THE RELATIONSHIP BETWEEN SUPERINTENDENTS' PERCEPTIONS ABOUT GIFTED EDUCATION AND THE CONTENT OF LOCAL ACADEMICALLY OR INTELLECTUALLY GIFTED EDUCATION PLANS

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ABSTRACT

Kaye B. Clark: The Relationship Between Superintendents' Perceptions About Gifted
Education and the Content of Local Academically or Intellectually Gifted Education
Plans
(Under the direction of Dr. Fenwick English)

A public school superintendent, as the chief executive officer in a district, is in a unique position to influence the programs addressing the needs of gifted students in that district. A superintendent's beliefs could impact program content, resource allocation, and priority status. This study looked at superintendents' perceptions of the North Carolina Academically or Intellectually Gifted Program Standards. It examined the level of importance each assigned to these standards and related practices and then compared each superintendent's responses to the practices actually found in his/her district AIG plan. In addition to determining this correlation between perceptions and content, the study hypothesized that superintendents with more connections to gifted education, such as being identified as gifted as a child or holding AIG certification, would have closer matches between their perceptions of gifted education practices and the level of implementation of those practices in local plans. Overall, there was significant dispersion by set and by district, but forty-four percent of respondents achieved a correlational strength considered as moderate to high. The results suggested that superintendents having two or more connections to gifted education were more likely to have higher correlations.

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Chapter I: Introduction to the Study

Students with special gifts and talents, referred to as *gifted*, come from all cultural, economic, and linguistic backgrounds. "Children and youth with outstanding talent perform or show potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment" (U. S. Department of Education, 1993, p.3). Gifted students are individuals with diverse needs and abilities and may require programs and services that generally are not provided in the regular education classroom.

All fifty states have adopted definitions of giftedness, and many states have legislated that talented and gifted students receive special services (Purcell & Eckert, 2006). North Carolina has had legislation for gifted education in place since 1961. The most recent revision of this law, passed in 1996, is known as Article 9B and provides a definition for academically and/or intellectually gifted (AIG) students, requires local education agencies (LEA) to have plans to address the needs of gifted children, and mandates identification and services for gifted education in grades kindergarten through twelve (§ 115C-150.5-.8, 1996). Article 9B states:

> Academically or intellectually gifted students perform or show the potential
> to perform at substantially high levels of accomplishment when compared
> with others of their age, experience, or environment. Academically or
> intellectually gifted students exhibit high performance capability in
> intellectual areas, specific academic fields, or in both the intellectual areas
> and specific academic fields. Academically or intellectually gifted students
> require differentiated educational services beyond those ordinarily provided

by the regular educational program. Outstanding abilities are present in students from all cultural groups, across all economic strata, and in all areas of human endeavor.

In July 2009, as a result of a performance audit by the Office of the North Carolina State Auditor, performance standards for all local AIG programs were approved by the State Board of Education (SBE). According to the SBE, the AIG Program Standards represent the state's "commitment to ensure that the academic, intellectual, social, and emotional needs of AIG students are being met" (Public Schools of North Carolina, 2009, p.2). The six standards are defining statements that serve as a mandated framework for all 115 North Carolina LEAs to develop and implement comprehensive programming for gifted students. They reflect the requirements of Article 9B and are closely aligned with the Pre-K-Grade 12 Gifted Program Standards of the National Association for Gifted Children (NAGC, 2000). Addressed in the standards are the areas of (1) student identification, (2) differentiated curriculum and instruction, (3) personnel and professional development, (4) programming within a total school community, (5) partnerships, and (6) program accountability.

In North Carolina LEAs, the superintendent is the chief executive officer of the school district and has, under the direction of the local board of education, general supervision of all the schools and of all the personnel and various departments of the school district. Public school superintendents may delegate the directorship of a program or department to another central level administrator, but the superintendent remains the executive who is responsible for successes and failures of the programs. North Carolina superintendents are charged by law to keep themselves thoroughly informed of all

policies and programs adopted by the State Board of Education, such as the required local

AIG plans, and to work with other personnel in the district to ensure development and

implementation of them (§ 115C-276, 2009).

"Today's schools need strong leadership and well-prepared and educated

administrators who understand the complexity of the educational system, can solve

problems, and have the commitment to raise the benchmark for educational programs and

performance in America's schools" (Hanson, 2005, p. 3). According to Petersen and

Barnett (2003), superintendents can have a significant influence on the curriculum and

instruction in a district. Rothstein and Jacobsen (2007) believed district policy and district

focuses are heavily influenced by the superintendent. The American Association of

School Administrators (1994) stated that the superintendent has a responsibility "to serve

as a catalyst" (p. 11) for the district in the proposal, planning, and implementation of

programs and services. It was important to examine the perceptions of public school

superintendents as these leaders can be an important impetus for the creation and

advancement of programming. A superintendent's attitudes and beliefs about a particular

type of policy or program may have a bearing on its content, on its budgetary allotment,

on its priority level, and on its ultimate success or failure.

<div align="center">Statement of Problem</div>

Many in the field of gifted education declare that the future of the nation literally

depends upon the next generation of gifted and talented students and the programs

designed for them (Gallagher, 2005; Renzulli, 2005). Practicing professionals attempting

to make reasonable decisions in creating a quality program for gifted students are faced

with a dilemma. Central office leadership needs to know what programs and services will

best meet the diverse needs of gifted learners. "Many central administrators have shared openly that they are overwhelmed and need guidelines to direct the provision of educational opportunities for high-achieving students" (Purcell & Eckert, 2006, p. xi).

The state of North Carolina has made an effort to address this need by developing and mandating AIG Program Standards to serve as a statewide framework; however, local needs and local resources vary significantly across the state's public school districts. The standards, which may be viewed as critical in providing guidelines, honor local flexibility and thus cannot ensure consistent content in all districts. With AIG programming embedded within and responsive to local context, differences may arise among programs. These differences could dictate the degree to which a local AIG plan can be successfully written and put into practice.

A critical factor in the effectiveness of a local AIG plan and program is the superintendent who is leading the district. According to Marzano and Waters (2009), superintendent leadership practices were correlated with student achievement, and their evidence suggested that effective superintendents empower leaders in the district to improve student performance. Other studies addressed how central leadership could impact student outcomes through the design, planning, and implementation of programs and services (Anderson, 2003; LaRoque & Coleman, 1990; MacIver & Farley, 2003, Massell & Goertz, 2002). With policies and programming relying heavily on the attitudes of key players in a district (Purcell & Eckert, 2006), and numerous researchers believing that district policies and programs are influenced by the superintendent (Petersen & Barnett, 2003; Rothstein & Jacobsen, 2007), the perceptions of the superintendent about

gifted education might have a significant impact on the content and the implementation of a local AIG plan.

Purpose of Study

Superintendents are in a position to influence the policies and programs addressing the needs of gifted students in their districts (Rothstein & Jacobsen, 2007). While the North Carolina State Board of Education has mandated that public school districts use specific standards in planning and implementing local AIG plans, the state has offered no guidelines for the prioritization of gifted programming within a district's academic and instructional plan, and no increased funding to local education agencies to provide gifted education to students. With additional requirements in place and historic cuts in funding for education from the state (Governor, 2011), superintendents must allocate scarce resources to meet many needs. They may choose to commit funding to what they see as immediate priorities or to priorities that seem to be more in line with current cultural values. When funding to school systems is reduced, programs for gifted and talented students may be compromised (Purcell & Eckert, 2006).

The purpose of the study was to examine the attitudes and perceptions of North Carolina public school superintendents about gifted education. Of particular interest were their perceptions of the state-mandated standards and related practices that comprise the required framework for local AIG plans. The study examined the actual content of local AIG plans. It was not known if there could be a relationship between public school superintendents' perceptions about the North Carolina gifted education standards and the content based on those standards that was found in local Academically and Intellectually

Gifted Education Plans. Should a relationship exist, these data could be important for future policies and programming for gifted students.

Research Design

The research design followed the framework of the North Carolina Academically or Intellectually Gifted Program Standards as approved by the State Board of Education in July 2009 (see Appendix A). The standards, or designated levels of performance, are intended to assist school districts in examining the quality of their programming for gifted learners and are based on the work of multiple researchers active in the field of gifted education (Brown, Avery, VanTassel-Baska, Worley, and Stambaugh, 2006; Reis, 2006).

A study of North Carolina public school districts' local plans for gifted education was completed looking at the six required standards and their related practices. All districts' AIG plans were made available through the Academic Services and Instructional Support Division of the North Carolina Department of Public Instruction. The documents were reviewed using an information matrix similar to one used by Coleman and Gallagher (1992) in a report on state policies for gifted students.

North Carolina public school districts are required when completing the AIG plan template to assign each of the gifted education practices one of three categories: (1) Maintained, (2) Focused, or (3) Future Practice. A designation of *Maintained* means the practice is currently being implemented effectively in the district and little or no change is needed. A *Focused* item indicates the district needs to improve significantly in the practice and will allocate resources during the life of the new three-year plan to add and/or improve the practice. A designation of *Future Practice* indicates the district is not

presently implementing the practice and will likely not address it until the development of the next three-year plan. In the information matrix, practices designated as *Maintained* were considered the most important, since the district had already chosen to allocate resources to implement them and planned to continue doing so. Items marked *Focused* were considered the next most important, as the district had determined it should be implementing these practices and planned to begin doing so during the next three years. *Future* practices were considered the least important since the district had yet to allocate resources to add these to its AIG Plan. Other information factors that were reviewed to determine the relative importance of practices in district plans were the number of grade levels or students impacted by the practice, whether or not additional personnel were required for implementation, if professional development was needed and/or provided, and if additional instructional materials were necessary.

An online survey was sent to the 115 public school superintendents in the state. The 2013-2014 Education Directory published by the North Carolina Department of Public Instruction was used to identify superintendents. The survey instrument was based on the concepts found in the North Carolina Academically or Intellectually Gifted Program Standards. Survey items were created based on the gifted education practices the SBE describes as "what an LEA should have in place" (Public Schools of NC, 2009, p. 3). Superintendents were asked to rank the survey items numerically in order of greatest to least importance for meeting the needs of gifted students. Demographic information was collected from the superintendents. Information was asked regarding district enrollment, geographic location of district within the state, years of experience as a

superintendent, years in present position, ethnicity, and connections or experiences with AIG. Information was confidential and anonymity was maintained.

An email about the survey was sent to superintendents one week prior to the survey being sent electronically. A second letter with additional information accompanied the survey. Two assistant superintendents and two district AIG Directors previewed and critiqued the survey before distribution, and changes were made as deemed necessary.

An analysis was made of the relationship between the level of importance superintendents assigned statements regarding gifted program practices and the level of importance the practices were actually given in local plans. The study was not an examination of superintendents' ratings, but whether their perceptions may have had an influence on the level of emphasis a district assigned certain practices and therefore, an influence on the content of local programming.

The relationship between the two was considered through the lens of a modified principal and agent model (Ferris, 1992). The principal agent model provided a structure that could help to understand a relationship between two entities, individuals, or ideas. The principal, represented by a superintendent's perceptions about gifted education, gave authority to the agent, represented by the content of a local AIG plan. Public institutions are formed to fulfill societal needs to create, preserve, and transmit knowledge (Lane & Kivisto, 2008). The public school superintendent, as the head of a public institution, has an expectation that the district AIG plan will fulfill a part of his/her mission for the school district. In this study, the principal set expectations, oversaw allocations, and empowered the agent to fulfill the task of utilizing resources and

adhering to policies to provide a comprehensive gifted education program for the students in a district. There was an implied agreement between the two as authority was designated from one to the other. The agent was expected to represent the interests of the principal.

This conceptual model was used to analyze the interactions and the outcomes of superintendents' perceptions about gifted education and what was written in local AIG plans. The principal-agent relationship was considered to be reciprocal (Smart, 2010; Vanhuysse & Sulitzeanu-Kenan, 2009). A superintendent's perceptions may have played a role in what was considered important enough to include in a local plan and how resources were allotted to implement the plan. The content of a local AIG plan may have been viewed as a reflection of a superintendent's effectiveness in leading a district to fulfill its mission, and as a part of the mission, to plan for and meet the needs of its gifted students.

Assumptions

There were several assumptions made in the study. It was assumed that superintendents were critical to the effective planning and implementation of programs in their districts (MacIver & Farley, 2003), and that superintendents were aware of the legislative requirements of Article 9B and the State Board of Education mandate to follow the North Carolina Academically or Intellectually Gifted Education Program Standards framework when creating plans for gifted education. It was assumed the State Board of Education AIG mandate provided an effective vehicle to support the needs of gifted learners in North Carolina. The data reported by the state of North Carolina regarding the 115 local AIG plans and the listing of superintendents per local education

agencies was believed accurate.

It was assumed that each public school district in North Carolina wrote an AIG plan based on the requirements issued by the Department of Public Instruction and the State Board of Education (July, 2009). These requirements mandated that each of the practices under the six AIG standards be studied at the district level and then assigned a rating in the AIG plan according to how necessary the district found each practice to be and/or how district resources may have impacted the implementation of each practice. It was assumed that a rating of *Maintained* on a local AIG plan practice indicated a district believed the practice was necessary to meet the needs of its gifted students and that resources had been allocated in previous years and would continue to be allocated to ensure its implementation; *Focused* as a rating indicated the district saw a need to add the practice to its plan to improve its services to gifted students and would allocate sufficient resources at least during the life of the current three year plan for the practice to be implemented; and *Future Practice* indicated the practice was not believed to be critical to meet current student needs and/or the district was presently unable to allocate resources to implement or sustain the practice; thus, it would not be looked at until the development of the next three year plan with no current resources allocated.

Limitations

Local AIG plans from the state of North Carolina only were reviewed. The document matrix and the online survey addressed only programming for academically and intellectually gifted students. The administrators surveyed were superintendents from the 115 districts in North Carolina. Superintendents may have completed the survey themselves, as requested, but may have delegated the responsibility to another, or asked

another person for assistance with some responses. It was assumed their responses were representative of their professional perceptions and opinions. A superintendent's values, or the values of a community, could have affected answers. The politics of a local board of education may have played a role in how a participant responded. The researcher has many years of experience with gifted education, having gifted education certification and having served as a district coordinator for gifted programming. This personal experience could have influenced conclusions and recommendations.

Research Questions

The following questions guided the study:

1. What are the perceptions of public school superintendents in North Carolina about gifted education; in particular, what do they believe is the importance of the concepts related to the standards and practices that comprise the required framework for local AIG plans?

2. What is the relationship between superintendents' perceptions of the importance of gifted education practices and the level of importance, or intensity of focus, actually assigned to the practices in local plans for gifted education?

• Hypothesis: The perception of importance superintendents give to the concepts related to standards and related practices that comprise the required framework for local AIG plans correlates strongly with the level of emphasis assigned to the standards and practices within local AIG plans.

• Hypothesis: The importance ratings given by superintendents with more connections to gifted education will more closely match the importance levels assigned to the practices in local plans than the ratings of superintendents with few or no connections to

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gifted education.

Definition of Terms

The following list of terms were used in the research:

• *Article 9B*: the current North Carolina legislation, passed in 1996, that mandates identification and services for gifted education in grades kindergarten through twelve.

• *Gifted education*: a broad term for special practices, procedures, and theories used in the education of children who have been identified as academically or intellectually gifted and who require differentiated educational services beyond those provided by a regular education program (Public Schools, 2009).

• *Local Plan for Gifted Education (AIG Plan)*: All local education agencies are required by legislation to develop 3-year plans with specific components to address the needs of academically or intellectually gifted students in their districts.

• *North Carolina Academically and Intellectually Gifted Program Standards*: In 2009, the state developed performance standards for local AIG programs to provide a consistent vehicle to monitor program implementation, to protect the rights of gifted students, and to support quality AIG programming.

• *Perception*: the act or faculty of apprehending by means of the senses or of the mind; cognition; understanding; immediate or intuitive recognition or appreciation; insight; intuition (Merriam-Webster, 2003).

• *Program:* a plan of action that delineates a school or district response to the needs of students (Rogers, 2002).

• *Superintendent*: in North Carolina, the Chief Executive Officer of a school system whose duties are specified by the NC General Assembly.

Significance of Study

The review of relevant research indicated that the superintendent role as an instructional leader was important to student academic achievement, but most of the studies focused on data related to struggling students, which may or may not have included gifted students (Bredeson & Kose, 2007; Sherman, 2008; Smolek, 2005). Other researchers noted that little has been done to examine the beliefs and behaviors of superintendents in the local context, particularly as they translate state mandates, such as North Carolina's Article 9B, into practice (Lane, 2006; Waters & Marzano, 2006).

The results of this study may have provided a greater depth of understanding of the perceptions of superintendents relative to programming for academically or intellectually gifted students. It may have offered insight into the superintendent's role in gifted programs and to what extent, if any, that role affected the content of local AIG plans. Given that superintendents are ultimately responsible for the instructional and executive leadership of their districts, perhaps they have been an untapped source of power as advocates for gifted education. The current AIG process, including the use of a required template, the assignment to multiple practices of varying levels of emphasis, and the completion of a state-mandated review at the end of three years, is relatively new to North Carolina. This process was ongoing as this study was being conducted, so little data existed about it. This research has added to the literature regarding this newest generation of AIG plans in North Carolina and may have raised awareness of current state legislation for gifted children.

Chapter II: Review of Related Literature and Research

Introduction

Effective leadership is a crucial force in efforts to plan programs and services to meet the needs of an increasingly diverse population of public school students, including those of gifted students. District leaders implement multiple programs in an environment of constantly shifting priorities, sharing information with a wide variety of stakeholders and receiving feedback on a range of issues. The public school superintendent is responsible for high-visibility political and managerial duties that may overshadow his increasingly important attention to student achievement. This chapter provides an overview of the literature as it relates to: 1) the principal forces needed to ensure effective programming at the district level, 2) the current role of the superintendent in curriculum planning and instructional leadership, and 3) the history of the statewide framework for gifted programming in North Carolina. The chapter concludes with a discussion of how these three issues merge to impact the content of local plans for gifted education and how the perceptions of public school superintendents about gifted education could influence that impact.

Effective Programming at the District Level

Introduction

Principal findings from the literature revealed practices and emphases in districts where program development and implementation efforts are recognized as successful. Studies of effective programs yielded findings about the role of the superintendent and other central office leaders in contributing to their success (Public Schools of NC, 2000). Common, closely connected, overlapping themes surfaced across multiple studies. These themes were effective leadership, quality teaching and learning, support for system-wide

improvement, and collaborative relationships (Anderson, 2003; LaRoque & Coleman, 1990; Learning First Alliance, 2003; MacIver & Farley, 2003; Shannon & Bylsma, 2004). Other themes were present in the research as well, but these four areas appeared the most consistently across studies and were considered as the principal forces needed for district leadership to ensure successful programs and services.

Effective Leadership

All students learning. According to Shannon and Bylsma (2004), leadership focusing on all students learning is the basis for success. The twin goals of equity and excellence must be the responsibility of everyone, but it is up to the superintendent to demand and promote high expectations for all students. The vision must be focused on student learning and instructional achievement, and this vision drives program decisions. According to Jane Clarenbach, director of public education with the National Association for Gifted Children, gifted programming varies widely from district to district and even building to building. She believes gifted learners may be wholly dependent at the local level on a superintendent as an advocate (AASA, 2015). Myers and Berkowicz (2015, p.63) reported:

> It is a violation of a leaders' responsibility to ignore or destroy the talent existing in schools; a leader of a school community should not abandon its future to the control of others. The efficacy to create a community's future resides in the hands of its leaders, even if it is influenced by mandates put in place by others.

It ultimately falls to the superintendent to implement legislated mandates, such as Article 9B.

Nonnegotiable goals that all staff members act upon must be established. With input from all stakeholders, the goals may be set by the school board, or more likely by the superintendent. The district leader sets targets for the district, for individual schools, and for subgroups of students. The targets are made clear and a sense of urgency about the goals is conveyed. The superintendent should express a sense of moral responsibility for the learning of all students (Public Schools of NC, 2007). With respect to the goals, s/he does not set a single instructional model or a required list of services for all schools. Instead a broad framework with common language, common options, and consistent use of research-based strategies is established.

When expecting and ensuring learning for all students, district leadership must address specific areas to achieve the goal. These include, but should not be limited to, cultural awareness training, programming to enhance student strengths, and use of nonbiased assessments. Leadership must demonstrate concern for students who may have been inadvertently left behind from achieving their fullest potential by asking the critical questions, but more importantly, the hard questions. It may prove necessary to challenge the gifted education programming of before and address the barriers to equity and excellence that exist.

Superintendent Dale Brown of Warren County, Kentucky believes superintendents should compare their gifted program components to the National Association of Gifted Children's standards and practices. He suggested questioning one's perceptions to determine what is needed for student success (AASA, 2015). The survey and the document matrix in this study were based on these national standards and practices, as is the North Carolina template for AIG plans.

Scheurich and Skrla (2003) stated, "The real point is whether we have the will to educate any child - whether we are willing to change, to learn new skills, new programs, new assumptions, new attitudes" (p.20). Leadership for social justice, or in other words, ensuring that the needs of all students are recognized and met, has "three essential components: leadership for social justice, moral transformative leadership, and the praxis of social justice" (Dantley & Tillman, 2005, p 16). Social justice must be a naturally occurring part of district leadership.

Distributed leadership. District leadership should be focused in purpose, highly visible in the schools, and clearly interested in instruction. It is not enough to talk about students receiving appropriate services and instruction to meet their needs. Concrete action is needed to ensure this happens. The superintendent cannot take on implementation of successful programming alone, but must rely on the leadership in the schools and in the classrooms. In the districts with effective programming, personnel did not describe their leadership as shared. Instead, each person took on the areas of implementation for which he or she was best suited (Shannon & Bylsma, 2004).

Distributed leadership when implementing quality programs and services means that some people will focus on aligning the curriculum, some will collect and analyze data, some will provide professional development, some will work with the finances, and others will assist with meeting the diverse needs of students. Many opportunities abound and it is the responsibility of district leaders to actively nurture and support principal and teacher leaders. Mobilizing efforts along more than one pathway is necessary for success.

The superintendent plays a key role in this ensemble performance. The leader develops his/her district team, and it is to be hoped that his/her true nature and intentions

towards programs, such as those for the gifted, is revealed. Myers and Berkowicz (2015) suggested that superintendents model integrity to gain trust from their ensemble. Positive rapport and working to put into place what one says is important could be the necessary investment needed for the success of a gifted program.

Sustained efforts over time. The research showed that for a system to experience success with any program, the district leadership must stay the course and view the programs and services as a long-term process. Promising results come from sustained efforts over time. Carnoy and Loeb (2002) found that leadership consistency and long-term commitment to policy implementation of at least five or more years could contribute significantly to the strength of gifted programs, and thus, to student success.

"If things are good for kids, we should be doing it," (Brenneman, 2016). Superintendents and other district leaders must encourage principals and teachers to try new ideas without demanding immediate results. Massell and Goertz (2002) found "teachers needed time to become familiar with new approaches to teaching, participate in professional development, and try out new techniques in the classroom…." The teachers in their study expressed appreciation for consistency of focus and the sustained support from the central level. Brenneman (2016) stated that superintendents must ensure different opportunities are created for students. Colangelo and Davis (2003) asserted that those in the schools measure the importance of a program by the amount of time and level of support the district leadership gives to it. This study looked to find if a relationship existed between what district administrators said they believed was important about gifted practices and what their district policies actually included. The implications may be that if a superintendent espoused gifted education to be important and needed,

and then saw to it that his/her district planned for and implemented an effective AIG plan, the teachers in the district may also have found gifted education to be important and needed.

For educators to follow leaders and thus ensure sustained efforts over time, they have certain expectations. District leaders must be there when things go wrong, assuring those in the schools that all will be well. They must be seen as leading progress, moving the district forward in a positive manner. They must be seen as legitimate and that they are truly caring and personifying the high expectations set for all. When superintendents are able to leverage their interpersonal skills, getting an ensemble group to support their ideas and approaches, they are more likely to be viewed as effective (Blanco, 2009; Kelly, 2009; Leithwood, et al., 2010).

Quality Teaching and Learning

High expectations for adults. In order to focus on a high level of achievement for all students, quality teaching and learning is required. Effective districts hold all adults in the system accountable for student success. District leadership must make clear its expectations for instruction and unceasingly monitor the schools to ensure students are achieving. Holding a high level of expectation for adults affects who is hired, how they perform, and how they are evaluated.

It is important to remember what the research indicated as the most important predictor of student achievement. Multiple studies (Fergusen, 1991: Sanders & Rivers, 1996) found that the qualifications of the teacher showed the most variation in student achievement. This is significant for central leaders as they consider education, certification, and experience when recruiting, hiring, and planning professional

development for teachers. Teachers need additional training in instructional strategies, collaborative planning, and differentiation methods. David and Shields (2001) found it was just as important to set high expectations for instructional practice as it was to have high expectations for student achievement. For gifted education, this means teachers need professional development leading to AIG certification. As part of this study, superintendents were asked to rate how important they believed gifted certification was for teachers and whether they supported district level professional development related to gifted education for all teachers. This seemed to be especially needful in North Carolina, where fewer and fewer teachers are seeking gifted certification. The AIG plans reviewed in this study were based, in part, on practices regarding partnerships of local education districts with institutions of higher education. AIG certification for teachers in the state now requires twelve hours of college credit, an investment in time and money.

To increase their impact on quality teaching and learning, district leaders must be motivated to achieve. They must model a passion for the work, refuse to accept the status quo, and raise the performance bar for themselves and those around them. Optimism and commitment to the organization are key characteristics. High expectations for adults means that central staff should strive to meet and surpass district goals, exercise creativity to meet the goals, and seek to be innovative in content and role (Goleman, 2003).

In a comprehensive meta-analysis of research on superintendents, Marzano and Waters (2009) found a significant statistical relationship between district leadership and student achievement. They stated that an effective superintendent was one who used a collaborative process, focused on teaching and learning, had high expectations for students and staff, and created goals. Multiple benefits were determined to be a result of

fostering high expectations for adults and students in a study by Clarenbach (2007). Fewer gifted students left public schools to attend private schools, more businesses provided mentoring and internships for gifted students, and local funding for gifted education increased.

Aligned curriculum. Curriculum must be adopted district-wide and must be aligned to goals, standards, and policies. Massell and Goertz (2002) reported "in today's charged atmosphere of accountability and standards-based reform, districts are seeking to align the curriculum and instruction vertically to state policies and horizontally to other elements of district and school practice" (p. 4). A centralized curriculum can build capacity and increase understanding of standards and curriculum materials.

Educational organizations frequently choose objectives, goals, or curricula that are contradictory. These may be at opposition in the community as well. For example, a program for gifted students must "cast its net wide" in order to seek out students from diverse backgrounds with diverse academic needs; in addition, the program must also maintain high standards and expectations for students it serves. Some educators have viewed these two as oppositional. The superintendent can lead a challenge to these assumptions and work toward resolution; however, his/her beliefs about whether or not these two issues are in opposition at all could affect outcomes. This study examined the possibility of superintendents' perceptions impacting programming. Perceptions matter. If a practice or standard related to gifted education seems reasonable or necessary to people in leadership, then the likelihood of implementation is higher (Brown et al., 2006).

It is critical that district leadership understand the importance of keeping the three types of curricula, the written, the taught, and the tested, closely aligned. When

developing and implementing successful programs, all three elements must be focused on together. Curriculum alignment of these elements to standards and assessments can lead to significantly improved test results (Brown et al., 2006). In North Carolina, the study found "the alignment of written, taught, and tested" (p. 11) promoted higher levels of achievement for students. All teachers should be provided with district-wide pacing guides, units and lessons differentiated for diverse learners, both gifted and struggling.

Professional development. McLoughlin and Talbert (2002) note "reforming districts seek out and use cutting-edge practices, most especially in professional development where they have allocated resources…to foster teachers' learning and instructional capacity" (p. 17). High quality development should be intensive, ongoing, and focused on classroom practice. Capacity must be built for educators to meet the increasingly challenging learning and accountability goals.

The one-time, one-stop workshop approach is no longer sufficient. What is needed is coherent, district-wide research-based training that focuses on best practices and is clearly connected to district policies and goals. State departments of education are providing districts with guides that offer research-based practices (Shannon & Bylsma, 2004) and suggested guidelines for implementing coherent professional development (Public Schools of NC, 2003). It is the responsibility of district leadership to model, guide, and facilitate participation in quality training. The district should work with surrounding institutions of higher education to arrange for cohorts of teachers to take needed classes, such as the twelve hours needed for AIG certification mentioned previously. Making long-term changes in classrooms will require sustained and focused efforts by central office leadership.

Classroom instruction. The superintendent and other district leaders must pay close attention to classroom instruction. It is in the classroom that real differences can be made in the lives of students. The literature suggested districts that communicated clear expectations of what to teach and focus on good instruction showed improved student performance (Anderson, 2003), and student achievement was of primary importance. Central office personnel must guide, monitor, correct, and align curriculum, instruction, and practice. David and Shields (2001) stated "districts that communicated ambitious expectations for instruction, supported by a strong professional development system, are able to make significant changes in classroom practices" (p. iii). All too often, ambitious expectations are not held for all students as the focus is on struggling learners and reaching a bare minimum proficiency.

Teachers need to know what appropriate instruction for all levels of student abilities looks like. A U.S. Department of Education study (1993) found that gifted students spend the majority of the instructional day in regular classrooms with no modifications to address their learning needs even though they have mastered up to 50% of the curriculum prior to the start of the school year. Regular classroom teachers need coaching and monitoring and support as they implement new instructional strategies for gifted learners as well as all others. If possible, district-level specialists should work with them in the schools to help improve their practice (Massell & Goertz, 2002). According to Renzulli (2012), a leader in the field of gifted education:

> In order for school districts to develop appropriate programming, educators and administrators must have some knowledge of giftedness and issues related to it,

including the developmental needs of this population, theories on best practices

for programs, and the role of gifted education in schools (p.211).

Students benefit from instruction that actively engages them in rigorous content. Teachers

should regularly assess the impact of instructional methods and reflect on their practice. It

is clear that students who are taught well learn more. Nurturing the potential and the

abilities of our students merits excellent instruction. Superintendents need to maintain

unwavering attention to quality teaching in order to fulfill their essential role in

improving students' learning. One of the overarching standards for which data were

collected in this study directly addressed differentiated curriculum and instruction.

Support for System-wide Improvement

Effective use of data. To determine whether or not students are making good

progress, district leaders must use data as evidence for monitoring results, making

allocation decisions, and for accountability. Schools need central assistance in gathering

and interpreting data. Equity issues must be monitored, written-tested-taught alignment

must be overseen, and professional development activities must target needs.

District-implemented programs must have multiple measures of student and

school performance. Standardized test data alone cannot suffice. McLoughlin and Talbert

(2003) viewed data as district change agents. According to David and Shields (2001),

growing expertise with data at the local level led to "increased attention to data in school

planning, examples of richer notions of accountability that rely on multiple measures,

professional judgment, and shared responsibility for student learning" (p. 44). Data

should be used as tools for seeking solutions. They can help generate a sense of urgency

to meet the diverse needs of students, identify areas for improvement, and provide

information on individual students. The effective use of data can enable superintendents to strategically target resources to meet identified needs.

Data are not neutral. It is necessary to consider the lens through which data are perceived. One must determine the meaning and the importance of the data and be careful that the lens used does not leave out key variables. A leader must always consciously consider the lens through which he or she is looking.

A concern mentioned by researchers in the field of gifted education was that the focus of data use was primarily on student identification and less so on instruction to meet gifted learners' needs (Brown et al., 2006). The practices surveyed and reviewed in this study, and that are required by the state of North Carolina for local AIG plans, were representative of multiple areas of gifted education. Using data to develop nurturing groups, assess curriculum and instruction, choose resources, and employ various instructional strategies were included in the AIG plan template.

Allocation of resources. A successful program needs resources to support its students. District leaders must allocate sufficient resources to ensure quality instruction. These may include time, personnel, materials, and facilities. District leadership is necessary to see that resources are used to greatest advantage in improving teaching and learning. Spillane and Thompson (1997) described the interdependent nature of human and social capital and financial resources:

> Human capital includes the commitment, dispositions, and knowledge of local
> reforms that are part of a district's capacity needed to promote school improve-
> ment. Social capital, a result of professional networks and trusting collegial
> relations, is needed for creating human capital and in turn depends upon human

capital for its effectiveness. Time, as a material resource, interacts with human

and social capital along with curricular materials to shape district capacity for

educational reform. District leadership, commitment, knowledge, and trust-

worthiness are needed to ensure that resources are used to greatest advantage

in improving teaching and learning (pp. 2-3).

Teachers must have time and opportunity to meet together and plan, to discuss student

progress, to analyze data, and to observe colleagues. The needs of all students can be

targeted through the strategic allocation of human and financial resources.

Education resources are scarce, and the persons in charge of the implementation

of programs and services have the power to benefit some students or constituencies more

than others. One must remember that all constituencies do not have the same level of

power. The superintendent must be deliberate in acknowledging the differences in

knowledge, power, and resources of a system's various constituencies. All students

should have access to quality programs and services, not just those whose parents have

the most capital (Scheurich & Imber, 1991). The reviewer's experiences with gifted

education found that schools with higher socio-economic levels of families had

significantly higher numbers of AIG-identified students than the lower socio-economic

schools.

In North Carolina, local school systems are allocated funds for serving gifted

students at the rate of 4% of the total district enrollment. Regardless of the actual

percentage of gifted learners in a district, state money is set at this amount. Districts have

the option to add to this amount with local funding if they choose. More about this is

discussed in the review of the North Carolina Framework for Gifted Education.

Program coherence. Improving services to students requires a coherent, system-wide approach. The program and its practices must be linked to district goals. "The central office monitors coherence of actions and programs to the focus and vision of the district" (Shannon & Bylsma, 2004, p. 42). Any program that is implemented to meet the needs of a specific group of students or all district students as a whole must support the overall vision.

Schools are complex organizations and no single change can make all the difference for students. Improvements must occur on several fronts. Strategic planning can build coherence and increase the chances that the program components are strongly connected to district goals. Coherence is also built when learning standards, district expectations, professional development, and multiple measures of accountability are linked (MacIver & Farley, 2003). Coherent policies will send consistent messages to the community and to teachers that a program is valued. The literature suggested that school district leadership should emphasize instructional program coherence, including professional development, curriculum adoption, and recruitment and hiring. District policies and mandates should be carefully examined to consider their effects on program coherence (Shannon & Bylsma, 2004).

Professional culture. District leaders should intentionally work to build a culture of commitment, mutual respect, and stability. Trust is essential among all the leaders in the district. McLoughlin and Talbert (2003) found that "dramatic growth in student achievement seemed to coincide with periods when there was a high level of trust between the superintendent and the school board" (p.13). The professional norms of shared responsibility and collaboration will more likely lead to the development of new

ideas and initiatives. Districts "that had made the greatest strides in reforming their…programs were also ones with a strong sense of trust among educators in the district. Trust was essential for genuine collaboration among educators" (Spillane & Thompson, 1997, p.195). Trust is built over time, in varying situations and through multiple decisions. Longevity is needed for trust to develop, and yet, district superintendent is largely a short-term position. Most superintendents have been in their position for fewer than four years (Chingos, Whitehurst, & Lindquist, 2014).

Getting along is not the goal. The goal of collaborative efforts is to benefit students. Fullan (1985) offered that "collective moral purpose" (p. 43) is necessary for sustained change and a commitment to making education better. District leaders should consciously seek out the tools needed to foster collaboration. Teachers and principals need to know that the superintendent and his team value their opinions and are there to help them.

School and district responsibilities. Central office leaders must carefully balance district authority and school autonomy. District leaders should support learning, serve as mentors, and seek solutions. Above all, they should act as change agents so that the schools can constantly improve. The central office accepts the responsibility for defining and sharing goals and standards, while the schools need latitude in the use of resources and other issues important to school staffs.

Different districts and even different buildings within a district need the autonomy to plan gifted programming that meets the needs of their students. This researcher's experience in administering and evaluating AIG programs revealed that one size does not fit all. Some schools may need numerous "nurture groups" to help students who have had

fewer educational experiences scaffold to more rigorous instruction. Scheduling may dictate a need for parallel or co-teaching rather than pulling students from regular classrooms. Transportation may be needed to allow students to participate in dual enrollment at a nearby community college. The survey used in this study asked superintendents to rate the importance of local control in the allocation of funding and in the continuum of services that could be offered for gifted learners. Perhaps their opinions about these impacted what was written in their local AIG plans.

Research described the change in district leadership roles. The district now supports teaching and learning in the schools rather than monitoring adherence to rules and regulations. This change has led to tensions between the schools and the central office as decisions are made about curriculum, professional development, and finances. But David and Shields (2001) stated, "In fact, we did not find any instances in which schools on a widespread basis were able to make significant improvements in classroom practice in the absence of active support and leadership from the district" (p. 37). Clearly, there is a delicate balance between the two. Responsibilities and functions of each should be determined. The district can be "assertive and empowering, strong and supportive" (McLoughlin & Talbert, 2003, p. 22) at the same time. Regardless of what the district assumes responsibility for, the primary goal of doing what is best for all students, including the gifted, must be kept in the forefront of all decisions.

External environment. District leadership should act as a buffer for the schools against external disturbances, manage community support, and work to involve the family as partners in their children's educations. The teaching and learning processes must be protected from distractions. Analysis and interpretation of local, state, and

federal policies is also needed and can impact the relationship of the district with other agencies. Certainly interpreting and implementing multiple policies is not straightforward, and well-informed, knowledgeable leaders are needed to direct proper responses and actions. Policymakers use varying instruments in order to get desired behavior from school systems. Whether mandates or inducements, whether welcome or not, how the superintendent and other district leaders respond to external agencies can influence local program planning and implementation. The capacity to use the external influences to the benefit of the school system and its students depends on the district level resources available to carry out related decisions. If student learning is viewed as a mutual responsibility, and the district actively seeks to involve parents and community members in the schools, benefits abound.

According to James Gallagher, a longtime expert in the field of policy and advocacy for gifted education, and the Kenan Professor of Education Emeritus at the University of North Carolina, advocacy for gifted students, at both the local and state levels, is "pallid and hesitant" (Plucker & Callahan, 2008, p.520). Policymakers seem reluctant to change state legislation for gifted students. He questioned their reluctance, wondering if it is the "fear of being labeled an elitist" (Plucker & Callahan, 2008, p. 520), or if many of their own children are in AIG programs and they may be seen as showing favoritism to their families. Such an external environment cannot benefit AIG plans or programs.

The Role of the Superintendent

Introduction

A wide variety of researchers and organizations have offered competing versions of professional standards, leadership duties, and wide-ranging responsibilities of school superintendents (AASA, 1993; Lambert, 2003; Marzano, Waters, & McNulty, 2005; Public Schools of NC, 2007). Many attempts have been made to define the work of a district superintendent and how that work has evolved. "These attempts acknowledge the role's complexity, and there is general agreement that the work encompasses three areas- education, management, and politics, and that their interrelatedness influences a superintendent's effectiveness" (Orr, 2006, p. 1365).

The balancing of theory and practice in a changing educational landscape is a daunting challenge (Hansen, 2005). In a 2000 interview, Larry Cuban contended that schools are a reflection of what the public wants and that the role of the superintendent is defined by current social demands (O'Neill, 2000). Responding to social and political influences in a spotlight of frequent criticism and dissatisfaction with leadership performance requires a skilled leader. (Byrd, Drews, & Johnson, 2006). While it is the managerial and political aspects of the job that may be the most highly visible to the schools and to the community, current increasing growth of standards-based accountability systems has placed a high priority on the superintendent's role in curriculum planning and instructional leadership. As the most publically accountable and visible school employee, superintendents may have a significant effect on their subordinates' behaviors and attitudes. A synthesis of 20 years of research by Rorrer, Sklra, and Scheurich (2008) found that "districts do matter" (p. 332).

Emergence of accountability

Undoubtedly, school and district accountability has been significantly impacted by the No Child Left Behind Act of 2001. Sherman (2008) proposed that prior to NCLB little evidence could be found that superintendents were working to improve achievement inequities across groups or schools. With accountability believed to be a crucial step in addressing achievement differences among student groups, states are setting standards and requiring assessments to measure student progress. Virtually every education reform now has a component for accountability that relies on rigorous data collection and reporting. Schools work toward prescribed targets and school and district report cards are published to share information with stakeholders. Districts not meeting state goals or not demonstrating a level of growth are subject to sanctions, scrutiny, and pressure.

In North Carolina, it is no different in the area of gifted education. A 2008 performance audit by the Office of the State Auditor examined the Academically or Intellectually Gifted Program and identified weaknesses in the evaluation process and monitoring guidelines. Accountability for state funding specifically allotted for AIG students was the initiating concern. More about this will be discussed later in the study.

The superintendent's focus on managerial and fiscal responsibilities has shifted with accountability demands. The historical responsibilities have not diminished, but public demands have forced superintendents to target their energy on the task of increasing student achievement (Bredeson & Kose, 2007; Waters & Marzano, 2006). As the chief officer and representative of a school district, s/he must lead the district in focusing on processes that support student learning. "All children will be taught" appears to have become the new imperative in public education. According to a 2005 survey of

superintendents, "Next to school finance, the greatest pressure on school superintendents is the pressure to obtain higher performance on high-stakes tests from the schools in their districts" (Hoyle, Bjork, Collier, & Glass, p. 23). "The adoption of student and performance standards has increased the role of state boards of education in stipulating expectations of educators, including superintendents" (Dipaola & Stronge, 2001, p. 99). External community sources also have contributed to increased focus on accountability for district leaders. Politically charged community members, powerful citizens, and legislators calling for school reform have greatly affected "the manner in which superintendents relate to and interact with all facets of leadership" (Trunslow & Coleman, 2005, p. 20).

Accountability under No Child Left Behind and resulting mandates has spotlighted a need for superintendents to lead district reform efforts that will bring all students to proficiency levels. Research has focused on the significance of the role of the district-level leader and the complex relationship between the superintendent and academic growth for all students (Archer, 2005; Bredeson & Kose, 2007; Sherman, 2008). Standards-based reform requires a new kind of leader (Elmore, 2004).

Student achievement

The effectiveness of reform is generally measured by continuous progress toward achievement of tasks or standards. Superintendents rated improvement of student achievement as the most challenging reform task they face (Byrd et al., 2006); yet they are well-positioned to have a significant impact in this area. Waters and Marzano (2006) found that district leadership made a difference in student achievement. Effective superintendents were goal-setters and had the ability to keep their districts focused on

goals that addressed teaching and learning. The researchers conducted a meta-analysis of 27 reports meeting specific criteria that involved 2,714 school districts. They identified five areas of responsibility that positively influenced student achievement. They were (1) collaborative goal setting, (2) non-negotiable goals for achievement and instruction, (3) board alignment and support of district goals, (4) monitoring goals for achievement and instruction, and (5) use of resources to support achievement and instruction goals.

Goals 4 and 5 are of interest to this study. Superintendents were defined as "effective" when they continually monitored instructional goals and when they used resources to accomplish district goals. To determine this, the study surveyed superintendents regarding their *perceptions* of district-level variables. This study wanted to determine if superintendents' perceptions affected gifted education planning in their districts by, in part, allotting resources to and monitoring implementation of AIG plans.

Similar results were found by other researchers. According to Forsyth and Turner (2004), a critical finding emerged in a study of school districts that had demonstrated high growth in student achievement. The key to the overall success of improvement efforts was attributed to an effective superintendent. Cudeiro (2005) found that superintendents who supported principals and who supported building instructional leadership positively affected student achievement.

Also in the Waters and Marzano (2006) study, superintendent tenure was correlated with achievement. A .19 statistic suggested that length of tenure for superintendents positively correlated with student achievement. Leadership consistency and at least 5 years of sustained program implementation was found to have contributed to student growth (Borman, Hewes, Overman, & Brown, 2003; Furney, Hasazi, &

Hartnett, 2003). One of the demographic items in the survey for this study asked for a superintendent's years in his/her current position. The researcher hoped to determine if longer tenure led to a closer relationship between espoused and enacted statements regarding gifted education.

The use of data may be essential to addressing the complex issue of student achievement. Marsh and Robyn (2006) reported that superintendents who used state assessment data when developing strategic plans, professional development plans, and school improvement plans were considered effective. Data-driven decision-making has permitted some small, resource-poor districts to perform as well as districts with much greater resources (Pan, Rudo, Schneider, & Smith-Hanson, 2003). According to Luo (2008), successful superintendents understood applied statistics and data analysis and were able to interpret research and evaluate programs in order to promote student achievement. Today's superintendents, under increasing pressure to improve student achievement, must create and sustain a culture of data-based planning. They must lead districts in translation of data into decisions that positively impact student learning. Standard 4, Organizational Management, from the American Association of School Administrators (AASA) adopted standards (1993) states the superintendent must, "Exhibit an understanding of the school district as a system by defining processes for gathering, analyzing, and using data for decision making" (p. 9).

The public and political expectations for improved student achievement have necessitated a change in superintendent behaviors and a different view of superintendent effectiveness. Student success is most likely to occur in school districts having participatory and involved superintendents. Superintendents are uniquely positioned to

facilitate change and to provide the necessary leadership to improve student achievement (Blank, de las Alas, & Smith, 2008; Childress, Elmore, & Grossman, 2006).

Curriculum planning and instructional leadership

Houston (2007) stated that superintendents must be "champions of curriculum and masters of teaching and learning" (p. 4). Archer (2007) found that instructional leadership capacity was a critical component for increasing student achievement, and that districts with superintendents who were closely involved with the development and implementation of curricular and instructional programs were more likely to have student achievement increases. Those superintendents were the key initiators of instructional and curricular changes and actively monitored the implementation of programs in district classrooms. They actively mentored principals to be instructional leaders as well. Petersen and Barnett (2005) asserted, "District administrators must have an increased philosophical and technical expertise in curriculum scope, sequence, and alignment" (p. 120).

The American Association of School Administrators (2000) offered guidelines that superintendents must serve their districts in curriculum planning and development and in instructional management. In the state of North Carolina, a superintendent is evaluated annually in instructional leadership with a focus on curriculum, instruction, and assessment (Public Schools of NC, 2007).

As early as 1985, researchers called for district leaders to establish clear goals in curriculum and instruction and to monitor the extent to which the goals were monitored (Murphy, Hallinger, & Petersen). Yet knowing this and all that the ensuing standards-based reform years have shown, the daily reality for many superintendents may be

overloaded agendas filled with organizational and managerial issues and policy needs. A focus on such supervisory or participatory roles could present an obstacle to instructional leadership. Bredeson and Kose (2007) found that some superintendents did not take on the role of instructional leader even when they ranked curriculum and instruction as high priorities.

An area of curriculum and instruction in which district leadership can play an important role is in financial planning. Implementation of new programs requires additional resources and a commitment to the teaching and learning process. A superintendent can generate the necessary financial support both within and outside the school system and use the leadership position as a vehicle for conveying urgency that students and teachers be provided the tools needed to meet demanding standards (Bjork, 2009).

Leading a district in instructional and curricular matters implies that specialized skills and knowledge are needed. Conditions must be established that value continuous learning, both for individuals and collectively, and the superintendent should model what is expected of others in the organization. Opportunities should be created that engage people in learning new forms of practice and efforts must be made to insulate teachers from extraneous non-instructional distractions. The leader should also be willing to have his/her practice examined with the same scrutiny he/she directs to others (Elmore, 2004).

The Belin-Blank International Center for Gifted Education and Talent Development at the University of Iowa releases annual reports of state policies affecting gifted learners, and it found North Carolina to be at the forefront of services offered to these students (2014). A broad continuum of instructional and curricular opportunities are

available to kindergarten through grade twelve AIG students from early entrance to kindergarten to graduation credit for proficiency. A superintendent may be challenged by the need to be aware of and keeping up-to-date on such instructional matters.

Leadership in the area of curriculum and instruction, particularly in the highly public arena of standards-based reform, will require that superintendents lead their districts in how they think about their work and its purpose. Changes in skills and knowledge are needed in schools. Both the school community and the greater community must change their ideas about who and what a leader should be. A superintendent must lead, in effect, a district re-design as both the leadership and the system adapt to current pressures.

The North Carolina Framework for Gifted Programming

Introduction

The General Assembly of North Carolina defines giftedness as academic or intellectual. In Article 9B, 115C-150.5, it states:

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

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There are many issues that need to be understood and accounted for when developing and implementing programs and services for gifted students, involving cultural, psychological, and educational facets. Gifted students must be viewed as individuals and offered appropriately leveled intellectual stimulation. They are not a homogeneous group. Hoy and Hoy (2003) stated, "there is a growing recognition that gifted students are being poorly served by most public schools" (p. 39). Without set policies or mandates from the federal government, states must develop their own policies that represent effective practices for the gifted (Gentry, 2006). For the purposes of this study it was important to understand the background of gifted education in North Carolina and to have considered the possible effects this history may have had on superintendents' perceptions about AIG practices and programming.

N. C. Legislation 1961-1992

North Carolina was one of the first states to enact legislation governing the education of gifted students. The original law was passed in response to the 1961 report by the Commission on Reorganization of Education of the Exceptionally Talented titled, "Practices in Teaching the Superior and Gifted" (NCGA, 2011). In 1974, the N.C. General Assembly determined that gifted students were considered to have special needs, and soon after granted "full educational opportunity for all children requiring special education" (§ 115C-106.1, 1977).

Chapter 247 in N.C. Sessions Law introduced the label "academically gifted" in 1983. (§ 115C-109, 1983). Students labeled as academically gifted, or AG, had a Group Education Plan that specified how their needs would be met. No guidelines were offered to local agencies for how this should be done. The reason given by the legislature for the

new label was to emphasize a strong commitment to academics. In effect, the label meant that students who showed exceptional abilities in the performing and/or visual arts would not qualify for services on those merits alone.

N. C. Legislation 1993-2011

In 1993, the State Board of Education was required by N.C. Session Law to "re-examine the State's laws, rules, and policies concerning the education of academically gifted children" (Chapter 321, Section 134[c], 1993). A task force gathered information, presented it to the General Assembly, and new legislation was enacted in 1996, separating gifted students from other special needs children. *Article 9B: Academically or Intellectually Gifted Student*s (§ 115C-150, 5-8) contained the state definition for gifted and required each local public school district to develop a plan every three years to address the needs of gifted students. The plan had to be approved by the local board of education and then sent to the N.C. State Board of Education and the N.C. Department of Public Instruction (NCDPI) to be reviewed. Article 9B remains the current law governing gifted education in the state.

Performance audit of the state AIG program

In 2007, in response to parent complaints that money intended for gifted programming was being spent for other reasons, the Office of the State Auditor conducted a performance audit of the state AIG Program. The purpose of the audit was "to determine whether the Exceptional Children Division of the North Carolina Department of Public Instruction adequately monitors the use of State funding for the Academically or Intellectually Gifted (AIG) Program" (NCDPI, 2008). Data were gathered from parents of AIG students, local education agencies, and NCDPI financial

and enrollment records. State laws as well as state and local AIG policies and procedures were examined. When released in February 2008, the audit report identified several weaknesses in monitoring and evaluation of the AIG Program: (1) delivery of planned AIG services by local programs is not monitored at the state level, (2) local AIG program expenditures are not monitored at the state level, (3) local AIG Programs are not evaluated by NCDPI, and (4) the authority to monitor local programs is not clear.

The report findings showed example LEA budget transfers. One LEA in 2006 had transferred 98% of its AIG state monies out of the AIG program, funding non-AIG certified teachers. In 2007, another LEA had taken 99% of the AIG money away from the program. LEAs were left to self-monitor, increasing the risk that misuse of state funds would not be discovered (Office, 2008). If a superintendent does not ensure that state funds allotted to his/her district for gifted education actually are spent on gifted education, then one might speculate the superintendent does not find the program to be necessary or important. The superintendent's beliefs could then have a significant effect on the services provided in his/her district for gifted students.

In 2007, the NC state auditor mailed a parent satisfaction survey to the families of a random sample of 600 AIG-identified students. The results may not have been representative of all AIG parents due to the response rate of 24%, but data showed that 39% of parents were not satisfied with the level of AIG services their children received. Only 55% of parents surveyed indicated they receive information from their school about their children's progress in gifted classes, and 20% believed their children received none of the planned academic services (Office, 2008). Again, a superintendent's beliefs about

the importance of gifted education programs may affect whether or not students and their families are heard, and whether or not services are monitored.

Recommendations for corrective action were offered as part of the findings. The State Board of Education was tasked to clarify authority for the monitoring of the AIG Program. The North Carolina Department of Public Instruction was advised to require evidence from local agencies that differentiated educational services were provided for gifted students and that funds were used as outlined in AIG plans. It was recommended that AIG programs be evaluated regularly and the results made available to stakeholders. And, most importantly for this study, NCDPI was asked to establish performance standards for all local AIG services (Office, 2008).

North Carolina Academically or Intellectually Gifted Program Standards

With a mandate in place to develop program standards, NCDPI wanted to make sure the standards would reflect the most recent research. The goal was for improved state policy to inform and strengthen local policies, which would guide and maintain development and implementation of gifted programs. Best practice guidelines do not carry the force of law, but the new standards were to be binding on local districts. According to multiple researchers in the field, gifted programming standards should address the critical areas of: (1) identification, (2) services, (3) curriculum, (4) instruction, (5) teacher preparation, and (6) program evaluation (Gallagher, 2002; Landrum & Shaklee, 1998; Russo, Harris, & Ford, 1996; VanTassel-Baska, 2003).

A task force had developed standards for the National Association for Gifted Children (NAGC) in 1998. Considered to be the most comprehensive and coherent available (Purcell & Eckert, 2006), they were based on the research-identified critical

areas for gifted programming standards, and they provided a range of levels of performance. Grounded in theory, research, and paradigms for practice, they provided the base for the new North Carolina Academically or Intellectually Gifted Program Standards. The new standards were approved by the State Board of Education in July 2009 and plans began immediately to redesign the process by which local education agencies would plan, create, and implement their three-year plans for gifted education.

Role of the standards in local AIG programs and plans

According to NCDPI, "the standards have been developed to serve as a statewide framework and guide LEAs to develop, coordinate, and implement thoughtful and comprehensive AIG programs" (Public Schools, 2009, p.3). There are six overarching standards that articulate the expectations for local plans. They are (1) student identification, (2) differentiated curriculum and instruction, (3) personnel and professional development, (4) comprehensive programming within a total school community, (5) partnerships, and (6) program accountability. Within each of the standards are related practices that provide sources of evidence to stakeholders (Public Schools, 2009).

Through a process requiring input from stakeholders, self-assessment of current services, and examination of present and future resources, local districts choose one of three options for each of the related practices within the standards. Each practice must be assigned a rating of *Maintained*, *Focused*, or *Future*, indicating the level of attention the district will give to the practice during the life of the three-year plan. Data are recorded on a required template and submitted to NCDPI electronically. Approval of the plan must be given by both local and state boards of education. At the end of the three-year cycle,

NCDPI conducts a comprehensive evaluation of each local plan's success in addressing the practices.

Discussion

As revealed through the literature, the superintendent has an important role to play in the attainment of student performance goals. Having the district leader closely involved with the development and implementation of curriculum and instruction can lead to district-wide gains (Blank, de las Alas, & Smith, 2008). Sharing common, not competing, values with local board of education members can help to strengthen those gains. The examined literature reinforced the claim that superintendents hold the key to any local programming priority.

The literature also revealed that gifted students need specialized programming, but many are still being poorly served by public education (Hoy & Hoy, 2003; Brown et al., 2006). The themes of (1) effective leadership, (2) quality instruction, (3) system-level improvement, and (4) collaborative relationships emerged across multiple studies as necessary for successful programming at the district level (Anderson, 2003; MacIver & Farley, 2003; Shannon & Bylsma, 2004).

The state of North Carolina is at the forefront of putting policies and guidelines in place that can lead to effective programming for gifted learners; however, the relatively new procedures for writing AIG plans are yet unproven. No data have been released to indicate how well or how poorly individual school districts met the needs of their gifted students through the use of the new template and its required standards and practices.

Studying the perceptions and attitudes of public school superintendents toward gifted education practices may provide a contribution to how gifted learners are educated.

Superintendents are ultimately responsible for the instructional and curricular leadership

in their districts, and as such are uniquely and powerfully positioned to make a difference

in effective programming for gifted students.

Chapter III: Methodology

This chapter reviews the purpose of the study, provides an overview of the conceptual framework and research hypotheses, explains the rationale for the selection of site and participants, and details the methodology that was used in the study.

Purpose

The purpose of the study was to examine the attitudes and perceptions of North Carolina public school superintendents regarding gifted education. The study looked at the level of importance superintendents gave to statements about gifted education and gifted programming and compared those responses to the level of importance that the related standards and practices were assigned in local academically or intellectually gifted plans. The literature suggested that superintendent leadership practices are correlated with student performance and that superintendent involvement in planning and implementation of programming and services can positively impact student outcomes (Anderson, 2003; Marzano & Waters, 2009; Purcell & Eckert, 2006). Certainly, superintendents are in a position to influence, either directly or indirectly, the policies and programs affecting gifted students in their districts (Rothstein & Jacobsen, 2007). This study examined the relationship between what superintendents perceive to be most or least important about gifted education and what was actually in place for gifted students in the public school districts of North Carolina. Superintendents have the authority to enact, or not, what they espouse regarding programs in their districts. The study was not an examination of superintendents' ratings, but whether their perceptions may have had an influence on the level of emphasis a district assigned certain practices and therefore, an influence on the content of local programming.

Conceptual Framework

A superintendent's perceptions and beliefs may play a role in what is considered important enough to focus on in local programming. The content of a local AIG plan may be viewed as a vehicle for what a superintendent believes to be necessary in leading a district to plan for and meet the needs of its gifted students. The possible relationship between the two was considered through the lens of a modified principal-agent model (Ferris, 1992). The superintendent's perceptions as principal gave authority to the local AIG plan as agent, and as agent, the local plan addressed the specific issue of meeting the needs of gifted students, which is ultimately the responsibility of the superintendent. The relationship between principal and agent was viewed as reciprocal (Smart, 2010; Vanhuysse & Sulitzeanu-Kenan, 2009). What was written in local AIG plans may or may not have been related to the beliefs of superintendents about gifted education.

Hypotheses

Major Research Hypothesis

The major research hypothesis for the study was that the perception of importance superintendents give to concepts related to the standards that comprise the required framework for local academically or intellectually gifted plans for North Carolina closely matches the level of importance actually assigned to the standards and practices in local AIG plans.

Research Hypotheses

In addition to the major research hypothesis, the investigator also attempted to determine if the importance ratings given by superintendents with more connections or experiences with gifted education more closely aligned with levels assigned to practices

in the plan. Of similar interest was how superintendents with more years in the same district perceived and assigned importance. As noted in the review of the literature, longevity of tenure has been found to affect student performance, so it may have played a role here as well (Marzano & Waters, 2009). The investigator wanted to find if superintendents with more connections to gifted education had perceptions that were more closely in line with the reality of what was written in AIG plans. Connections included having been identified as a gifted student, having one's child identified as gifted, having received certification in gifted education, or having direct experience with writing AIG plans. The null hypothesis for the study was that there is no significant relationship between superintendent perceptions of gifted education and the content of local AIG plans. An alternate hypothesis was that there is a strong and positive relationship between the perceptions and the content based on superintendent connections to gifted education.

<div align="center">Site Selection and Participants</div>

Access and rationale

The researcher electronically surveyed superintendents in the 115 public school districts in North Carolina. Superintendents were chosen because their role is to set high standards for curriculum and instruction in an accountable environment. They are to create conditions where all students can reach specific achievement targets, allocating resources and monitoring implementation of programs as necessary. North Carolina has historically been a leader in gifted education programming (Brown et al., 2006), and it currently has a rigorous, state-mandated process for the writing of local AIG plans (Public Schools of North Carolina, 2009).

Instruments

The survey for this investigation was created by the researcher and was administered using an online program. Suggestions for survey design were provided by the Odum Institute for Research in Social Sciences at the University of North Carolina at Chapel Hill. Survey items were based on the standards and related practices found in the North Carolina template required for submission of a district plan for gifted education (Public School of NC, July, 2009). Use of an electronic survey was chosen to allow respondents to finish quickly, being mindful of the demanding schedule of superintendents. An online instrument was low in cost, needed few resources, and provided a short turn around time (Trochim, 2005).

The AIG plans of the 115 public school districts in North Carolina were reviewed using a researcher-created matrix. Information was collected from the primary documents to gain an understanding of what the focuses were in North Carolina public school districts regarding gifted education. Links to the documents were found on the web site of the North Carolina Department of Public Instruction.

Rationale for Use of Mixed Methods

Several studies have examined the relationship between district leadership and student achievement. Investigations by Massell and Goertz (2002) and Anderson (2003) found that central leadership, when involved in design, planning, and implementation of district programming, could positively impact achievement. According to Marzano and Waters (2009), superintendent leadership practices were correlated with student achievement, and their evidence suggested that superintendents can empower other leaders in the district to improve student performance. They found a .24 correlation

between district leadership practices and student achievement. Another study of interest to the researcher was that of Schlechty (1997) who found that the programs and areas the superintendent valued were valued by the district and those that the superintendent prioritized were prioritized by the district. This study aimed to determine a correlational relationship between what superintendents perceived was important in gifted education and what public school districts in North Carolina actually focused on, and thus allocated resources to, in their local three-year AIG plans.

The use of a mixed methods approach, a collection of both qualitative and quantitative data, utilized the strengths of both kinds of research. It assisted in generalizations of findings by adding scope to the study. A sequential collection of diverse types of data provided an understanding of the possible correlational relationship.

A survey can provide a numeric description of perceptions of a population by studying a sample of the population. The researcher can then make inferences about the rest of that population. Surveys offer a quick turnaround time in data collection and electronic forms can be manageable for most researchers to create and administer. Online surveys are usually inexpensive and are convenient in both location and time for researchers to use. In this study, a single-stage sampling procedure was possible due to the accessibility of participants' names and email addresses from NCDPI web site (Creswell, 2009).

Document review can provide a systematic procedure to identify and analyze information from existing documents. Such information can be located and verified independently by the researcher. It is often inexpensive since the data have been previously collected, and it is an efficient method as it requires data selection, not data

collection. Document review may provide a look at gifted programming that is not otherwise observable. It could bring attention to issues not noted by other means, and in looking at the gifted programming data, assume they are thoughtful in that district personnel gave time and attention when compiling them (Creswell, 2009). In this study, document analysis offered a rich description of programs for the gifted in the public school districts of North Carolina.

Methodology

Using Qualtrics software, individualized email invitations with a link to an online survey were sent to all public school superintendents in North Carolina. Superintendent email addresses were available from the North Carolina Department of Public Instruction (Public Schools of NC, 2013). Survey items were worded based on the state-mandated practices that the NC State Board of Education describes as what should be in place for gifted students (Public Schools of NC, 2009). For example, the North Carolina Academically or Intellectually Gifted Program Standards document states a local district should "employ multiple criteria for student identification" (Public Schools of NC, 2009, p.3). The corresponding item on the survey asked a superintendent to rate how important s/he believed it is that multiple criteria are employed for AIG identification.

Survey items were organized by the six AIG Program Standards: (1) Student Identification, (2) Differentiated Curriculum and Instruction, (3) Personnel and Professional Development, (4) Comprehensive Programming within a Total School Community, (5) Partnerships, and (6) Program Accountability (Public Schools of NC, 2009). Superintendents were asked to rank groups of three to seven survey items numerically in order of greatest to least importance for meeting the needs of gifted

students. In addition, the survey requested that each superintendent provide district enrollment, years of experience as a superintendent, years in the position, superintendent ethnicity, superintendent gender, and his/her connections with gifted education.

Prior to the survey being sent, a pre-notification email from the researcher's account was mailed to participants. The researcher hoped to improve survey cooperation rates and to identify any inaccurate email addresses in the distribution list. The brief pre-notification explained who the researcher was, what the purpose of the study was, and that the recipient could expect another email in one week inviting him/her to participate.

In addition, a letter of introduction was sent with the electronic survey. The letter included researcher identification, purpose of the study, data collection procedures, instructions for completing the survey, statement regarding no obligation to complete, and completion timeline. Respondents were given ten days to reply to the survey. Those not responding within the time frame received an email reminder and a five-day extension for completion. Online survey response rates can vary. A number of researchers and survey development companies suggest that rates of 20%-30% are acceptable (Nulty, 2008; SurveyMonkey, 2009). Holbrook, Pfent, and Krosnick (2003) concluded low response rates on surveys still delivered excellent demographic representation. For this study, the researcher wanted a response rate from the superintendents of at least 25%.

Information was coded to maintain confidentiality and anonymity. Each survey was assigned a numerical code instead of recording identifying information, and a separate document linking the codes to subjects' identifying information was kept in a secure location with only the primary researcher allowed access. Any face sheets

containing identifiers were removed from surveys received from participants. All survey materials were properly disposed of after the completion of the study.

While the survey was sent to all 2013-2014 North Carolina public school superintendents, in order to have had a possible impact on the AIG plans being reviewed, a superintendent would need to have served in his or her district for at least three years. This would extend their tenure back to the timeframe during which the plans were written. Of the 114 surveys delivered via Qualtrics, 26 superintendents who completed the survey met this criterion for a response rate of 23%.

The researcher secured copies of the academically and intellectually gifted plans for each of the school systems from which a responding superintendent met the criteria. The state-required template instructs all local districts to follow 51 designated practices related to gifted education (see Appendix A). For each practice a district must assign a level of attention, or intensity of focus, it plans to give to implementation of that practice for the three-year life of the AIG plan. A level of *Maintained* means the district is already carrying out the practice and intends to make little or no change in implementation strategies during the next three years. *Focused* indicates the district needs to improve significantly in implementation of that practice and that the district will allocate resources to address it during the life of the plan. Assigning a level of *Future* means the district is not currently implementing the practice and will likely not attempt to implement it during the three-year plan. The expectation from the state is that a practice marked for the future in a current plan must be attempted to be addressed in the school district's next submitted plan (Public Schools of NC, 2009).

The districts' AIG plans were reviewed and the information about the practices required to be in the plans was placed in an information matrix. The matrix included a list of the coded names for each of the responding 26 public school districts and all of the practices from the state template. The practices were organized by the overarching six standards just as they were on the superintendents' survey.

The data were reviewed in a two-phase analysis. In the first phase of document review each practice was assigned a level of importance based on the focus assigned it by a specific district. In the information matrix, practices designated as *Maintained* were considered the most important, since the district had already chosen to allocate resources to implement them and planned to continue doing so. These practices were coded in the matrix as number 1. Items marked *Focused* were considered the next most important, as the district had determined it should be implementing these practices and planned to begin doing so during the next three years. Such practices were coded number 2. *Future* practices were considered the least important since the district had yet to allocate resources to add these to its AIG plan and were coded as 3. For example, Practice (f) under Standard 2 reads, "uses on-going assessment to differentiate classroom curriculum and instruction" (Public Schools of NC, 2009, p.4). If a district stated this practice was already in place then the district's AIG plan labeled it as *Maintained,* and it was coded on the matrix as most important, or 1.

Once the practices had been assigned a numerical designation of 1, 2, or 3, a second phase of review was completed. Additional information factors were reviewed to further assist in determining the relative importance of practices in district plans. These factors were (1) the number of grade levels or students impacted by the practice, (2)

whether or not additional personnel would be required for implementation, (3) if professional development would be needed and/or provided, and (4) if additional instructional materials would be necessary. For example, under Standard 3, practices (a) and (d) may both have been coded as *Focused*; however, the district indicated in the plan that additional personnel would be hired to implement practice (a), while practice (d) would require no additional resources. For the purposes of this study, practice (a) was considered more important even though both were designated as *Focused* in the district's plan.

Using the two-phase review process allowed the researcher to have all the survey items under each of the overarching six standards to be arranged numerically in order of greatest importance to least importance based on the information found in each district's AIG plan. Use of the information matrix allowed the investigator to see the implied importance a district had for the individual practices based on the intensity the district had assigned to each practice, the approximate number of students affected, and the resources allocated for implementation.

Analysis

Procedures

The numerical values from the survey and the matrix were loaded into statistical analysis software, SAS. Assistance in approaches to the data and analysis of the data was provided by the Odum Institute for Research in Social Sciences at the University of North Carolina at Chapel Hill; in particular, recommendations about how to interpret the quantitative with the qualitative data were useful. The use of SAS provided the researcher with the capability to look for underlying trends and patterns in a small data set. The

research design was a correlation study where a single number described the degree of relationship between two variables. Since the study sought to determine if superintendents' perceptions about gifted education influenced the content of AIG plans, data from the superintendent survey was used as the independent variable. Matrix data taken from the content of local AIG plans, which may have been influenced by superintendents' beliefs, was utilized as the dependent variable.

A simple correlation was computed using data from the matrix and the survey items to find the least squares means. The least squares means correlation, LSMEAN, can express the strength and direction of the relationship between two variables. For this study, LSMEAN scores measuring between .0 and .2 were considered *low*. Those measuring between .3 and .4 were *medium*. A *high* correlation was between .5 and 1.0. These measures are generally accepted by the behavioral sciences (Green & Salkind, 2005).

Additional data from the survey, including ethnicity, gender, years as a superintendent, years in current position, connections with gifted education, and district enrollment, were considered to determine what effect, if any, they may have had on the correlations. If what superintendents perceived to be important regarding gifted education did appear to correlate positively with the content of local AIG plans, a categorical variable such as gender or years of service could have been a part of that influence.

Reliability and Validity

The reliability and validity of the matrix data was dependent on the procedures used by local education authorities in compiling and submitting their AIG plans to NCDPI. The reporting process was the same for each public school district in the state,

with a required template and required steps for completion in place. All plans were uploaded on the NCDPI web site. The survey was tested for content validity by reviewers from the field of gifted education, including classroom educators holding AIG certifications and district educators who were experienced in writing AIG plans. In addition, two assistant superintendents and two district AIG coordinators read the survey items and provided feedback. Reviewers were asked to compare survey items to the original AIG template items to ensure there was similar wording and meaning. Three reviewers completed the survey as if each was a district superintendent and then together, we completed a sample matrix.

<div align="center">Significance</div>

The findings of Waters and Marzano (2006) indicated "that when district leaders effectively address specific responsibilities, they can have a profound, positive impact on student achievement in their districts" (p. 8). Superintendents have as one of their duties, the responsibility to oversee identification, implementation, and monitoring of best practices to meet the varied and diverse needs of students, and among these students are the gifted and talented. The results of this study may have provided insight into a superintendent's role in seeing that the district meets the needs of its gifted students, or that some variables more or less greatly affected a superintendent's perceptions about gifted education. The findings indicated that the degree to which superintendents hold certain beliefs about gifted education resulted in variations in local AIG plans, directly impacting services to gifted students. Data implied that which the superintendent valued was valued by the district and that which the superintendent prioritized was prioritized by the district (Schlechty, 1997).

Chapter IV: Analysis of Data

Introduction

This chapter shares the results of the study. Data is reported in narrative and table formats. Demographic information such as district size, experiences with gifted education, gender, ethnicity, and years of service as a superintendent is reported. The findings from the district AIG plans and the superintendents' perception data are shown. A summary of findings is provided.

Purpose

The purpose of the study was to examine the attitudes and perceptions of North Carolina public school superintendents about gifted education. According to Petersen and Barnett (2003), superintendents can significantly influence the curriculum and instruction in their districts. Superintendents' beliefs could impact program content, resource allocation, and priority status. Rothstein and Jacobsen (2007) found district policies and focuses were heavily influenced by the superintendent. In particular, the study looked at superintendents' perceptions of the six standards and related practices that comprise the state-required framework for all local Academically and Intellectually Gifted plans. It examined what practices they perceived to be most or least important about gifted education and reviewed what was found in the gifted education plans in North Carolina districts. The study compared each superintendent's survey responses about gifted education to the practices found in his/her district's AIG plan. The study also considered the possible impact on perceptions by superintendent ethnicity, gender, years in current position, years as a superintendent, and personal and professional connections with gifted education.

Research Questions

The superintendents of North Carolina public school districts who participated in this study completed a comprehensive survey based on the six principal standards and accompanying practices required by the state to be in local AIG plans. Survey responses from the superintendents were compared to the practices the LEAs had in place in their plans. The comparison was designed to answer the following questions:

1. What are the perceptions of public school superintendents in North Carolina about gifted education; in particular, what do they believe is the importance of the concepts related to the standards and practices that comprise the required framework for local AIG plans?

2. What is the relationship between superintendents' perceptions of the importance of gifted education practices and the level of importance, or intensity of focus, actually assigned to the practices in local plans for gifted education?

Research Design

A mixed-methods approach that included both quantitative and qualitative data was used for the study. The approach allowed the researcher the opportunity to collect data that were essential to identify and describe the perceptions of superintendents regarding gifted education and to review the contents of local AIG plans. Simply listing the responses obtained from the electronic survey of the superintendents would be informative, but according to Creswell (2005), quantitative data alone may not be enough to gain an understanding of the complexities surrounding an intricate issue, such as the possible impact of a superintendent on local gifted programming.

The survey responses were analyzed to determine how each superintendent perceived the importance of the six required standards and their clarifying practices found in local AIG plans as well as to determine how the superintendents as a group perceived the importance of the same standards and practices. The local AIG plans of the survey respondents' districts were reviewed to see if and how the standards and practices were to be implemented or not implemented in the school systems during the 2010-2013 three-year cycle.

Data collection began in the spring of 2014. A panel of all North Carolina public school superintendents was created using information from the NCDPI site (June, 2014) and Qualtrics software. The superintendents were sent an email message informing each of an upcoming study regarding perceptions of gifted education. One week later the online survey was sent along with an introductory letter about the researcher, study purpose, participants' rights, and directions for survey access. Respondents completed and submitted the online survey with two additional contacts made to those who did not complete the survey within ten days.

During the next phase of data collection, the local AIG plan from each respondent's district was retrieved from the NCDPI site (June, 2014). The 51 practices in each plan were coded in a two-tiered process to determine an overall ranked level of importance. First, the practices were coded as a 1, 2, or 3 based on the category of implementation the district had assigned. Ones were assigned to maintained practices, 2s were for focused practices, and a 3 was given to practices the district labeled for future implementation,

In the next phase of coding, the responses were placed into 5 categories by number of students impacted, if additional personnel would be needed for implementation, whether or not professional development was needed and/or provided, if additional instructional materials would be necessary, and if existing personnel would be required to take on additional duties and responsibilities.

Participants

The survey population for the study was public school superintendents employed in the state of North Carolina during the 2013-2014 school year. The group mailer for the superintendents was found on the NC Department of Public Instruction website. The group included 115 individuals. As stated, participants were sent an email about the nature of the survey one week prior to the actual survey delivery. Once the survey was sent, the participants had a ten-day window in which to respond. After one week, a reminder was sent to participants who had not returned the survey, and at the end of day ten, a second reminder email was sent.

Efforts were made to maximize the response rate- participation was requested in advance, sufficient days were allotted to complete the survey, the survey was designed with one item per page, questions were close-ended, the survey could be completed quickly, and email reminders were sent. While online survey response rates can vary widely, a number of researchers and survey development companies suggest that rates of 20%-30% are acceptable (Nulty, 2008; SurveyMonkey, 2009). Forty-one superintendents responded to the survey, or 36%. For purposes of this study, only the data of respondents who had served a minimum of 3 years in their districts could be included. This reduced the applicable response rate to 23%.

Cook, Heath, and Thompson of Texas A&M University proposed in a 2000 meta-analysis that, "response representativeness is more important than response rate in survey research" (p. 822). The districts responding were diverse. The public school districts represented by this survey's respondents ranged in size from an enrollment of less than 1,500 students to more than 140,000 students. In North Carolina, these enrollments represent the size of the state's smallest districts up to some of the largest in the state (Public Schools of North Carolina, 2014). The districts were evenly distributed geographically across the state. Twenty-eight percent of the school districts are found in the western area of the state, thirty-two percent in the central region, and forty percent in the east. Most districts responding would be considered rural or suburban, but multiple urban areas were represented as well. Consideration of high-wealth or low-wealth was not given. While the end response rate of 23% was low, the demographic data show that the respondents and their districts were representative of North Carolina's public school system.

Demographic Data from Survey

Table 1 presents district size data collected from each survey respondent in the study. The greatest number of responses was from superintendents serving less than 4,999 students with the least number of responses coming from those serving in districts with more than 50,000 students. The results aligned adequately with the school district sizes for the state of North Carolina which are: 44% have less than 4,999 students, 26% are in the 5,000-9,999 range, 22% have 10,000-29,999, 4% have 30,000-49,999, and 4% serve greater than 50,000 students.

Table 1

School District Size for Responding Superintendents

District Size	Percent of the State	Percent of Respondents
< 4,999	44.0	48.0
5,000-9,999	26.0	12.0
10,000-29,999	22.0	36.0
30,000-49,999	4.0	0.0
>50,000	4.0	4.0

The superintendent demographic profile consisted of five questions: 1) years as superintendent in current district, 2) total years as a superintendent, 3) connections with gifted education, 4) ethnicity, and 5) gender. Years of service in both the current district and years as a superintendent are displayed in Table 2. The greatest number of respondents, 64%, had been in their current districts for 3-5 years with no superintendents having more than 12 years in a current district responding to the survey.

Table 2

Years of Service as a Superintendent

Item	Years in Current District (Percent)	Years in Total (Percent)
3-5 years	64.0	40.0
6-8 years	24.0	40.0
9-11 years	12.0	12.0
>12 years	0.0	8.0

Years of experience as a superintendent were the same for both categories of 3-5 years and 6-8 years, 40%. It was not surprising to have the most respondents from the lowest years of service categories. In North Carolina, approximately 68% of superintendents have less than 5 years of experience with a turnover rate of almost 20% annually (Public Schools of NC, 2015).

Participants were asked to indicate their previous and current experiences or connections to gifted education. Purcell and Eckert (2006) stated that gifted programming in a school district relies heavily on the attitudes of key players, so past or present connections with gifted education might have an impact on what is found in the local AIG plan. Local policies may define the mechanisms by which advanced learning opportunities are extended, and a well-informed superintendent could prove to be an invaluable advocate for gifted programming. Likewise, a superintendent with little direct contact or experience with gifted education may not be prepared to effectively support or advance the program.

Table 3

Experiences and/or Connections with Gifted Education

Experiences and/or Connections	Frequency	Percent of Respondents
Hold/Held gifted certification	2	8.0
Identified as gifted as a child	10	40.0
Own children receive(d) services	16	64.0
Have helped write a gifted plan	14	56.0
Other	4	16.0

In Table 3, experiences and/or connections with gifted education are shared. Since respondents may have had multiple experiences, the percentages add up to more than one hundred percent. The highest percentage of involvement reported by the superintendents, 64%, was having one's own children receive some form of gifted education services. Only 8% of respondents had held AIG certification, but 56% indicated they had experience in helping to write an AIG plan. How in-depth this experience was is unknown. Forty percent of superintendents had been identified as gifted as a child.

As shown in Table 4, the majority of the respondents were male. Three of the respondents were female. These percentages closely mirrored the overall number of male and female public school superintendents in North Carolina at the time of the survey, which was 83% male and 17% female (Public Schools of North Carolina, 2014).

Table 4

Superintendent Gender

Gender	Percent of Respondents
Male	88.5
Female	11.5

Table 5 indicates the ethnicity data collected from the superintendents. It was surprising to the researcher that none of the respondents represented an ethnic group other than African-American and White; however, these percentages are similar to statewide demographics of superintendents as a whole (Public Schools of NC, 2014). Superintendents in North Carolina, while serving a diverse population of students, are not

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ethnically diverse themselves. When considering the current awareness of identifying gifted students from traditionally under-represented populations, and the required attention to this in AIG plans, perhaps a lack of ethnic diversity in district leadership could impact the content of the plans.

Table 5

Superintendent Ethnicity

Ethnicity	Percent of Respondents
African-American	16
Asian	0
Hispanic or Spanish	0
Middle Eastern	0
Pacific Islander	0
White, not Hispanic	84
Other	0

Superintendents' Perception Data

The researcher surveyed North Carolina public school superintendents with an online questionnaire to gather precise numerical data and statistical summaries. The survey respondents who had been in their districts at least three years were the target as this meant each had been in place when their districts' AIG plans had been written.

The survey was comprised of statements matching the AIG program practices required to be addressed in AIG plans. These statements were organized in groups of

three to seven and represented the 6 North Carolina AIG Program Standards- Student

Identification, Differentiated Curriculum and Instruction, Personnel and Professional

Development, Comprehensive Programming Within a Total School Community,

Partnerships, and Program Accountability. Respondents force-ranked the practices

offered under each program standard in their perceived order of importance. Respondents

rated the items within each group numerically, giving a "1" to the item in the group each

thought to be most important for meeting the needs of gifted learners, a "2" for the

second most important item, and so on until all items in the group were ranked. While all

items in the survey could have been viewed as important, respondents were asked to

provide frank responses for the purpose of the study, and the forced ranking meant that a

different value was assigned to each statement in the groups. Survey responses provided

an overall ranking by the superintendents from most important to least important within

the framework of the six North Carolina AIG program standards. No identifying

information was attached to the respondents' data.

Standard 1: Student Identification

This standard encompasses 7 practices that were divided into two groups on the

survey. Group 1 consisted of 4 practices while group 2 had 3 practices. The goal of this

standard is to ensure equitable identification procedures leading to appropriate services

for students. Over three-fourths of superintendents believed the use of multiple criteria

was first or second in importance when identifying students in need of gifted services.

The majority, 80%, perceived having procedures responsive to the demographics of the

school on the lower half of the importance scale. About half, 48%, rated having

procedures responsive to traditionally under-represented populations in the lower end of

importance. Under-represented populations may include economically disadvantaged, English language learners, highly gifted, and ethnically diverse students. Fifty-six percent believed it was important to screen at least one grade level annually. Table 6 shows the rankings by percentage the superintendents gave to 7 practices under the standard.

Table 6

Ranked Importance by Superintendents of Student Identification Practices by Percentage

Student Identification Practices	1	2	3	4
Group 1				
Multiple criteria are employed	52	28	8	12
ID procedures are responsive to school demographics	8	12	24	56
Consistency in implementation of ID procedures is ensured within each school	20	28	28	24
ID procedures are responsive to traditionally under-represented populations	20	32	40	8
Group Two				
Documentation explaining service options for students are reviewed annually with parents/guardians	40	40	20	--
A screening measure for all students in one or more grades is administered annually	56	20	24	--
Policies to safeguard the rights of students are in writing	4	40	56	--

Standard 2: Differentiated Curriculum and Instruction

This standard has 10 practices on the NC template and its goal is the use of challenging and rigorous curriculum and instruction to meet the needs of a wide variety of gifted students. These practices from the AIG plans were coded in 2 groups, one with 7 practices and one with 4. One practice was lengthy and bulleted, so it was divided into 2 for the purpose of more accurate coding; thus, 11 practices appear in the table. In group 1, the superintendents gave the highest scores to adapting the curriculum according to student needs and accelerating the curriculum according to ability levels, with all superintendents ranking them as a first or second choice. Both of these practices can be implemented in the regular education classroom using regular education personnel and materials. Items clustered in rank near the low end of choices were the use of affective curriculum and an annual review of services. Studies have indicated that some gifted children need assistance coping with their perfectionism, asynchronous development, and career planning (Neihart, Reis, Robinson, & Moon, 2002; Delisle & Galbraith, 2003). Whether superintendents perceived this need as unnecessary for gifted students or whether they believed it would require additional materials and personnel to implement is unknown. In group 2, the superintendents ranked the grade levels most needful of gifted services. Over half perceived grades 3-5 as most important. Grades 6-8 were ranked next in importance, followed by grades 9-12. Very little gifted programming may be offered to students in grades 9-12 other than Honors and Advanced Placement courses. While these options are typically the primary service models for high school students, little research is available regarding the appropriateness of the materials for gifted high school learners. The addition of independent studies, internships, and/or

Table 7

Ranked Importance by Superintendents of Differentiated Curriculum and Instruction
Practices by Percentage

Differentiated Curriculum and Instruction Practices	1	2	3	4	5	6	7
Group 1							
Adaptation of NC Standard Course of Study according to student needs	24	24	12	16	0	12	12
Acceleration of curriculum to address ability levels	32	24	12	16	12	4	0
Supplemental resources to extend the curriculum	4	12	40	16	4	12	12
Intentional programming to nurture K-3 students	20	8	16	20	12	16	8
Affective curriculum to support social and emotional needs of AIG students	0	8	4	8	12	32	36
Collaborative planning among AIG personnel and other professional staff	12	16	8	12	40	12	0
Annual review of services	8	8	8	12	20	12	32
Group 2							
Programs and services for grades K-2	8	16	20	56	--	--	--
Programs and services for grades 3-5	56	20	24	0	--	--	--
Programs and services for grades 6-8	16	60	24	0	--	--	--
Programs and services for grades 9-12	20	4	32	44	--	--	--

topical seminars could provide a format other than the lecture and rapid pace associated with most AP classes (Hertberg-Davis & Callahan, 2008). Fifty-six percent found services in grades K-2 to be least important. Issues of maturity and development in young students may cloud the perception of a need for services. Many professionals doubt young children can be reliably identified (Plucker & Callahan, 2008), so it is not surprising that superintendents found this age group to be the least important in terms of the need for services.

Standard 3: Personnel and Professional Development

With this standard the state seeks to determine if districts have procedures in place to recruit, keep, and train personnel to meet the needs of gifted students. The surveyed superintendents ranked 5 practices in this area from most to least important. The responses were spread quite evenly across all practices. It was interesting that nearly half believed having an AIG-licensed educator to oversee the district program was at the low end of importance. In 2009, with the adoption of the new NC AIG program standards, teachers must now earn AIG certification through an institution of higher education and can no longer earn it through locally offered workshops (unless the district provides an IHE instructor). This has led to fewer teachers seeking AIG certification. As no extra pay is offered by North Carolina for AIG certification, there may be little incentive to seek it, thus leading to a possible shortage of AIG-certified personnel. Data were spread evenly across responses regarding having AIG teachers explicitly address the needs of AIG students. If AIG-certified personnel can work only with AIG-identified students, this may negate the opportunity to nurture students who have not yet been identified or prevent the AIG teacher from collaborative time with teachers of English language learners or

exceptional children. Fifty-six percent found alignment of the AIG plan goals with

district professional development was also on the least important end of the rankings. A

majority of the superintendents, 56%, believed it to be either first or second in importance

for personnel involved in AIG services to have required professional development.

Table 8

Ranked Importance by Superintendents of Personnel and Professional Development Practices by Percentage

Personnel and PD Practices	1	2	3	4	5
An AIG-licensed educator to oversee the district AIG program	28	4	12	8	48
Placement of AIG students in classrooms with teachers who are AIG-licensed	16	24	20	20	20
Professional development requirements for personnel involved in AIG services	24	32	24	16	4
Engagement of AIG teachers in tasks that explicitly address the needs of gifted learners	20	16	36	16	12
District-provided professional development aligned with AIG plan goals	12	24	8	40	16

Standard 4: Comprehensive Programming Within a Total School Community

With standard 4, districts are expected to provide a wide range of services by the

entire school community to meet the needs of AIG students. This encompasses social and

emotional needs as well as intellectual and academic. The total community implies that

more personnel than AIG teachers should be involved in gifted children's education.

Districts are to provide an array of services in kindergarten through grade twelve. Once

again, as previously noted in the standard related to curriculum and instruction, the survey respondents overwhelmingly found curriculum acceleration for gifted students to be most important. Providing intentional programming for traditionally under-represented populations was found by most superintendents to also be high on the rankings of importance. Forty-eight percent ranked offering extra-curricular events to develop interests of gifted students as least important of this group of practices, with only 4% of respondents choosing it as most important. Communication between schools at key transition points, such as moving from middle school into high school, may be critical to ensure a continuation of services, but the data indicate this practice was not viewed as highly important for students. Eighty percent of superintendents ranked this on the low end of the spectrum. The responses on the other practices were mixed.

Table 9

Ranked Importance by Superintendents of Comprehensive Programming Within a Total School Community Practices by Percentage

Comprehensive Programming Practices	1	2	3	4	5
Intentional programming for under-represented populations	28	36	12	8	16
Collaboration of school counseling personnel to address social and emotional needs of gifted students	4	20	24	32	20
Extra-curricular events to develop interests of gifted students	4	20	8	20	48
Acceleration of curriculum for an individual when warranted	52	16	20	12	0
Communication between schools at key transition points such as middle school to high school	12	8	36	28	16

Standard 5: Partnerships

This standard broadens the term "stakeholders" to include entities outside the general school community such as local businesses and industries, colleges and universities, and community members who may or may not have a family member attending a public school. Based on survey results, superintendents believed that sharing information with stakeholders was of top importance. Seventy-six percent ranked it as a first or second choice. Eighty percent of respondents believed involvement of stakeholders in the development of an AIG plan was important, rating it as a first or second choice. Seventy-six percent found business or industry support to be on the lower end of the rankings. The wording of the practices regarding businesses and universities implies that school districts should not wait for others to contact them offering help, but that the districts should actively seek support and partnerships with these community members. More than half ranked sharing information with families in their native language as the least important of these practices. It is not known if the low importance assigned to not sharing information in a student's native language was due to a lack of diversity in some schools, a lack of personnel or funding to translate materials, or truly a lack of finding this practice to be needed. In 2013, 73% of North Carolina students identified as gifted were white (Public Schools of North Carolina, 2014). Not providing materials in families' native languages may be a factor in the overall lack of diversity in North Carolina's AIG programs (Public Schools of NC, 2015). Perhaps sharing information in the language of students' families could help to bring a more diverse population of students into the program.

Table 10

Ranked Importance by Superintendents of Partnerships Practices by Percentage

Partnerships Practices	1	2	3	4	5
Share information about the AIG program with stakeholders	64	12	8	4	12
Involve stakeholders in the development of the AIG plan	32	48	16	4	0
Share information with families in their native language(s)	4	16	8	20	52
Gain support from local businesses or industry to support the AIG program	4	8	12	36	40
Form partnerships with institutions of higher ed. to enhance the AIG program	8	20	24	36	12

Standard 6: Program Accountability

The practices under this standard are intended to assist districts with monitoring the effectiveness of AIG services. Superintendents were asked to rate them in two groups. In group 1, a significant percentage chose annual review and revision as most important. This is a legislated requirement. Eighty-eight percent ranked the practice as 1 or 2. At the other end of rankings, eighty-eight percent chose sharing dropout rate data as 3 or 4 in importance. Respondents were divided on the other practices. In group 2, fidelity of implementation across the district was selected by over half as the most important practice. Fifty-two percent of superintendents ranked using state funds allotted for AIG only for AIG students as least important. Misuse of state funds for gifted was one of the key factors leading to the 2008 state audit of the program. Parents complained that tough budget decisions had led some school administrators to use AIG funds for other purposes

while AIG students' needs were not being met. One response to the audit was NCDPI's request for legislated oversight of AIG program expenditures. Regardless of legislation, the leaders indicated they would prefer some choice in how funds are spent within their districts.

Table 11

Ranked Importance by Superintendents of Program Accountability Practices by Percentage

Program Accountability Practices	1	2	3	4
Group 1				
Conduct annual review and/or revision of local AIG plan	76	12	8	4
Shares all data from evaluation of local AIG plan with public	4	44	32	20
Maintains and shares with public annual dropout rate data for AIG students	4	8	28	60
Maintains and shares with public student performance data for AIG students	16	36	32	16
Group 2				
Ensures fidelity of AIG plan implementation in all schools in the district	56	28	16	--
Uses state funds allotted for AIG exclusively for AIG students	16	32	52	--
Formation in each school of an advisory group representative of stakeholders	20	12	68	--

AIG Plans Matrix

The AIG plans from the target group's districts were obtained from the NC
Department of Public Instruction's website. Each plan was reviewed in a two-phase
process and information was coded to determine if and how the standards and practices
were addressed by the districts. The matrix was completed using an Excel spreadsheet.
The practices were listed in the same order and same groups as the practices appeared on
the superintendents' survey instrument. Each respondent's district was represented by its
own data column.

The practices were reviewed in small groups of three to seven items. First, all
practices were coded per the category the district had assigned to them in the 2010-2013
AIG plan. If a practice was categorized as *Maintained*, it was given a 1, *Focused* was
coded as a 2, and *Future* was a 3. The researcher considered Maintained practices as the
most important for the district, Focused as next most important, and Future as least
important. This was determined because a Maintained practice was one that the district
had opted to implement in the district prior to 2010 and was to continue being
implemented during the reviewed plan cycle. A Focused practice would be implemented
only beginning with the 2010-2013 plan, and a Future practice would not be considered
for implementation until another plan cycle, or until after June, 2013.

Within the same small groups of three to seven items, in a second review phase,
all practices coded as a 1 were ranked a second time for importance based on a list of
items considered by Purcell and Eckert (2006) as components that may be needed to
achieve the goals of an AIG program. Data considered for the second level of practices
review were used to create a checklist so the reviewer could systematically ensure

identification of pertinent information. Items on the checklist were (1) the approximate number of students or grade levels impacted by the practice, (2) whether or not additional personnel would be hired to implement the practice, (3) if professional development would be needed and/or provided to personnel, (4) if additional materials would have to be purchased for the practice, and/or (5) if extra duties would be assigned to current personnel in order to implement the practice. After the Maintained practices were ordered, the same process was applied to the practices coded as 2, and then the Future practices which were coded as 3. Thus, each item in each small group was ranked top to bottom according to its importance in its district's AIG plan.

Districts' AIG Plans Data

The two-phase process of coding the AIG plans' practices provided an overall ranking by the districts from most important to least important within the framework of the six North Carolina AIG program standards. The standards reflect the legislation and best practices in gifted education (Public Schools of NC, July 2009).

Standard 1: Student Identification

This standard addresses equitable and comprehensive student identification procedures. Table 12 shows the importance by percentage found by the coding of the identification practices in the AIG plans. Forty percent of districts indicated in their plans that consistency in implementation of identification processes within the LEA was of greatest importance. Clustered near the upper end of importance, 64% of districts found multiple criteria necessary. Twelve percent found identification procedures that were responsive to school demographics as most important and another twelve percent found identification procedures that were responsive to traditionally under-represented

populations as most important. It is interesting to note that small percentages of LEAs found equitable identification to be a top priority. Aside from these aforementioned practices, other order-of-importance percentages regarding this standard were spread evenly across the districts.

Table 12

Ranked Importance of Student Identification Practices Found in AIG Plans by Percentage

Student Identification Practices	1	2	3	4
Group 1				
Multiple criteria are employed	36	28	16	20
ID procedures are responsive to school demographics	12	24	36	28
Consistency in implementation of ID procedures is ensured within each school	40	12	24	24
ID procedures are responsive to traditionally under-represented populations	12	36	24	28
Group 2				
Documentation explaining service options for students are reviewed annually with parents/guardians	36	36	28	--
A screening measure for all students in one or more grade levels is administered annually	36	28	36	--
Policies to safeguard the rights of students are in writing	28	36	36	--

Standard 2: Differentiated Curriculum and Instruction

The practices within this standard address the use of rigorous curriculum and instruction designed to meet the needs of a wide variety of gifted learners. These items were ranked in two groups. Table 13 shows that the majority of school districts indicated they found adapting the Standard Course Of Study to meet identified student needs was at the top or near the top in importance, with 88% choosing it in the top four. The same was true in the use of supplemental materials to extend and augment curriculum. A cluster of 72% chose it as near the top in importance. Most districts placed programming to nurture younger students near the bottom in importance. This was true with affective curriculum for social and emotional needs as well with 76% of districts ranking it as one of the last 3 choices in a group of 7.

In Group 2, AIG plans were analyzed to determine the grade levels found to receive the most services. It was clear that K-2 students received the least attention in AIG plans with 68% of districts indicating through the services offered that they found this grade span the least important. Grades 3-5 received the most services and programs, followed by grades 6-8, and then, grades 9-12.

Standard 3: Personnel and Professional Development

School systems are to recruit and retain highly qualified professionals, providing them with ongoing training that enables them to meet the needs of gifted learners. Table 14 indicates that the majority of respondents' districts allocated funding to ensure an AIG-licensed educator helped to plan, develop, and implement the local AIG program. Seventy-six percent chose this option as most important or next most important in meeting the needs of gifted learners.

Table 13

Ranked Importance of Differentiated Curriculum and Instruction Practices Found in AIG Plans by Percentage

Differentiated Curriculum and Instruction Practices	1	2	3	4	5	6	7
Group 1							
Adaptation of NC Standard Course of Study according to student needs	32	16	20	20	12	0	0
Acceleration of curriculum to address ability levels	28	12	12	12	16	12	8
Supplemental resources to extend the curriculum	16	24	16	16	4	8	16
Intentional programming to nurture K-3 students	8	0	8	24	16	20	24
Affective curriculum to support social and emotional needs of AIG students	8	4	4	8	20	16	40
Collaborative planning among AIG personnel and other professional staff	4	8	32	12	24	12	8
Annual review of services	4	36	8	8	8	32	4
Group 2							
Programs and services for grades K-2	4	16	12	68	--	--	--
Programs and services for grades 3-5	44	28	24	4	--	--	--
Programs and services for grades 6-8	28	48	16	8	--	--	--
Programs and services for grades 9-12	24	8	48	20	--	--	--

The practice regarding placement of identified students with teachers who are AIG-licensed was found to be of low importance with over half of districts having it as one of the two lowest options. Districts may not have included this option as important in plans because so few AIG-licensed teachers were available, and not because they did not believe it to be needed. About one-third of districts believed having AIG teachers participate in tasks explicitly addressing the needs of gifted learners was of top importance. One-third of districts found providing professional development aligned with the AIG plan to be of least importance under this standard.

Table 14

Ranked Importance of Personnel and Professional Development Practices Found in AIG Plans by Percentage

Personnel and PD Practices	1	2	3	4	5
An AIG-licensed educator to oversee the district AIG program	28	48	8	8	8
Placement of AIG students in classrooms with teachers who are AIG-licensed	8	16	20	24	32
Professional development requirements for personnel involved in AIG services	4	4	28	48	16
Engagement of AIG teachers in tasks that explicitly address the needs of gifted learners	32	12	32	12	12
District-provided professional development aligned with AIG plan goals	28	20	12	8	32

Standard Four: Comprehensive Programming within a Total School Community

Gifted education is to be provided by members of the total school community, not just by AIG-licensed teachers. Five practices from this standard were analyzed in the AIG plans. Found to be of most importance in the respondents' plans were providing extra-curricular events and acceleration of curriculum when warranted. Over half of the reviewed plans indicated these were the top priorities. Few districts found programming for traditionally under-represented populations to be highly important with 40% finding it to be the least important of these practices. Once again, affective choices were rated near the low end of importance. Data regarding communication between schools at key transition points were evenly spread.

Table 15

Ranked Importance of Comprehensive Programming within a Total School Community Practices Found in AIG Plans by Percentage

Comprehensive Programming Practices	1	2	3	4	5
Intentional programming for under-represented populations	8	20	16	16	40
Collaboration of school counseling personnel to address social and emotional needs of gifted students	8	16	12	36	28
Extra-curricular events to develop interests of gifted students	36	28	12	12	12
Acceleration of curriculum for an individual when warranted	36	16	28	16	4
Communication between schools at key transition points such as middle school to high school	12	20	28	20	20

Standard Five: Partnerships

School systems are asked to include a wide range of stakeholders as participants in planning and implementing an AIG plan. These participants include family members, local businesses, and other education institutions. Sixty-eight percent of districts found sharing information with stakeholders about the AIG program, plan, and policies to be the most important practice in this group. Forty-eight percent of districts indicated sharing information in families' native language to be of low importance.

Table 16

Ranked Importance of Partnerships Practices Found in AIG Plans by Percentage

Partnerships Practices	1	2	3	4	5
Share information about the AIG program with stakeholders	68	8	4	8	12
Involve stakeholders in the development of the AIG plan	16	4	40	24	16
Share information with families in their native language(s)	8	44	0	12	36
Gain support from local businesses or industry to support the AIG program	0	4	12	60	24
Form partnerships with institutions of higher ed. to enhance the AIG program	8	8	20	24	40

Eighty-four percent of districts showed gaining support from local businesses and/or industries as lowest or next to lowest in level of importance, and sixty-four percent

indicated the same about institutions of higher education. The advantages to be gained from such partnerships seem overwhelmingly positive in terms of resources. It is unclear why schools may not embrace the importance and value of these options.

Standard Six: Program Accountability

Seven practices under this standard were reviewed. It is the responsibility of the LEA to ensure the needs of gifted students are met by the AIG program. These needs include academic, intellectual, social, and emotional. One of the primary parent concerns that led to the 2008 performance audit of the AIG program was whether or not the NC Department of Public Instruction adequately monitored the use of state funding for the AIG program. This was most likely a key factor in 88% of respondents indicating the use of funding allotted for AIG used exclusively for AIG students being first or second in importance. A cluster of 68% of reviewed plans showed districts had an annual review and/or revision as important. This is also legislated. One-fourth of districts had sharing annual dropout data for AIG students as not important, and nearly one-half indicated sharing plan evaluation results with the public was the least important practice in this standard. It was interesting to note that districts found sharing AIG student performance data as important, but sharing AIG dropout data as not important. It is assumed school districts would prefer to share positive student outcomes, which would likely be represented by AIG achievement data.

Table 17

Ranked Importance of Program Accountability Practices Found in AIG Plans by Percentage

Program Accountability Practices	1	2	3	4	5
Ensures fidelity of AIG plan implementation in all schools in the district	28	36	24	4	8
Uses state funds allotted for AIG exclusively for AIG students	60	28	4	4	4
Formation in each school of an advisory group representative of stakeholders	4	24	40	8	24
Conduct annual review and/or revision of local AIG plan	60	8	16	16	--
Shares all data from evaluation of local AIG plan with the public	12	28	12	48	--
Maintains and shares with public annual dropout rate data for AIG students	0	28	48	24	--
Maintains and shares with public student performance data for AIG students	28	36	24	12	--

Research Questions Data

Research Question 1

Research question 1 examined the perceptions of public school superintendents in North Carolina about gifted education. Based on the AIG Program Standards and the accompanying practices, superintendents indicated on a survey the level of importance they believed the practices to have. The data were represented in Tables 6 through 11 in a previous section on perception data.

Some practices received a high number of respondents ranking them as a 1 or 2, indicating the superintendents perceived them to be most important in meeting the needs of gifted learners. Practices that addressed the use of acceleration when student data showed a need received high ratings. Adaptation of the NC Standard Course of Study to meet student needs also received high percentages when articulated as part of practices.

Superintendents gave high rankings to the practice regarding screening all students for possible gifted characteristics (76%). They overwhelmingly felt the use of multiple criteria for student identification was most important (80%). Practices related to program transparency and the sharing of information with stakeholders were perceived as important. Ensuring the fidelity of implementation of the district AIG plan in all district schools was rated by over half the superintendents as the most important practice in the Program Accountability data (56%).

Superintendent's rankings gave top priority to meeting the needs of gifted learners in grades 3-5 with 56% ranking it as a 1 and 20% ranking it as a 2. No superintendents ranked grades 3-5 or grades 6-8 as least important. Only 8% of respondents perceived services for students in grades K-2 to be most important while 56% found meeting the needs of this age group to be the least important. Providing intentional programming to meet the needs of traditionally under-represented populations was ranked a 1 or 2 by 64% of superintendents.

Some practices practices received low rankings by a large majority of the superintendents. Providing extra-curricular events to develop interests of gifted students, addressing their social and emotional needs, gaining business or industry support for the AIG program, sharing dropout rate data for AIG students, and sharing information in

families' native languages all had only 4% choose them as most important. Half of the respondents (48%) perceived having an AIG-licensed educator to oversee a district AIG program as the least important practice in the Personnel and Professional Development data section. More than half (52%) perceived the use of state funds allotted for AIG used exclusively for AIG students to be of low importance.

Research Question 2

Research question 2 examined the relationship between the perceptions superintendents had about the importance of gifted education practices and the level of importance actually given to those practices in local plans for gifted education. Use of the General Linear Models procedure provided a data set for each of the groups of AIG practices that were ranked from greatest to least importance, both on the survey and in the AIG plans. The Least Squares Means results were based on a linear model, and yielded a correlation between what superintendents overall stated as their idealized view of AIG practices and the actual use overall of AIG practices at the local level.

There was substantial variation across sets. The highest correlation between idealized and actual was with Partnerships, Standard 5 of the AIG program standards, at .624. Using the generally accepted correlational relationships, this is considered high. The least relationship between idealized and actual was with Comprehensive Programming Within a Total School Community, Standard 4, at .008. This correlation was quite low. Overall, one set had a correlational relationship that was high (≥5), four were moderate (3-4), and four were low (0-2). The results of the data by set can be found in Table 18.

Table 18

Scores LSMEAN by Set from Greatest to Least Correlation

Set	Score LSMEAN	Correlation Strength
Partnerships	0.62400000	High
Program Accountability – Group 1	0.40000000	Moderate
Program Accountability – Group 2	0.36400000	Moderate
Student Identification – Group 2	0.36000000	Moderate
Differentiated Curriculum - Group 1	0.32714286	Moderate
Student Identification – Group 1	0.09600000	Low
Personnel and Professional Development	- 0.06000000	Low
Differentiated Curriculum – Group 2	- 0.03200000	Low
Comprehensive Programming	0.00800000	Low

The GLM Procedure also yielded a correlation for each individual superintendent and his/her district's AIG Plan. Again, the data showed tremendous inconsistency with the highest correlation at .666 and the lowest at .0016. Twelve percent of superintendents had correlations that rated as high (≥5), 32% were moderate (3-4), and 56% had results in the low range (0-2). Table 19 displays the results by LSMEAN.

Table 19

Scores LSMEAN by Individual Superintendents from Greatest to Least Correlation

Superintendent ID	Score LSMEAN	Correlation Strength
ID 14	0.66666667	High
ID 20	0. 52222222	High
ID 22	0.50476190	High
ID 16	0.49761905	Moderate
ID 11	0.46190476	Moderate
ID 25	0.44047619	Moderate
ID 24	0.38730159	Moderate
ID 2	0.38650794	Moderate
ID 12	0.35952381	Moderate
ID 7	0.34761905	Moderate
ID 15	0.32857143	Moderate
ID 17	0.29444444	Low
ID 19	0.28253968	Low
ID 4	0.23174603	Low
ID 9	0.21507937	Low
ID 8	0.15396825	Low
ID 23	0.13015873	Low
ID 3	0.08730159	Low
ID 18	0.07936508	Low
ID 1	0.03571429	Low
ID 6	0.02936508	Low
ID 13	0.02380952	Low
ID 10	0.01666666	Low
ID 21	0.01428571	Low
ID 5	0.00158730	Low

Demographic Data and Correlation Strength

The demographic data from the 11 superintendents who rated a correlational strength of moderate or high were examined to look for possible patterns or trends. Three had a score that fell in the high range (>5). One served in a district with 5,000 – 9,999 students, one with 10,000 – 29,999 students, and one served in a district having more than 50,000 students. Two had been superintendents for 6-8 years and one for 9-11 years. Two had been in their current district for 3-5 years, while one had served for 9-11 years in his/her district. One scoring in the high correlation range was a female, the other 2 male. All 3 were white. One of this group indicated 3 experiences or connections with gifted education, and the other 2 indicated 2 experiences. All 3 were identified as gifted when they were in school, 1 had children identified as gifted, and 1 was AIG-certified. Two marked "other" under experiences with no further explanation.

Eight superintendents had correlations that fell in the moderate range (3-4). Of these, 3 served a system having 4,999 or fewer students and 5 were in a district with 10,000 – 29,999 students. Four had been a superintendent for 3-5 years, 3 for 6-8 years, and 1 for 9-11 years. Five had been in their current district for 3-5 years and 3 had served in their current district for 6-8 years. One was a female and one was African-American. Of this group, 2 had 3 or more connections with gifted education, 2 had 2 connections, and the rest indicated only 1 connection with gifted education. One had AIG certification, 3 were identified as gifted when they were in school, 5 had children identified as gifted, 4 had experience writing an AIG plan, and 1 indicated "other".

Demographic Data Findings

The demographic data collected for the study reasonably reflected data for the

total population of North Carolina public school superintendents. Forty-eight percent of respondents served in a school district with fewer than 4,999 students, which closely mirrored 44% for the state. Eighty-eight point five percent of respondents were male, while in North Carolina 83% of superintendents were male at the time of the survey. Ethnicity data matched as well with only White or African-American groups represented in the survey and in the state.

It was surprising to find that 64% of respondents had served fewer than five years in their current districts and that 80% had served eight or fewer years in total as a superintendent. One would think that a person selected as the head of a school system would have much experience and expertise to offer and would be needed to serve in such a position in one or more districts for a lengthy period of time. These data, however, are supported by a report released by NCDPI (2015) stating that nearly 70% of North Carolina's public school superintendents have fewer than five years of experience, and that the annual turnover rate is 20%. The survey's demographic data also supported a 2014 report by Chingos, et. al that found most superintendents in the United States have been in their position for fewer than four years.

In counterpoint to these findings, Carnoy and Loeb (2002) reported that tenure of five or more years could contribute significantly to the strength of gifted programs. Spillane and Thompson (1997) stated longevity was needed to allow trust to develop, and as a result of trust among educators, great strides could be made in program reform. Both studies agree with this study's data that showed higher correlations between what was espoused and what was enacted among superintendents with 6-8 or more years in the same school district.

With superintendents having limited experience in the position and the high likelihood of moving to another district or to another job, they may be unable to devote the time to become informed about individual programs, such as gifted programs, that affect a small percentage of students and can vary so much from district to district. Marzano and Waters (2009) found that superintendent leadership practices correlate with student achievement, yet the political reality of superintendent tenure may negatively impact the outcome. Studies, such as those by Anderson (2003) and Rothstein and Jacobsen (2007), found that the design, planning, and implementation of programs and services could significantly affect student outcomes. With a high turnover rate at the top of senior leadership, a superintendent's influence may be too brief to affect policies or programming for the gifted.

<div align="center">Perception Data Findings</div>

Survey responses were collected from the superintendents regarding their perceptions of gifted education. These were categorized by the 6 North Carolina AIG Program Standards.

The identification of gifted students can be a controversial aspect of programming. There seems to be no consensus among researchers or practitioners as to what giftedness is or how best to measure it (Plucker & Callahan, 2008). The respondents seemed to feel the same as their survey answers on the Student Identification standard were varied. Eighty percent perceived the use of multiple criteria as important, but the state does not specify what those criteria should be, and in the plans reviewed identification criteria was quite diverse. The majority of superintendents believed that students should be screened annually, but again, the state gives no specifics on the

screening tool to be used, the grade levels to be assessed, or how the screening affects identification. As one might expect, this practice looked very different from district to district. These data support research by Clarenbach (AASA, 2015) who found gifted programming varied widely from district to district and building to building. On other practices under this standard, especially those related to student demographics and consistency of identification procedures, the superintendents' responses were evenly spread from greatest to least importance. The spread of responses seemed to indicate that these leaders agreed that identifying gifted students is a challenging task and perhaps must be considered from the context of a local district rather than from state-required criteria.

The highest percentage of respondents found practices that could be implemented using current resources to be the most important under the standard of Differentiated Curriculum and Instructional Practices. Adapting the NC Standard Course of Study to meet student needs and accelerating the curriculum to meet ability levels are expectations for all classroom teachers and would require no additional outlay for personnel or materials. Superintendents must adhere to the state Standards for Superintendents, one of which is managerial leadership (Public Schools, 2010). They oversee district processes for budgeting and staffing and must solicit resources to meet district needs for all students; therefore, it was not surprising that respondents chose those cost-saving practices as most important. The limitations of the 4% state-allotted funds for gifted education, regardless of the total percentage identified as gifted in a district, could lead a superintendent to be cost-conscious. On all others in the category, answers were spread fairly evenly from greatest to least importance, seeming to indicate that superintendents

did not feel strongly as a group about any of those practices.

One area in which they did feel strongly as a group was in the perception of the grade levels that were most important in terms of receiving gifted services. Over half of respondents, 56%, chose grades 3-5 as most important, and only 8% chose K-2 as most important. Responses for grades 6-8 and 9-12 were more evenly spaced. The study found that many school districts offer little in the way of services for gifted students in middle or high school other than honors or AP courses, which are open to all students. Again, perhaps finances and the need for resources play a role in the choices. Many in education believe that determining giftedness in young students is problematic, as the issue may be one of maturity rather than ability (Plucker & Callahan, 2008). The respondents perhaps felt the same and perceived resources were more wisely spent on students in grades 3-5.

No clear patterns emerged under the Personnel and Professional Development standard. Superintendent responses were spread comparably across the spectrum from greatest to least important. The one exception was their perceptions of the importance of having an AIG-licensed educator to oversee an AIG program. Almost half of all respondents selected the practice as the very least important in meeting the needs of gifted students. This finding is in opposition to what many researchers in the field of gifted education report. When a district does not provide an individual with needed skills and competencies to oversee and implement programming, the results may be less than positive. Proper qualifications and training are needed to facilitate the development and promotion of a strong program and to communicate effectively and knowledgeably with stakeholders (Purcell & Eckert, 2006; Renzulli, 2012; and Gallagher, 2014). Despite the superintendents' low ratings on this practice, the study revealed that most districts do

have an AIG-licensed person in charge of their gifted programs.

Under the standard Comprehensive Programming Within a Total School Community, 2 practices were remarkable. Sixty-eight percent of respondents perceived acceleration of curriculum for an individual student when warranted as highly important. This closely matched their responses to a related practice under Student Identification. Another practice regarding programming for under-represented populations was indicated as important by 64%. This appeared to be the opposite of their responses under the Student Identification standard where 48% of superintendents rated identification procedures responsive to under-represented populations as least important and 56% perceived procedures responsive to school demographics as least important. The forced rankings may have affected the responses somewhat, but these were high percentages at opposing ends.

The Partnerships standard seemed to evoke similar responses as a group with the majority of superintendents rating a practice as either most important or least important in meeting the needs of gifted students with very few responses in the middle range. Sixty-four percent perceived sharing information about the AIG program with stakeholders as most important, but over half, 52%, believed sharing information with families in their native language was least important. Ethnically diverse students, including those from Native American and Latino/a backgrounds, remain under-identified in gifted programming (McBee, 2006). Not having information about the AIG program delivered in their native language, and the language most likely used at home, might negatively affect a family's interest in or understanding of the possible benefits of gifted services. Again, finances could have been a factor. Translators and publication of multiple forms

of a document could be expenses a district cannot afford, particularly if multiple languages are involved.

Program Accountability practices, like Partnerships, produced responses that were slanted toward the ends of the ranges. Over three-fourths of superintendents found conducting an annual review of the AIG plan as most important. Over half believed ensuring fidelity of the plan in all schools in the district was very important. Sixty percent perceived sharing dropout data of AIG students as least important and 52% found the use of state allotted funding for AIG exclusively for AIG as not important. Superintendents seemed to feel strongly about accountability measures as indicated by the responses. The state of North Carolina allots funding based on 4% of a district's total student population, and the funds are to be used solely for programming and services for identified gifted students. Clearly, many superintendents perceived that the district should determine how the funding is spent, not the state.

The anonymity of the online survey allowed superintendents the opportunity to provide frank responses. It is to be hoped that a district leader would find all of the AIG practices important, but the forced ranking assigning different values to each practice may have affected the level of importance given to some.

<center>AIG Plans Data Findings</center>

The coded practices from each respondent's district were ranked from most important to least important as they appeared in the district AIG plan. The two-phase coding provided a picture of how the practices were addressed by each public school district.

The levels of importance given to the Student Identification practices were much

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more evenly spread from greatest to least as found in the plans than they were as perceived by the superintendents. The plans did show that well over half of the districts find employing multiple criteria as important, and that is notable as 80% of superintendents found it to be of greatest importance. Consistency of implementation was also found to be of importance in the plans, matching the survey respondents' rankings.

The adaptation of the NC Standard Course of Study to meet student needs, found under the Differentiated Curriculum and Instructional Practices standard, was similar to the level of importance assigned by the superintendents and found to be of greatest importance in the plans. An annual review of services was also found to be important. Again, similar to the levels assigned by the respondents, affective curriculum for the gifted was found to be of least importance. Closely mirroring the perception data about which grade levels should receive programs and services, the plans had the least services for grades K-2, the most services for 3-5, and limited services for 6-8 and 9-12.

Contrary to what the superintendents had ranked as least important, the plans data showed that 76% of districts believed that having an AIG-licensed educator to oversee the AIG program was important. One can only speculate about the discrepancy. Perhaps the practitioners closer to the implementation of the program felt the need for the credibility and experience brought by an administrator with an AIG certification, while a superintendent saw only a need for someone with overall leadership skills. The review of the plans under the standard of Personnel and Professional Development found that 64% of districts gave low importance to professional development requirements for AIG personnel. This could be due to a lack of funding for professional development or the decreasing availability of AIG-certified personnel. While districts found these

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requirements to be of low importance, multiple studies (Ferguson, 1991; Sanders & Rivers, 1996, McLoughlin & Talbert, 2002; Brown, 2006) report that the qualifications of the teacher show the most variation in student achievement.

In Comprehensive Programming Within a Total School Community, data from the superintendents and the plans was mixed. While the superintendents had found programming for under-represented populations to be important, it was found to be of least importance in the plans. Also, the superintendents found extra-curricular events to develop the interests of AIG students as of low importance, but in the plans it was most important. Both sets of data showed that acceleration of the curriculum when warranted as of greatest importance. Programming for other practices in this category varied widely across districts.

The Partnerships standard again showed strongly slanted results. The AIG plans review data matched what the survey respondents showed, which was that sharing information about the AIG plan with stakeholders was of greatest importance. Sixty-eight percent of the plans indicated this. Over 80% of AIG plans found gaining support from local businesses or industry to be of least importance, yet a key theme that surfaced across the literature was that of the need for collaborative relationships (Anderson, 2003; Shannon & Bylsma, 2004; Leithwood et.al, 2010). The data regarding sharing information in stakeholders' native language(s) was evenly spread from greatest to least in the plans, unlike the superintendents' responses, which indicated it was of least importance.

Under the Program Accountability standard, the response to the practice about using state-allotted funds only for AIG students was of note. While superintendents had

found it to be of least importance, in 88% of AIG plans it was of greatest importance. Superintendents' rankings were anonymous, while the AIG plans were submitted to the State Board of Education for approval. Both sets of data indicated that fidelity of implementation in all district schools was important and that an annual review of plans was of greatest importance.

<div align="center">Research Questions Findings</div>

Two research questions shaped the findings regarding superintendents' perceptions about gifted education and the content of local AIG plans.

Research Question 1

Research question 1 examined superintendents' perceptions about gifted education based on their responses to a survey asking them to rank the importance of the practices found on the state-required AIG plan template. The data indicated that the superintendents found practices that required no additional resources outside the regular classroom to be important. Adaptation of the Standard Course of Study, acceleration of curriculum or grade level, sharing information about the program (in English), having all district schools implement the AIG plan as written, and involving local stakeholders in the development of the plan received high percentages from respondents. All could be accomplished using regular education personnel. Sharing information in families' native languages, providing extra-curricular events, having an AIG-licensed educator to oversee the AIG program, and developing affective curriculum were ranked as low in importance. These may require additional funding.

Responses to some survey items indicated that superintendents felt strongly about topics that may be controversial and yet they answered frankly. Sharing information to

students' families in their native language(s) was viewed as of least importance in its category. This could be received unfavorably if a leader said it to stakeholders. The state mandates that AIG-allotted money be spent on AIG students, but superintendents found this to be not important. Again, this is not an opinion a leader might want to share publicly. Working with members of the community to gain support from businesses and/or industry for the gifted program was ranked as least important in its category by the respondents. Superintendents, as public and political figures, must work with the community for the success of the school system. Such an opinion about local businesses could be problematic if shared. It is noteworthy that the anonymity of the survey seemed to have allowed superintendents to say what they actually perceived, not what was the safe thing to say. The literature revealed that leadership must demonstrate concern for all students and address barriers to equity by asking critical questions. These data raise such questions as: How is it equitable to share information about gifted education in English only? How can nurturing be provided for under-represented populations if state-allocated money is spent only on AIG-identified students? How can the district work with the community for the success of students and yet believe it not important to gain support from businesses, industry, and institutions of higher education? Superintendents need to understand that gifted learners may be wholly dependent on them at the local level as advocates (AASA, 2015; Myers & Berkowicz, 2015).

Research Question 2

Research question 2 studied the relationship between the levels of importance superintendents gave to AIG practices and how those same practices were addressed in local AIG plans. If a superintendent believed a practice was highly important, was that

practice assigned high importance when written in the AIG plan for the district? The correlation strength between the two was moderate (3-4) or high (≥5) for five of the nine categories examined, with the highest correlation at .624 for Partnerships. This finding indicated that the perceptions of superintendents and what was written in their district AIG plans were similar for the majority of practices reviewed. Brown et. la (2006) found that if leadership believed a practice to be reasonable or necessary, then the likelihood of implementation was much higher. This study's results agreed with that finding.

The data in the plans supported the superintendents' appreciation for practices that required no additional funding beyond the regular classroom. It is interesting to note that for the practices where the survey's anonymity allowed for certain responses, differing responses were seen in the very public AIG plans. The majority of AIG plans indicated that sharing information in families' native languages, spending AIG-allotted money on only AIG students, and gaining support from local businesses and/or industry were of great importance.

Hypothesis 1

This hypothesis was confirmed. The perception of importance superintendents gave to the practices that comprise the required framework for local AIG plans correlated strongly with the level of emphasis assigned to those practices in local AIG plans. These data supported findings by several researchers that superintendents are uniquely positioned to facilitate change and provide leadership affecting student achievement (Blank, de las Alas, & Smith, 2008).

Hypothesis 2

This hypothesis was confirmed. Of the 11 superintendents who rated a

correlational strength of moderate (3-4) or high (≥5), 4 of them reported 2 experiences or connections with gifted education and 3 reported 3 or more experiences. Of the 14 superintendents with a low correlational strength (0-2), 5 reported 2 experiences or connections with gifted education and 1 reported 3 or more experiences. Renzulli (2012) stated that administrators need some knowledge of giftedness and its issues in order to develop appropriate programs to serve AIG students. Confirmation of hypothesis 2 seemed to show a similar finding.

Summary

This chapter analyzed the data and reported the findings from the perceptions survey completed by North Carolina public school superintendents and the practices found in local Academically and Intellectually Gifted Plans in those same superintendents' districts. Demographic data regarding gender of the superintendent, ethnicity of the superintendent, school district size, years of experience as a superintendent, years in current district as a superintendent, and experiences with gifted education were collected and studied. Overall, there was significant dispersion by set and ID. Forty-four percent of respondents achieved a correlational strength of moderate or high. The results suggest that superintendents with greater than 6 years of experience as a superintendent attained a closer match between what practices they perceived as important and the practices actually written into their AIG plans. The results also suggest that superintendents having 2 or more connections to gifted education were more likely to have higher correlations. School district size appeared to have no effect as a variable. A complete discussion of implications, recommendations, and conclusions is found in the next chapter.

Chapter V: Summary and Recommendations

Introduction

As an educator and administrator I have many years of experience with public education. I have certification as a teacher of academically and intellectually gifted and have served as a district coordinator of gifted education, both administering and evaluating AIG programs. I have observed other educators, including superintendents, and their attitudes toward gifted programming. This, and my commitment to providing opportunities for all students to reach their potential, were factors that led to this study.

Multiple researchers have addressed the impact of central leadership on student outcomes through the effective use of programs and services (Anderson, 2003; MacIver & Farley, 2003; Massell & Goertz, 2002). The superintendent can heavily influence district policies and focuses (Rothstein & Jacobsen, 2007), and can significantly influence curriculum and instruction (Petersen & Barnett, 2003). A superintendent's experiences with gifted education may offer others insight into their willingness, or lack of willingness, to support and encourage services for gifted learners. Marzano and Waters (2009) found that effective superintendents empower district leaders to improve student achievement. Attitudes and beliefs, or what is perceived regarding education and students, may influence decision-making and other behaviors. An administrator can implicitly or explicitly affect a district's allocation of resources (Ormrod, 2003). The perceptions a superintendent holds about gifted education may have a strong effect on its priority level, its financial support, and ultimately, its degree of success.

Purpose of the Study

The purpose of the study was to examine the attitudes and perceptions of North Carolina public school superintendents about gifted education. It considered whether superintendents could influence the curriculum and instruction in their districts and if superintendents' beliefs could impact AIG program content, resource allocation, and priority status. In particular, the study looked at superintendents' perceptions of the six standards and related practices that comprise the state-required framework for all local Academically and Intellectually Gifted plans. It examined what practices they perceived to be most or least important about gifted education and reviewed what is found in the gifted education plans in North Carolina districts. The study compared each superintendent's survey responses about gifted education to the practices found in his/her district's AIG plan. The study also considered the possible impact on perceptions by superintendent ethnicity, gender, years in current position, years as a superintendent, and personal and professional connections with gifted education. The major research questions for the study were:

1. What are the perceptions of public school superintendents in North Carolina about gifted education; in particular, what do they believe is the importance of the concepts related to the standards and practices that comprise the required framework for local AIG plans?

2. What is the relationship between superintendents' perceptions of the importance of gifted education practices and the level of importance, or intensity of focus, actually assigned to the practices in local plans for gifted education?

In addition, these hypotheses were posed:

- Hypothesis: The perception of importance superintendents give to the concepts related to standards and related practices that comprise the required framework for local AIG plans correlates strongly with the actual level of emphasis assigned to the standards and practices in local AIG plans.

- Hypothesis: The importance ratings given by superintendents with more connections to gifted education will more closely match the importance levels assigned to the practices in local plans than the ratings of superintendents with few or no connections to gifted education.

A review of the literature revealed that the superintendent has an important role to play in the attainment of student performance goals. District-wide gains have been attributed to the close involvement of the superintendent in the development and implementation of curriculum and instruction (Blank, de las Alas, & Smith, 2008). In 2008, leaders with the National Association for Gifted Children stated that school district administrators needed to be a large part of the discourse about gifted education (NAGC). The organization committed to involving these educators in their research studies (Robinson, 2011). This and other literature reinforced the key role of the superintendent in local programming priority.

While the literature reported that many gifted students are being poorly served by public education, North Carolina was recognized as having strong procedures and guidelines in place to meet AIG students' needs. Since superintendents are ultimately responsible for instructional and curricular leadership at the local level, they are positioned to have a major effect on programming for gifted education. This study

examined the relationship between the perceptions of North Carolina public school superintendents about gifted education and the content of their local academically and intellectually gifted education plans.

Discussion

As revealed through the literature and the results of this study, superintendents have an important role in the design, planning, and implementation of curriculum and instruction for all students, including the gifted. They hold the key to local programming priorities. The data indicated that what the superintendent perceived to be important was put into place by the district. This supported the multiple research studies finding that superintendents can have a significant impact on student outcomes in their districts. In North Carolina, regardless of the number of AIG-identified students in a school district, state funding is allotted at 4% of Average Daily Membership. The state has mandated program standards and a template based on these standards to be implemented in every district; however, there is no requirement that any curriculum beyond the regular education Standard Course of Study be used with gifted students. In order to provide advanced programs and services, the support and understanding of a strong advocate may be needed. A superintendent who is well informed about gifted strategies and opportunities, as well as the state requirements surrounding the program, could fill that role.

The superintendents in this study had strong correlations between espoused and enacted beliefs about gifted programming. The study revealed that superintendents with more connections to gifted education had more closely matched perceptions with AIG plan content. Such a small group of respondents cannot be assumed to be representative

of North Carolina superintendents as a whole, but it is interesting to think that perhaps knowing about gifted education from the inside, as a child or through one's children or through certification, can have an effect on the content of local programming. A savvy gifted coordinator might want to investigate his/her superintendent's connections or experiences with gifted education, and carefully plan how best to approach the challenge of prioritization for services. Bringing one's superintendent directly into the planning process could be done at the AIG program's peril without such information. Equally, one could capitalize on a leader's background knowledge to strengthen and expand an often-challenged program.

Patterns and contradictions were revealed by the data. Many were representative of issues I dealt with as a district leader for gifted education and are frequent topics of discussion in the field of gifted education. Some of the more apparent ones will be discussed here.

Acceleration

"Acceleration is an educational intervention that moves students through an educational program at a faster than usual rate or younger than typical age" (Colangelo, Assouline, & Gross, 2001, p.5). In the study, a majority of superintendents responded that they believe acceleration of the curriculum, when warranted, to be of great importance. A majority of AIG plans reviewed indicated acceleration as one of their district's top 3 choices in importance. The plans included options such as early entrance to school, grade-skipping, and single-subject acceleration. Meta-analyses have shown that no other service for gifted students works as well (Kulik & Kulik, 1984; Rogers, 1991). Cost is minimal. Yet, throughout my career, I have heard comments from other educators: " He

won't be able to adjust socially or emotionally," "It will upset the other students," "He'll have gaps in knowledge," "Why accelerate him and not her? He doesn't even do his homework."

The reality is that very few students are accelerated. In North Carolina, early entrance to kindergarten requires a 4-year old to score at the 98-99% on a standardized test of intelligence and another of achievement, both of which must be administered by a licensed psychologist. The school does not provide the testing- parents must pay. Parents must also provide 2 letters of recommendation from non-family members detailing the child's physical and social/emotional maturity. These requirements would seem to effectively bar early entrance of any children who do not have affluent or well-educated families.

As a coordinator for gifted education, I was contacted on several occasions by parents requesting grade-skipping for their child. I provided parents with information and then referred them to their child's school principal, who would make such decisions. Rarely were any students accelerated. Some principals were not happy that acceleration had been considered as an option. Legislation aiming to bring all children up to proficiency, such as is currently the focus in North Carolina, is an admirable goal, but it completely ignores the students who are above and need more.

Programming for Under-Represented Populations

Sixty-four percent of surveyed superintendents ranked intentional programming for under-represented populations of students as their first or second choice in terms of importance. Over half of the AIG plans, however, indicated that making intentional efforts to include these students was not important. These populations include African-

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Americans, special needs children, Latinos, Native Americans, and second language learners.

In spite of the research focus on the needs of underrepresented populations in programs and services for the gifted and talented, special populations continue to be over-identified for remedial classes and underrepresented in gifted and talented programs and services (National Research Council, 2002).

Nationally, about 10% of these students are in gifted programs. In North Carolina, in 2013, 73% of students identified as gifted were white (Public Schools of North Carolina, 2014). While some of this group may have been economically disadvantaged or had special needs, the disproportionality is striking.

In my experience, it was not that students from under-represented populations could not qualify for gifted services, it was that they were not nominated for the services. For example, a student who is loud, frequently out of his seat, and rarely completes homework may be the first student in the class to reassemble bones from a science activity owl pellet into a recognizable mouse skeleton. Is his teacher likely to recognize this as possible non-verbal giftedness? When an English language learner sits quietly in class, would her teacher know how to recognize gifted characteristics she might display?

It is not enough for superintendents and other educators to say they believe addressing this disparity is important. Specific actions could be taken at the local level, such as understanding alternative behaviors indicating giftedness, expanding identification procedures, using culturally non-biased tests, and providing professional development about gifted students and their needs. Demographics vary significantly in

districts and buildings, so planning a course of action may be determined by the students who will be served with the programming.

Sharing Information with Families in their Native Language(s)

When asked if families should receive information about AIG and related opportunities in their native languages, over half of superintendents ranked it as lowest in importance. In the corresponding AIG plans, it was ranked in over half as the top one or two choices in importance. Since native language needs can vary widely from district to district and even building to building, it is difficult to speculate why this contradiction occurred. This also seems to be in opposition to the data about under-represented populations, one of which is second language learners, discussed earlier.

The literature clearly indicated that under-representation of ethnically diverse students in gifted classrooms is severe and longstanding. Much information regarding school programs is disseminated in children's bookbags to go home. If important information about identification, events, or opportunities goes home in a language that the adults in the family cannot easily read, how likely is it that the children will benefit from the information? A key component of the North Carolina Academically or Intellectually Gifted Program Standards is developing and maintaining meaningful partnerships with stakeholders. Children who are second language learners may be overlooked in gifted programming without intentionally reaching out to these families in their native languages. Superintendents may have been considering cost when responding to this item. It could be expensive and time-consuming to have documents translated into multiple languages. There are computer programs that can translate, but the families may not have access to them.

AIG Licensure

Nearly half of superintendents perceived having an AIG-licensed person to oversee the gifted program in their districts to be of least importance. Yet in the AIG plans, 76% of districts indicated it to be the most important item. When asked about having an AIG-licensed teacher in the classroom with gifted children, the responses were evenly spread across least to greatest importance, both by superintendents and as written in the plans.

"Those with special training in gifted education content and pedagogy are more effective than those without such training in delivering services for advanced learners" (Purcell & Eckert, 2006, p. 163). Many studies document that the most important factor affecting student learning is the teacher, and this is no different for AIG students (Brown et al., 2006; Marzano et al., 2005). A teacher spending time with gifted children should be highly qualified and have the knowledge to provide appropriate learning experiences for them. Some teachers are aware of the needs of gifted learners, but cannot translate this into differentiated lessons. A need for improved teacher preparation at the university level and targeted professional development at the local district level exists. As stated earlier, in North Carolina AIG certification can be earned only at an institution of higher education; however, no additional pay is offered to AIG-certified teachers. AIG teachers often have to travel between schools serving students, and thus there is little incentive to gain the certification. Gifted children deserve to learn from a professional who understands and knows how to address their unique needs and characteristics. The best-written AIG district plan will be of little use without qualified, trained personnel to implement it.

State vs. Local Control of Funding

Most superintendents surveyed clearly had concerns regarding state vs. local control of funds targeted for gifted students. All AIG plans indicated that 100% of state-allotted funds for AIG were spent for programming for gifted students, yet over half of superintendents chose that practice as least important. Prior to the required state audit in 2009, these funds were dispensed at local discretion, but parent complaints about how the funds were being spent on other programs led to tighter state control and accountability measures. In the audit, LEAs were documented as having used AIG monies for other programs; some transferred up to 99% of AIG dollars into other accounts.

A superintendent may feel that s/he knows best the fiscal needs of a district, yet historically, gifted programming has fluctuated with the strength of local and state economies. In most of the reviewed plans, no local money was allotted to AIG- just the 4% from the state. Without the assurance that this state funding will be dedicated to gifted education, AIG programs could be significantly affected.

Superintendent Tenure

The literature revealed that longevity of tenure by the district leader leads to gains in student achievement, increased trust among educators in the district, and a greater likelihood of being viewed as effective. Yet 64% of the superintendents in this study had been in their districts for only 3-5 years, and the national rate is approximately 70% serving less than 4 years. The American Association of School Administrators released a 2010 report that found superintendents required at least 5 years to lay a foundation for improvement and make an effective impact. A change in leadership means that the work begins again, leading to increased frustration and even exhaustion felt by others in the

district. Superintendent tenure would appear to be an issue needing a close examination by local boards of education who need to understand the costs of frequent leadership turnover. Objective evaluation measures, not feelings, may be needed with boards looking at explicit goals they want administration to reach. Stability should be recognized as a key factor in good leadership.

Equity and Excellence

There has been an ongoing policy battle between the concepts of equity and excellence, with equity seeming to be dominant in the current environment. North Carolina's definition of giftedness and the literature reviewed for this study reveal that the two must exist together for gifted learners in all cultures to be valued and served. It has been stated that there is an overwhelming disproportionate number of white students in AIG classes. Clearly, leaders must address identification procedures, communication with parents, teacher knowledge about characteristics of giftedness, and unconscious prejudices in order to close the cultural gap.

I have experienced negativity and ambivalence toward gifted programs and have been accused of elitism for supporting them. Gifted programming should be both excellent and equitable. No reluctance should be shown to advocate for our gifted learners. Our state's changing demographics means there is no time to waste in ensuring that all students, regardless of culture, ethnicity, or economics, be educated to the greatest of their academic abilities.

Recommendations

Data analysis has led to the following recommendations for future study:

1. Similar studies using the newest generation of AIG plans could be conducted. The process is still new to North Carolina stakeholders.

2. Similar studies could consider length of experience as a superintendent or another demographic factor as the key variable. The literature revealed a difference between the typical length of superintendent tenure and the importance longevity of leadership has on student achievement.

3. Rather than using an online survey, superintendents could be interviewed to gain more insight on their perceptions about gifted education and their previous experiences or connections with gifted education. Determining if the experiences were positive or negative could add to the understanding of superintendents' involvement, or lack of, with gifted programming.

4. An analysis of the required AIG template and its effects on local planning and implementation could be conducted. While the mandated template ensures that the focus of data is not primarily on student identification, little research is available on how NC districts met the challenge of implementing the required 51 practices during the 2010-2013 plan cycle.

5. Personnel who oversee local gifted programs could be surveyed to gather data as to how they involve senior leadership in the design of a local AIG plan.

6. Gather information from students who were identified as gifted to learn about their experiences with, and perspectives on, gifted education. Likewise, interview students who were accelerated to find how they benefited, or not, from the experience.

7. A broader study of superintendents across state lines could be conducted. A larger sample size may provide additional insight into superintendents' perceptions of gifted

education. Additional studies could better reveal the place administrators hold in gifted education and their role in advocacy efforts.

Conclusion

This study examined the relationship between superintendents' perceptions of gifted education practices and the application of those practices in local AIG plans. Specifically, did a superintendent's beliefs match closely with what his/her district focused on in gifted programming? Due to the significant role that superintendents play as the educational leader in districts, a study of their perceptions was needed to better understand their possible effects on local gifted programming.

The complex nature of a superintendent's duties and responsibilities leads to daily challenges, changing expectations, and overwhelming decisions to be made for the benefit of multiple programs. Increasing demands for limited resources make those decisions more difficult. Having insight into a superintendent's point of view about a particular program could prove helpful when soliciting his/her input on designing, planning, or implementing that program.

Gifted children deserve access to programs that are challenging and rigorous, provided by well-trained teachers and supported by key personnel. Having the advocacy of an informed superintendent could provide a strong foundation for high-quality services. As asserted by Schlechty (1997), that which the superintendent values is valued by the district and that which the superintendent prioritizes is prioritized by the district.

Appendix A

North Carolina Academically or Intellectually Gifted Program Standards

North Carolina Academically or Intellectually Gifted Program Standards

State Board of Education Policy GCS-U-000 – October 2015

Historical Overview of Academically or Intellectually Gifted (AIG) in NC

North Carolina has had legislation governing gifted education since 1961, exemplifying the state's strong commitment to gifted education for over fifty years. In 1974, legislation identified gifted and handicapped children as children with special needs. In 1977, Chapter 927 in the NC Session Laws brought into compliance a system of educational opportunities for all children requiring special education. In 1983, Chapter 247 in the NC Session Laws revised the program title to "Academically Gifted" to emphasize North Carolina's commitment to academic programs and legislated that a student's gifted education program may be described with an Individual Education Plan (IEP) or a Group Education Plan (GEP). In 1993, Chapter 321, Section 134(c) in NC Session Laws, required that the State Board of Education reexamine the state's laws, rules, and policies concerning the education of academically gifted children. As a result, new legislation for gifted education was passed in 1996, resulting in Article 9B Academically or Intellectually Gifted Students (N.C.G.S. § 115C-150.5-8 (Article 9B)). Article 9B provides a state definition for Academically or Intellectually Gifted (AIG) students and requires local education agencies (LEA) to develop three-year AIG local plans with specific components to be approved by local school boards and subsequently sent to the State Board of Education and Department of Public Instruction (DPI) for review and comment. Article 9B is the current legislation mandating identification and services for gifted education K-12.

State Definition of AIG Students, Article 9B (N.C.G.S. § 115C-150.5)

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

Rationale for the AIG Program Standards

"The General Assembly believes that public schools should challenge all students to aim for academic excellence" (Article 9B). The State Board of Education's (SBE) mission is that "every public school student will graduate from high school, globally competitive for work and postsecondary education and prepared for life in the 21st Century." Therefore, quality and comprehensive AIG programs are essential in supporting these goals and the needs of gifted learners across North Carolina.

In January 2008, the North Carolina AIG program, under the auspices of the Exceptional Children Division of DPI, received a performance audit through the Office of the State Auditor. The audit was initiated in response to parent/family concerns that state allocated AIG budget funds were being used for purposes other than AIG programming, while AIG students were left underserved. One of the recommendations of the audit was to develop state performance standards for local AIG programs in order to provide a statewide vehicle for monitoring program implementation, to support quality and effective local AIG programs, and to safeguard the rights of AIG students.

The structure that holds gifted programs together is nested in the policies, statutes, and guidelines that states have enacted (Brown, Avery, VanTassel-Baska, Worley & Stambaugh, 2006). Local gifted programs, and subsequently the growth of gifted learners, are heavily influenced by the strength of the initiatives emanating from the state level. Moreover, the federal *No Child Left Behind Act of 2001* (PL 107.110) neither excludes nor includes gifted learners, resulting in compromised services for AIG students in order to focus on specific mandates addressed in the federal legislation. Thus, in the absence of federal legislation, state policies and legislation are the cornerstone of gifted programming.

AIG programs in North Carolina are embedded within and responsive to the local context of an LEA and, as a result, give rise to differences among programs across the state. Therefore, the AIG Program Standards are critical in providing a statewide framework for quality programming, while still honoring local flexibility. In an effort to strengthen gifted education in North Carolina, these AIG Program Standards represent the SBE's and DPI's commitment to ensure that the academic, intellectual, social, and emotional needs of AIG students are being met.

Since the SBE approved the AIG Program Standards in 2009, these standards have served the purpose of guiding local AIG plan development. These program standards provide clear direction and support for the comprehensive nature of an effective local AIG plan and program for serving gifted learners in North Carolina's public schools.

Foundations of the AIG Program Standards

The AIG Program Standards are based on the following principles*:

Gifted learners form a diverse group of students with a variety of academic, intellectual, social, and emotional needs different than those of other children of their age, experience, and environment; therefore, they require appropriate identification and a range of service options within a comprehensive program.

Gifted learners possess the ability to think with more complexity and abstraction and learn at faster rates; therefore, they require challenging, differentiated curriculum and instruction which are developmentally appropriate and will prepare them for the 21st century.

Gifted learners have different learning needs; therefore, they require time with others who are similar to themselves in order to establish cognitive relationships and to facilitate their academic, intellectual, social, and emotional growth.

Gifted learners have unique social and emotional needs; therefore, they require access to appropriate support systems and counseling to assure their affective well-being.

Gifted learners have needs different than others of their age, experience or environment; therefore, they require teachers and other personnel involved in their education who have the necessary knowledge, skills, and understandings to meet those needs.

Gifted learners, including those children with limited educational opportunities, are shaped by their early education experiences which form future learning habits; therefore, they need access to an appropriately challenging and engaging education early in their schooling to ensure that their potential is developed and optimized.

Gifted learners from under-represented populations are often overlooked in gifted programming; therefore, they require purposeful and intentional support to ensure that their potential is recognized, developed, and served. Gifted learners who are often left underserved include students who are culturally/ethnically diverse, economically disadvantaged, English language learners, highly gifted, and twice-exceptional.

When an appropriately differentiated education is not provided, gifted learners do not thrive in school, their potential is diminished, and they may even suffer from cognitive and affective harm; therefore, gifted learners must have their needs addressed in order to become capable, valuable, effective, and successful contributors to our global society.

Providing equity and excellence for all students in North Carolina is a priority; therefore, it is critical to meet the academic, intellectual, social, and emotional needs of gifted learners in an overall educational program.

*Adapted with permission of the authors. Coleman, M. R. & Gallagher, J.J. (1995). Appropriate Differentiated Services: Guides for best practices in the education of gifted children. Gifted Child Today, 18(5), 32-33.

Programs for the gifted differ in response to local needs and resources, but successful program design takes into account a common set of components. According to Reis (2006), a cohesive, thoughtful, and comprehensive gifted program design serves three major functions. First, it communicates which students' needs will be met and how. Second, it communicates a plan for implementation and coordination among the design components. Third, it provides a framework for decision-making and continuous program improvement.

The North Carolina AIG Program Standards have been developed to serve as a statewide framework and guide LEAs to develop, coordinate, and implement thoughtful and comprehensive AIG programs. These standards reflect Article 9B and nationally-accepted best practices in gifted education. Furthermore, the AIG Program Standards help ensure that the needs of AIG students are met and the potential of AIG students is optimally developed.

These AIG Program Standards will:
- convey expectations for quality local AIG programs and services;
- guide the development, revision, and monitoring of local AIG programs;
- articulate best practices for local AIG programs, including those related to student identification, differentiated curriculum and instruction, and comprehensive programming;
- provide a guide for AIG personnel and professional development;
- promote strong partnerships and communication between and among home, school, and community; and
- serve as a vehicle for continuous program improvement and accountability.

Organization of the AIG Program Standards

Each standard is formatted as follows:

Standard: The standard is a defining statement articulating the expectations for quality, comprehensive, and effective local AIG programs and relates to the categories addressed in Article 9B.

Practices: The practices clarify the standard, describe what an LEA should have in place, and guide LEAs to improve their programs. These practices will be verified to stakeholders through a variety of sources of evidence.

Standard 1: Student Identification

The LEA's student identification procedures for AIG are clear, equitable, and comprehensive and lead towards appropriate educational services.

PRACTICES

a) Articulates and disseminates the procedures for AIG student identification, including screening, referral, and identification processes for all grade levels to school personnel, parents/families, students, and the community-at-large.

b) States and employs multiple criteria for AIG student identification. These criteria incorporate measures that reveal student aptitude, student achievement, or potential to achieve in order to develop a comprehensive profile for each student. These measures include both non-traditional and traditional measures that are based on current theory and research.

c) Ensures AIG screening, referral, and identification procedures respond to traditionally under-represented populations of the gifted and are responsive to LEA demographics. These populations include students who are culturally/ethnically diverse, economically disadvantaged, English language learners, highly gifted, and twice-exceptional.

d) Implements screening, referral, and identification processes consistently within the LEA.

e) Maintains documentation that explains the identification process and service options for individual AIG students, which is reviewed annually with parents/families.

Standard 2: Differentiated Curriculum and Instruction

The LEA employs challenging, rigorous, and relevant curriculum and instruction K-12 to accommodate a range of academic, intellectual, social, and emotional needs of gifted learners.

PRACTICES

a) Adapts the NC Standard Course of Study (SCOS) K-12, to address a range of advanced ability levels in language arts, mathematics, and other content areas as appropriate through the use of differentiation strategies, including enrichment, extension, and acceleration.

b) Employs diverse and effective instructional practices according to students' identified abilities, readiness, interests, and learning profiles to address a range of learning needs at all grade levels.

c) Selects and uses a variety of research-based supplemental resources that augment curriculum and instruction.

d) Fosters the development of 21st century content and skills an advanced level.

e) Uses on-going assessment, both formative and summative, to differentiate classroom curriculum and instruction and inform flexible grouping practices.

f) Creates affective curricular and instructional practices which support the social and emotional needs of AIG students.

g) Cultivates and develops the potential of young (K-3) students through purposeful and intentional strategies and differentiated curriculum and instruction.

h) Collaborates with AIG personnel and other professional staff, including regular education teachers, special education teachers, other instructional staff, and administrators, to develop and implement differentiated curriculum and instruction.

i) Develops and documents a student plan that articulates the differentiated curriculum and instruction services that match the identified needs of the K-12 AIG student, such as a Differentiated Education Plan (DEP). This document is reviewed annually with parents/families to ensure effective programming, provide a continuum of services, and support school transitions.

Standard 3: Personnel and Professional Development

The LEA recruits and retains highly qualified professionals and provides relevant and effective professional development concerning the needs of gifted learners that is on-going and comprehensive.

PRACTICES

a) Employs an AIG-licensed educator as lead coordinator to guide, plan, develop, implement, revise, and monitor the local AIG program and plan.

b) Ensures that AIG-licensed specialists are engaged in tasks which explicitly address the academic, intellectual, social, and emotional needs of gifted learners.

c) Establishes specific and appropriate professional development requirements for all personnel involved in AIG programs and services, including classroom teachers, special education teachers, counselors, and school administrators.

d) Places AIG students in general education classrooms with teachers who have earned an AIG add-on license from an Institute of Higher Education (IHE) or who have met the LEA's professional development requirements for that position.

e) Aligns professional development opportunities with local AIG program goals, other district initiatives, and best practices in gifted education.

f) Provides opportunities for AIG specialists and other teachers to plan, implement, and refine applications of their professional development learning.

Standard 4: Comprehensive Programming within a Total School Community

The LEA provides an array of K-12 programs and services by the total school community to meet the diverse academic, intellectual, social, and emotional needs of gifted learners.

PRACTICES

a) Delivers AIG programs and services which are comprehensive of the academic, intellectual, social, and emotional needs of gifted learners across all classroom environments, grade levels, and settings.

b) Aligns AIG programs and services with each area of AIG identification, goals of the program, and resources of the LEA.

c) Delivers AIG programs and services that are integral and connected to the total instructional program of the LEA in policy and practice.

d) Informs all teachers, school administrators, and support staff about delivery of differentiated services and instruction for AIG students, regulations related to gifted education, and the local AIG program and plan.

e) Communicates among and between teachers and schools to ensure an effective continuation of K-12 services, especially at key transition points.

f) Facilitates collaboration among school counseling personnel, regular education teachers, AIG specialists, and others to address the social and emotional needs of AIG students.

g) Articulates and implements opportunities for acceleration, including compacted content, Credit by Demonstrated Mastery, subject and/or grade acceleration when an appropriate body-of-evidence indicates the need.

h) Provides intentional programming for traditionally under-represented AIG populations, including culturally/ ethnically diverse, economically disadvantaged, English language learners, highly gifted, and twice-exceptional.

i) Encourages extra-curricular programs and events that enhance and further develop the needs and interests of AIG students.

j) Utilizes intentional, flexible grouping practices to facilitate effective instruction and support the growth of AIG students.

Standard 5: Partnerships

The LEA ensures on-going and meaningful participation of stakeholders in the planning and implementation of the local AIG program to develop strong partnerships.

PRACTICES

a) Develops partnerships with parents/families and the community that are intentional and meaningful to support the following needs of AIG students:
   • academic and intellectual
   • social and emotional.

b) Shares with stakeholders, including all students' parents/families, information regarding the local AIG program, the local AIG plan, and other policies relating to gifted education.

c) Establishes and utilizes an advisory group to develop, implement, and monitor the local AIG program and plan. This advisory group is representative of the diverse populations of the district and is at least comprised of community members, AIG parents and families, AIG teachers, and other instructional and support staff.

d) Informs parents/families and the community of opportunities available to AIG students on an ongoing basis and in their native language.

e) Forms partnerships with institutions of higher education, local business and industry, and other stakeholders within the community to enhance and gain support for AIG programs and services.

Standard 6: Program Accountability

The LEA implements, monitors, and evaluates the local AIG program and plan to ensure that all programs and services are effective in meeting the academic, intellectual, social, and emotional needs of gifted learners.

PRACTICES

a) Develops a written AIG plan to describe the local AIG program, in accordance with state legislation and SBE policy (N.C.G.S. § 115C-150.5-.8 [Article 9B]), which has been approved by the LEA's school board and sent to SBE/DPI for review and comment.

b) Monitors the implementation of the local AIG program and plan in accordance with current legislation and state policies to ensure fidelity of implementation for all AIG program components.

c) Uses and monitors state funds allotted for the local AIG program according to state policy.

d) Maintains, analyzes, and shares student achievement, student growth, and annual drop-out data for AIG students.

e) Monitors the representation, performance, and retention of under-represented populations in the local AIG program, including students who are culturally/ ethnically diverse, economically disadvantaged, English language learners, highly gifted, and twice-exceptional.

f) Maintains current data regarding the credentials of personnel serving AIG students.

g) Elicits regular feedback from students, parents/families, teachers, and other stakeholders regarding the implementation and effectiveness of the local AIG program.

h) Utilizes multiple sources of data to review and revise the local AIG program and plan during comprehensive program evaluation.

i) Disseminates all data from evaluation of the local AIG program to the public.

j) Safeguards the rights of all AIG students and their parents and families through established written policies, procedures, and practices. The LEA plan includes: informed consent regarding identification and placement, reassessment procedures, transfers from other LEAs, and procedures for resolving disagreements.
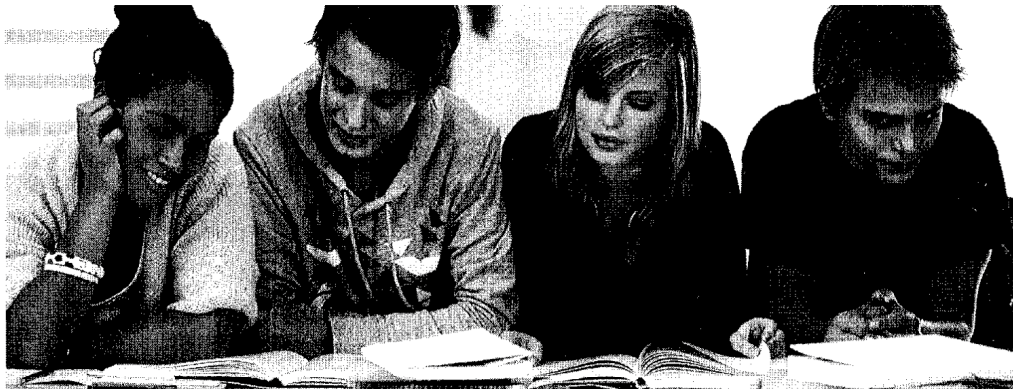
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Appendix B

Survey Instrument

We understand it may be difficult to rate items when you believe all of the items to be important; however, for the purposes of the study, your frank responses are appreciated. Remember that no identifying information will be attached to your responses.

How important is it that a district includes the following in their programs and services offered to gifted students? Give a "1" to the item you think is the most important for meeting the needs of gifted learners, a "2" to the item you think is second most important, and so on until you have ranked all 5 items.

	1	2	3	4	5
Intentional programming for traditionally under-represented populations, such as English language learners and minority students	○	○	○	○	○
Collaboration of school counseling personnel to address social and/or emotional needs of gifted students	○	○	○	○	○
Extra-curricular events and/or programs to develop interests of gifted students	○	○	○	○	○
Acceleration of curriculum for an individual student when warranted	○	○	○	○	○
Communication between schools at key transition points, such as middle school to high school, to ensure service continuation	○	○	○	○	○

Please rank each of the following items from most important to least important. Give a "1" to the item you think is the most important for meeting the needs of gifted learners, a "2" to the item you think is second most important, and so on until you have ranked all 5 items.

	1	2	3	4	5
Ensures fidelity of the local AIG plan implementation in all schools in the district	○	○	○	○	○
Uses state funds allotted for AIG exclusively for AIG-identified students	○	○	○	○	○
Formation in each school of an advisory group representative of stakeholders	○	○	○	○	○
Gain support from local businesses and/or industry to support the AIG program	○	○	○	○	○
Form partnerships with institutions of higher education, such as universities and community colleges, to enhance the AIG program	○	○	○	○	○

Please rank each of the following items from most important to least important. Give a "1" to the item you think is the most important for meeting the needs of gifted learners, a "2" to the item you think is second most important, and so on until you have ranked all 4 items.

	1	2	3	4
Conducts an annual review and/or revision of the local AIG plan	○	○	○	○
Shares all data from evaluation of the local AIG plan with the public	○	○	○	○
Maintains and shares with the public annual drop-out rate data for AIG students	○	○	○	○
Maintains and shares with the public student performance data for AIG students	○	○	○	○

Please rank each of the following curriculum-related items from most important to least important. Give a "1" to the item you think is the most important for meeting the needs of gifted learners, a "2" to the item you think is second most important, and so on until you have ranked all 7 items.

	1	2	3	4	5	6	7
Adaptation of the NC Standard Course of Study (also referred to as Common Core/Essential Standards) according to student abilities	○	○	○	○	○	○	○
Acceleration of the curriculum to address a range of academic ability levels	○	○	○	○	○	○	○
Supplemental resources to extend the curriculum	○	○	○	○	○	○	○
Intentional programming to nurture young students (K-3)	○	○	○	○	○	○	○
Affective curriculum to support the social and/or emotional needs of AIG students	○	○	○	○	○	○	○
Collaborative planning among AIG personnel and other professional staff	○	○	○	○	○	○	○
Annual review of curriculum services for K-12 AIG students	○	○	○	○	○	○	○

How important is it that a district ensures the following? Give a "1" to the item you think is most important for meeting the needs of gifted learners, a "2" to the item you think is second most important, and so on until you have ranked all 5 items.

The following statements use the term "stakeholders." In this context, it refers to parents, families, and the community.

	1	2	3	4	5
Share information about the AIG program with stakeholders	○	○	○	○	○
Involve stakeholders in the development of the AIG plan	○	○	○	○	○
Involve stakeholders in the implementation of the AIG plan	○	○	○	○	○
Involve stakeholders in the monitoring of the AIG plan	○	○	○	○	○
Share information with stakeholders in their native language(s)	○	○	○	○	○

How important is it that the following procedures for AIG identification are followed in your district? Give a "1" to the item you think is the most important for meeting the needs of gifted learners, a "2" to the item you think is the second most important, and so on until you have ranked all 3 items.

	1	2	3
Documentation explaining service options for individual students are reviewed annually with parents/guardians	○	○	○
A screening measure for all students in one or more grade levels should be administered annually	○	○	○
Policies to safeguard the rights of AIG students are in writing, such as procedures for resolving disagreements	○	○	○

How important is it that the following procedures for AIG identification are followed in your district? Give a "1" to the item you think is the most important for meeting the needs of gifted learners, a "2" to the item you think is second most important, and so on until you have ranked all 4 items.

	1	2	3	4
Multiple criteria are employed	○	○	○	○
Identification procedures are responsive to school demographics	○	○	○	○
Consistency in implementation of identification procedures is ensured within each school	○	○	○	○
Identification procedures are responsive to traditionally under-represented populations, such as English language learners and minorities	○	○	○	○

Please rank each of the following personnel-related items from most important to least important. Give a "1" to the item you think is the most important for meeting the needs of gifted learners, a "2" to the item you think is the second most important, and so on until you have ranked all 5 items.

All of these choices are important. We know resources are limited; if you have to make choices, how would you order these items?

	1	2	3	4	5
An AIG-licensed educator to oversee the district program for gifted education	○	○	○	○	○
Placement of AIG students in classrooms with teachers who are AIG-licensed	○	○	○	○	○
Professional development requirements for all personnel engaged in AIG services	○	○	○	○	○
Engagement of AIG teachers in tasks that explicitly address needs of gifted learners	○	○	○	○	○
District-provided professional development aligned with local AIG plan goals	○	○	○	○	○

How important is it that a district includes the following in their programs and services offered to gifted students? Give a "1" to the item you think is most important for meeting the needs of gifted learners, a "2" for the item you think is second most important, and so on until you have ranked all 4 items.

	1	2	3	4
AIG programs and services for grades kindergarten through two	○	○	○	○
AIG programs and services for grades three through five	○	○	○	○
AIG programs and services for grades six through eight	○	○	○	○
AIG programs and services for grades nine through twelve	○	○	○	○

Please choose the radio button that best describes you and your experience.

Please indicate the size of your school district.

○ 4,999 students or less

○ 5,000 to 9,999 students

○ 10,000 to 29,999 students

○ 30,000 to 49,999 students

○ 50,000 students or greater

Please indicate how long you have been superintendent in your current school district.

○ 0 to 2 years

○ 3 to 5 years

○ 6 to 8 years

○ 9 to 11 years

○ 12 + years

Please indicate the number of years you have served as a superintendent of schools. Include any interim positions.

○ 0 to 2 years

○ 3 to 5 years

○ 6 to 8 years

○ 9 to 11 years

○ 12 + years

Please indicate any experiences or connections you have had with gifted education. Please choose all that apply.

☐ hold or have previously held a gifted education (AIG) certification

☐ were identified as gifted when you were in school

☐ one or more of your own children have received gifted education services

☐ have direct experience writing a district plan for gifted education

☐ Other

What is your ethnicity? Please choose all that apply.

[ ] African-American

[ ] Asian

[ ] Hispanic or Spanish

[ ] Middle Eastern

[ ] Pacific Islander

[ ] White, not Hispanic

[ ] Other

What is your gender?

( ) Male

( ) Female

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