ABSTRACT

Title of Document:	EXPLORING THE IMPACT OF ELEMENTARY PRINCIPALS' PERCEPTIONS OF GIFTED EDUCATION PROGRAMS
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Gifted education programs are designed to meet the needs of students who have demonstrated a need for accelerated and enriched learning experiences. Without these authentic learning opportunities, gifted students many not reach their full academic potential and may lose the desire and motivation for learning.

The purpose of the exploratory study was to examine elementary school principals' perceptions of gifted education as related to leadership and instructional practices that are used in their schools. The study sought to identify any correlations between principals' perceptions of gifted education with effective leadership and instructional practices that supported gifted students and programs. An online survey was used with adapted items from a state–level document that outlines the criteria for excellence in gifted education programs and items from an existing perceptions survey (McCoach & Siegel, 2007). The survey was distributed to 106 elementary school principals. Responses to individual items were

collapsed to create three scores: (a) Perceptions (b) the Importance of Practices and (c) Practices Used of respondents' reports of practices used in their schools. Analyses revealed that the three highest-rated items on the Perceptions scale were indicators of support for gifted education. On the Importance of Practices scale, analyses revealed that providing staff members differentiated professional development and ensuring that they understand the identification process for gifted students were rated as the most important practices. Using pre-assessments for student learning was rated the highest for the Practices Used scale.

Pearson correlations for the three summary measures show a significant, but weak relationship between principals'' Perceptions score and the ratings of the Important of Practice score. Additionally, the data revealed no statistically significant relationship between the Importance of Practices and Practices Used scores.

This study enriches the literature on perceptions of elementary principals towards gifted education and the impact their perceptions may have on programs and student outcomes.

EXPLORING THE IMPACT OF ELEMENTARY PRINCIPALS'
PERCEPTIONS OF GIFTED EDUCATION PROGRAMS

by

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Dedication

This effort is dedicated to three family members who have taught me the most important lessons in my life. In memory of my loving father, Joseph L. Gaines, who taught me to have a growth mindset way before Carol Dweck came up with this concept. He would often tell me, "You can do anything you want, if you put your mind to it and put forth your best effort". I would like to thank my mother for her endless love and unwavering support. Thank you for all the meals and hours watching Sydney so that I could attend classes and work on my paper. Thank you for your continued support. I would like to thank my daughter, Sydney, who unknowingly served as my inspiration for choosing gifted education as my research topic. I was interested in learning more about ways to support her talents and creativity, as well as those of the gifted students that I serve each day.

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"Feeling gratitude and not expressing it is like wrapping a present and not giving it" (William Arthur Ward).

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extraordinary! With such a committed group of individuals, it made it easier for me to complete my dissertation knowing that I didn't have to worry about things at work. We definitely have those systems and structures, along with high expectations in place! Finally, I would like to thank the school district for providing me with this opportunity to learn and grow.

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Section 1

"A gifted and talented student needs different services beyond those normally provided by

the regular school program in order to develop the student's potential" (Annotated

Code 8-202).

There is "a growing recognition that gifted students are being poorly served by most public

schools" (Hoy & Hoy, 2003).

Research shows that far too many schools in the United States are not meeting the

unique needs of gifted students. Gifted students must have access to enriching and

challenging opportunities that will stretch, grow, and develop their strengths, and passions

(Gessner, 2007). These students also need time to interact with intellectual peers who share

the same interests, abilities, and excitement about learning (Gessner, 2007). Unfortunately,

the needs of the gifted learner are often overlooked in increasingly large classroom settings

where teachers' primary focus is on getting students to the proficiency level (Long, 2013).

While educators want to meet the needs of all students, accomplishing this task is very

difficult "when they're limited by district curriculum requirements and have fewer funds for

more advanced materials, teachers' assistants, technology, or professional development, it

can be challenging" (Long, 2013, p. 1).

Research supports the notion that the leadership provided by an effective building

principal is second only to the instruction provided by the classroom teacher in impacting

student learning (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005). Studies have

shown that a principal plays a significant role in helping a school maintain a focus on its

primary reason for existence—helping all students learn (Blasé, Blasé, & Phillips, 2010;

Smylie, 2010). According to McHatton, Boyer, Shaunessy, Terry, and Farmer (2010),

principals' perceptions, knowledge and practices of gifted education play a major role in determining the success and effectiveness of gifted programs. Further, in 2004, an evaluation of gifted programs in the large urban school district that was the site of the present study (District M), concluded that principals are key stakeholders who have the ability to make impactful changes within the district's Talented and Gifted (TAG) programs (Cook, 2006).

Using a mixed methodology that included the collection of data through teacher and parent surveys, TAG program staff interviews, classroom observations, and focus groups, this past study focused on the implementation of TAG programs in District M. Despite the importance of the principal in supporting TAG programs, this evaluation did not obtain input directly from principals regarding their understanding or perspectives of programs for gifted and talented students. It is important to note that many of the recommendations made during Cook's (2006) TAG evaluation over a decade ago still have not been addressed in the district. As a result, this present study used elementary school principals as the unit of analysis and focused on examining their perceptions and leadership and instructional practices that impact the TAG students and programs in their schools.

Who are Gifted and Talented Students?

Before discussing the issues regarding programming for gifted and talented students, it is important to discuss who these students are. The National Association for Gifted Children (NAGC) was founded in 1954 and is the largest organization that advocates for, and is committed to improving, gifted education policies and practices. According to NAGC, approximately six to ten percent of the total student population in the United States (or 3-5 million children and youth) consists of gifted and talented students from every racial, ethnic, and socio-economic group (www.nagc.com).

Giftedness, *intelligence*, and *talent* are fluid concepts that have multiple meanings. NAGC (2013) defined gifted learners as follows:

Gifted individuals are those who demonstrate outstanding levels of aptitude (defined as an exceptional ability to reason and learn) or competence (documented performance or achievement in top 10% or rarer) in one or more domains. Domains include any structured area of activity with its own symbol system (e.g., mathematics, music, language) and/or set of sensorimotor skills (e.g., painting, dance, sports). (p. 1)

Nearly every state has its own definition of gifted students. The state in which the present study took place has defined TAG students as follows:

Elementary or secondary student who is identified by professionally qualified individuals as: (1) Having outstanding talent and performing, or showing the potential for performing, at remarkably high levels of accomplishment when compared with other students of a similar age, experience, or environment; (2) Exhibiting high performance capability in intellectual, creative, or artistic areas; (3) Possessing an unusual leadership capacity; or (4) Excelling in specific academic fields. (Annotated Code, Title 8 § 201)

Several researchers have posited that the multiple definitions for *giftedness*, *intelligence*, and *talented* may contribute to the underrepresentation of minorities in gifted programs (Callahan, Tomlinson, & Pizzat, 1994; Clark, 2002; Frasier & Passow, 1994), as these broad and open definitions leave too much room for interpretations. As such, the identification process for gifted programs has been an issue for many years (Brown et al., 2005).

Who Teaches Gifted Students?

In order to maximize the potential of gifted students, teachers must be equipped with instructional knowledge and tools to meet their needs. Most states do not require teachers to take any classes or professional training in gifted education (National Association of Gifted Children, 2011). In fact, only three states have a requirement that general education teachers have training of any kind in gifted education, and eight states estimate that 5% or fewer of their general education teachers receive processional development in gifted education (NAGC, 2013b). On the other hand, there are only six states that require all preservice teachers to be trained in gifted education (National Association of Gifted Children, 2011).

According to Plunkett & Krongboro (2011), after taking one gifted education class, preservice teachers perceptions of gifted students changed in a positive way. Every school should be equipped with teachers who understand the unique learning needs of gifted students. According to Gallagher (2004), many gifted students spend the majority of their time in general education classrooms where the curriculum is (a) often several years below their ability and (b) taught by teachers who have no experience working with gifted students. In District M, a program evaluation conducted of the district's TAG programs in SY 2004-2005 noted a major finding: about 50% of elementary and middle school TAG teachers received no professional development in gifted education (Cooke, 2006, p.11). Cooke also noted, "The quality of TAG instruction and curricula implementation was not consistent throughout the school district and ranged from exemplary to barely existent" programs (p.7).

Benefits of Gifted Education

In 1972, Sidney P. Marland Jr., Commissioner of Education, delivered to Congress a report that outlined the educational needs of gifted students in the United States (Russo, 2001). In this report, Marland likened the need for identification and differentiated services for advanced learners to the needs of special education students (Milligan, J., Neal, G., & Singleton, J. 2012). Marland (1980) also noted that America did not have enough challenging programs to meet the needs of its gifted and high-achieving students. In 1993, the U.S. Department of Education (DOE) released a national report titled "National Excellence: A Case for Developing America's Talent." This report discussed a "quiet crisis" in America that rose from the nation's failure to challenge gifted and talented students (DOE, 1993, p. 5).

Several researchers have noted the benefits of providing a quality education to gifted students. According to NAGC (2005a), gifted programming positively affect students' postsecondary plans. Kell, Lubinske, and Benbow (2013) found that 63% of 320 students identified as gifted who received appropriate services throughout high school reported completing a master's degree or higher, with 44% receiving doctoral degrees. In contrast, only 2% of the general U.S. population reached these levels of educational attainment (Kell et al. (2013).

Unfortunately, data show that not all gifted children receive a rigorous education. Reis and McCoach (2000) found that when gifted students had consistent exposure to TAG programs and services that lacked academic rigor, they did not work up to their potential and ultimately did not gain the skills needed to compete in a global society. According to Renzulli and Park (2000), a number of gifted students underachieve in school, and some even drop out of high school in response to the lack of academic rigor.

In 2008, Loveless, Farkas, and Duffet conducted a national survey on high-achieving students in the No Child Left Behind (NCLB) Era. The researchers surveyed a random sample of 900 public school teachers of students in Grades 3-12. Sixty percent of those teachers stated that low achievers were a "top priority" at their schools. Conversely, only 23% of the teachers stated that high achievers were a priority. Additionally, while 86% of the teachers believed that all students deserved the same amount of attention from the teacher, 81% responded that struggling students were more likely to get one-on-one attention (Loveless et al., 2008). As Assouline, Colangelo, Van Tassel-Basks, and Luprowski-Shoplik (2015) opined, "It is hard to argue students who are gifted need as much one-on-one help as students with special needs" (p. 54).

Federal and State Mandates

Since 1975, when the U.S. Congress passed Public Law 94-142, which guaranteed a free and appropriate public education to each child with a disability, the federal government has mandated and funded special education services. As a result of this mandate, federal funds are provided to every school district to operate programs for children who need special education remedial services (Perkins, 2011). These services include identification, the development of an Individual Education Plan, and access to special education programs with trained teachers and staff who are able to meet their educational needs (Milligan, Neal, & Singleton, 2012).

In contrast, "in 1988, the federal government passed the Gifted and Talented Students Education Act, which recognized that intellectually gifted students have needs but did not require states to provide special services for them" (Rinn & Cobane, 2009, p. 54). In the absence of a federal mandate, all decisions regarding gifted education are made at the state or

local school district level, and there are no federal funds available to operate gifted programs at the local level (Milligan, Neal, & Singleton, 2012). Some school districts include gifted education under the special education umbrella, which results in more funds for gifted students.

Each state has the flexibility to develop their own policies regarding the identification process, curriculum selection and development, and the funding of gifted programs. However, federal laws like the 2001 Elementary and Secondary Education Act (ESEA)—No Child Left Behind Act (NCLB)—put additional pressures on school districts and educators to improve student performance and ensure that every student met grade-level requirements (Reback, Rockoff, & Schwartz, 2011). These pressures led educators to foster educational environments that focused on improving academic deficits, while failing to place an appropriate emphasis on building on strengths and providing enrichment opportunities.

According to Neal and Schanzenbach (2007), accountability systems based on proficiency tests lead educators to focus on children who are close to the proficiency levels, the "golden band" students. Like Neal and Schanzenbach, Finn and Wright (2015) noted that many federal and state educational policies, including those around high stakes testing, have caused schools to target underachieving students by providing remediation skills. As a result, schools often miss the mark with students who are proficient or advanced and rarely develop curriculums that challenge them because there is no incentive to continue moving them forward academically (Finn & Wright, 2015).

The Every Student Succeeds Act. In 2015, President Barack Obama signed into law the Every Student Succeeds Act (ESSA). This newest iteration of the Elementary and Secondary Education Act (ESEA) replaced NCLB, and its new provisions went into effect

during school year (SY) 2017-2018. One major highlight of ESSA is that it gives individual states more control over educational standards and policy. For example, beginning in SY 2017-2018, states had the authority to determine proficiency levels for students, instead of following a federal one-size-fits-all mandates (ESSA, 2015).

While NCLB mentioned gifted students, the legislation's heavy focus on underperforming students largely overshadowed provisions for gifted students. Conversely, ESSA includes two new specific requirements that states must implement for gifted students to increase states' accountability for serving this special population. The two provisions are as follows:

(http://www.nagc.org/sites/default/files/Advocacy/Q%2BA%20on%20ESSA%20(web).pdf)

- On the state report cards: States must include student achievement data at each achievement level that is disaggregated by student subgroup (e.g., low-income, race, English learners, gender, and students with disabilities). Previously, states provided detailed information for students performing at the proficient level and below. Now, states also will have to include information on students achieving at the advanced level.

- In applying for Title II professional development funds, states must include information about how they plan to improve the skills of teachers and other school leaders in a way that will enable them to identify gifted and talented students and provide instruction based on the students' needs. (National Association for Gifted Children, n.d.)

According to the NAGC (n.d.), ESSA also includes the following provisions for gifted education:

- Districts may use Title I funds to identify and serve gifted and talented students;

- States can use computer adaptive tests for state assessments and authorizes grant funding to states to develop such assessments;

- Districts may use their Title II professional development funds to provide training on gifted education-specific instructional practices like enrichment, acceleration, and curriculum compacting;

- Districts and states must collect, disaggregate, and report their student achievement data at each achievement level;

- Districts that receive Title II professional development funds must use the money to address the learning needs of all students. ESSA specifically says that "all students" includes gifted and talented students.

State policy. The mid-Atlantic state ("the state") in which the district in this study took place is one of six states that mandates the provisions of gifted education programs; however, the state provides no additional funding for schools to offer these programs (COMAR 13A.04.07). Consequently, schools have little incentive to provide appropriate educational services for their gifted students. COMAR 13A.04.07 is a state regulation that provides local school districts guidance to help them identify gifted students and then develop and implement programs to serve this population.

In 2010, this state was one of nine states, including the District of Columbia, that received $250 million dollars from the Race to the Top grant, which was designed to support education reform efforts implemented by 2014. District M received $21 million of those state dollars (DOE, 2014). Like NCLB, the Race to the Top funds increased states' focus on getting low-performing students and schools to meet the proficiency threshold. With

mandates like NCLB and Race to the Top, high achievers and gifted students made lesser gains than low achievers. "Policy efforts that raised the floor and eased the achievement gap did so at the expense of strong students, who were already nudging the ceiling" (Finn & Wright, 2015, p. 15).

"In 2002, the State General Assembly enacted the *Bridge to Excellence in Public Schools Act.* This legislation provides a powerful framework for all school systems to increase student achievement for all students and to close the achievement gap. The *Bridge to Excellence* legislation significantly increased state aid for public education and required each local education agency to develop a comprehensive Master Plan, to be updated annually, which links school finance directly and centrally to decisions about improving student learning" (District M, 2015, p. viii).

The Advisory Council on Gifted and Talented Education. This state leaves most decision-making regarding gifted education to the local school districts (The State Department of Education, 2012). As a result, in 2002, The State Advisory Council on Gifted and Talented Education was formed. The council consists of professional educators, school and district administrators, parents, and colleges and universities, as well as community and business stakeholders. The primary purpose of the council is to "encourage the development and consistent implementation of comprehensive, high quality services with regard to gifted and talented education, in order to assure equity of access for all children throughout the state" (http://marylandpublicschools.org/programs/Pages/Gifted-

Gifted Education in District M

District M is one of the largest urban school districts in the country. It is the second largest school district in the state, with an annual operating budget of 1.8 billion dollars.

During SY 2015, District M served over 128,000 students in 209 schools. The district has a very diverse student population: 61% are Black or African American, 30% are Hispanic/Latino, 4% are White, 3% are Asian, 16% are English language learners, 11% are eligible for special education services, about 12% are identified and gifted and talented, and 64% receive free or reduced meals (FARMS; District M, 2015).

District M has served gifted students in TAG programs since 1976. During SY 1985-1986, the district established TAG Magnet programs using the National Gifted Program Standards (NGPS; Cooke, 2006), which focused on program design and management, student identification, professional development, and program evaluation. In 2014, District M had 12,859 identified TAG students in Grades 2-6, which was 12.9% of the total school system population.

Today, elementary schools in District M use one of the three TAG service delivery models—TAG Centers, TAG in the Regular Classroom, and TAG Pull-Out—to meet the needs of gifted students. TAG Centers provide TAG-identified students with full-day enrichment and acceleration experiences designed to meet the unique needs of gifted learners. TAG in the Regular Classroom (TRC) provides TAG-identified students within school boundaries with differentiated instructional services in the general education classrooms. TAG Pull-Out Programs provide TAG-identified students within school boundaries an enrichment program specifically developed for gifted learners outside of the general education classroom. The TAG Pull-Out model and TAG in the Regular Classroom program serve the majority of the gifted elementary students in the district. These models served as the focus of this study.

Each year, in its Bridge to Excellence Plan, District M uses COMAR 13A.04.07 to outline three goals that will help the district address the needs of gifted students (see Figure 1).

Goal 1. Student Identification
Each local education agency shall establish a process for identifying gifted and talented students as they are defined in the Educational Article §8-201 [*COMAR 13A.04.07.02(A)*].
Goal 2. Programs and Services
Each local education agency shall provide different services beyond those normally provided by the regular school program in order to develop the gifted and talented student's potential *[COMAR 13A.04.07.03(A)]*.
Goal 3. Professional Development
Teachers and other personnel assigned to work specifically with students identified as gifted and talented shall engage in professional development aligned with the competencies specified by 13A 12.03.12 Gifted and Talented Education Specialist.

Figure 1. District M Master Plan. Three goals and corresponding strategies designed to address the needs of gifted students (District M, 2015, p. 272).

Goal 1: Student identification. In alignment with the NAGC standards, District M established the goal of identifying at least 10% of the total student populations as TAG. Table 1 shows the percentage and number of district TAG students in Grades 2-12 for five consecutive school years and demonstrates acceptable growth in the TAG population over that period. More specifically, District M pays close attention to the underrepresented subgroups, like of ESOL, FARMS, and twice-exceptional populations, as well as the cultural groups identified for TAG services. Table 2 shows the number of district TAG students in each grade level and their identified subgroups

Table 1

District M TAG Population Data Summary

School year	Grades 2-12 student population	Number of TAG students	% of TAG students
2009-2010	102,796	11,867	11.5%
2010-2011	101,652	12,705	12.5%
2011-2012	99,444	12,140	12.2%
2012-2013	98,448	12,463	12.6%
2013-2014	99,348	12,859	12.9%

(Source: District M, 2014, Part 1, p. 313)

Universal screening. District M uses universal screening for TAG identification to ensure that all students have an opportunity to take the assessment used to identify gifted students. There are several different paths to TAG nomination and identification at each grade level. Until SY 2016-2017, district representatives assessed all students in Grades 1 and 3 using the Otis-Lennon School Ability Test (OLSAT). During that year, the district planned to begin assessing first grade students using a new ability tool, the Cognitive Abilities Test (CogAT), which measured reasoning and problem solving using verbal, quantitative, and nonverbal or spatial symbols (Lohman, Korb, & Lakin, 2008).

Unlike the CogAT, the OLSAT assesses only test taking skills and verbal ability, as the test must be read aloud to first graders. As a result, other school districts do not recommend that use of the OLSAT test to assess young children (Cataldo, 2009) or English language learners (Reed, 2007). Additional benefits of the CogAT include the fact that (a) teachers can use the results to increase instructional opportunities for all students and (b) the

test identifies more minority students, including English language learners (ELLs) who may be eligible for gifted and talented programs (Houghton et al., 2001). However, in January 2017, it was decided by the school district that the first graders would not take the new CogAT assessment; but instead take the OLSAT as they had in previous years.

All students in Grade 2 in District M take the Stanford 10 (SAT 10) Reading and Math Achievement Tests. Additionally, District M also occasionally administers the Naglieri Nonverbal Assessment Test (NNAT) to children who do not speak English as a first language. When students score at the desired percentile ranking on these assessments, they are automatically screened for TAG services (District M, Master Plan, 2014).

In addition to the ability and achievement data, District M also uses teacher and parent checklists, as well as report card grades, to determine students' eligibility for TAG services. While the parent checklist is not scored and directly factored into the requirement for a student to be identified as gifted, the information provides valuable background information on the child prior to school and offers useful data about the student's interests outside of school (District M, Master Plan, 2014).

Table 2

Gifted and Talented Enrollment by Subgroup and Grade Level

Grade level	K	1	2	3	4	5	6	7	8	9	10	11	12
All GT students	N/A	N/A	1133	1472	1848	1827	1680	1387	1487	1173	1080	1001	858
Hispanic/ Latino of any race	N/A	N/A	151	241	293	310	281	203	199	136	103	108	79
American Indian/ Alaskan Native	N/A	N/A	16	64	123	158	135	97	88	71	58	45	30
Asian	N/A	N/A	58	74	73	91	85	96	79	62	49	43	44
Black/ African American	N/A	N/A	636	753	966	946	882	830	774	700	669	630	530
Native Hawaiian/Other Pacific Islander	N/A	N/A	11	34	42	27	15	<10	<10	<10	<10	<10	<10
White	N/A	N/A	232	258	249	177	183	178	153	133	108	110	121
Two or more races	N/A	N/A	29	48	102	118	99	83	84	71	93	65	54
Special education	N/A	N/A	<10	30	28	24	19	36	18	20	18	14	<10
Limited English proficient (LEP	N/A	N/A	<10	21	37	29	19	31	37	26	25	17	27
Free/ reduced meals (FARMS)	N/A	N/A	166	262	298	312	262	187	176	122	91	61	29

Source: District M, 2014, Part 1, p. 338

District M assesses all students for TAG programs in Grades 1-3. The district also offers off-level testing to students who are new to the district, as well as to those who are nominated for rescreening by their parents, teachers, administrators, or themselves and do not have valid test data. Off-level testing involves the administration of an achievement or ability test at a grade level other than the one for which it was specifically designed. The district also uses this off-level testing for students who are applying for early entrance into first grade. These kindergarten students are nominated by teachers or parents for acceleration into first grade at the end of the first quarter of school.

Goal 2: Programs and services. District M has established one objective for its TAG Program under Goal 2: *Provide programs and services that enrich, modify, or replace regular classroom curricula and instruction to meet the unique needs of talented and gifted students* (PGCS, 2014, p. 306). At the elementary school level, there are three service delivery models for TAG: TAG Pull-Out Model (TPO), TAG in the Regular Classroom (TRC) and TAG Center (TC). Table 3 shows the participation in each type of elementary TAG program for SY 2013-2014.

Table 3

TAG Service Delivery Models for Elementary Programs

Program type	Enrollment
TPO (Elementary)	3,142
TRC (Elementary)	1,526
TC (Elementary)	1,399
Elementary school subtotal	7,180

Source: (District M, 2014, Part 1, p. 324)

TAG Pull-Out (TPO) Program. As Table 3 shows, the majority of elementary TAG-identified students participated in the TPO during SY 2013-2014. Through the TPO program, the district typically delivers TAG services at the students' neighborhood schools, where TAG teachers pull these students out of their general education classroom for a minimum of 1.5 hours per week for primary students in Grades 2-3 and two hours per week for intermediate students in Grades 4-6. The TPO program requires that students meet at least once a week from October until the end of the school year, which equals about 30 times during the school year (District M, Master Plan, 2014). The TPO curriculum includes enrichment units that fostered critical and creative thinking skills. In SY 2016-2017, the TPO model began using a new Makerspace program

TAG in the Regular Classroom (TRC) Program. The TRC model provides TAG students with accelerated and differentiated opportunities within the regular classrooms at their neighborhood school. This model uses cluster grouping, which can occur in a mixed ability classroom with a cluster of gifted students. According to the District M Master Plan (2014), the teachers in these classrooms have been trained in differentiating for gifted learners in the regular classroom and use an enriched approach to language arts, as well as opportunities for math acceleration.

TAG Center (TC) Program. The District M (2014) Master Plan explained that the TC program is only open to TAG-identified students in District M through a lottery process. The program offers a full-day intensive instructional program with advanced and enriched opportunities designed to meet the unique needs of the gifted learner. All teachers in the TAG Centers are trained in gifted education and allow students to progress at their own pace. The students receive accelerated instruction in mathematics with enrichment opportunities,

laboratory approaches to accelerated science instruction, and an enriched approach to language arts that integrates literature, reading, and composition. Students can also take world languages, including Latin, Spanish, or French, and participate in many field trips that provide scientific and artistic enrichment opportunities. There are only eight District M TC programs at the elementary level, so enrollment is limited to available seats and is based on the home address of the students (District M, 2014).

Goal 3: Professional development. The stated strategy for this goal involves providing ongoing professional development opportunities in gifted education for District M school-based administrators, teachers, and other staff members that work with gifted students (District M, 2014). During SY 2013-2014, the District M TAG Office staff held over 25 professional development opportunities on various gifted topics, including identification, differentiation, instructional practices, and social and emotional needs. The sessions targeted TAG coordinators, teachers of gifted students, instructional specialists, and principals (District M, 2014, p. 322).

Evaluation of District M TAG programs. According to Reis (2003), evaluations of gifted programs should occur consistently, using the national standards for gifted education, to determine the effectiveness of established programs. As Reis (2003) explained, these ongoing evaluations are key because, while the field of gifted education "has advocated evaluation as a central part of program development for a number of years, there is a paucity of studies in literature to provide insight on what works and what does not work in gifted programs" (p. 62).

The Joint Committee on Standards for Educational Evaluation (1994) asserted that evaluation is critical to the success of gifted education programs. It stands to reason, then,

that since many gifted programs are not evaluated on a regular basis, they are vulnerable to questions of efficacy (Borland, 1997). Van Tassle-Baska (2004) also contended that school districts must have funds to support the recommended changes that result from these program assessments:

> Without access to good data for making program decisions, we can fall further behind on our efforts to expand and deepen program opportunities for gifted students. Because gifted programs are seriously underfunded and under resourced everywhere, there is a real need to leverage evaluation findings to gain a stronger position within educational contexts for continued and stronger support. In an era of educational accountability, we must be proactive in our efforts to enhance services on behalf of gifted learners. (p. 36)

During SY 2004-2005, the Department of Research and Evaluation in District M conducted a program evaluation of the district's TAG programs (Cooke, 2006). The purpose of this evaluation was to provide information on the implementation of the TAG programs and services in order to improve opportunities for gifted students. The evaluation focused on four major areas: (a) identification of gifted students, (b) curricula, (c) instruction, and (d) professional development. Using a mixed methods approach, the researcher surveyed teachers and TAG coordinators, administered a survey to a sample of TAG parents, conducted a focus group with 12 parents, completed a review of documents related to professional development, and conducted observations of 17 students in 53 classrooms (Cooke, 2006).

Major findings of the evaluation included the following:

- Identification procedures and the existing TAG curricula meet most of the exemplary and all of the minimum NGPS (Cooke, 2006, p. 7);

- Professional development in gifted education was offered consistently, but focused primarily on training TAG coordinators and pullout teachers; while teachers of TAG students providing TRC instruction did not receive sufficient training (p. 7);

- Approximately 50% of elementary and middle TAG teachers received no professional development (p. 11);

- Teachers, principals, and parents reported a shortage of pullout staff and TAG coordinators; duties of teachers providing pull-out instruction included too many other job responsibilities (testing coordinator, reading specialist, etc.); and teachers reported not having sufficient time to coordinate the program, plan TAG instruction, and teach pull-out classes (p. 11);

- For various reasons, at least seven elementary schools did not provide TAG instruction to identified students (p. 9); and

- Teachers reported that regional (district) support and monitoring of TAG implementation, coordination of staffing, and teacher training were insufficient (p. 11).

While a universal screening process helped District M to meet the NGPS standards relating to identification, Cooke's report noted that "Hispanic students, FARM students, and students with special learning needs were underrepresented in the elementary TAG population, while Caucasians and Asian students were over-represented" (p. 8).

Cooke (2006) presented several key findings from the study, stating, "[The quality] of TAG instruction and curricula implementation was not consistent throughout the school district and ranged from exemplary to barely existent" (p. 7). The researcher also found that the district schools implemented TPO and TRC programs inconsistently (p. 11) and that seven PGCPS schools provided no TAG instruction at all (p. 11).

Cooke's (2006) report offered several recommendations to help district staff enhance TAG programs. As she stated, "The TAG evaluation was designed to provide information on implementation of the current program to help district staff providing services to gifted children improve delivery of the TAG services and TAG programming efforts" (p. 78). To that end, Cooke's recommendations included the following:

- "In order to enhance the Pull-Out Instruction, a full-time or part-time teacher needs to be dedicated in each school with responsibilities limited to the TAG program." (p. 78)

- "Ongoing professional development opportunities should be provided to general education teachers of TAG students. These professional development opportunities should include identifying TAG students, understanding the unique needs of gifted students, TAG instructional strategies including differentiation, modification and extension of the core curriculum, and acceleration opportunities." (p. 78)

- "In order to assist general education teachers of gifted students, TAG curricula framework should include differentiation strategies that teachers can easily refer to when planning. Principals must be held accountable for TAG curriculum implementation." (p. 78)

- "Communication between home and school needs to be significantly improved. Principals should conduct orientation workshops and parent TAG meetings throughout the school year in addition to the annual orientation meeting. During these meetings, parents should be informed of schedules, curricula, model of the TAG program and any other pertinent information." (p. 78)

- "In alignment with the National Gifted Program Standards, it was recommended that provisions for reevaluation of TAG students should be added. It was suggested that individual assessment plans be created for TAG students that identify their learning interests and needs. It was also suggested that procedures for increasing the identification of under-represented subgroups be considered" (p. 79).

The major findings and recommendations of this 2004-2005 program evaluation identified principals as key stakeholders who have the ability to make impactful changes within the district's TAG programs. However, principals were not a part of the evaluation study, and it is not clear how these recommendations were shared with principals and other school leaders.

Recent TAG initiatives in District M. During SY 2015-2016, a former deputy superintendent for Teaching and Learning in District M created a Gifted Project Team, which consisted of the supervisor and specialists of advanced and enriched instruction; curriculum and instruction supervisors; testing and ESOL specialists; principals from TAG Centers, TRC programs, and TAG Pull-out programs; and parents from the association for talented and gifted education organization. The team's prime directive was to review various aspects of TAG programs in District M and suggest changes that would make the programs more

effective. Over the course of its first year in existence, the project team discussed many topics and made changes in the following areas:

1. The team decided that in SY 2016-2017

    a. all first graders would be tested with the CogAT instead of the OLSAT (As mentioned earlier, the transition to the new CogAT assessment was postponed.);

    b. all first grade teachers would complete a HOPE scale on all of their students as part of the TAG screening process; and

    c. first grade students would be tested in January instead of October. x

2. If there were any first grade students considered "outliers" because they lacked an intellectual peer group in their instructional setting, the students would automatically be placed into Grade 2 at TAG centers instead of staying at their neighborhood schools. This action would prevent gifted students from becoming underachievers due to the lack of gifted services.

3. The team formed a STEAM (science, technology, engineering, arts, and mathematics) committee to investigate programs already in existence for Grades 4 and 5. This committee also led an investigation into the use of Genius Hour and Maker Education programs for TAG students. The Makerspace Education program was selected and began implementation in TPO programs during SY 2016-2017.

Excellence in Gifted and Talented Education (EGATE)

As noted above, the state leaves most decision-making regarding gifted education to the local school districts (State Department of Education, 2012). Because the current policies and administrative procedures for TAG programs are more "recommendations" than "requirements," there can be a vast difference in the quality of TAG services provided across school districts, and even among schools within the same district. As a result, in 2010, the state department of education and the state Advisory Council for Gifted and Talented Education created the Excellence in Gifted and Talented Education Award to recognize Pre-K-12 public schools that had established TAG programs that aligned with the state board of education gifted advisory committee's established criteria for excellence in gifted education. According to these criteria, principals are responsible for the following:

- Setting goals and objectives for TAG students in the school improvement plan;

- Coordinating services for TAG students in the school;

- Developing staff expertise in TAG education;

- Allocating resources to the TAG program; and

- Providing effective communication regarding TAG programming to staff, students, parents, and the community. (State EGATE application, 2015, p. 6)

To apply for the award, each school must complete a comprehensive application that focuses on four program objectives: student learning, curriculum and instruction, professional development, and program management and evaluation. There are 21 corresponding criteria of excellence. The schools submit documentation and artifacts of the activities that are aligned with the criteria of excellence that have occurred over a 15-month period. Members of the Advisory Council for Gifted and Talented Education and local

school system personnel review and score the EGATE applications and binders (State Department of Education, 2012). As of February 2016, 44 schools from ten school districts in the state had received this prestigious award over the previous seven years.

Sydney Springs Elementary School (not its real name) provides a useful example of an EGATE-recognized school in District M. Sydney Springs is a Title I school that serves approximately 875 students, and its students represent more than 30 different countries, with major subgroups that include Hispanic (46.3%), African American (43.1%), ESOL (40.1%), and FARMS (84.8%). The school also has a small percentage of White, Asian, and Special Education students (SDE, 2014).

Despite the school's large populations of minority and low socioeconomic students, its principal had a vision for meeting the unique needs of each child, including the gifted students. As a result, Sydney Springs Elementary was the first Title I school in District M, and the second in the state, to win the prestigious EGATE School Award.

During an EGATE reception held at Sydney Springs Elementary in May 2016, the principal described why she decided to pursue the EGATE Award:

What is equity? It is being fair and just. It is making the playing field even for all students. This term resonated with me when I thought about my school, and the number of gifted students, and the quality of our gifted and talented program. I began to think, "Why not? Why not give my teachers the opportunity to enhance their skills to provide my gifted students with what they rightfully deserve? Why not empower and support my teacher leaders to help champion our vision?" (Principal, State Department of Education EGATE Reception, 2016).

With this unique perspective on gifted education, along with the knowledge that minorities and low socioeconomic students were underrepresented in TAG education and often had limited access to high-quality TAG programs, the principal started her journey to build the capacity of her school team and empower them to build a successful TAG program at Sydney Springs Elementary. The school is now a model school for gifted education, both in District M and in the state.

There are 44 recognized EGATE schools in the state, and 15 of those schools are in District M. Eleven of the schools are elementary, representing only 0.10% of all elementary schools. Among the 8 District M TAG centers, four have earned the EGATE award. Seven of the TRC programs have earned the EGATE award including one Title I school. To date, none of the District M TAG Pull-Out programs have received this award.

Literature Review

The researcher conducted a literature review to identify existing research studies that focused on the history of gifted education, definition of gifted, status of gifted education in the United States, unique needs of gifted students, identification of giftedness, strategies for educating gifted students, barriers to gifted education, the impact of policy on gifted students, and principals' role in gifted education. This review's focus on the extant literature provided valuable context for the study and for the researcher's efforts to understand elementary principals' perceptions of factors that influence gifted education programs in their schools. I used the World Cat library catalog, ProQuest Database, Google Scholar, District M documents including administrative procedures, and various websites to conduct my research.

History of gifted and talented education. Research shows that the field of gifted education was established during the mid-19th century, when formal programming efforts began to address the needs of students with high academic ability (Jolly, 2004). In 1868, representatives from St. Louis Public Schools designed the first system of early grade promotions for students who demonstrated high academic ability (Jolly, 2004). Shortly thereafter, research on intelligence led to the development of tools to measure individual aptitude (Fowler, 2004). To that end, Alfred Binet developed a series of 30 practical tasks that assessed mental functions like memory, attention, and discrimination accompanied by practical judgment and good sense (Facncher as cited in Eby & Smutry, 1990). Through these tests, Binet was able to compare a student's mental age to his actual age. The mental age proved a measure of intelligence, based on the average abilities of a certain age group. Binet believed that with appropriate training and education, a person could improve their mental age (NAGC, 2005b, p.1).

In 1916, Lewis Terman, known as the father of gifted education, revised the Binet-Simon test using American participants (Terman, 2007, p. 1). He then developed and published the Stanford-Binet test, which U.S. public schools subsequently used to assess student intelligence by comparing an individual's mental age to her actual age. This measure, known as the intelligence quotient (IQ), purportedly determined a student's intellectual strengths, weaknesses, and overall potential. If a student had an IQ score of 130 or above, they were identified as gifted. It is important to note that all of the subjects in Terman's (2007) studies were children of White middle class families.

Leta Hollingsworth, known as the mother of gifted education, also believed in one's mental ability to possess intelligence (NAGC, 2005b). Unlike Terman (2007), Hollingsworth

asserted that giftedness was inherited but could also be nurtured through one's educational and environmental opportunities. To that end, she developed ways to nurture and instruct the whole child using strategies like counseling and other supports to develop students' full potential. In 1922, Hollingsworth began the Special Opportunity class at P.S. 165 in New York City, which was designed to meet the needs of gifted students (NAGC, 2005b).

As pioneers in the field of gifted education, Hollingsworth and Terman used empirical research to define giftedness, identify characteristics of gifted behaviors, and create guidelines for gifted school programs (Jolly, 2004). Despite their efforts, after World War II, research on gifted education and program options for gifted students were limited and at an all-time low (Jolly, 2009). The field of study gained new attention in 1957, however, when the Soviet Union launched the satellite Sputnik into outer space, and politicians saw the need to promote the education of America's gifted students (Benjamin, 2012). It was then determined that to train "top level specialists" for national security and global dominance, the United States needed to increase opportunities for gifted students by building a pipeline for future scientists and mathematicians (Passow, 1960).

Attitudes toward gifted education. Begin and Gagne (1994a) explained that over many years, Americans have held uncertain attitudes toward gifted students and gifted education. Similarly, Subotnik, Olszewski-Kubilius, and Worrell (2011) noted that while most people could name some award-winning athletes, musicians, and actors; if you were asked them to name the winners of last year's Nobel Prizes in Economics, Physics, or Literature, most would not be able to do so. Subotnik et al. further explained, "Children's performance and athletic abilities are identified, cultivated, actively nurtured, and often

refined through intensive coaching and training" (p. 7). As NAGC (2006) posited, how many athletes make it to the Olympics without intense training and a coach?

Concerns Relating to Gifted Education

Despite the years of research that has been conducted in the field of gifted education, there are still many misconceptions, myths, and barriers related to gifted students and the programs available to them.

Concerns about elitism. In 1982, Charles W. Eliot, then president of Harvard University, firmly asserted, **"**I REFUSE TO BELIEVE that the American public intends to have its children sorted before their teens into clerks, watchmakers, lithographers . . . and so forth, and treated differently in their schools according to their prophecies of their appropriate life careers. Who are we to make these prophecies?" (Salmans, 1988, p. 1). Conversely, Marshall, Ramirez, Plinske, and Veal (1998) contended that many people see the development of intellectual talent in gifted students as elitism. Research indicates that the likening of gifted education to elitism has been occurring for years. McCoach and Siegle (2007), for example, found that many educators believed that specialized instruction and programs provided distinct privileges and opportunities for students who were often already performing above grade level. However, as Subotnik et al. (2011) argued, children who displayed academic talents needs and deserved the same support and talent development, as did talented athletes and musicians. "Gifted learners must be given stimulating educational experiences appropriate to their level of ability if they are to realize their potential" (Delisle & Galbraith, 2002, p. 91).

Rinn and Cobane (2009) explained that the categorization of gifted programs as elitist was due, in part, to the demographic make-up of the subgroup of participating students.

Dictionary.com (n.d.) defines the term *elitist* as "a class of persons considered superior by others or themselves." According to Rinn and Cobane (2009), regardless of an individuals intellectual ability, the needs of all students should be nurtured in order to maximize educational opportunities. When the needs of gifted students are addressed, this is not elitism; but instead, equal opportunities (Rinn & Cobane, 2009).

After the launch of Sputnik in the 1960s, school systems in the United States began to prioritize an increase in the rigor of academic programs. In response to this new focus on rigor, educational leaders created both gifted education and special education programs to address concerns that the general education system was not addressing the needs of all students (Loveless, 1998). The development of gifted and special education programs also led to a growth in academic tracking, which involved the permanent placement of students into low, average, and high achieving groups based on their perceived intellectual ability. This tracking system ultimately perpetuated systems of discrimination and racism. Data show that schools tended to place fewer minorities and women in the college preparatory tracks, relegating them to other tracks that did not require college and often involved physical labor. Similarly, Loveless (1998) found that many young women were tracked into home economic and family classes instead of those that prepared them for higher education.

Underutilization of acceleration. Colangelo, Assouline, and Gross (2004) defined the term *acceleration* as "an educational intervention that moves students through an educational program at a faster than usual rate or younger than typical age" (p. 5). Numerous studies have shown that acceleration works for high-ability and gifted students (Steenbergen-Hu, Makel, & Olszewski-Kubilius, 2017). A meta-analysis of the literature showed overwhelming evidence that acceleration can benefit students from kindergarten through

higher education (Steenbergen-HU & Moon, 2011). Despite these findings, acceleration opportunities have been underutilized in public schools in the United States (Gallagher, 2004) due, in part, to concerns about acceleration.

One major concern that many educators have regarding acceleration practices is that they can be harmful to a student's social and emotional development.   However, Colangelo et al. (2004) argued that while educators may need to address the social and emotional needs of gifted students in acceleration programs, an overwhelming amount of research indicates that the majority of students have participated in acceleration opportunities with no apparent academic, social, or emotional issues.

There are several types of acceleration practices that elementary principals can incorporate into gifted education programs, including (a) Early Admission to Kindergarten, (b) Early Admission to First Grade, (c) Grade-Skipping, (d) Continuous Progress, (e) Self-Paced Instruction, (f) Subject-Matter Acceleration/Partial Acceleration, (g) Combined Classes, (h) Curriculum Compacting, (i) Telescoping Curriculum, (j) Mentoring, (k) Extracurricular Programs (Southern & Jones, 1991, pp. 5-12). Acceleration is a low cost method for addressing the academic needs of gifted students without harming the learning opportunities for other students (Steenbergen-Hu, Makel, and Olszewski-Kubilius, 2017).

The underrepresentation of minority and low-income students. Miller (2004) asserted, "Compared to Whites and Asian Americans, African Americans, Latinos, and Native Americans are severely underrepresented among top students in the United States at all levels of the education system" (p. 1). Miller went on to explain that this disparity is evident in every traditional measure of academic achievement, including standardized tests,

grade point averages, and class rank. Data show that this underrepresentation is also apparent in programs for gifted and talented students.

According to Worrell (2007), concerns about the lack of diversity in gifted education have grown significantly over the past four decades, particularly as the United States becomes increasingly diverse. Much of the early work by educators and researchers in the gifted education field focused on the achievement gap between minorities and White or Asian students, as well as between low-income and high-income students, on intelligence tests used to screen and identify individuals for gifted programs. However, Worrell explained the following:

> More recent research has focused on documenting the extent of underrepresentation of various racial and ethnic groups in GATE (gifted and talented education) programs and proposing alternative identification mechanisms for increasing the numbers of ethnically diverse students in GATE programs. (p. 28)

The underrepresentation of gifted minorities needs to be further investigated because of the numerous factors that affect the recruitment and retention of these students.

Teacher experience and professional development. Research indicates that one contributing factor to the underrepresentation of minorities and low-income students in gifted education is teachers' lack of knowledge and training in recognizing and educating gifted students. Farkas and Duffett (2008), for example, found that more than half (65%) of classroom teachers reported that they have received little or no training on working with gifted students. Ford et al. (2001) suggested that teachers may have biases towards students from minority populations, which in turn, results in lower expectations and lower numbers of referrals to gifted programs. In fact, Ford (1995) found that a large number of African

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American students who had high achievement scores in the 95th to the 99th percentile were not in gifted programs because their teachers did not refer them for screening.

Principals' role in gifted education. Data show that principals' perceptions, knowledge, and practices around gifted education play a major role in determining the success and effectiveness of TAG programs (McHatton, Boyer, Shaunessy, Terry, & Farmer, 2010) and this role has evolved significantly. Cotton (2003) discussed the extent to which the role of the principal has changed over the years, as federal and state mandates, along with changing student populations, place increasing demands on school leaders that intensify each year.

Despite this changing role, existing research consistently suggests that the principal is a key stakeholder in the overall success of the schools; however, few studies have examined the role that principals play in the process of educating the academically gifted. Clark (2002) declared that this issue has not received notable attention because many researchers believe that gifted students can make progress on their own without the influence of the principal. However, Taylor (1984) countered that perspective by stating, "The more gifted children are, the more they need a principal who is a gifted leader" (p.16). Taylor believed that "gifted children need a principal who can provide the encouragement and leadership necessary to help them discover and develop their abilities" (p. 16). In an attempt to get principals to reflect on their leadership practices in gifted education, Taylor asked 18 yes or no questions on how the principals met the needs of gifted students at their schools.

In *A Tale of Two Principals*, Weber, Colarulli-Daniels, and Leinhauser (2003) also noted the lack of available research that examined the role of elementary principals in gifted education (p. 55). The authors interviewed two principals of gifted programs in Florida to

determine the skills, competencies, and characteristics needed in their roles as elementary principals of gifted programs. One principal led a private school that served only gifted students. The other principal lead a magnet school for gifted students that took into account students' socioeconomic status. The researchers first concluded, generally, that the evaluation of gifted education initiatives was essential to determining the overall effectiveness of the programs. They also found that the principals regularly communicated the school's mission, with a focus on gifted education, to the community in order to gain buy-in. In these instances, the principal was responsible for providing professional development opportunities for teachers so they understand the unique needs of gifted students and possessed the instructional strategies to challenge these students. Lastly, this study emphasized the need for a shift to a learning community paradigm. In this type of school setting, the principal oversees the whole instructional program; however, the principal is not the only leader in the building that has an impact on gifted programs.

Reeves (2006) argued, "Leaders need not, indeed they cannot, *be* every dimension themselves, but they can and must insure that every leadership dimension is provided by some member of the leadership team" (p. 34). Data show that establishing a community paradigm in the school setting has many benefits, including freeing time for the principal to focus on integrated learning services like the gifted programs (Reeves, 2006). While the findings of this study may be useful for elementary principals, it is difficult to generalize the experiences of these two principals in "special" school settings to the principals of neighborhood public schools where most gifted students are served.

According to Darling-Hammond et al. (2005), principals have many responsibilities, including being knowledgeable of the latest curriculum and instruction, creating a safe and

orderly environment, setting a vision for the school and aligning resources to support that vision, becoming testing experts, developing budgets to meet the needs of the school programs, and staying abreast of all policy mandates and initiatives. Principals must make decisions to support teaching and learning by providing the necessary resources and professional development opportunities (Darling-Hammond et al., 2005). The National Education Association (2012) noted that successful principals also monitor the performance of teachers and students to ensure that all children achieve their full potential. Gentilucci and Muto (2007) also declared that principals make key decisions that affect the education of gifted students, and their individual perspectives and attitudes play a large role in the decisions that they make about professional development, resource allocation, scheduling and grouping, policies, and procedures relating to gifted education. The principal has the authority to determine whether a gifted education program is a priority in his or her school (Gentilucci & Muto, 2007). As Lewis, Cruizeiro, and Hall (2007) asserted, "In these standards-driven times, it is a strong and forward-looking principal who recognizes that all students need to learn something new each day" (p. 59).

While principal leadership is important to the success of a school, Davis, Darling-Hammond, LaPointe, and Meyerson (2005) countered that it is most important to have effective teachers in the classrooms when seeking to improve student achievement. Similarly, Hallinger, Bickman, and David (1996) concluded that while principals play an important role in the overall effectiveness of a school, they have only an indirect effect on student achievement. As Hallinger and Heck (1996) explained, it is the principal's job to build the capacity of the teachers, who directly impact student learning.

Summary of literature review. Since the mid-19th century, researchers have sought to bring credibility to the field of gifted education. After the Soviet Union launched Sputnik in the late 1950s, the federal government realized that the country's needs were changing (Haensly, 1999). To maintain its position in the global economy, the nation needed to foster the development of gifted students. To this end, in 1957, policy makers established legislation to designed to help schools serve gifted students more effectively (Haensly, 1999). Over the years, as educational laws changed and high stakes testing became the accountability measure for success, educators shifted their focus to provide remedial services for underachieving students (O'Donnell & White, 2005). As a result, many gifted students became bored and unchallenged in the regular classrooms and failed to achieve their full potential (Reis & Coach, 2000).

Research has also revealed that minority and low-income students are largely underrepresented in gifted programs. The data show that there are many potential causes for this underrepresented, including identification and referral procedures, lack of teacher training in gifted education and multicultural education, and the use of traditional psychometric measures to identify gifted students (Ford, 1998). Additionally, studies show that the lack of federal and state mandates for gifted education contributes to many of the issues of underrepresentation evident in this field (Milligan, Neal, & Singleton, 2012). The literature suggests that principals can be influential in addressing these issues because they play a very important role in the education of all students, including those considered gifted. To be effective, gifted programs need principals who are knowledgeable about gifted education and can provide the leadership necessary to monitor the performance of teachers

and students and ensure that gifted students reach their full potential (Gallagher & Gallagher, 1994).

Principals' knowledge and perceptions of special student populations and how programs should be implemented is important because negative attitudes, prejudices, and misinformation may lead to inappropriate practices (Rodriguez, 2009). Booth and Brown (1985) researched the role of the principal in gifted education over 30 years ago and found that the perceptions and knowledge of the principal guided all decision making regarding professional development, curriculum, allocation of resources, scheduling and program implementation. The authors recognized the important roles of the principal in regards to gifted programs, stating, "The administrator serves as motivator of people (staff, community, students, parents) and the promoter of a practical, flexible and meaningful program" (Booth & Brown, 1985, p 2).

Studies have shown that administrators and other professionals have "little awareness of gifted students, and they often rely on stereotyped perceptions and beliefs when interacting with or making decisions about the gifted populations" (Earle, 1998, p. 24). Without an accountability system for monitoring gifted education, principals' knowledge and perceptions determine if they are a stakeholder or gatekeeper for gifted education students and programs. This truth is evident in decisions that they make regarding curriculum, budget, resource allocations, professional development, scheduling, and teacher recruitment to name a few. Ideally, principals make decisions about gifted education that are driven by the state mandates, school district policies and procedures, and the desire to provide a quality, appropriate education for each student that they serve.

Summary of Section I

According to Bhatt (2011), despite the popularity of gifted programs, the existing

research on the topic lacks a comprehensive review of gifted education, which results in a

lack of uniformity among gifted programs across the county. As Shaunessy explained,

without federal mandates, each state determines whether or not they will provide gifted

services and what those services will look like in terms of identification, programming, and

reasonability at the school district and individual school levels. Unfortunately, research

indicates that schools are not challenging gifted students and fail to provide enrichment and

acceleration opportunities on a regular basis, and the NAGC (n.d.) has contended that change

is necessary at a federal, state, and local level.

The NAGC (n.d.) found that gifted students encounter a range of services from state

to state and even district to district. To monitor these vastly different approaches to the

delivery of services to gifted students, the NAGC and the Council of State Directors of

Programs for the Gifted (CSDPG) conduct a biennial survey, *State of the States in Gifted*

Education, which provides data on how each state regulates and supports gifted programs

(NAGC, n.d.).

In the state that serves as the focus on the present study, gifted education programs

are mandated; however, the state educational agency provides no funds to the school districts

(COMAR 13A.04.07). As a result, District M provided recommendations, not mandates, for

TAG programs in Administrative Procedure 6142.2 (2009). As evidenced in Cook (2006),

District M proved guilty of the inconsistent implementation of gifted programs throughout

county schools, and more than a decade after Cooke's (2006) evaluation, gifted programs are

still an area of challenge within District M. During personal conversations with the

researcher during SY 2015-2016, several school-based administrators revealed that they needed to do a better job with the TAG program at their schools. One administrator stated, "This is an area that we definitely need to make improvements" (Principal Jones, not the real name). Another administrator stated, "It is hard to do the pull-out program consistently because the TAG coordinator is also the Reading Specialist and Testing Coordinator" (Principal Jackson, not the real name). Still another administrator mentioned, "We are going to try TAG next year. There are so many other initiatives right now" (Principal King, not the real name). These comments indicated that all gifted students in District M did not have access to high-quality TAG programs during the instructional day at the time of this study.

As mentioned previously, part of the problem with gifted education is the lack of federal mandates that enforce the implementation of TAG programs; it is up to individual states and school districts to set the expectations for program implementation (Delisle & Lewis, 2003). To provide some level of guidance for the implementation of school-level TAG programs, District M has created Administrative Procedure 6142.2; however, no system or structure exists to monitor the execution of these guidelines. As a result, schools throughout the district are implementing TAG programs inconsistently (Cooke, 2006).

Purpose of this Study

Fullan (2005) asserted that the principal is pivotal to the success of a school's gifted program. As such, the primary purpose of the proposed study is to examine elementary school principals' perceptions of gifted education and determine the factors that influence their ability to lead successful gifted programs.

While a number of previous studies have addressed perceptions of gifted education, many of these inquiries focused on the viewpoints of undergraduate students, classroom

teachers, and even superintendents of school districts; few researchers have attempted to explore the perceptions and knowledge that principals possess regarding gifted education. In alignment with the National Gifted Program standards, and state law, COMAR13A.04.07, District M uses a multiple criteria screening process for identifying gifted students and has programs and services designed to meet the needs of gifted students. However, without an accountability system, designated funds for gifted education, and a level of certainty and constancy in the principals' ability to oversee successful TAG programs, there is inconsistent implementation of TAG programs and services across the school district.

In District M, it is important to obtain a clearer understanding of principals' perceptions and knowledge of gifted and talented students and programs and how those viewpoints and levels of knowledge contribute to the way that they run the TAG initiatives in their schools. The findings from this study will advance the knowledge and practice of the principals and executive leadership staff overseeing TAG programs by providing information on how elementary principals can be supported with the implementation of the gifted service delivery model in their schools. By collecting and analyzing data on this topic, the researcher sought to identify effective strategies that principals can use to support gifted student achievement and build consistency in TAG programs across the school system.

Section 2: Methodology

This section begins with an overview of the purpose of the study, and the research questions that guided this inquiry. The section also includes an outline of the methodology, with specific discussions of the research questions, study design, participants, the research instrument, and the process used to collect and analyze data.

Purpose of the Study

The role of the principal is pivotal to the success of a school's programs for gifted students (Fullan, 2005). Elementary school principals have the responsibility of leading instruction in a wide variety of academic and enrichment subjects. Principals' are the gatekeepers for all school programs and their perceptions and knowledge of gifted education can greatly affect the experiences of both gifted students and their teachers. Therefore, the purpose of the study was to examine elementary principals' perceptions of gifted education, their knowledge of leadership practices, and their use of instructional practices that impact the gifted students and programs in their schools.

Research Questions

The following research questions guided the development of this study, as well as the data collection and analysis processes:

1. What are elementary school principals' perceptions of gifted education?

2. What is elementary principals' level of knowledge about leadership practices that represent excellence in gifted education programs?

3. What is the relationship between elementary school principals' perceptions of gifted education, leadership practices in gifted education, and the instructional practices used in their schools?

Research Design

The researcher determined that a quantitative research methodology was most appropriate for this study. Some quantitative research focuses on how one variable affects another variable (Crestwell, 2014). More specifically, the researcher decided to use a survey based on the fact that this type of instrument helps to measure the variables in a study. The researcher utilized a web-based survey, Qualtrics to collect the data. "Surveys should be employed when the goal is to draw relatively quick conclusions regarding the perceptions of a target population. Surveys can reach a large number of people in a short amount of time and typically produce data that is easy to analyze" (Crestwell, 2014).

Instrument

The researcher modified an existing survey to develop an appropriate instrument for the collection of data on elementary principals' perceptions of gifted education, their knowledge of leadership practices, and the use of gifted instructional practices used in their schools. This instrument was created after examining similar survey instruments, and the researcher ultimately drew heavily from an instrument titled "Opinions About the Gifted and Their Education," developed by Gagne' and Nadeau (1991). The original instrument included 35 questions that utilized a Likert scale. The scale for each question ranged from 1 to 7 (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat agree, 6 = agree, 7 = strongly agree). Gagne designed the survey to research factors about educators' opinions of gifted students (1991).

Several researchers have made changes to Gagne' and Nadeau's survey in hopes of improving the original instrument (McCoach & Siegle, 2007; Plunkett & Kronborg, 2011). McCoach and Siegel (2007), for example, developed an adapted version of the original

survey that included five questions designed to examine whether educators' self-perceptions of being gifted or not influenced their views of students who were gifted (McCoach & Siegel, 2007).

For this study, the researcher developed a four-part anonymous web-based survey designed to capture the (a) perceptions of principals regarding gifted education, (b) leadership practices relating to gifted education, (c) instructional practices in gifted education and (d) demographic and background information of each principal. The first part of the survey was based on McCoach and Siegel's (2007) *Opinions About the Gifted and Their Education Survey* instrument, which they adapted from Gagne' and Nadeau's original survey (Gagne & Nadeau, 1991). The researcher used three statements from each subscale of the survey (i.e., Supports, Elitism, Acceleration and Self Perceptions) for this study, and measured all items on the scales using a 5-point Likert-type scale. The second and third parts of the survey were designed to examine leadership and instructional practices relating to gifted education. The researcher developed these questions using the criteria for excellence in gifted education outlined by the state board of education gifted advisory committee. The final section of the survey focused on the collection of demographic and background information of each participant.

Survey pilot testing. After developing the survey, the researcher piloted the instrument with the TAG supervisor for District M, as well as a principal and assistant principal who both had experience working with gifted students. The researcher administered the survey to each individual and asked the respondents to provide feedback on the clarity of the survey items and directions, as well as on the flow of the survey. The administrators voted on each question to determine if it was an appropriate or inappropriate question for the

survey. They also provided suggestions for the rewording of survey items. Based upon the feedback, the researcher reworded four questions, but did not delete any of the items.

Sample Selection

In District M, schools identify students for TAG services in first grade, and gifted education programs begin in second grade. Thus, the researcher believed that it would be best to use elementary principals as the unit of analysis, since the elementary programs build the foundation for gifted students.

The principals for this study were selected from 116 comprehensive elementary schools with Pre-K-5 and Pre-K-6 configurations. Principals from charter schools, specialty programs (i.e., Language Immersion, Montessori, and K-8 academies) and TAG Centers were not included in this study, nor was one of the district's elementary schools, because the researcher served as the principal. After considering the above variables, there were 106 eligible elementary principals invited to participate in the study. Table 4 below details the response rates for the survey.

Table 4

Response Rates

	Number surveyed	Completed surveys	Completed surveys
Principals	106	94	87%

Data Collection Procedures

After obtaining approval from the University of Maryland Institutional Review Board (IRB) and the Department of Research and Evaluation in District M, the researcher contacted each of the 106 principals by email from the Qualtrics, web-based program. The email introduced the study, detailed its purpose, provided an overview of the survey and how their

responses would be used, and explained that all responses would remain anonymous. The email also contained a link to the survey. When the principals clicked on the link, they would be taken to the first page of the survey, which was the informed consent form. If the participants consented, the survey opened. If the participant did not consent, the survey closed.

One of the elementary principals reported to the researcher that the some of the initial emails went to the participants' SPAM folder. As a follow up, the researcher sent an email asking participants to check their SPAM folders for the original email from the Qualtrics program. The survey remained open for approximately two weeks. Reminder emails were sent to participants at the end of week one and mid-week of the second week.

Data Analysis

The researcher selected Qualtrics a web-based program as the application that housed the survey. The program allowed the researcher to export all survey data into both Microsoft Excel and the statistical program SPSS for analysis. The researcher used the data exported into Excel to develop descriptive statistics, such as frequencies, and compute means from the participants' survey responses.

Confidentiality

Prior to the study, each participant received a cover letter describing the study, and an electronic consent form to sign. The consent form included the title of the study, name of the researcher, purpose of the study, procedures, benefits of the study, potential risks, promise of confidentiality, details about participants rights, and an explanation of the participants' right to withdraw from the study. All questionnaire data was stored on the Qualtrics website, which is password-secured. Each participant was assigned a unique identification number in

order to maintain confidentiality while they completed the survey. The Qualtrics account and all surveys were deleted upon completion of the research and data analysis.

Summary

This section outlined the research methodology that was used to examine elementary school principals' perceptions and knowledge of gifted education, as well as leadership and instructional practices that affected the success of gifted programs in their schools. The section detailed the problem of practice, research questions, selection of principals. procedures, data instrument, data collection, survey pilot testing and data analysis that were employed over the course of this study.

Section III: Results, Discussion, and Conclusions

The purpose of this quantitative study was to examine the perceptions of elementary school principals' and the leadership and instructional practices that impact the gifted students and programs in their schools. The inquiry was guided by the following three foundational research questions:

1. What are elementary school principals' perceptions of gifted education?

2. What is elementary principals' level of knowledge about leadership practices that represent excellence in gifted education programs?

3. What is the relationship between elementary school principals' perceptions of gifted education, leadership practices in gifted education, and the instructional practices used in their schools?

To obtain data that addressed each of these queries, the researcher administered a four-part survey to 106 elementary school principals from a large urban school district (District M) in the Mid-Atlantic region of the United States.

This section provides a summary of the results of the study. The findings are presented in the following systematic order: demographic profile of participants, preliminary analyses, findings related to each research question, discussion of results and conclusions, implications for District M, limitations, and recommendations for future research studies.

Demographic Profile of the Participants

During the data collection process for this quantitative study, 94 of the original 106 principals completed the online survey, resulting in a response rate of 88.6%. The researcher retrieved data files for the responses from Qualtrics and exported the data to Excel and SPSS for analyses.

Table 4 and Figure 1 summarize the demographic and background characteristics of the research sample. As the table and figure demonstrate, most of the principals surveyed had been educators for more than 16 years (89.4%) at the time of the study, and of these individuals, over half (59.6%) had 21 or more years' experience as an educator. Almost three quarters (74.4%) of the respondents had served in their role for ten years or less, and 40.4% had 1 to 5 years of experience as a principal. Of the principals that responded, 54.3% are in Title I schools; however, only 6.4% of the principals served at EGATE schools, which are recognized state public schools with gifted and talented education programs that align with the state's criteria for excellence detailed in the Gifted and Talented Program Guidelines and COMAR 13A.04.07 Gifted and Talented Education.

The demographic and background characteristics part of the survey included queries about whether the respondents were or could have been gifted in school. Almost three-fourths (n=69, 73.4%) believed to some degree that they were or could have been in a gifted program in school. The section also included inquiries about whether they had a child or close relative that had been identified as gifted. A little more than three fourths (n=74, 78.4%) responded that they had a child or close relative that had been identified as gifted. According to Michener (1980), individuals who perceive themselves as academically gifted or have children or relatives who are gifted tend to possess more positive perceptions toward gifted individuals.

When asked if their educational background and on-the-job training had adequately prepared them to meet the needs of gifted students, a little more than half of the research participants (52.1%) responded that they only somewhat agreed (n=25, 26.6%), somewhat disagreed (n=11, 11.7%), or disagreed (n=13, 13.8%) with that statement. More specifically,

about one-fourth (n=26, 25%) of the principals actually somewhat disagreed or disagreed that

their educational background and on-the-job training had prepared them to meet the needs of

gifted students.

Table 4

Demographic and background characteristics (n =94)

	Frequency	Percentage
I was or could have been in a gifted program in school.		
Strongly Agree	22	23.4
Agree	35	37.2
Somewhat Agree	12	12.8
Somewhat Disagree	6	6.4
Disagree	16	17.0
Strongly Disagree	2	2.1
not answered	1	1.1
I have a child or close relative that is identified as gifted.		
Strongly Agree	40	42.6
Agree	30	31.9
Somewhat Agree	4	4.3
Somewhat Disagree	2	2.1
Disagree	16	17.0
Strongly Disagree	2	2.1
My educational background and on the job training has adequately prepared me to meet the needs of gifted students.		
Strongly Agree	12	12.8
Agree	33	35.1
Somewhat Agree	25	26.6
Somewhat Disagree	11	11.7
Disagree	13	13.8
Are you a Title I School?		
Yes	51	54.3
No	43	45.7
Are you an EGATE (Excellence in Gifted and Talented Education) school?		
Yes	6	6.4
No	86	91.5
not answered	2	2.1

How many years have you been an educator?

11 to 15 Years
11%

16 to 20 Years
30%

21+ Years
59%

- 11 to 15 Years
- 16 to 20 Years
- 21+ Years

16 to 20 Years 6%   21+ Years 2%   **How many years have you served as a principal?**

11 to 15 Years
17%

1 to 5 Years
41%

6 to 10 Years
34%

- 1 to 5 Years
- 6 to 10 Years
- 11 to 15 Years
- 16 to 20 Years
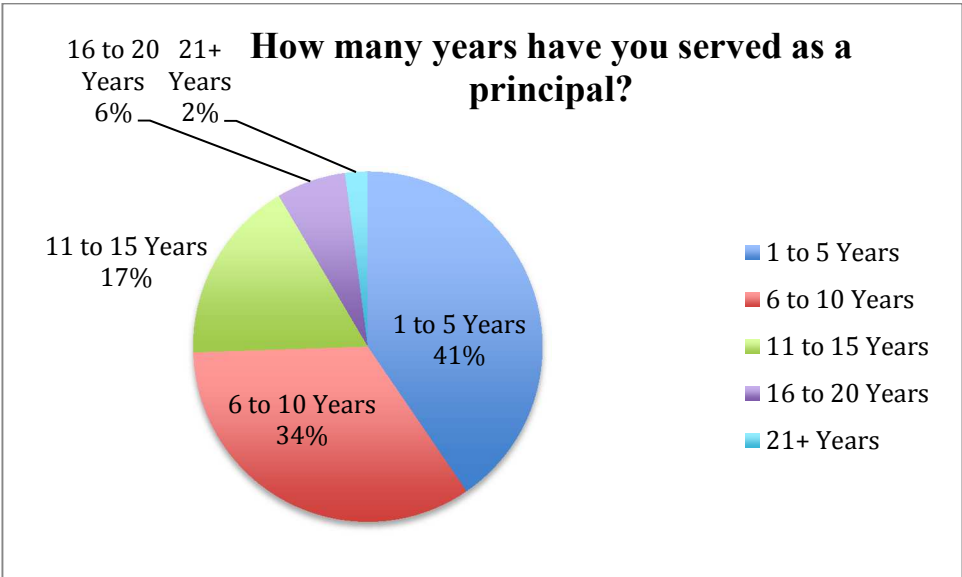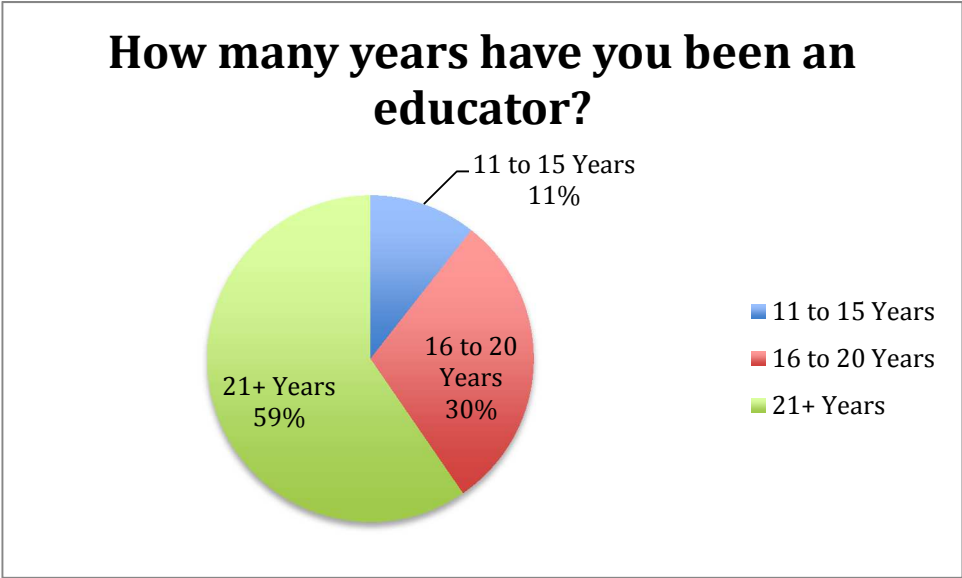- 21+ Years

Figure 1. Years of professional experience. The pie charts provide a graphic representation for the subjects' years of professional experience as an educator and as a principal.

Preliminary Analyses

Prior to running analyses to assess the research questions, the researcher recoded,

summarized, and assessed the survey items for internal consistency. The researcher then

50

computed an overall perceptions score using nine of the items extracted from the 2007

McCoach survey:

1. All of our school should offer special education services for the gifted;

2. Students who are gifted need special attention to fully develop their talents;

3. Children who are gifted should have the same entitlement to supplementary funding as students with disabilities;

4. Special programs for gifted children are elitist;

5. When gifted students receive special attention, the other students feel devalued;

6. Identifying students as gifted increases the labeling of children as strong-weak, smart-not smart, good-less good;

7. Gifted students should be allowed to skip one or more grades based on their academic performance;

8. Gifted students' social/emotional readiness is a factor in the academic acceleration process; and

9. Gifted students should have an accelerated curriculum.

Of the nine items, three negatively-worded items were reverse-scored so that lower scores on the scale indicated higher agreement, and higher scores indicated stronger agreement. The three negatively-worded items (Items 4, 5, and 6) focused on elitism. The other six positively-worded items (Items 1, 2, 3, 7, 8, and 9) were not reverse-scored. Higher scores on the scale indicated higher agreement, and lower scores indicated less agreement. As a result, higher scores on the overall Perceptions Scale reflected more positive attitudes and support for gifted programs and gifted students.

To determine the internal consistency of the perceptions score, the researcher computed a Cronbach's alpha coefficient for the nine survey items. Cronbach's alpha describes the extent to which the items on the survey measure the same concept. Cronbach alpha is expressed as a number between 0 and 1. An internal consistency reliability analysis of the nine items on the Perceptions scale yielded a Cronbach's alpha coefficient of .60. The benchmark for Cronbach's alpha coefficient is usally.70, which shows good internal consistency and reliability (Nunnally, 1967). It is important to note that while .60 does not meet the widely used benchmark, it is considered a moderate score for exploratory research. Nunnally (1967) stated, "In the early stages of research on predictor tests or hypothesized measures of a construct, one saves time and energy by working with instruments that have only modest reliability, for which purpose reliabilities of .60 or .50 will suffice" (p. 226). According to Gall, Borg, and Gall (2006), if a scale has a high alpha coefficient, typically .60 or higher, individuals who respond in a certain way to one item on the scale are likely to respond in a similar manner to another item of the same concept. It is important to note that while .60 is acceptable for exploratory and/or descriptive research, this Chronbach Alpha score would be extremely low for some measures, such as intelligence tests. The typical reliability for an IQ test is .90 (Uno, Mizukami, Ando, Yukihiro, Iwasaki & Ozaki, 2014).

The researcher also created two additional scores: (a) the Importance of Practices score; which consisted of seven items (items numbered 13 - 19) that addressed the importance of leadership practices in gifted education and the (b) Practices Used score, which consisted of seven items (items numbered 20 – 26) that addressed actual instructional practices in gifted education used at the principals' schools. Internal consistency reliability

analyses showed high internal consistency reliability, with Cronbach's alpha coefficients of .82 and .87, respectively.

Findings

  Research Question 1. Research Question 1 asked, "What are the perceptions of elementary school principals relating to gifted education?" The first step in addressing the research question involved the computation of the mean scores on each of the nine perception items. Table 5 displays the means and standard deviations for the Perception items, sorted from the most highly endorsed items to the least endorsed. Figure 2 shows the means. Responses ranged from 1 = strongly disagree to 6 = strongly agree. The three highest-rated items from the McCoach survey are indicators of support for gifted education. High scores on these items indicate positive perceptions towards gifted students. The most highly-rated statement was "Students who are gifted need special attention to fully develop their talents," which had a mean response score of 5.45. The next two most highly rated items were, "all of our schools should offer special education services for the gifted," With a mean response score of 5.29, followed by "Children who are gifted should have the same entitlement to supplementary funding as students with disabilities," with a mean response score of 5.26.

Table 5

Summary statistics for items measuring perceptions regarding gifted education

Item	Mean	SD
Students who are gifted need special attention to fully develop their talents	5.45	0.76
All of our schools should offer special education services for the gifted	5.29	1.04
Children who are gifted should have the same entitlement to supplementary funding as students with disabilities	5.26	0.91
Gifted students should have an accelerated curriculum	4.93	0.91
Gifted students social/emotional readiness is a factor in the academic acceleration process	4.93	1.06
When gifted students receive special attention, the other students feel devalued (reverse-scored)	4.13	1.29
Special programs for gifted children are elitist (reverse-scored)	4.08	1.48
Identifying students as gifted increases the labeling of children as strong-weak, smart-not smart, good-less good, etc. (reverse-scored)	4.00	1.39
Gifted students should be allowed to skip one or more grades based on academic performance	3.38	1.23

The lowest rated item, with a mean score of 3.38, measured respondents' perceptions toward acceleration: "Gifted students should be allowed to skip one or more grades based on academic performance." The three items with the next lowest mean ratings, ranging from 4.00 to 4.13, were all indicators from the McCoach survey that measured concerns about elitism (see Figure 2).
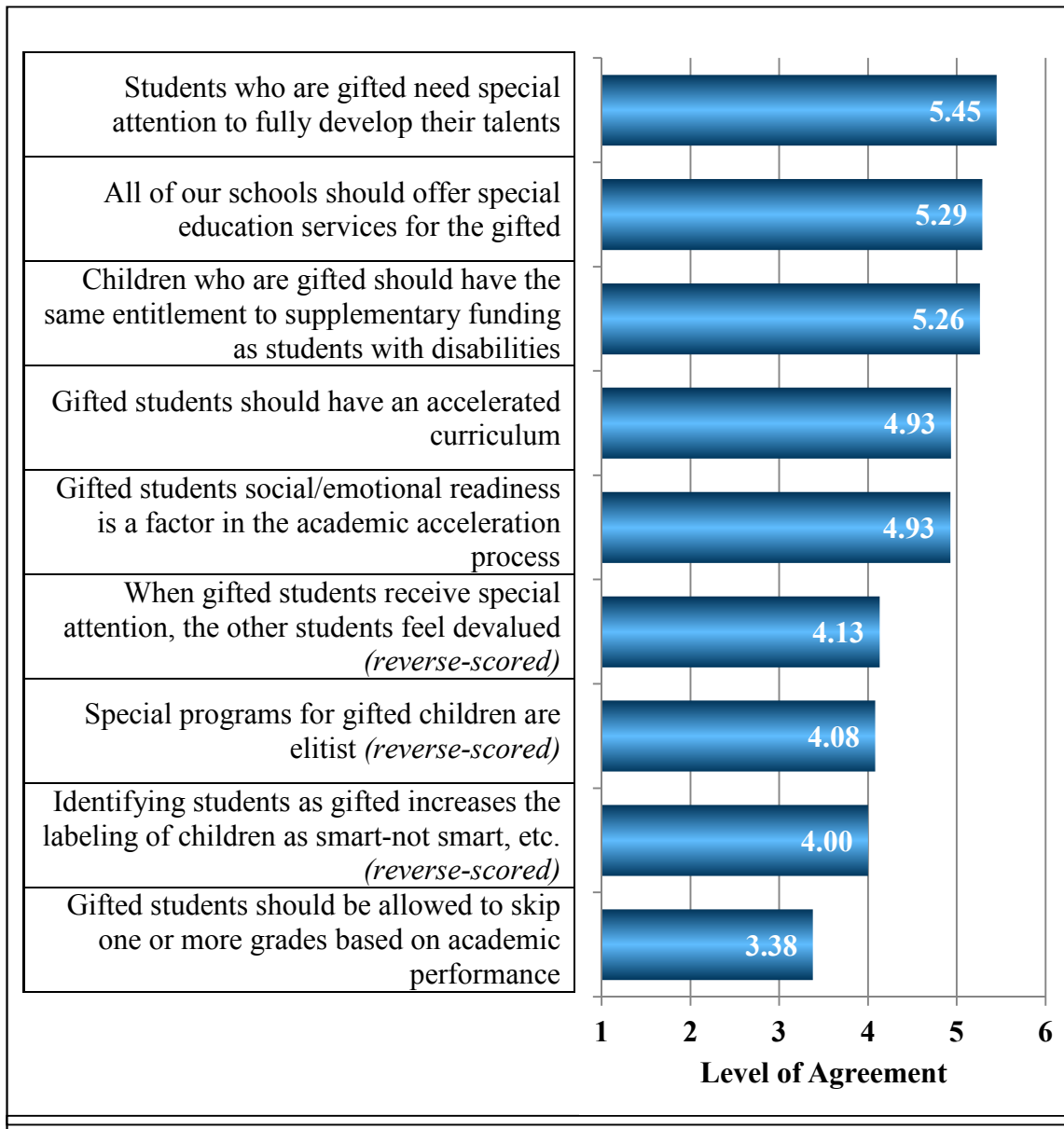
Figure 2. Perceptions regarding gifted education.

Research Question 2. Research Question 2 inquired, "What is the level of principals'

knowledge of leadership and instructional practices that represent excellence in gifted

education program?" The researcher assessed this question by computing mean rating scores

on the seven Importance of Practices items and the seven Practices Used items. Table 6

displays the mean and standard deviation for the importance of leadership practices. Figures

3 and 4 show the means for the two sets of items, respectively, sorted from the most highly

rated items to the lowest rated.

Table 6
Summary statistics for items measuring importance of leadership practices in gifted

education

Item	Mean	SD
Providing staff members differentiated professional development opportunities, which includes a background of general knowledge about the characteristics of giftedness and implications for curriculum, instruction, and assessment	4.50	0.56
Ensuring that all staff members understand the identification procedures and criteria for selecting gifted students	4.38	0.66
Assessing gifted students' progress using multiple indicators that measure mastery of content, demonstration of higher level thinking skills, and affective growth	4.37	0.64
Engaging in professional development, specifically for school based administrators in how to implement effective gifted and talented programs	4.32	0.66
Allocating resources in student based budget that allows for resources to enhance educational experiences for gifted students	4.19	0.71
Creating a school-based gifted committee consisting of teachers, and administrators that collects and analyzes gifted students' data, makes identification decisions and makes professional decisions about appropriate programs and services for gifted students	4.10	0.72
Offering a variety of acceleration opportunities (Whole grade skipping, early entrance to kindergarten and first grade, subject acceleration)	4.02	0.85
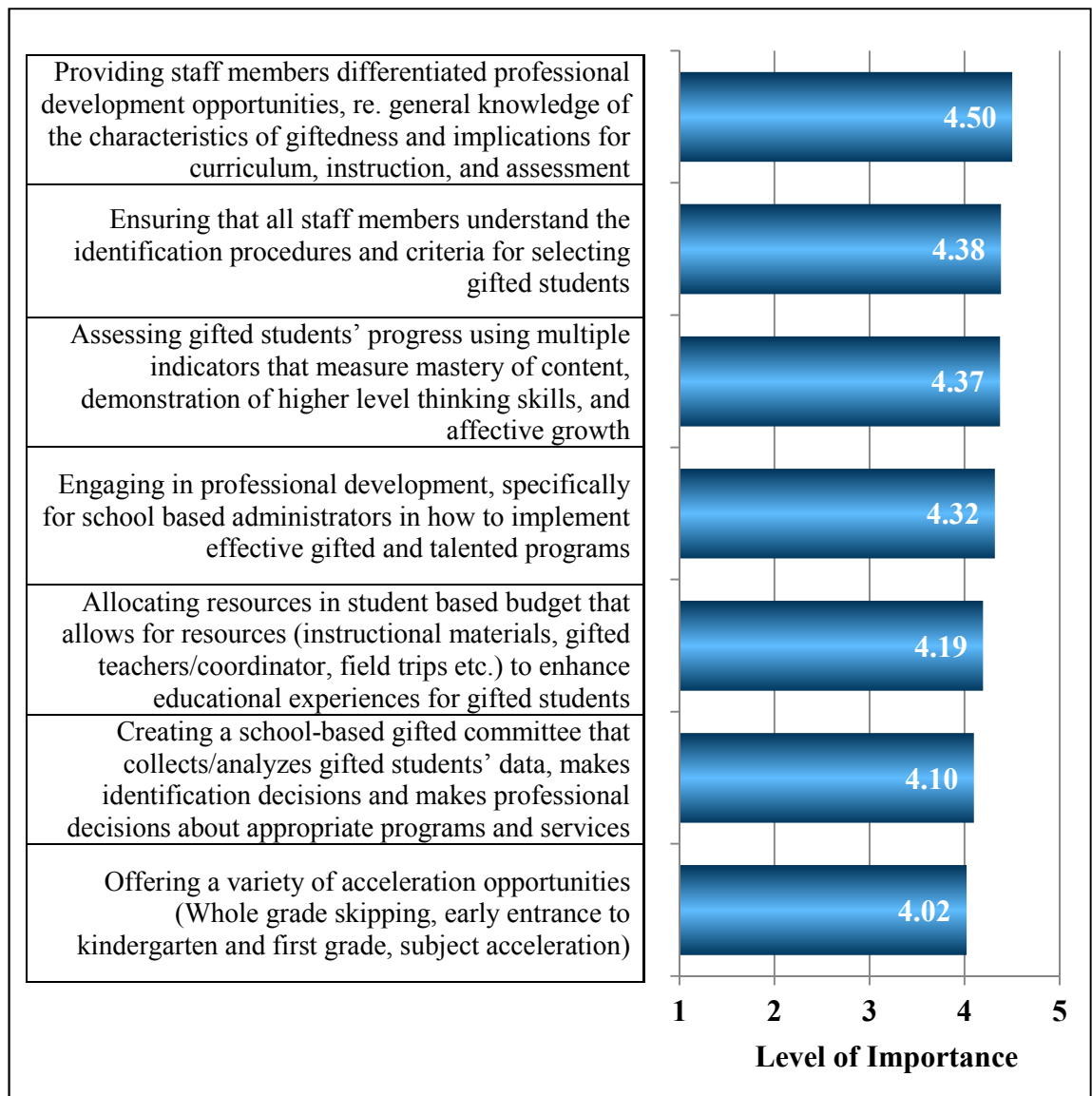
Figure 3. Importance of Leadership Practices in gifted education.

For the Importance of Practice items, ratings ranged from 1 = not important at all to 5 = absolutely essential. In Figure 3, the respondents rated as the most important practice with a mean rating of 4.5 was "Providing staff members differentiated professional development opportunities, re. general knowledge of the characteristics of giftedness and

implication for curriculum, instruction and assessment." The next highest item, "Ensuring that all staff members understand the identification procedures and criteria for selecting gifted students," had a mean rating of 4.38, and participants gave the item "Assessing gifted students' progress using multiple indicators that measure mastery of content, demonstration of higher level thinking skills, and affective growth" a mean score of 4.37. The practice with the lowest mean score (4.02) was "Offering a variety of accelerations opportunities (whole grade skipping, early entrance to kindergarten and first grade, subject acceleration)," indicating that on average, the principals deemed this practice "very important," but not "absolutely essential."

Table 7 displays the mean and standard deviation scores for the instructional practices used at the principals' schools. Mean scores for Practices Used items (see Figure 4) were based on responses that ranged from 1 = don't know/not sure to 6 = used by all teachers. The highest rated practice, with a mean rating of 5.11, was "Using pre-assessments to determine what students already know and data to provide appropriate differentiation." The item, "Using instructional groupings (homogenous grouping, independent study, etc.) to facilitate differentiated instruction for advanced students," had the next highest score, with a mean rating of 4.94.

The item, "Providing extended learning opportunities to students for more in-depth examination of a variety of topics" received lowest mean rating of 3.81. The responses also indicated that, on average, the item, "Incorporating instructional strategies specifically designed for gifted students into instruction," which had a mean rating of 4.08, was used by a little over half the teachers at their schools.

Table 7

Summary statistics for items measuring instructional practices in gifted education used at the principal's school

Item	Mean	SD
Using pre-assessments to determine what students already know and data to provide appropriate differentiation	5.11	1.00
Using instructional groupings (homogenous grouping, flexible grouping, cluster grouping within heterogeneous classes, cross-grade-level grouping, independent study) to facilitate differentiated instruction for advanced students	4.94	1.03
Regular collaborative planning meetings to design lessons, analyze data, and look at student work of gifted students	4.76	1.28
Analyze formative and summative data to identify potential gifted students in order to determine next steps for learning	4.50	1.30
Using problem based learning and other instructional strategies that include research, problem solving, and the creation of original products	4.22	1.19
Incorporating instructional strategies specifically designed for gifted students into instruction	4.08	1.18
Providing extended learning opportunities to students for more in-depth examination of a variety of topics	3.81	1.24

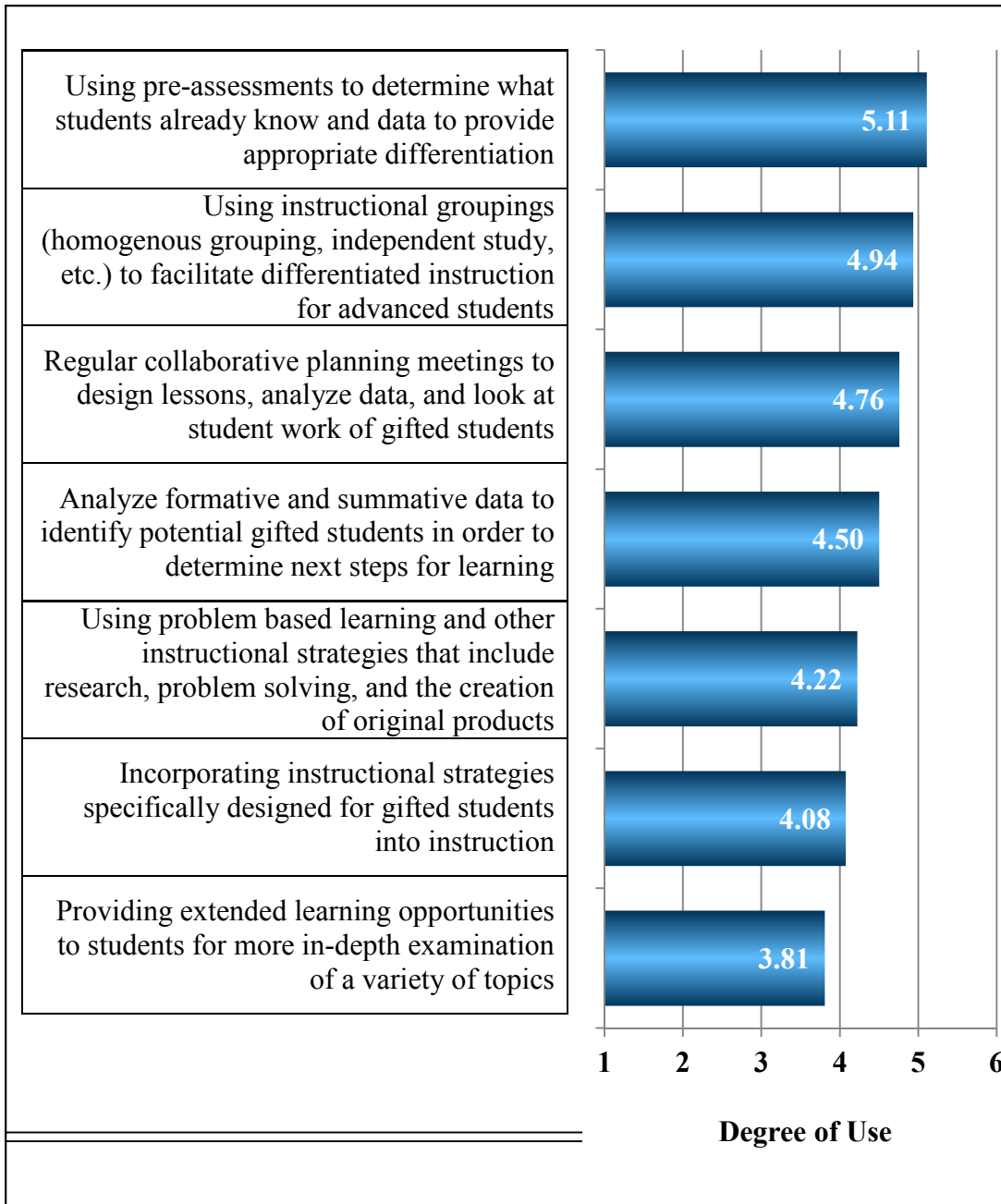| Instructional Practice	Degree of Use
Using pre-assessments to determine what students already know and data to provide appropriate differentiation	5.11
Using instructional groupings (homogenous grouping, independent study, etc.) to facilitate differentiated instruction for advanced students	4.94
Regular collaborative planning meetings to design lessons, analyze data, and look at student work of gifted students	4.76
Analyze formative and summative data to identify potential gifted students in order to determine next steps for learning	4.50
Using problem based learning and other instructional strategies that include research, problem solving, and the creation of original products	4.22
Incorporating instructional strategies specifically designed for gifted students into instruction	4.08
Providing extended learning opportunities to students for more in-depth examination of a variety of topics	3.81

Degree of Use

Figure 4. Instructional Practices Used in gifted education used at the principal's school

Research Question 3. Research Question 3 asked, "What is the relationship between elementary school principals' perceptions of gifted education, the importance of leadership practices in gifted education and the leadership practices that they use in their schools?" Responses to this question provided data on respondents' perceptions about gifted education and the leadership and instructional practices used in the principals' schools. Specifically, resulting data from this item helped the researcher examine the correlation between (a) the Perception and Importance of Practices scores, (b) the Perceptions and Practices Used scores, and (c) the Importance of Practices and the Practices Used scores. The summary statistics are highlighted in Table 8.

Table 8

Summary statistics for three summary measures (n =94)

	Mean	SD	Cronbach's Alpha
Perceptions	4.60	0.54	0.60
Importance of Practices	4.27	0.49	0.82
Practices Used	4.49	0.89	0.87

A Pearson correlation measures the strength and direction of association that exists between two variables. This correlation attempts to draw a line of best fit through the data of two variables and indicates how far away the data points are from the line of best fit (Hauke, & Kossowski, 2011). In order to determine if Pearson correlation is the best tool to analyze your data, four assumptions must meet: (a) your variables should be measured at the interval or ratio level, (b) there must be a linear relationship between the two variables, (c) there should be no significant outliers, and (d) your variables should be normally distributed. Assumptions b, c and d were tested using SPSS Statistics.

The Pearson correlations are summarized and presented in Table 9, and show a significant, but a weak, relationship between the principals' Perceptions score and the ratings of the Importance of Practices score (r = .273, p = .008). Evans (1996) stated that an r score between .20 - .39 is a weak score. Additionally, the data revealed that no statistically signification relationship existed between the Perceptions and Practices Used scores. Similarly, there was no statistically significant relationship between the Importance of Practices and Practices Used scores.

Table 9

Pearson correlations for three summary measures (n =94)

	Importance of Practices		Practices Used	
	R	P	r	p
Perceptions	0.273	0.008	-0.003	0.977
Importance of Practices			0.132	0.204

Discussion and Conclusions

The purpose of this study was to determine if the perceptions of elementary principals and their knowledge of leadership and instructional practices influenced the gifted students and programs at their schools. McCoach and Siegel (2007) stressed that to implement curricular and instructional programs that challenge and meet the needs of gifted students, administrators must provide appropriate support to teachers of gifted students. Survey data from this inquiry clearly demonstrated that, overall, elementary principals reported having positive perceptions about gifted education.

Additionally, the respondents consistently reported being very supportive of gifted education programs and making every effort to ensure that their school's programs met the needs of gifted students and developed their talents appropriately. This finding was in

alignment with a few other studies. While the McCoach & Siegel survey focused on teachers, the results were similar in that teachers were generally supportive of gifted education, and the mean (5.45) on the support subscale was the highest of all subscales (McCoach & Siegel, 2007). Similarly, in a study conducted by Lindberg (2015), who also utilized the McCoach survey, the superintendents surveyed also had the highest mean on the support subscale. In fact, 92% of the superintendents reported that they supported gifted students.

In the present study, the respondents also reported that they were very aware of the importance of leadership practices in gifted education; however, they rated "Offering a variety of acceleration opportunities" as the least important practice. With so many empirical studies supporting various forms of academic acceleration, a further investigation of why principals are not implementing these opportunities nor supporting this strategy is needed. A study conducted by Cornell, Callahan, Basin and Ramsay (1991) found two main reasons why educators are uncertain about acceleration: (a) They are not aware of the research around acceleration opportunities and (b) fear that the supporting research did not sufficiently take into consideration the social and emotional problems that could occur and potentially be harmful to students. In the McCoach survey, teachers also reported more negative attitudes about acceleration (McCoach & Siegel, 2007); similarly, only 38.8% of the superintendents in the Lindberg study were strongly in support of acceleration (Lindberg, 2015).

As reported earlier, one of Cooke's (2006) major findings in her examination of gifted education in District M, was the notable inconsistencies in the implementation of gifted programs across the school district. The results of the present study support Cooke's findings. For example, the Importance ratings, despite being significant, are not strong. The

data also revealed discrepancies between ratings of importance and actual practices that were being implemented.

In fact, a post hoc analysis revealed a highly significant correlation ($r = .356$, $p < .001$) between the Practices Used scale and the principals' agreement with the statement, "my educational background and on the job training has adequately prepared me to meet the needs of gifted students". An additional post hoc analysis compared the Practices Used scale between principals who did and did not agree or strongly agree with the statement, "I was or could have been in a gifted program in school". (see Table 4). A t-test found no significant difference between those who self-identified as gifted and those who did not ($t (92) = 0.71$, $p = .482$). This indicates that the principals who felt they were more prepared were more likely to implement practices to support gifted education, but that personal experience with giftedness did not have a bearing on such implementation.

While the findings from this study provided information about the respondents' perceptions of gifted education and knowledge of leadership practices, it did not determine whether those factors affected the actual instructional practices used in the schools.

Implications for the School District

Despite the lack of statistical significance in the findings from this inquiry, the data still has important implications for gifted programs in District M. In particular, it is important to note that over half (52.1%) of the principals reported that their educational background and on-the-job training in gifted education only somewhat prepared them or did not prepare them to work with gifted students (see Figure 5).

My educational background and on the job training has adequately prepared me to meet the needs of gifted students.

Disagree 14%
Strongly Agree 13%
Somewhat Disagree 12%
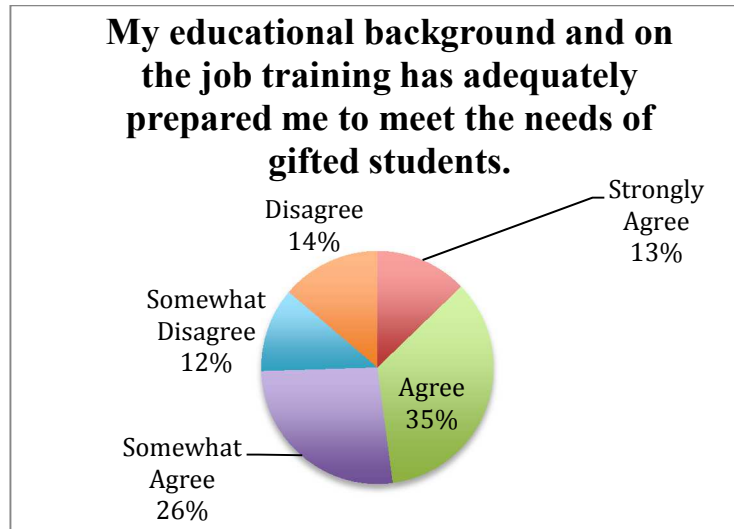Agree 35%
Somewhat Agree 26%

Figure 5. Background and Training.

District M would benefit from establishing a process designed to (a) build the capacity and comfort level of principals around gifted education and (b) help them better understand how to meet the educational and social needs of gifted students. For example, principals would profit from learning about ways to implement a variety of acceleration opportunities for gifted students. It would also be beneficial for principals to understand the importance of creating a school-based gifted committee as suggested by the state department Gifted Advisory Council. This gifted committee would be responsible for collecting and analyzing gifted students' data, properly identifying gifted students, and making professional decisions about appropriate programs and services for students and teachers. The following ideas also may be helpful for District M to consider:

1. District-level administrators of gifted education should provide professional development opportunities for principals on leadership and instructional practices like acceleration. Acceleration is a low-cost and low-risk practice that can easily be implemented in any elementary program with some training and ongoing support.

2. Principals would also benefit from learning about extended learning opportunities for gifted students.

3. Districts can also help principals build their capacity by providing opportunities for them to learn about instructional strategies designed for gifted students and ways to help teachers incorporate them into their daily lessons.

4. Principals must foster an environment that embraces collaboration and provides time and opportunities for teachers to collaborate through a gifted professional learning community. School leaders can easily implement this strategy by creating a school-based gifted committee that is responsible for making all decisions relating to gifted students, including analyzing student data, establishing identification procedures, and making professional decisions for gifted students.

5. To ensure that they have the resources needed to strengthen their gifted programs, principals should allocate financial resources through Student-Based Budgeting to support gifted students and programs in their schools with appropriate teacher and students' resources and professional development opportunities, including state and national gifted conferences for teachers and administrators.

Limitations

The study was limited by the fact that the only data collected was from a survey instrument designed to collect general information regarding elementary principals' perceptions and knowledge of gifted education, as well as the leadership and instructional practices used in their schools. The participants' responses to the survey were dependent on the accuracy and truthfulness in self-reporting, despite the need for them to answer questions in what may be considered an unfavorable manner. It is important to note that the use of a

mixed methods study that allowed respondents to elaborate on their perceptions and knowledge of leadership and instructional practices through interviews or focus groups may have resulted in more comprehensive understanding of how principals are perceiving some of the items and concepts, such as "acceleration".

The study was also limited to the one target school district. The elementary schools in the sample were limited to traditional or comprehensive schools and did not include any special programs (e.g., charter, language immersion, Montessori, performing arts, IB etc.). Still, this study did pose questions that could be valuable to many urban districts interested in building the capacity of elementary principals around gifted education.

Recommendations for Future Investigations

As the instructional leader of their schools, principals constantly work to improve performance outcomes for all students, including those considered gifted and talented. This study examined elementary school principals' perceptions of gifted programs, as well as the leadership and instructional practices that impact the gifted students and programs in their schools. While the study did not reveal any statistically significant relationships between the variables examined, the findings did lead to the following recommendations for further study:

1. This study should be replicated to include elementary school teachers of gifted students. While this inquiry explored elementary principals' perceptions of gifted programs and their own leadership practices, it is vital to understand principals' leadership practices from the perspectives of the teachers. A study focusing on teachers of gifted students' perceptions of school leadership, and of the practices

these teacher use, would allow comparisons between their responses and the responses given by principals.

2. Future iterations of this study should also include interviews and focus groups designed to gain a better understanding of principals' experiences and to provide principals the opportunity to express their perspectives of gifted education and leadership practices used in their schools. A qualitative component would allow the researcher opportunities to ask principals in-depth questions about instructional practices implemented in their schools that support gifted students, as well as professional development opportunities and other practices that support teachers of gifted students.

3. Future study in this area should also include principals' opinions about obstacles and barriers to providing effective gifted education programs.

4. Replication of this study could also include interviews with district-level administrators of gifted education, which would provide new insight into ways to build the capacity of principals around gifted education.

5. Future studies in this area may also focus on middle school principals. When students transition to middle school, the service delivery options change. Including a sample of middle school principals would allow comparisons between elementary and middle school principals' perceptions and practices. Results of such comparisons could highlight areas of focus for creating greater continuity in instructional practices, so that gifted students can experience less disruption as they transition from elementary to middle school.

APPENDICES

Appendix A

Default Question Block

Please take a few minutes to respond to each of the 30 items below regarding gifted education. This should take you no more than 15 minutes. For the first section, use the attached scale that ranges from "Strongly Agree " to "Strongly Disagree" to indicate your viewpoints. All responses will be treated confidentially.

All of our schools should offer special education services for the gifted.

○ Strongly Agree

○ Agree

○ Somewhat Agree

○ Somewhat Disagree

○ Disagree

○ Strongly Disagree

Students who are gifted need special attention to fully develop their talents.

○ Strongly Agree

○ Agree

○ Somewhat Agree

○ Somewhat Disagree

○ Disagree

○ Strongly Disagree

Children who are gifted should have the same entitlement to supplementary funding as students with disabilities.

- ○ Strongly agree
- ○ Agree
- ○ Somewhat Agree
- ○ Somewhat Disagree
- ○ Disagree
- ○ Strongly Disagree

Special programs for gifted children are elitist.

- ○ Strongly Agree
- ○ Agree
- ○ Somewhat Agree
- ○ Somewhat Disagree
- ○ Disagree
- ○ Strongly Disagree

When gifted students receive special attention, the other students feel devalued.

- ○ Strongly Agree
- ○ Agree
- ○ Somewhat Agree
- ○ Somewhat Disagree
- ○ Disagree
- ○ Strongly Disagree

Identifying students as gifted increases the labeling of children as strong-weak, smart-not smart, good-less good, etc.

- ○ Strongly Agree
- ○ Agree
- ○ Somewhat Agree
- ○ Somewhat Disagree
- ○ Disagree

○ Strongly Disagree

Gifted students should be allowed to skip one or more grades based on academic performance.

○ Strongly Agree
○ Agree
○ Somewhat Agree
○ Somewhat Disagree
○ Disagree
○ Strongly Disagree

Gifted students social/emotional readiness is a factor in the academic acceleration process.

○ Strongly Agree
○ Agree
○ Somewhat Agree
○ Somewhat Disagree
○ Disagree
○ Strongly Disagree

Gifted students should have an accelerated curriculum.

○ Strongly Agree
○ Agree
○ Somewhat Agree
○ Somewhat Disagree
○ Disagree
○ Strongly Disagree

I was or could have been in a gifted program in school.

○ Strongly Agree
○ Agree
○ Somewhat Agree

○ Somewhat Disagree

○ DIsagree

○ Strongly Disagree

I have a child or close relative that is identified as gifted.

○ Strongly Agree

○ Agree

○ Somewhat Agree

○ Somewhat Disagree

○ Disagree

○ Strongly Disagree

My educational background and on the job training has adequately prepared me to meet the needs of gifted students.

○ Strongly Agree

○ Agree

○ Somewhat Agree

○ Somewhat Disagree

○ Disagree

○ Strongly Disagree

Please take a few minutes to respond to each item below regarding the importance of leadership practices in gifted education. Use the attached scale that ranges from "Absolutely Essential" to "Not Important At All" to indicate your viewpoints. All responses will be treated confidentially.

Creating a school-based gifted committee consisting of teachers, and administrators that collects and analyzes gifted students' data, makes identification decisions and makes professional decisions about appropriate programs and services for gifted students.

○ Absolutely Essential

○ Very Important

○ Of Average Importance

○ Of Little Importance

○ Not Important At All

Ensuring that all staff members understand the identification procedures and criteria for selecting gifted students.

○ Absolutely Essential

○ Very Important

○ Of Average Importance

○ Of Little Importance

○ Not Important At All

Offering a variety of acceleration opportunities. (Whole grade skipping, early entrance to kindergarten and first grade, subject acceleration)

○ Absolutely Essential

○ Very Important

○ Of Average Importance

○ Of Little Importance

○ Not Important At All

Allocating resources in student based budget that allows for resources (instructional materials, gifted teachers/coordinator, field trips etc.) to enhance educational experiences for gifted students.

○ Absolutely Essential

○ Very Important

○ Of Average Importance

○ Of Little Importance

○ Not Important At All

Providing staff members differentiated professional development opportunities, which includes a background of general knowledge about the characteristics of giftedness and implications for curriculum, instruction, and assessment.

○ Absolutely Essential

○ Very Important

○ Of Average Importance

○ Of Little Importance

○ Not Important At All

Engaging in professional development, specifically for school based administrators in how to implement effective gifted and talented programs.

○ Absolutely Essential

○ Very Important

○ Of Average Importance

○ Of Little Importance

○ Not Important At All

Assessing gifted students' progress using multiple indicators that measure mastery of content, demonstration of higher level thinking skills, and affective growth.

○ Absolutely Essential

○ Very Important

○ Of Average Importance

○ Of Little Importance

○ Not Important At All

Please take a few minutes to respond to each item below regarding instructional practices in gifted education used in your school. Use the attached scale that ranges from "Used By All Teachers " to "Don't Know/Not Sure" to indicate your viewpoints. All responses will be treated confidentially.

Using pre-assessments to determine what students already know and data to provide appropriate differentiation.

○ Used By All Teachers

○ Used By Many Teachers

○ Used By About Half of the Teachers

○ Used By Very Few Teachers

○ Not At All

○ Don't Know/Not Sure

Regular collaborative planning meetings to design lessons, analyze data, and look at student work of gifted students

○ Used By All Teachers

○ Used By Many Teachers

○ Used By About Half of the Teachers

○ Used By Very Few Teachers

○ Not At All

○ Don't Know/Not Sure

Incorporating instructional strategies specifically designed for gifted students into instruction

○ Used By All Teachers

○ Used By Many Teachers

○ Used By About Half of the Teachers

○ Used By Very Few Teachers

○ Not At All

○ Don't Know/Not Sure

Providing extended learning opportunities to students for more in-depth examination of a variety of topics.

○ Used By All Teachers

○ Used By Many Teachers

○ Used By About Half of the Teachers

○ Used By Very Few Teachers

○ Not At All

○ Don't Know/Not Sure

Using instructional groupings (homogenous grouping, flexible grouping, cluster grouping within heterogeneous classes, cross-grade-level grouping, independent study) to facilitate differentiated instruction for advanced students

○ Used By All Teachers
○ Used By Many Teachers
○ Used By About Half of the Teachers
○ Used By Very Few Teachers
○ Not At All
○ Don't Know/Not Sure

Using problem based learning and other instructional strategies that include research, problem solving, and the creation of original products.

○ Used By All Teachers
○ Used By Many Teachers
○ Used By About Half of the Teachers
○ Used By Very Few Teachers
○ Not At All
○ Don't Know/Not Sure

Analyze formative and summative data to identify potential gifted students in order to determine next steps for learning

○ Used By All Teachers
○ Used By Many Teachers
○ Used By About Half of the Teachers
○ Used By Very Few Teachers
○ Not At All
○ Don't Know/Not Sure

Please take a moment to complete the following questions about your school and work experiences.

Are you a Title I School?

○ Yes

○ No

Are you an EGATE (Excellence in Gifted and Talented Education) school?

○ Yes

○ No

How many years have you been an educator?

○ 1 to 5 years

○ 6 to 10 years

○ 11 to 15 years

○ 16 to 20 years

○ 21+ years

How many years have you served as a principal?

○ 1 to 5 years

○ 6 to 10 years

○ 11 to 15 years

○ 16 to 20 years

○ 21+ years

Appendix B

Week 1 Reminder Email

Dear Principal,

I recently contacted you about completing a brief 15-minute survey for my doctoral research. The research could assist PGCPS and other public school districts with the development of support for principals in better meeting the needs of gifted students.

Your participation is critical to this study. Therefore, I am respectfully requesting that you complete a short, 15-minute, online survey by clicking the link provided below. The survey is self-explanatory. There are no right or wrong answers.

Participants that complete the survey within the next week will be eligible for a random drawing of one of four $25 gift cards. I will notify all of those eligible for the drawing as well as the winner within two weeks after the survey is completed.

Please note that all information from the survey will be kept confidential through the web-based software program. The program has a log-on feature and a high end firewall system to prevent any type of data breach.

The last day to complete the survey is _____.

Please feel free to contact me if you need additional clarification. I can be reached at 301-379-7991. Thank you in advance for your participation and prompt response to the survey.

Sincerely,

Monica Gaines

Appendix C

Week 2 Reminder Email

Dear Principal,

I recently contacted you about completing a brief 15-minute survey for my doctoral research. The research could assist PGCPS and other public school districts with the development of support for principals in better meeting the needs of gifted students.

Your participation is critical to this study. Therefore, I am respectfully requesting that you complete a short, 15-minute, online survey by clicking the link provided below. The survey is self-explanatory. There are no right or wrong answers.

Please note that all information from the survey will be kept confidential through the web-based software program. The program has a log-on feature and a high end firewall system to prevent any type of data breach.

The last day to complete the survey is _____.

Please feel free to contact me if you need additional clarification. I can be reached at 301-379-7991. Thank you in advance for your participation and prompt response to the survey.

Sincerely,

Monica Gaines

Appendix D

University of Maryland College Park

Initials _____ Date _____

Project Title	Exploring the Impact of Elementary Principals' Perceptions of Gifted Education
Purpose of the Study	This research is being conducted by Monica Gaines as a part of my doctoral dissertation under the direction of Dr. Margaret McLaughlin, my advisor at UMCP. The purpose of this research project is to explore elementary school principals' perceptions regarding gifted education and the impact it may have on leadership and instructional practices used in their schools.
Procedures	The procedures involve completing a 15-minute web-based anonymous survey. The survey will ask you to provide your: • Perceptions of gifted education programs • Perceptions of needs of gifted students • Leadership practices relating to gifted education • Instructional practices used in your school for gifted students • Demographic information
Potential Risks and Discomforts	There are no known risks to participants. Every effort will be taken to prevent breach of confidentiality. Your identity will remain anonymous, and all data will be reported in the aggregate and only maintained using randomly assigned numbers for each participant.
Potential Benefits	There are not direct benefits from participating in this research. However, possible benefits include providing the school district with effective leadership and instructional practices that enhance gifted education programs. We hope that, in the future, other people might benefit from this study through improved understanding of how to better prepare and train elementary school principals to understand the unique needs of gifted students in order to maximize their academic experiences and reach their full potential.
Confidentiality	Any potential loss of confidentiality will be minimized through the use of the anonymous Qualtrics survey, which is a web-based software program. The program has a log-on feature and a high end firewall system to prevent any type of data breach.
Incentive	By participating in this study, you could receive one of four $25 gift cards if you complete the survey within the first week and your name is randomly selected.
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop

APPROVED
EXPIRES ON
JUNE 30, 2018
PGCPS-IRB OFFICE

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