
		% of Total	47.8%	7.3%	55.2%	38.4%	6.5%	44.8%	86.2%	13.8%	100.0%
	Eligible	Count	13	6	19	8	2	10	21	8	29
		% within White	61.9%	75.0%	65.5%	38.1%	25.0%	34.5%	100.0%	100.0%	100.0%
		% of Total	44.8%	20.7%	65.5%	27.6%	6.9%	34.5%	72.4%	27.6%	100.0%
	Total	Count	124	23	147	97	17	114	221	40	261
		% within White	56.1%	57.5%	56.3%	43.9%	42.5%	43.7%	100.0%	100.0%	100.0%
		% of Total	47.5%	8.8%	56.3%	37.2%	6.5%	43.7%	84.7%	15.3%	100.0%

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

## Logistic Regression Statistics

In the follow sections, the results from the logistic regression analysis are presented.

The primary research question that this analysis addressed was: *How do the demographic profiles and multiple criteria indicators of students eligible for the gifted program who were referred in primary grades compare to students who were referred in upper elementary?*

The probability of eligibility for the six pathways taking into account the categorical variables gender, race/ethnicity, teacher ethnicity, grade range (K-2 or 3-5) is described below.

**Probability of Eligibility by Pathway I.** For students to become eligible by Pathway I, they must meet the criteria in each of the four gifted evaluation criteria areas: Mental Ability, Achievement, Creativity and Motivation. The analysis without the predictors, the null model, shows that 442 students are predicted to be eligible and 232 are predicted to be ineligible. The first binary logistic regression analysis was to determine effects on gifted eligibility Pathway I, the outcome variable and the predictors Gender, Black, Hispanic, Asian, Grade Range, Teacher Ethnicity. The predictor White is not included in the model, since it can be decided by other variable, that is White is the combination of not Black, not Hispanic and not Asian. All predictors were entered simultaneously in the model. There were 674 selected cases, with no missing cases. The Categorical Variables Codings table (See Table 32) includes the frequencies for members and non-members of each predictor and the dummy coding for binary variables with values of one and zero.



Table 32

<i>Categorical Variables Codings</i>			Parameter
		Frequency	coding
			(1)
White	White	100	1
	Not White	574	0
Black	Black	167	1
	Not Black	507	0
Hispanic	Hispanic	203	1
	Not Hispanic	471	0
Asian	Asian	204	1
	Not Asian	470	0
GradeRange	3-5	289	1
	K-2	385	0
TeacherEthnicity	Not White	430	1
	White	244	0
Gender	Female	329	1
	Male	345	0

There are six pathways by which it is possible for evaluated students to qualify for placement in gifted programs in Georgia. In Table 33, “Yes” and “No” indicate the particular areas in which students must achieve the required score to qualify for placement by that pathway.

Table 33

## Georgia Gifted Eligibility Pathways

Eligibility Path	Mental Ability	Achievement	Creativity	Motivation
I	Yes	Yes	Yes	Yes
II	Yes	Yes	Yes	No
III	Yes	No	Yes	Yes
IV	No	Yes	Yes	Yes
V	Yes	Yes	No	Yes
VI	Yes	Yes	No	No

A logistic regression was performed to ascertain the effects of gender, ethnicity, grade range and teacher ethnicity on the likelihood that students would be identified as gifted by Pathway I. For the logistic regression the baseline groups are male, White, Grade Range is K-2, and Teacher Ethnicity is White.

When determining the odds ratio for eligibility by Pathway I, Gender is not significant, with the coefficient for female  $b = 0.036$ , Wald  $\chi^2(1) = 0.020$ ,  $p = .889$ ,  $\text{Exp}(b) = 1.036$ , (95% CI: 0.628, 1.712). Being Black is significant, with  $b = -.0821$ , Wald  $\chi^2(1) = 4.7$ ,  $p = 0.030$ , and  $\text{Exp}(b) = 0.44$ , which means the odds of Black students becoming eligible by Pathway I are 44% of the odds of White students becoming eligible by Pathway I, keeping all other predictors fixed. Being Hispanic was significant, with  $b = -1.243$ , Wald  $\chi^2(1) = 10.094$ ,  $p = .001$ , and  $\text{Exp}(b) = .289$  (95% CI: 0.134, 0.621). The odds of Hispanic students becoming eligible by Pathway I are 28% the odds of White students qualifying by Pathway I giving other predictors fixed.

The predictor of the indicator for eligibility for students in third, fourth and fifth (Grade Range 3-5), was statistically significant, with  $b = -0.65$ , Wald  $\chi^2(1) = 0.27$ ,  $p = 0.020$ . The odds ratio is  $\text{Exp}(\beta) = 0.524$  with a 95% confidence interval [0.304, 0.902]. The odds of students in Grade Range 3-5 becoming eligible by Pathway I is 52% of the odds of students in Grade Range K-2 becoming eligible by this pathway. Teacher Ethnicity and being an Asian student were not significant predictors.

Table 34

*Probability of Eligibility by Pathway I*

								95% C.I.for	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 <sup>a</sup>	Gender	0.036	0.256	0.020	1	0.889	1.036	0.628	1.712
	Black	-0.821	0.378	4.726	1	0.030	0.440	0.210	0.922
	Hispanic	-1.243	0.391	10.094	1	0.001	0.289	0.134	0.621
	Asian	-0.548	0.342	2.563	1	0.109	0.578	0.295	1.131
	GradeRange	-0.646	0.277	5.443	1	0.020	0.524	0.304	0.902
	TeacherEthnicity	0.163	0.267	0.373	1	0.541	1.177	0.698	1.986
	Constant	-1.311	0.323	16.452	1	0.000	0.270		

a. Variable(s) entered on step 1: Gender, Black, Hispanic, Asian, GradeRange, TeacherEthnicity.

**Probability for Eligibility by Pathway II.** Gifted Eligibility Pathway II requires that students meet the evaluation criteria in Mental Ability, Achievement, and Creativity, but not Motivation. We repeated the binary logistic regression model with the same variables to evaluate probability for eligibility with Pathway II as our outcome variable. For the logistic regression the baseline groups are male, White, Grade Range is K-2, and Teacher Ethnicity is White. According to the model, the log odds of a student becoming eligible by Pathway II is positively related to Black and Asian and negatively related to Gender, Hispanic, Grade Range and Teacher Ethnicity with none of the predictors being significant. Gender is not significant with  $b = -0.064$ ,  $\text{Wald } \chi^2(1) = 0.054$ ,  $p = 0.816$ ,  $\text{Exp}(b) = 0.938$  (95% CI: 0.545, 1.613) indicating that there are no differences for males and female to qualify by Pathway II when all other predictors are held fixed. The actual total number of males eligible by this Pathway is 33 and for females, 28. Being a Hispanic student did not significantly predict the probability of becoming eligible by Pathway II, with  $b = 0.574$ ,  $\text{Wald } \chi^2(1) = 1.209$ ,  $p = 0.272$ ,  $\text{Exp}(b) = (95\% \text{CI: } 0.202, 1.568)$ . Though

none of the predictors were significant in this regression, it is important to keep in mind that eliminating just one insignificant predictor could make one or more become significant.

Table 35

*Probability of Eligibility by Pathway II*

								95% C.I.for	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 <sup>a</sup>	Gender	-0.064	0.277	0.054	1	0.816	0.938	0.545	1.613
	Black	0.329	0.474	0.482	1	0.488	1.390	0.549	3.520
	Hispanic	-0.574	0.522	1.209	1	0.272	0.563	0.202	1.568
	Asian	0.704	0.446	2.497	1	0.114	2.023	0.844	4.846
	GradeRange	-0.497	0.295	2.836	1	0.092	0.608	0.341	1.085
	TeacherEthnicity	-0.478	0.310	2.375	1	0.123	0.620	0.337	1.139
	Constant	-2.189	0.436	25.214	1	0.000	0.112		

a. Variable(s) entered on step 1: Gender, Black, Hispanic, Asian, GradeRange, TeacherEthnicity.

**Probability for Eligibility by Pathway III.** Gifted Eligibility Pathway III requires that students meet the evaluation criteria in Mental Ability, Creativity, and Motivation, but does not require a qualifying Achievement score. The binary logistic regression model was repeated to evaluate probability for eligibility with Pathway III as our outcome variable. For the logistic regression the baseline groups are male, White, Grade Range is K-2, and Teacher Ethnicity is White.

In this model, gender ( $p = 0.401$ ), Black ( $p = 0.115$ ), Hispanic ( $p = 0.333$ ), Asian ( $p = 0.147$ ), grade range ( $p = 0.248$ ) or teacher's ethnicity ( $p = 0.461$ ) were not significant on predicting the probability of eligibility.

Table 36

*Probability of Eligibility by Pathway III*

								95% C.I.for	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 <sup>a</sup>	Gender	0.299	0.356	0.704	1	0.401	1.348	0.671	2.711
	Black	1.230	0.780	2.484	1	0.115	3.421	0.741	15.794
	Hispanic	0.769	0.794	0.937	1	0.333	2.157	0.455	10.228
	Asian	1.125	0.775	2.105	1	0.147	3.080	0.674	14.078
	GradeRange	-0.440	0.380	1.337	1	0.248	0.644	0.306	1.358
	TeacherEthnicity	-0.288	0.391	0.544	1	0.461	0.750	0.349	1.612
	Constant	-3.771	0.765	24.301	1	0.000	0.023		

a. Variable(s) entered on step 1: Gender, Black, Hispanic, Asian, GradeRange, TeacherEthnicity.

**Probability for Eligibility by Pathway IV.** Gifted eligibility by Pathway IV requires students to meet the evaluation criteria for Achievement, Creativity and Motivation, but not Mental Ability. A logistic regression was performed to determine the effect of gender, being a Black, Hispanic, Asian or White student, grade range (K-2 and 3-5), and teacher ethnicity, on the likelihood that students would be identified as gifted by eligibility Pathway IV. For the logistic regression the baseline groups are male, White, Grade Range is K-2, and Teacher Ethnicity is White.

Gender significantly predicted probability of eligibility by Pathway IV with  $b = 0.520$ , Wald  $\chi^2(1) = 8.892$ ,  $p = 0.004$ , OR = exp( $b$ ) = 1.682 (95% CI: 1.181, 2.395), which means the odds of female becoming eligible by Pathway IV is 1.682 times the odds of male becoming eligible by Pathway IV, with lower bound 1.181, and upper bound 2.395.

The predictor Black is not significant for this model, with  $b = 0.420$ , Wald  $\chi^2(1) = 2.058$ ,  $p = 0.151$ , OR = 1.521 (95% CI: .858, 2.699). However, it worth mention that the odds of Black students becoming eligible by Pathway IV is 1.521 times the odds of White students, when all other predictors are held fixed. Being Hispanic also is not significant with  $b = .238$ , Wald  $\chi^2(1) =$

0.681,  $p = 0.409$ . OR = 1.269 (95% CI: 0.720, 2.236). However, the odds of Hispanic students becoming eligible by this pathway is 1.269 times the odds of eligibility for White students when all other predictors are held fixed. The statistics for Asian, Grade Range and Teacher Ethnicity were not significant for the model with Pathway IV as the outcome.

Table 37

*Probability of Eligibility by Pathway IV*

								95% C.I.for	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 <sup>a</sup>	Gender	0.520	0.180	8.292	1	0.004	1.682	1.181	2.395
	Black	0.420	0.293	2.058	1	0.151	1.521	0.858	2.699
	Hispanic	0.238	0.289	0.681	1	0.409	1.269	0.720	2.236
	Asian	-0.150	0.297	0.255	1	0.614	0.861	0.481	1.541
	GradeRange	-0.115	0.185	0.388	1	0.533	0.891	0.620	1.281
	TeacherEthnicity	-0.098	0.191	0.265	1	0.607	0.906	0.624	1.317
	Constant	-1.409	0.283	24.830	1	0.000	0.244		

a. Variable(s) entered on step 1: Gender, Black, Hispanic, Asian, GradeRange, TeacherEthnicity.

**Probability for Eligibility by Pathway V.** Gifted eligibility by Pathway V requires students to meet the evaluation criteria for Mental Ability, Achievement and Motivation, but not Creativity. A logistic regression was performed to determine the effect of gender, being a Black, Hispanic, Asian or White student, grade range (K-2 and 3-5), and teacher ethnicity, on the likelihood that students would be identified as gifted by gifted eligibility Pathway V. For the logistic regression the baseline groups are male, White, Grade Range is K-2, and Teacher Ethnicity is White.

Grade Range was a statistically significant predictor of the probability of eligibility by Pathway V, with  $b = 0.767$ , Wald  $\chi^2(1) = 9.463$ ,  $p = 0.002$ ,  $\text{Exp}(b) = 2.154$  (95% CI: 1.321, 3.511). The odds of students in grades 3-5 becoming eligible by Pathway V is 2.154 times the odds of K-2

students. There were 32 students eligible by Pathway V in grades K-2. That number was surpassed with 47 eligible, 3-5 students by Pathway V.

Gender was not a significant predictor of the probability of eligibility by Pathway V, with  $b = -0.310$ , Wald  $\chi^2(1) = 1.561$ ,  $p = 0.211$ ,  $\text{Exp}(b) = 0.734$  (95% CI: 0.452, 1.192) when all other predictors are held fixed. The Ethnicity of the teacher, or being Black Hispanic or Asian, were not significant at 0.05 level in predicting the probability of students becoming eligible by Pathway V; however, Asian is significant at 0.10 level with  $b = 0.730$ , Wald  $\chi^2 = 3.611$ ,  $p = 0.057$ , and OR=2.075 (95% CI: 0.977, 4.404).

Table 38

*Probability of Eligibility by Pathway V*

								95% C.I.for	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 <sup>a</sup>	Gender	-0.310	0.248	1.561	1	0.211	0.734	0.452	1.192
	Black	-0.353	0.452	0.612	1	0.434	0.702	0.290	1.702
	Hispanic	0.059	0.414	0.020	1	0.887	1.061	0.471	2.389
	Asian	0.730	0.384	3.611	1	0.057	2.075	0.977	4.404
	GradeRange	0.767	0.249	9.463	1	0.002	2.154	1.321	3.511
	TeacherEthnicity	0.191	0.250	0.587	1	0.444	1.211	0.742	1.976
	Constant	-2.553	0.402	40.282	1	0.000	0.078		

a. Variable(s) entered on step 1: Gender, Black, Hispanic, Asian, GradeRange, TeacherEthnicity.

**Probability by Pathway VI.** Eligibility by Pathway VI requires students to meet the evaluation criteria in Mental Ability, with a qualifying score on a standardized test, in Reading or Math Achievement. This method of qualifying is the Psychometric Method. For the logistic regression the baseline groups are male, White, Grade Range is K-2, and Teacher Ethnicity is White.

The predictor Black significantly predicted eligibility by Pathway VI, with  $b = -1.297$ , Wald  $\chi^2(1) = 4.142$ ,  $p = 0.042$ ,  $\text{Exp}(b) = 0.273$ , (95% CI: 0.078, 0.953). The odds of Black students becoming eligible by Pathway VI are 0.273 times the odds of White students or 27.3% of the odds of White students becoming eligible by this pathway.

Grade Range was a significant predictor of eligibility by Pathway VI,  $b = 1.643$ , Wald  $\chi^2(1) = 12.135$ ,  $p = 0.000$ ,  $\text{Exp}(b) = 5.170$  (95% CI: 2.051, 13.029). The odds of students in Grades 3-5 are 5.170 times the odds of students in Grade K-2 to become eligible by Pathway V, keeping all other predictors fixed. The actual number of K-2 students eligible by Pathway V were 6, and students in 3-5 were 23.

Gender, being Hispanic or Asian, or having a teacher that is not White were not significant in predicting probability of eligibility by Pathway VI.

Table 39

*Probability of Eligibility by Pathway VI*

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for	
								Lower	Upper
Step 1 <sup>a</sup>	Gender	-0.663	0.410	2.611	1	0.106	0.515	0.231	1.152
	Black	-1.297	0.637	4.142	1	0.042	0.273	0.078	0.953
	Hispanic	-0.662	0.535	1.533	1	0.216	0.516	0.181	1.471
	Asian	-0.608	0.515	1.393	1	0.238	0.545	0.198	1.494
	GradeRange	1.643	0.472	12.135	1	0.000	5.170	2.051	13.029
	TeacherEthnicity	0.433	0.392	1.220	1	0.269	1.542	0.715	3.327
	Constant	-3.393	0.586	33.586	1	0.000	0.034		

a. Variable(s) entered on step 1: Gender, Black, Hispanic, Asian, GradeRange, TeacherEthnicity.

As each logistic regression analysis for this study is examined, it is clear that the six models need improvement. Though 674 cases are not a small sample, it is possible that the inability of this set of predictors to determine the probability of eligibility is still due to the characteristics of the sample.



Since students are categorized by gender, ethnic group, grade range and by the ethnicity of their teacher, there may not be enough cases that fit each of the possible demographic profiles for the regression models to accurately predict the probability of eligibility. Expanding the number of cases to include the eligibility data from other elementary schools in Georgia with similar populations would improve the model. Similar schools would include large proportions of student enrollment participating in the National School Lunch Program, an indicator of low socio-economic status for the families of the students. During the span of years from which the eligibility data was collected, student participation in the school lunch program was not collected. Using student SES status would make for an important variable in each of these models.

Other considerations for improving the model are creating additional variables for early childhood education experiences, whether a student started kindergarten soon after they turned five-years-old or had a birthday after September first, and more recently, August or July 1. The education level of parents may determine the values and available resources in the home.

The logistic regression analyses no matter the significance of predictors, informs our understanding of how students of different demographic profiles exhibit different patterns of performance.

## **CHAPTER 5**

### **DISCUSSION**

In this chapter, I discuss the findings from the two quantitative analyses and connect them to the related research. I will describe the limitations of this study and explain how the implications revealed by the findings may prompt the need for future research. Finally, my conclusions will explain how this research contributes to the body of work in this field of study.

#### **Summary of Findings**

The two types of quantitative analysis presented in this study, cross tabulation and logistic regression, provide a response to the three research questions that drive this study, and evidence to support recommendations for local evaluation procedures and future research on the issue of representation and identification of gifted CLD students.

*What are The demographic profiles of students assessed for Holmes County Public Schools (HCPS) gifted education programs at Logwood Elementary?*

The cross tabulations of the Logwood eligibility data for enrollment years 2004-2016 provide an opportunity for an objective examination of the interactions between gifted eligibility and student gender, ethnicity, and grade level. This summary will explain the results of gifted evaluations conducted at Logwood Elementary during the FTE years for 2004 to 2016, by gifted eligibility Pathway according to students' grade range, and by gender.

## **Trends in Gifted Enrollment**

Logwood school enrollment rose steadily throughout the 13-year time span of the study as did gifted program enrollment. In the fall of 2011, 150 students from two elementary schools were redistricted to Logwood giving the school a small increase in both school enrollment and gifted program enrollment.

The Georgia Department of Education collects the reported school and gifted enrollment for all schools in the state. Though each school's total enrollment has been published on the organization website since 2004, gifted enrollment by gender and ethnicity can be retrieved beginning with the year 2012.

## **Ranking Six Eligibility Pathways Grades K-2**

**Males and Pathways.** The pathway by which K-2 Black and Hispanic males qualified in greatest numbers was Pathway IV (See Table 36). This pathway does not require students to meet the criteria for mental ability. Asian males qualified most by Pathway I, and White males also qualified by Pathway I in numbers equal to their numbers in Pathway IV. Black, Hispanic and Asian Males qualified least often by Pathway VI. In fact, there were no Black or Asian males in K-2 who qualified by Pathway VI. Interestingly, the eligibility pathway ranked second for White males in K-2 was Pathway VI. Black, Hispanic, and Asian and White Females qualified most often by Pathway IV at both grade ranges K-2 and 3-5. White Females in grades K-2 qualified an equal number of cases by Pathway I as by Pathway IV.

**Females and Pathways.** Pathway V was the second highest ranked pathway by which Hispanic, Asian and White females qualified; however, each of these groups also had an equal

number of students qualify by one other pathway. Pathway II was the second-ranked pathway by which Black females in K-2 became eligible. As with K-2 males, Pathway VI was the lowest ranked method by which students of every ethnic group qualified including White females.

### **Ranking Six Eligibility Pathways Grades 3-5**

**Males in Grades 3-5.** In grades 3-5, students from all ethnic groups except Asians qualified most often by Pathway IV, similar to their K-2 counterparts. Asian males qualified most by Pathway V, though Pathway IV was ranked second. The pathway by which males in grades 3-5 qualified least often was by Pathway III, ranked last or next to last for Hispanic, Asian and White males.

**Females in Grades 3-5.** Females in grades 3-5 qualified most by Pathway IV and the least by Pathway III. Interestingly, the eligibility pathway ranked second for Black females in K-2 was Pathway VI, which was the lowest ranked for Black females in grades K-2. For Hispanic and Asian female students in grades 3-5, Pathway VI ranked third. For Hispanic and White females, Pathway I ranked second for number of 3-5 eligible females. Asian males and females in grades 3-5 qualified the least often by Pathway I. Black males qualified least often by Pathways II and VI.

### **Most Frequent Pathways**

The pathway by which males in grades 3-5 qualified least often was by Pathway III, ranked last or next to last for Hispanic, Asian and White males. Females in grade 3-5 qualified most by Pathway IV and the least by Pathway III. Interestingly, the eligibility pathway ranked

second for Black males and females in 3-5 was Pathway V which was the second lowest ranked pathway for Black females in grades K-2.

For Hispanic and Asian female students in grades 3-5, Pathway VI was ranked third. Pathway VI is the Psychometric Method that includes only mental ability and achievement criteria. For Hispanic and White females, Pathway I was ranked second for the 3-5 eligible females. Asian males and females in grades 3-5 qualified the least often by Pathway I. Black males qualified least often by Pathways II and VI. In grades K-2, more Asian males qualified than males or females from any other ethnic group. Hispanic females in grades K-2 qualified the second highest number with 43. Black and Asian females qualified 34 students each. Black male totals were less than Hispanic and Asian groups, but not White males; however, the ratio of Black males evaluated to eligible are 27 to 42. For White males, the ratio was 17 eligible to 28 evaluated (60.7%). The percentage of Black males evaluated that became eligible was 64.28%.

**Logwood Females and Gifted Identification.** Various studies on gender issues in the identification of gifted students report similar findings on the equal achievement and interest in mathematics and science learning by both girls and boys during the elementary school years, with a drop in interest for many gifted girls after elementary school. This drop in interest by gifted girls is attributed to a need for girls to fulfill the more feminine gender roles encouraged by some of their parents, teachers, and peers (Kerr, Vuyk & Rea, 2012). One study looked at the relationship between teachers' math anxiety and girls' math achievement. The researchers found that female teachers with math anxiety transferred that anxiety to female students, but not to male students. The teacher, a female role model, was a strong influence on female students' attitudes and behaviors toward doing math (Beilock, Gunderson, Ramirez & Levine, 2010). We

might expect high-achieving, girls, who were referred for evaluation at Logwood, to achieve lower math test scores on standardized tests which are used to identify students as gifted. Lower math scores might mean the criteria for achievement would not be met; however, the girls at Logwood that qualified for gifted program placement were more likely to meet the criteria for achievement in math than for reading, and achieving eligibility by a pathway that includes achievement by obtaining the required math total on a standardized test.

**Logwood Student Eligibility Within Criteria Areas.** Pathway IV was the pathway by which all females in both grade ranges were most likely to qualify, giving evidence that all females in both grade ranges demonstrated the importance of the inclusion of criteria areas creativity and motivation in the identification process. Pathway II (mental ability, achievement and creativity) was the second ranked pathway by which Black females at Logwood qualified, while Pathway V (mental ability, achievement and motivation) was second for K-2 Asian, Hispanic and White females. Pathway VI was the pathway by which girls were least likely to qualify (mental ability and achievement, Eligibility Option A). For females and males unable to qualify, an achievement score in the 90th percentile or above would have been crucial to placement, if they had been able to meet additional criteria. Of 217 individual student eligibility reports reviewed, 72 students (33%) attained the required achievement score, 66 percent did not. Females to males was 25 to 47. There were 21 of 217 ineligible students (9.6%), (11 males, 10 females), that achieved the required mental ability score during evaluation, so 90% of ineligible students were unable to do so.

For the area of creativity, 99 of 217 ineligible students were able to demonstrate this ability by the GIFT or TTCT for the years 2004 to 2009, but most often by the Profile of Creative Abilities (PCA) or occasionally by the TTCT from 2011 to 2016. Females were 68 of the 99 ineligible students able to meet the criteria for creativity. Meeting the criteria seemed to depend on which

evaluation tool was used. The PCA was an untimed test that allowed students to demonstrate creativity on two separate sessions. The one-on-one session was a more dynamic assessment with the evaluator participating, and provided the opportunity for practice of the fluency/flexibility skills. The teacher recorded student responses, so the student did not have to think about writing. Logwood students were more often successful on this assessment than on any other creativity assessment.

There were 28 students of 217 whose eligibility reports revealed they were not able to meet any of the criteria in the four areas. These 28 students had either been referred due to an above average score for one area, though not a qualifying score, in either mental ability or achievement, or they were referred by a teacher or parent.

Perhaps students who did not achieve qualifying scores were not confident in their ability to perform on the tests. Steele found that students with a strong academic identity are most vulnerable to anxiety about the perceived and actual negative perceptions of others. Black gifted boys and girls in particular experience stereotype threat, the threat of being seen by others as being less capable, being judged as intellectually inferior because of their Blackness (Steele, 2006). Students of color involved in gifted evaluation are required to take several tests, and their performance in these high-stress situations can be negatively impacted by stereotype threat. Hispanic students' cognitive function is impacted by stereotype threat as well. Rodriguez (2014). Rodriguez found that being a high-performing student who is most concerned with academic performance makes these students the most vulnerable to stereotype threat in high-threat situations such as test taking. Specifically, students affected by stereotype threat answer fewer test questions and answer them less accurately compared to students in low-threat testing situations (Rodriguez, 2014).

Black and Hispanic students at Logwood being evaluated for gifted placement are often attempting certain types of test items for the first time. These CLD students may doubt that they are as intelligent as they thought, because of lack of exposure with different types of problems (Steele & Aronson, 1995). Less than desirable performance on a gifted evaluation assessment changes students' educational paths. It is essential that educators provide enrichment support for students that were talented enough to warrant a referral, just not successful enough on the narrow list of gifted evaluation instruments.

The profiles of students evaluated at Logwood held surprises in the representation of some subgroups and confirmed expected representation results for other subgroups. Asian males qualified for placement in the gifted program at a rate of 76.6%. Along with having the highest rate for eligibility at 82 of 107, Asian males were the second highest referred students with 107 referrals. White females ranked nearly five percentage points behind Asian males at a rate of 71.1% eligible, though White females were the second least referred students of the subgroups with 53 referred and 38 eligible over the thirteen-year span. The rate of eligibility for Black females was 71.3%, with 62 of 87 referred qualifying for placement in the gifted program. Considering the amount of literature devoted to the issue of underrepresentation of minority students, teacher perceptions of high-potential Black males and females, and lack of cultural awareness of minority expressions of creativity and intelligence, it is surprising that Black females at Logwood closely follow White females in gifted eligibility and placement with only a .44% difference.

Asian females had the fourth highest rate of eligibility (70%), with 68 of 97 students qualifying for placement. There is a six percent drop in the rate of eligibility between Asian



females and White males. White males qualified at a rate of 63.8% with 30 of 47 meeting the criteria for placement. There is about a two percent difference in the rate of eligibility between White males and Hispanic females. Of 92 Hispanic females referred, 57 were eligible at a rate of 61.9%. Black male eligibility followed this rate closely at 60% with 48 of 80 Black males eligible. The subgroup with members least likely to qualify, but who had the highest number of referrals over the 13 enrollment years was Hispanic males. Of the 111 Hispanic males referred, 57 students became eligible. Hispanic males were only able to qualify at a rate of 51.4%. This rate is 25.2% below that of Asian males, 12.4% below the rate of White males, and 8.6% below Black males. Hispanic males constituted the highest enrollment, for all years, over any of the eight subgroups represented in this study. The percent of Hispanic males alone were 21.6 to 28.6 percent of all students enrolled at Logwood during the years 2004 to 2016.

**Hispanic Students and Underrepresentation.** In his study on the probability of identification, McBee (2010) confirmed that Hispanic students are less likely to be identified for the gifted program due to the effects of low-SES and race. At Logwood, Hispanic students represent the highest percentage of school enrollment, and also the greatest percentages for underrepresented gifted students. The reasons Hispanic students are not identified for gifted programs at the same rate as Asian and White students at Logwood is not due to failure of teachers to nominate, but by a reliance on measures of mental ability and achievement. A review of the literature on intelligence testing exposes the intentional development and use of mental ability and achievement tests to label some as intelligent if they possessed the right skin color and values, and mislabel people *of* color. Though educators use standardized tests and are actively looking to identify and label children as gifted, any child who does not meet the criteria,

if by but a few points, is denied the label and thereby denied access to challenging learning opportunities (Bernal, 2002).

**Gifted Asian Students and Overrepresentation.** Yoon and Gentry (2009) questioned the soundness of claims that all Asian-American students in gifted programs are overrepresented. They present compelling facts about the composition of the group “Asians” as termed by federal and state agencies.

These authors and others (Kitano, & DiJiosia, 2002) describe the myriad of places from which subgroups that make up the group “Asians” originate, and emphasize that “Asians” within subgroups are divided further into multiple ethnic groups. There are great differences in the cultures and environments on the continent and the surrounding islands. The level of education and historical access to education differs from region to region. New arrivals to the United States come with different skill sets and abilities to earn income. Income levels among those considered “Asian” are not equal, but quite varied. The “model” student from Asia is often working hard to assimilate, and can experience stereotype threat as well (Yoon & Gentry, 2009).

Asian students from families of low socio-economic status experience some of the same issues as Black, Hispanic, and White children from that SES. In Southeast Asian and East Asian cultures, academic success is attributed to hard work (Yoon & Gentry, 2009). In contrast, many American students are led to believe that children are smart or they are not, believing that they are capable up to the limits of the intelligence with which they were born. Parents and teachers, often without realizing, reinforce these ideas. Asian students from different subgroups appear to experience greater success due to the work ethic established at home and perceived in observing family members and those who associate with their parents.

The intention of the Georgia Department of Education (GADOE) is that the State Board of Education Rule 160-4-2-.38 allows local systems to evaluate student abilities in order to serve students' instructional needs. The Multiple Criteria eligibility option allows students enrolled in schools in Georgia and specifically at Logwood Elementary, to demonstrate their potential. Though the intent of state-level and system-level education policies are to support equitable practices in the identification of gifted students, the gifted referral and evaluation data used in this study confirm there are still disparities in the percentages of culturally and linguistically different (CLD) students identified as eligible for access to gifted programming. The Cognitive Abilities Test and the Iowa Tests are administered to all first, second, fifth and eighth grade students including all Black and Hispanic students. Students at Logwood Elementary are referred for gifted evaluation over 95% of the time due to results of these standardized, nationally-normed tests. An analysis of the demographic profiles of referred and evaluated students demonstrate the disparities in identification rates for CLD students, but also supports the important role of the multiple criteria option in identifying CLD students.

This study contributes to the literature by focusing on the annual practices for referral and evaluation of Culturally and Linguistically Diverse students, identifying the demographic profiles for eligible students that qualify by one of six eligibility pathways. This study also attempts to determine the odds of students becoming eligible by one of six eligibility pathways when the predictors are gender, ethnicity, grade range, and teacher ethnicity.

## Profiles for Eligible Students Compared to Non-Eligible Students

*How do the demographics and patterns of performance of students eligible for HCPS's gifted program compare to referred, but non-identified students at Logwood Elementary? .....*

The Logwood Elementary total enrollment during the 2004 inaugural school year was 715 students with a gifted program enrollment of 54 students, 7.5% of student enrollment. Total enrollment for 2018-19, the current year is 1179 students with 93 students enrolled in the gifted program, 7.9%. Important questions for stakeholders involved in the education and referral and evaluation of students for the gifted program is “Which students are being referred?”, and “Which students at Logwood are qualifying for the gifted program?”

The percentage of males and females referred for the 674 student cases do not differ greatly. Males were 51.2% of referred students (345), females were 48.8% (329) of students referred for gifted evaluation. Traditionally there are a greater number of male students than female students enrolled in any given enrollment year.

**“Are CLD students being referred at the same rates as White students?”**. There were 167 Black students of 674 student cases that were referred for evaluation. That is 24.8% of all referred students. This percentage is comparable to the percentage of Black students enrolled at Logwood in any given year. There were 203 Hispanic students referred (30.1%). This percentage is not comparable to Hispanic student enrollment at Logwood. Asian student referrals were 204 of the cases represented in the study. Asian students are being referred at a greater rate than all other ethnic groups at 30.26% of cases included. There were 100 White students referred at 14.8%, though White students have never been more than 8% of total school enrollment and in most years closer to 5% of student enrollment.

**Pathways by which most students qualified.** The Pathway by which more students qualified for gender and ethnic group was Pathway IV. Meeting the criteria for Pathway IV means attaining achievement, creativity and motivation scores at the 90<sup>th</sup> percentile or greater. The exception was K-2 Asian males who qualified most often by Pathway I (All criteria areas met), and during grades 3-5 by Pathway V (mental ability, achievement and motivation, no creativity). White males qualified equally by Pathways IV and I in grades K-2, but by Pathway V in grades 3-5. The Pathway by which students were least likely to qualify was Pathway VI, the Psychometric method or Option A.

### **Thinking About Multiple Criteria**

The statistics describing how students from several cultures at one school achieved or did not achieve eligibility for the gifted program support the need for the multiple criteria method. Had it not been for the inclusion of criteria areas creativity and motivation, 102 kindergarten through second grade students and 69 third through fifth grade students would not have become eligible. Put another way, 71 male students and 100 female students (171 of 674) evaluated would not have become eligible had it not been for eligibility Pathway IV (achievement, creativity, motivation). This pathway does not require students to achieve a score in mental ability. The area of achievement was important for all but 17 male and 19 female students who became eligible with mental ability, creativity and motivation scores; however, these students would not have been eligible by Pathway VI. Also known as Option A or Psychometric Method, a total of 28 students male and female, became eligible by Pathway VI from both grade ranges. Twenty-three of the 28 were students in grades third, fourth or fifth. This great difference in the age at which students are able to qualify by an examination of cognitive development research at early

adolescence. When children are ages eight to ten, the human brain attains the ability to reason and apply logic. The brain's executive function area begins to organize thinking and becomes more goal oriented. The speed of information transmission increases, and the brain maintains important synaptic connections while it abandons unnecessary connections. (Boelema, Harakeh, Ormel & Hartman, Vollebergh, & Zandvoort, 2014)

### **The Influence of Teacher Ethnicity on Referrals**

The U.S. Department of Education Schools and Staffing Survey (SASS) surveyed a nationally representative sample of teachers and principals of whom 82% identified as White (Non-Hispanic) (SASS, 2009). In 2016, *The State of Racial Diversity in the Educational Workforce*, issued by U.S. Department of Education reported that in U. S. schools the population projection for students of color for the year 2024 was 56% (The U.S. Department of Education Policy and Program Studies Service Office of Planning, Evaluation and Policy Development and Program Studies Service, 2016). These statistics underline the urgent need for recruiting and supporting teachers of color for near and not too distant future).

Students of color or CLD students are more likely than White students to underachieve in the classroom and underperform on high-stakes tests, due to academic factors (low teacher expectations, access to resources, weak test-taking skills) and internal factors (cultural identity, academic motivation) (Moore, Ford & Milner, 2005). Finding a solution to these barriers to high achievement, involves attracting a diverse, well-trained educational workforce.

CLD students taught by teachers of color benefit from a role model who not only looks like them, but may be more culturally aware of student values and the characteristics of giftedness for specific cultures. All teachers need to engage in culturally sensitive interaction and

instruction with students, but a teacher of color understands the CLD student experience through their own personal experiences (Moore, Ford & Milner, 2005). Students of all ethnicities benefit from having a teacher of color as a strong role model. For White students, teachers of color break down stereotypes and help students prepare for the diversity of the world beyond school.

In this study, Teacher Ethnicity was less of a factor in referral rates, as the great majority of referrals are due to student score results from system-wide administration of the Cognitive Abilities Test in grades one, two, and five grades, and the Iowa Test in grades two and five. Once test scores arrive, the referral committee (one assistant principal, one gifted certified teacher and the gifted contact teacher) identifies mental ability scores for which an automatic referrals are made. Even so, it is essential that teachers who will make referrals be informed on the multidimensional nature of giftedness and the characteristics of gifted CLD students.

### **Profiles for Primary Grades Students Compared to Upper Elementary**

*How do the demographic profiles and multiple criteria indicators of students eligible for HCPS's gifted program referred in primary grades compare to students referred in upper elementary at Logwood Elementary?* When looking at raw totals by ethnic group from the analysis of Referrals by Grade and Ethnicity, it is clear that the greatest number of students referred for evaluation were Hispanic with 203 out of 674 students referred representing 30.1% of students referred, while Hispanics represent 53% of total student enrollment. Black students were 25.8% (167) of students referred. Black students are 27.9% of all students enrolled. Asian students were 30.3% (204) of students referred while being between 15 and 12% of total student enrollment. White students were 4% of students referred, while White students are 5.3% of all students enrolled at Logwood, but continue to be 'Overrepresented' in gifted enrollment compared to their percentage in total student enrollment. From this perspective, if the percentage

of student referrals by ethnic group should reflect percentages of students enrolled by ethnic group school-wide, then Hispanic students are ‘under-referred’, as are White students while Asian students are ‘over-referred’. Black students may seem to be slightly ‘over-referred’; however, Black gifted enrollment, for females and males remained below their percentages in the total student enrollment and were considered to be underrepresented.

The lack of referrals for Kindergarten and Fourth grades stands out with zero referred for all ethnic groups in 2004-2016. This raises the question: “What were the conditions that prevented referrals of students in Kindergarten?”

The analysis also shows that the greatest percentage of referrals for any group, are for Hispanic students in kindergarten through second grade (91 students), followed by 61 Black students in K-2. Asian students in grades kindergarten through second, (55), Hispanic students in grade 3-5 (53), Black students in grades 3-5 (48),

Mental ability scores are available for all First, Second, and Fifth grade students in the school as the CogAT was administered system-wide at these grade levels in 2014-15. Why were Black and Hispanic students referred at lesser percentages in First grade than Asian and White students when this is one of the grade levels for which mental ability scores are available for all enrolled students?

Over half of Black students referred, (52%) were referred in second grade during this year. Why were these same students not referred at a higher percentage, comparable to Asians and Whites, in First grade? What are the conditions which cause Black students to be referred in greater numbers in their Second grade year? It is important to understand how the performance profiles of Black and Hispanic students make them stronger referral candidates in Second grade



than in First grade, or if some other factor(s) influences the rate of referrals at these grade levels for these two groups.

Interestingly, while percentages of Black student referrals are the *second* highest among all ethnic groups, and enrollment of Blacks in the gifted program is not equal to their enrollment in the overall school population, the percentages of referred Black Male and Female students who became eligible for the gifted program in 2014-15 are the highest of all groups at 32% and 41% of respectively. This might indicate that the referrals of Black students are on target, or that Black students are able to perform more successfully on the types of tests administered during the evaluation process than students in other groups.

In contrast, while Hispanic students represent the greatest percentages in total enrollment (53%) and gifted referrals (41%), referred Hispanic Male and Female students only represent 27% and 32% of students who became gifted eligible. Are the referrals of Hispanic students based on weaker performance profiles than those of Black students and other ethnic groups? Are Hispanic students less able to demonstrate their potential on the types of tests administered during evaluations? These questions demand further study by educators in the school if they are to meet the commitment to providing access to students from all groups. Comparisons to findings to trends within the HCPS system.

When considering the Pathways through which students became eligible in the years 2004-2016, Hispanic Males were eligible through Methods IV, V, and VI, but not Methods I, II, III. Half of Hispanic Males became eligible through Method IV which includes qualifying scores in Achievement (Math), Creativity, and Motivation, but not Mental Ability. Another 33% became eligible by a more traditional Psychometric Method VI (Mental Ability and Achievement). Fifty-seven percent of Hispanic Females became eligible by Method IV, while

28% became eligible by Method II (Mental Ability, Achievement, Creativity, not Motivation).

One statistic of concern is that Hispanic Males represent 82% of all males evaluated that year that were ineligible for the program. Overall, 50% of referred and evaluated Hispanics were identified as gifted, while 50% were declared ineligible. Thirty-eight percent of ineligible females were Black. The question arises, “What were the reasons behind the pathways of ineligibility for Hispanic Female and Male and Black Female students at Logwood?” “What are the conditions that cause Asian males to continue to be well represented in the gifted program?” If we can observe the ways students become eligible for the gifted program, then observing the criteria areas, cultural responsiveness of tests and test procedures, and pathways through which students fail to achieve qualifying scores is critical for understanding the reasons for student ineligibility.

Compared to programs that select students at later grades based on their achievement to date, identifying students early on in elementary school, gifted-and-talented programs may hold even greater promise for promoting children from all backgrounds to reach their full academic potential (Wright & Ford 2017).

## **CHAPTER 6**

### **CONCLUSION**

The purpose of this study was to describe the demographic profiles and patterns of performance for the students at one Title I elementary school. Identifying giftedness in children is complex, because giftedness is multi-faceted (Baldwin, 1987; Frasier & Passow, 1994; Sternberg, 2007; Renzulli, 1978). Identification of giftedness in students requires more than just the administration of intelligence tests, it requires the use of assessments which build a “profile of abilities” (Runco, 1997). The results of the cross-tabulations in this study show that students of both genders, of different races and grade levels can and do qualify for gifted programs by evaluation of multiple criteria by multiple assessments. The results of these assessments can be used to begin construction of profiles of referred students.

One hypothesis offered during this study was that students of color will exhibit giftedness through high scores in multiple criteria areas while White students will exhibit giftedness through paths to eligibility that include mental ability criteria. The cross tabulation results show that the majority of students of color needed assessments in their evaluation that identifies characteristics of creativity and motivation as well as achievement and mental ability. This hypothesis was upheld as for all subgroups except Asian males; Pathway IV was the most frequent pathway by which students became eligible. That greater numbers of students become eligible for the gifted program in grades K-2 was an expected finding. Many students who are successful on the standardized test instruments began reading before attending first grade and some before kindergarten. Strong readers interpret test items with greater understanding.

Of all eligible students 31.5% became eligible by Pathway IV. Though 171 of all eligible students including Hispanic, Black and Asian and White students, became eligible by Pathway IV, 371(68.5%) students became eligible by one of the other five pathways. The need for eligibility pathways other than the Psychometric Method (Option A) supports the research that gifted students express their giftedness in different ways (Frasier, 1997).

Females from all ethnic groups became eligible at a higher rate than two groups of males, as Black and Hispanic males qualified at the lowest rates. Mentors within and outside of school may provide the additional encouragement to help Black and Hispanic males take on a scholar identity. Since Hispanic females became eligible most often in grades K-2, prescribed instruction to support Hispanic females beginning in kindergarten will ensure that even more Hispanic females will develop critical thinking skills and later become eligible for gifted services.

Though Black females became eligible at a rate of 71.3%, it does not mean that this group does not need support. Black and Hispanic females who have qualified for the gifted program and those who have not, but nonetheless require challenging instruction, can also benefit from having mentors.

There are several concerns that remain in the identification of students in spite of the use of multiple criteria. Though assessment occurs in the areas of mental ability, achievement (reading and math), creativity and motivation, each assessment administered results in a required total score. These cut-off scores cut off student access to the instructional services that they need, and many of them perform within one to three percentage points shy of eligibility. To what degree might the margin of error be considered in the use of instruments and scores? When considering students for referral for gifted evaluation, we risk not seeing the potential by relying on static systems of referral and evaluation and by not evaluating multiple score reporting data.

**Limitations**

The population for this study is confined to one local school site. Therefore, the results of this study may not be generalizable to students at other Title I schools, as each case is different and members of school communities and each school experience are different. Having access to a greater number of cases, (perhaps the inclusion of all referred students in an entire cluster of schools or all referred district) to incorporate in the logistic regression models, would improve the predictive power of the regression models.

One limitation of this study is the absence of the data for Logwood Elementary students' participation in the Federal Lunch Program. These data were not available for this study, but would strengthen future analysis of the relationship between student gifted eligibility and student demographic profiles.

Students enrolled sometime during the years 2004-2016 did not have the same evaluation instruments administered to them. Students evaluated during the years 2004 to 2010 may have been administered the GIFT (Group Inventory for Finding Talent) a student self-evaluation instrument, or the Torrance Test of Creative Thinking. Students evaluated in the years 2011 to 2016-17 were administered the PCA (Profile of Creative Abilities) or the TTCT, with the great majority being administered the PCA as this assessment had in the past been listed as 1<sup>st</sup> Choice in the creativity criteria area on the HCPS Gifted Education Evaluation Chart

The year 2013-14 was the only year that the Terra Nova Achievement Tests were available as a second choice assessment for students who did not achieve a qualifying score on the Iowa Tests. All first grade students, and those second and fifth grade students who did not achieve a qualifying achievement score from 2014 through 2016-17 were administered the

Measures of Academic Progress (MAP) in reading and/or math. The Iowa Test was administered to third and fifth graders during the years 2004 through 2013. In 2014, the Iowa Test was administered to second, third and fifth graders. In 2015 a final transition was made for the Iowa Test to be administered to second and fifth graders. The Cognitive Abilities Test administration was moved from third grade to second grade as well during this time period. With these changes for administration of tests, and differences in the tests themselves, the analysis of referral and eligibility by grade level and by criteria areas within pathways is most certainly affected. The students representing cases within the data experienced different evaluation situations.

### **Future Research**

This study presented demographic profiles of CLD students enrolled in a Title I school who were referred, evaluated and identified as either eligible or ineligible to receive gifted services. Though the questions for how profiles and performance of eligible versus non-eligible students, and primary versus upper elementary students compare, this study generated more questions that require further research. The lack of availability of multiple assessment instruments in each criteria area complicates the reasons for students' lack of success. A one-shot picture does not measure the totality of a student's ability and not every test allows a student to show their ability by the method provided.

A study of the use of assessment instruments, and the success rates for students of different ethnic groups would inform decision makers at the system level. If salient research is presented to system-level leaders, perhaps a greater investment will be made in test selection and consequently in students' futures. Deconstructing examples of the kind of assessment items will

help teachers to plan instruction addressing skills embedded within test items. Direct instruction of skills which students are expected to perform on tests is necessary to ensure student success. It seems unfair to ask students to perform on demand when the task has not been explained.

Further study of the reasons for performance during evaluation for students in each of the two grade ranges would provide support to continue effective instructional strategies to prepare foster success. Findings may also provide evidence of ineffective procedures in the evaluation process. An examination of teachers' understanding of research on stereotype threat can shed light on student behaviors, and help students to understand themselves, perhaps alleviating the fears that exemplify this internal struggle of the evaluation process. The creation and inclusion of a student attitude survey to document student perceptions of testing experiences *and* their level of preparedness for tests used in gifted evaluation may be informative. Also survey items on student beliefs of their own performance on the test. This can inform how evaluators promote a healthy test environment to positively impact student confidence and test performance. This would create a more multi-dimensional method for looking at student profiles of performance.

Researchers who choose to replicate or improve this study might modify the collection of data process to include student status in the National School Lunch Program, whether eligible or not. This variable will indicate the students' family background in terms of socio-economic status. These students may have a lack of access to learning resources, which could impact test performance.

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## Appendices

### Appendix A

*Student Eligibility Performance Ranked by Pathway*

Male									Female								
Grade		Black	Total	Hispanic	Total	Asian	Total	White	Total	Black	Total	Hispanic	Total	Asian	Total	White	Total
K-2	Pathway	IV	13	IV	17	I	15	IV	5	IV	20	IV	19	IV	13	I	5
		II	5	V	5	II	13	I	5	II	6	III	7	I	6	IV	5
		I	4	I	4	IV	10	VI	4	I	4	V	7	V	6	II	2
		III	4	II	2	V	8	II	2	III	2	I	5	II	5	V	2
		V	1	III	2	III	4	V	1	V	2	II	5	III	3	III	1
		VI	0	VI	1	VI	0	III	0	VI	0	VI	0	VI	1	VI	0
	Subtotal		27		31		50		17		34		43		34		15
3-5	Pathway	IV	7	IV	10	V	14	V	6	IV	12	IV	9	IV	12	IV	10
		V	4	V	7	IV	6	IV	3	V	5	I	3	V	9	I	6
		I	3	VI	6	II	5	I	2	I	4	V	1	II	4	II	3
		III	3	II	4	VI	4	VI	2	II	3	VI	1	VI	4	VI	2
		II	2	I	1	III	2	II	0	III	2	II	0	III	3	III	1
		VI	2	III	2	I	1	III	0	VI	2	III	0	I	2	V	1
	Subtotal		21		30		32		13		28		14		34		23
Total		48		61		82		30		62		57		68		38	

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

## Appendix B

### *Black Students by Gender by Eligibility Pathway by Grade Range*

Pathways		Male			Female			Total		
Eligibility	Grade	Not Black	Black	Total	Not Black	Black	Total	Not Black	Black	Total
Not Eligible	K-2	55	15	70	51	13	64	106	28	134
	3-5	41	17	58	28	12	40	69	29	98
	Total	96	32	128	79	25	104	175	57	232
Pathway I	K-2	24	4	28	16	4	20	40	8	48
	3-5	4	3	7	11	4	15	15	7	22
	Total	28	7	35	27	8	35	55	15	70
Pathway II	K-2	17	5	22	12	6	18	29	11	40
	3-5	7	2	9	7	3	10	14	5	19
	Total	24	7	31	19	9	28	43	16	59
Pathway III	K-2	6	4	10	11	2	13	17	6	23
	3-5	2	3	5	4	2	6	6	5	11
	Total	8	7	15	15	4	19	23	11	34
Pathway IV	K-2	32	13	45	37	20	57	69	33	102
	3-5	19	7	26	31	12	43	50	19	69
	Total	51	20	71	68	32	100	119	52	171
Pathway V	K-2	14	1	15	15	2	17	29	3	32
	3-5	27	4	31	11	5	16	38	9	47
	Total	41	5	46	26	7	33	67	12	79
Pathway VI	K-2	5	0	5	1	0	1	6	0	6
	3-5	12	2	14	7	2	9	19	4	23
	Total	17	2	19	8	2	10	25	4	29
Total	K-2	153	42	195	143	47	190	296	89	385
	3-5	112	38	150	99	40	139	211	78	289
	Total	265	80	345	242	87	329	507	167	674

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

## Appendix C

*Hispanic Students by Gender by Eligibility Pathway by Grade Range*

Pathways	Grade	Male			Female					
		Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total	Not Hispanic	Hispanic	Total
Not Eligible	K-2	40	30	70	39	25	64	79	55	134
	3-5	34	24	58	30	10	40	64	34	98
	Total	74	54	128	69	35	104	143	89	232
Pathway I	K-2	24	4	28	15	5	20	39	9	48
	3-5	6	1	7	12	3	15	18	4	22
	Total	30	5	35	27	8	35	57	13	70
Pathway II	K-2	20	2	22	13	5	18	33	7	40
	3-5	7	2	9	10	0	10	17	2	19
	Total	27	4	31	23	5	28	50	9	59
Pathway III	K-2	8	2	10	6	7	13	14	9	23
	3-5	5	0	5	6	0	6	11	0	11
	Total	13	2	15	12	7	19	25	9	34
Pathway IV	K-2	28	17	45	38	19	57	66	36	102
	3-5	16	10	26	34	9	43	50	19	69
	Total	44	27	71	72	28	100	116	55	171
Pathway V	K-2	10	5	15	10	7	17	20	12	32
	3-5	24	7	31	15	1	16	39	8	47
	Total	34	12	46	25	8	33	59	20	79
Pathway VI	K-2	4	1	5	1	0	1	5	1	6
	3-5	8	6	14	8	1	9	16	7	23
	Total	12	7	19	9	1	10	21	8	29
Total	K-2	134	61	195	122	68	190	256	129	385
	3-5	100	50	150	115	24	139	215	74	289
	Total	234	111	345	237	92	329	471	203	674

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

## Appendix D

*Asian Students by Gender by Eligibility Pathway by Grade Range*

Pathway	Grade	Male			Female			Not Asian	Asian	Total
		Not Asian	Asian	Total	Not Asian	Asian	Total			
Not Eligible	K-2	56	14	70	46	18	64	102	32	134
	3-5	47	11	58	29	11	40	76	22	98
	Total	103	25	128	75	29	104	178	54	232
Pathway I	K-2	13	15	28	14	6	20	27	21	48
	3-5	6	1	7	13	2	15	19	3	22
	Total	19	16	35	27	8	35	46	24	70
Pathway II	K-2	9	13	22	13	5	18	22	18	40
	3-5	4	5	9	6	4	10	10	9	19
	Total	13	18	31	19	9	28	32	27	59
Pathway III	K-2	6	4	10	10	3	13	16	7	23
	3-5	3	2	5	3	3	6	6	5	11
	Total	9	6	15	13	6	19	22	12	34
Pathway IV	K-2	35	10	45	44	13	57	79	23	102
	3-5	20	6	26	31	12	43	51	18	69
	Total	55	16	71	75	25	100	130	41	171
Pathway V	K-2	7	8	15	11	6	17	18	14	32
	3-5	17	14	31	7	9	16	24	23	47
	Total	24	22	46	18	15	33	42	37	79
Pathway VI	K-2	5	0	5	0	1	1	5	1	6
	3-5	10	4	14	5	4	9	15	8	23
	Total	15	4	19	5	5	10	20	9	29
Total	K-2	131	64	195	138	52	190	269	116	385
	3-5	107	43	150	94	45	139	201	88	289
	Total	238	107	345	232	97	329	470	204	674

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI - Mental Ability, Achievement (Psychometric Method)



## Appendix E

*White Students by Gender by Eligibility Pathway by Grade Range*

Pathways	Grade	Male			Female			Not White	White	Total
		Not White	White	Total	Not White	White	Total			
Not Eligible	K-2	59	11	70	56	8	64	115	19	134
	3-5	52	6	58	33	7	40	85	13	98
	Total	111	17	128	89	15	104	200	32	232
Pathway I	K-2	23	5	28	15	5	20	38	10	48
	3-5	5	2	7	9	6	15	14	8	22
	Total	28	7	35	24	11	35	52	18	70
Pathway II	K-2	20	2	22	16	2	18	36	4	40
	3-5	9	0	9	7	3	10	16	3	19
	Total	29	2	31	23	5	28	52	7	59
Pathway III	K-2	10	0	10	12	1	13	22	1	23
	3-5	5	0	5	5	1	6	10	1	11
	Total	15	0	15	17	2	19	32	2	34
Pathway IV	K-2	40	5	45	52	5	57	92	10	102
	3-5	23	3	26	33	10	43	56	13	69
	Total	63	8	71	85	15	100	148	23	171
Pathway V	K-2	14	1	15	15	2	17	29	3	32
	3-5	25	6	31	15	1	16	40	7	47
	Total	39	7	46	30	3	33	69	10	79
Pathway VI	K-2	1	4	5	1	0	1	2	4	6
	3-5	12	2	14	7	2	9	19	4	23
	Total	13	6	19	8	2	10	21	8	29
Total	K-2	167	28	195	167	23	190	334	51	385
	3-5	131	19	150	109	30	139	240	49	289
	Total	298	47	345	276	53	329	574	100	674

Note: Grade Range K-2 includes Kindergarten, 1st and 2nd grade students

Grade Range 3-5 includes 3rd, 4th, and 5th grade students

Eligible by Pathway = Eligible, Non-Eligible by Pathway = Not Eligible

Georgia Multiple Criteria Pathways to Gifted Eligibility:

Pathway I - Mental Ability, Achievement, Creativity, Motivation

Pathway II - Mental Ability, Achievement, Creativity

Pathway III - Mental Ability, Creativity, Motivation

Pathway IV - Achievement, Creativity, Motivation

Pathway V - Mental Ability, Achievement, Motivation

Pathway VI – Mental Ability, Achievement (Psychometric Method)

**Appendix F***Logwood ES School and Gifted Enrollment by Year*

Enrollment Year	School Enrollment	Gifted Enrollment	Percent of Total Enrollment
2004-05	715	54	7.5
2005-06	796	75	9.4
2006-07	803	61	7.6
2007-08	811	62	7.6
2008-09	853	63	7.4
2009-10	859	73	8.5
2010-11	896	68	7.6
2011-12	1063	81	7.7
2012-13	1131	71	6.3
2013-14	1183	108	9.2
2014-15	1155	122	10.6
2015-16	1140	126	11.2
2016-17	1233	139	11.4