

Minnesota Superintendents' Attitudes Toward Gifted Education

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Dedication

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Abstract

The key to success or failure of opportunities for gifted students is affected by what a school district provides, how it views giftedness, and how it supports academic flexibility and individualized or differentiated learning. Gifted programs are selected by administrative decision makers based upon their knowledge and understanding of the foundational theories in the field of gifted education. The implementation of policies and provisions for gifted education vary from state to state and often district to district. A commonality often reported is of the negative attitudes towards giftedness and gifted education by staff, faculty, and administrators. Many of the policy decisions in gifted education by administrators, although guided by theory, are influenced by personal experiences, myths, and stereotypes. A review of literature reveals a chronicled legacy of myths and misconceptions providing conflicting concepts of giftedness, gifted education, and educational programs. The effect of these perceptions may directly skew an administrator's ability to make unbiased informed decisions in relationship to this diverse population of gifted learners. The purpose of this study was to investigate Minnesota public school superintendents' attitudes toward gifted students and gifted education, and what factors affect these attitudes. This study utilized the McCoach and Siegle's revised edition of Gagné and Nadeau's survey, *Opinions About the Gifted and Their Education*. The survey is divided into three subcategories for analysis: support, elitism, and acceleration. Also included are sections on self-perception as gifted and demographic information. Survey data were analyzed using descriptive statistics. This exploratory study sampled 119 of 336 Minnesota superintendents in regards to gifted education.

Results show mild to moderate support for funding, with women superintendents perceiving themselves as gifted more than male superintendents and showing greater support for gifted education. Among the predictor variables, superintendents who had education or training in gifted education were more supportive toward giftedness and gifted education, less negative about gifted education as being elitist, and more positive toward acceleration of gifted students. With gifted programming relying on the discretion of local administrators and implementation of programs falling on the school faculty, it is important that these stakeholders have a working knowledge of gifted student development and gifted education. Therefore, further research might explore these attitudes in teacher education and administrator training programs.

Table of Contents

Acknowledgements.....	i
Dedication.....	ii
Abstract.....	iv
List of Tables	viii
CHAPTER 1. INTRODUCTION	1
Introduction to the Study	1
Problem and Background.....	5
Purpose of the Study.....	5
Research Questions.....	6
Definition of Terms.....	6
Summary.....	7
CHAPTER 2. LITERATURE REVIEW	8
Introduction.....	8
History of Giftedness, Theories of Intelligence.....	10
The 1900s.....	11
On Giftedness.....	18
Defining Giftedness	19
Asynchronous Development and Defining Gifted.....	20
Federal and State Views of Gifted Education: Legislation and Regulations.....	22
Legislation, Regulations, and Requirements	22
State of Minnesota and Gifted Education	23
Licensure.....	24
Foundations of Beliefs and Attitudes.....	25
Stereotypes and Misconceptions of Giftedness	28
Education of the Gifted.....	30
Models of Gifted Education.....	33
Summary.....	35
CHAPTER 3. METHODOLOGY	36
Introduction.....	36
Research Questions.....	36
Instrumentation	37
Participants.....	39
Research Methodology	41
Quantitative Data Collection.....	41
Research Design.....	42
Validity and Reliability.....	42
Data Analysis.....	43
Ethical Considerations	43

Summary	44
CHAPTER 4. RESULTS	45
Introduction.....	45
Minnesota Superintendents' Attitudes Toward Gifted Education	45
Factors Affecting the Superintendents' Attitudes Toward Gifted Education	48
Impact of Training and Experience.....	50
Impact of Demographics and School Environment	52
CHAPTER 5. CONCLUSIONS	54
Introduction.....	54
Research Questions.....	56
Discussion.....	57
Demographics	60
Conclusions.....	60
Implications and Recommendations	61
Issues.....	65
Research Recommendations	68
Bibliography	73
Appendices:	
A. Survey Instrument.....	86
B. Introductory Email and Consent Form	92
C. Subscales Used for Attitudes Study.....	98

List of Tables

Table	Page
1. Frequency of Demographic and School Environment Variables	40
2. Means and Standard Deviations for Scores on the Attitude Toward Gifted Education Scale	46
3. Correlations Between the Subscales	47
4. Means for Scores of Each Item in a 7-point Rating Scale	49
5. Mean Differences in Attitude by Superintendents' Training or Experience	51
6. Mean Differences of Superintendents' Attitudes by Demographics and Environment.....	53

CHAPTER 1. INTRODUCTION

Introduction to the Study

Given the state of national and international economies, our educational system is challenged to competitively prepare students to compete in a global employment market. President Barack Obama reflected his concern for our students, when he stated “high quality education for all students...is the goal our educational system” (The White House.gov, 2009, p. 1). This sentiment was also expressed by S.P. Marland over 30 years prior. As U.S. commissioner of education and a member of the State Board of Governors for Higher Education, Marland, in 1972, addressed Congress, charging them in regard to the education of gifted students, “Intellectual and creative talent cannot survive educational neglect and apathy” (p. 6). “Gifted and talented youth are the most underserved group of students who have special educational needs” (Marland, 1972, p. 42). Marland and Obama reflect the need to ensure the education of this valuable resource of gifted students.

The future of bright students is dependent upon the education they receive. These students are identified as gifted. One of the most common definitions of *gifted* is “students with outstanding talents who perform, or show the potential for performing, at remarkably high levels of accomplishment when compared with others of their age, experience, or environment” (Ross, 1993, p. 46). These students “exhibit high performance capability in intellectual, creative, and/or artistic areas; possess unusual leadership capacity; or excel in specific academic fields. They require services or

activities not ordinarily provided by the schools” (Ross, 1993, p. 46). Carter (2009) stated that the success of gifted students is greatly dependent upon the public educational system and its provision of experiences which lead to the ability to think and process information at an increasingly demanding level.

Gifted education is driven by many factors, and the fact that identification of gifted students falls to the interpretation of each state creates inconsistency and often confusion for those making decisions about funding and disbursement of funds. Schools, districts, administrators, and school boards work to provide the best education possible for all students. This often requires balancing public, political, and personal concepts of what is needed and fair. Federal mandates and state legislation significantly influence what a district is required to provide, as well as what it is not encouraged to provide. There is pressure to close the achievement gap, with laws like the No Child Left Behind Act (NCLB) dictating the process and regulating the money. Parents advocate for services to address the needs of their children. Some schools provide gifted education and some do not, depending on district interpretation of the multiple influences, legal mandates, and provided funding.

The Individuals with Disabilities in Education Act (IDEA), the Elementary and Secondary Education Act (ESEA), and NCLB, the latest iteration of ESEA, represent the legal mandates for the direction of educational services within all states, districts, and schools. These mandates state that equal learning, and the provision of appropriate opportunities for that learning, shall be available to all students. However, in many cases the application of appropriate learning situations does not occur. This is true in regards to

gifted students and gifted education. It is estimated that approximately 3.2 million students in elementary and high school have been identified as gifted (Snyder & Dillow, 2012). This means a large population of our students is not given equal opportunities to learn to their potential.

Gifted education in most school districts receives little or no funding for programs (Davidson, Davidson, & Vanderkam, 2004). Much of the research in the area of gifted education has looked at the needs of the student, differentiation of learning, environmental influences, developmental asynchronization, and standardized testing, leaving behind the exceptional learner. Although IDEA and NCLB have driven special groups to advocate for services for gifted students, the federal government and many states still do not require services let alone specific programming for gifted students. According to *A Nation Deceived* (Colangelo, Assouline, & Gross, 2001), the federal and state governments have not begun to look at the real education of our gifted. These students have been left in the dust created by the uncertainty of federal and state money, grant funding, policy dictated by NCLB, and the local demographic demands of falling populations and a need to consolidate educational facilities, programming, and staff (Colangelo et al., 2001).

The key to success or failure of gifted opportunities is directly related to what a school district provides, how it views giftedness, and how it supports academic flexibility, individualized or differentiated learning. *A Nation Deceived* (Colangelo et al., 2001) states that,

America's school systems keep bright students in line by forcing them to learn in a lock-step manner with their classmates...decisions about

acceleration have traditionally been based upon personal biases or incomplete and incorrect information. Amid the political wars of education, the interests of bright children have been lost. (p. 1)

Knowledge of giftedness, development, gifted education, and programming is influenced by current research. However, many of the myths and stereotypes that affect personal and policy decisions by administrators emanate from a long history of selective inequities. These stem from the early Greeks providing training for select gifted youth to the 1930s when Hollingworth created special schools and programming for gifted students. Little is known about how many decisions made by administrators and school boards about gifted education are founded on personal beliefs grounded in history and personal experience, or whether they are influenced by knowledge of gifted research and theory.

Two significant governmental resources addressed the need to focus attention and funding on the underserved population of gifted students. The 1988 Javits Act was written in order to focus “resources on identifying and serving students who are traditionally underrepresented in gifted and talented programs” (Colangelo et al., 2001, p. 4). It highlighted “economically disadvantaged, limited-English proficient and disabled student to reduce disparities in achievement” (Colangelo et al., 2001, p. 4). Overall, its purpose was to provide for the equity of education for all students. Marland (1972), in the first official report to Congress, assessed the needs of gifted students and gifted education. This report created a definition of giftedness in children that is the foundation of current definitions. It states that gifted students, if not challenged properly, may become at-risk for unhealthy adolescent behaviors as well as failure to complete school.

At the very least, they become bored, apathetic, and unmotivated and become labeled *underachievers*, wasting the capacity available to them (Gowan, 1955).

Problem and Background

Little is known about the beliefs and attitudes of superintendents regarding philosophical foundations and knowledge of giftedness and gifted education in the present educational environment. Knowledge of these beliefs is important in identifying why, what, and how programs are implemented within a district. Whether the schools, teachers, or principals follow through with concerted efforts in collaborating on curriculum, student identification, program development, and student support is affected by the dictates and attitudes of the administration.

Minnesota, like most states, deals with the confusion of definitions, selection of programs, and limited funding for gifted students. In recognition of the need for decision makers to have a knowledge and understanding of gifted education, the Minnesota state legislature in 2008 revised its requirements for licensures of principals and superintendents to provide “a gifted and talented competency into the knowledge, skills, and abilities required for licensure” (Minnesota State House of Representatives, 2008, n.p.).

Purpose of the Study

Earle (1998) and others conducted studies which looked at professionals related to gifted education. These studies have shown that administrators and other professionals have “little awareness of gifted students, and they often rely on stereotyped perceptions and beliefs when interacting with or making decisions about the gifted populations”

(Earle, 1998, p. 24). The purpose of the current study is to identify Minnesota superintendents' attitudes and factors that affect their perceptions of intellectually gifted students.

Research Questions

The following questions guide this study:

1. What attitudes about intellectually gifted students and education are held by Minnesota school superintendents?
2. What factors (Minnesota school superintendents' training and experience about gifted education, superintendents' demographic background, and school environment) have an impact on their attitudes toward gifted students and education?

Definition of Terms

Attitudes: Attitudes are formed through a process of affect, behavior, and cognition. Attitudes are implicitly and explicitly affected by internal and external experience and the beliefs held about those experiences (Wood, Green Wood, & Boyd, 2002).

Beliefs: Beliefs are the process of our thoughts and experience with or about an object, event or issue (Wood et al., 2002).

Gifted and Talented Students: The federal ESEA defines gifted and talented students as,

Students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, who need services and activities not ordinarily provided by the school in order to fully develop those capabilities. (U.S. Department of Education, 2002, p. 107)

Perceptions: The processes of understanding something using one or more of your senses; through experience (Perceptions, 2014).

Summary

This chapter identified the need for providing programs for gifted students. The legal mandates and the lack of required funding, as well as the confusion of definitions of the gifted, directly affect decision makers. Also noted was the need for the identification of Minnesota school administrators' attitudes and perceptions of giftedness and gifted education in providing for this diverse population. There is a love-hate relationship seen throughout the history of gifted education. The legacy of myths, misconceptions, and the conflicting concepts of giftedness are some of the factors which lend credence to the need for this study. In the next chapter a review of the literature regarding these issues will explore the "fascination with persons of unusual ability and potential for extraordinary expertise in any and all fields of human performance, which has given rise to an area of study in psychology and education called gifted education" (Sternberg & Davidson, 2005, p. 246).

CHAPTER 2. LITERATURE REVIEW

Introduction

This chapter reviews the literature relating to giftedness and gifted education in order to understand the foundations of Minnesota administrators' beliefs related to providing services in meeting the needs of gifted students. This chapter describes the history of giftedness and gifted education, and various definitions of giftedness. The chapter further reviews the theories of giftedness and intelligence, as well as the myths, misconceptions and stereotypes associated with giftedness and gifted education. Also, the formation of beliefs and attitudes and how they affect behaviors and decision making is discussed. Finally, this chapter addresses Minnesota state laws and rules, mandates, appropriations, and recommendations for gifted education.

Renzulli (1994) stated, "The way in which one views giftedness will be a primary factor in both constructing a plan for identification and in providing services" (p. 17). Administrative decisions about gifted education are influenced by multiple factors, including school administrators' attitudes and perceptions. These attitudes and perceptions are based on knowledge, personal experiences, and feelings about giftedness and gifted education. Many attitudes are grounded in the history of gifted education, multiple definitions of giftedness, characteristics of giftedness, and understanding the specific needs of gifted students and educational programming for gifted. Therefore, a review of these components provides the background for assessing superintendents' attitudes and beliefs about giftedness and gifted education.

Gifted education and programming is important to establish equal opportunities for all students (Davidson et al., 2004). Leta Stetter Hollingworth(1926), a psychologist who wrote the first textbook on gifted education, stated, “It is the business of education to consider all forms of giftedness in pupils in reference to how unusual individuals may be trained for their own welfare and that of society” (as cited in Matthews & Foster, 2005, p. 49). Her vision of diversity of learners was farsighted and offered new insight for the developmental understanding of students. She was fully aware of the close connections between society, economics, politics/policy, and education. Hollingworth’s concepts of socioeconomic-political connections to education were dramatically seen in post-WWI Germany and the USSR. Both countries, striving for world leadership, furthered identification of excellence and giftedness to promote their education for the benefit of the state (Imbeau, 1999). The fear of the advanced technology of other governments and the increased interest in talent development in the 1950s marched the U.S. into the race for space and dominance by promoting gifted education. The place of the U.S. as a leading world power was threatened with the Russians’ launch of Sputnik in 1957. In 1958, Admiral Rickover, the *father of the atomic submarine*, concerned about the National Defense Educational Act (NDEA) of 1958, remarked, “that nurturing careers of excellence and leadership in science and technology in young scholars is an essential investment in the U.S. national and global future” (Center for Excellence in Education, 1983, p. 2). The NDEA also resulted in a widespread search for talented students, spawning career and guidance counseling initiatives throughout the country.

History of Giftedness, Theories of Intelligence

The historical foundations of gifted education suggest that we as a nation discriminated against intelligence. Even historical geniuses are reported to have suffered at the hands of the educational system. Historically, giftedness has been viewed in a variety of ways, from IQ testing to identifying multiple types of giftedness. As far back as the ancient Greeks, there was gifted education. Tannenbaum (1997) states that in ancient Greece young boys were allowed to participate in a basic curriculum including reading, math, music, gymnastics, drawing, and painting. Those who showed exceptional potential in a specific area were singled out for a specialized education. They were then groomed for future leadership roles. The Greeks, as well as the Romans, believed that highly gifted youth were possessed by divine inspiration and they were given special attention (Persson, Joswig, & Balogh, 1997).

The specialization of education for the brightest permeated throughout history and took on multiple phases. Grinder (1985) divided the historical roots of interest in giftedness into three categories. They were (a) giftedness and divinity, which was pre-Renaissance; (b) giftedness and neuroses, which began with the Renaissance age; and (c) giftedness and mental testing, which covered the early 20th century to the present.

The education of exceptional children for centuries was aimed at benefitting the government and not the individual. In the 16th century, training for the gifted was credited with the success of the establishment of the Ottoman Empire (Kirk & Gallagher, 1979). In the 18th century, Thomas Jefferson called for the state of Virginia to provide public funding for gifted education. His goal was to preserve the new democracy. This funding

reached out to white males in grades one through eight. This spurred a rift that is still present today in general-versus-gifted education debates. Gifted education was seen as being elitist, and the egalitarianism that Jefferson promoted should have meant that all students would receive the same type and level of education (Tomlinson & Callahan, 1992).

Darwin's and Mendel's work in evolution of species led to investigations on the differences in intelligence among people. Galton, Darwin's cousin, focused on investigative procedures and data collection to develop his theory of giftedness as a hereditary factor. Galton's study led to his book, *Hereditary Genius*, in 1869, setting the stage for a modern view and educational involvement. This was the beginning of Rapid Advancement Classes for high achievers in New York City (Freeman, 1991).

The 1900s. With the new century, the 1900s became an era of proliferation of theories on intelligence. Many creative and visionary educators were beginning to emerge and their contributions changed the study of intelligence and gifted education. People such as Spearman, Thorndike, Simon and Binet, Terman, Hollingworth, and Piaget were some of the pioneers. The educational interest in high achievers created a need for a method of identification of intelligence. In 1904, Spearman published his theory of intelligence based on his statistical analysis of specific identifiable factors, thus the formulation of statistical analysis by Spearman leading to the development of intelligence testing (Spearman, 1904, 1927).

Thorndike, a contemporary of Spearman, felt that even though inheritance played a significant role in one's potential for higher intelligence, environmental experience was

the driving force behind intellect. He further theorized that giftedness was multifaceted, distinguishing between abstract intelligence and mechanical intelligence, and social intelligence (Plucker, 2013). Student identification was an international issue and at the same time in France, Binet and Simon (1905) developed a series of intelligence tests. Binet and Simon were the first to use mental age as a measure of intelligence, thus capturing intelligence in a single numerical outcome, resulting in the development of Intelligence Quotient (IQ) testing (Plucker, 2013). In 1916, Terman, noted as the *father of the gifted education movement*, published a revision of the Simon-Binet test as the Stanford-Binet, changing intelligence testing and education in America. These early connections between the concepts of giftedness and intelligence have a direct influence on current interpretation of identification and perceptions of the gifted. Throughout the U.S., states and school districts use above-average general intellectual ability as measured by IQ and achievement tests in identification of gifted assessment (Abeel, Callahan, & Hunsaker, 1994; Coleman & Gallagher, 1995).

Recognition of gifted education as a valid professional field of education began during the 1920s (Van Tassel-Baska, 1991). Terman (1925) was the first to do a longitudinal study, which set the standard for research in the field of gifted education. This was also the era of the progressive education movement led by Dewey and Hollingworth. Both worked to discover the commonalities between general education and gifted education, attempting to bring the study of human intelligence to a more practical level. Dewey, in 1900, advocated for progressive education for all children, complete with an environment that included rigorous content, project work, independent thinking,

self-management, and creativity. Hollingworth during this same time was using these same techniques of teaching in her work with gifted children (Klein, 2002).

Hollingworth was considered the *nurturant mother* of gifted education in the U.S. (Davis & Rimm, 1985). Her focus was on meeting the needs of gifted children. Until this time, educational focus, as with Galton, Binet, and Terman, had been mainly on why children were gifted. Hollingworth spent over 30 years inventing strategies, working directly with students, families, and schools to teach and counsel gifted students (Klein, 2002). The problem of identifying and understanding gifted learners within the context of education was a major focus for Hollingworth. She identified several critical issues needed within education in order to provide for the success of gifted students. She felt acceleration, enrichment, and segregation were at the core of programs for gifted (Klein, 2002). Even after three quarters of a century of research and development, experts affirm the benefits of her results, as is seen by school districts still randomly implementing them (Klein, 2002).

In 1936, Piaget developed his learning theory of adaptation and assimilation. Piaget believed that intelligence was a result of experience (Ormrod, 2003). With this focus on experiential development, Piaget and Hollingworth were foundational in bringing awareness of the involvement of environment in development and learning. They created an educational track toward what would later be crucial to theorists, leading to such educational constructs as individualized instruction in the 1970s and 1980s, and differentiation of learning and curriculum of the 1990s (Davis & Rimm, 2004).

Governmental involvement in supporting globally competitive students was sparked in 1950 with the National Science Foundation Act (NSFA). The NSFA's purpose was to provide funding for research and education in math and sciences to promote the U.S. in the global technological and scientific advancements. In 1957, the Soviet's launching of Sputnik produced a flood of educational reforms. The U.S. began to reexamine the quality of American schooling (Bestor, 1953; Koerner, 1963; Lynd, 1953). The federal government made a major attempt to support gifted education in 1958 with the passage of the NDEA. One of its proposed goals was to provide money for testing in order to "identify students with outstanding aptitudes and ability" (NDEA of 1958, p. 14). Gifted students continued to receive special focus through acceleration. This change in the political atmosphere, created by the advent of the launching of Sputnik and the drive for global competition, motivated important changes which led to more "intellectually challenging education" (Darling-Hammond, 1997, p. 11).

The increased interest during the 1950s also brought about private sector involvement. The National Association for Gifted Children (NAGC) was founded in 1954 to unite all groups interested in working with or supporting the research and development of gifted education. This was the beginning of nonacademic involvement in the field. NAGC has been instrumental in federal and state legislation and funding, setting guidelines for identifying the gifted, promoting research in the field, engaging leading theorists, and developing practical strategies for development of gifted children, supporting and advising families, and providing resources and direction for educators (NAGC, 2008).

Each decade brought changes to the support and view of gifted education. In the 1960s, there was an influx of money and enthusiasm for government funding. Equal opportunities and education for all was again emphasized with the passage of the 1964 Civil Rights Act. This era's social movement of independence was influencing the educational direction toward individualized instruction and student-centered learning (Richards & Esbensen, 1976).

The "elements of complex teaching and learning disappeared once again in the back-to-basics movement of the 1970's" (Darling-Hammond, 1997, p. 69). The Marland report in 1972 created the first official definition of gifted, encouraging schools to broaden their definitions to include academic and intellectual talent. Tannenbaum (1983) stated that the era between Sputnik and the 1970s was "twin peak periods of interest in gifted children" (p. 16).

Borland (1996) referred 1970s and 1980s as "the halcyon years in gifted education" (p. 134). This quiet time in gifted educational development was seeded with establishing programs for the gifted throughout the country; research was delving into the idea of multidimensional intelligence (Gardner, 1983; Sternberg, 1985). Renzulli (1977), Borland (1989), and others were developing program models which linked theory with practice. Researchers were also looking at intellectual and social-emotional development, identifying these as significant issues in the education of gifted student (Betts, 1985).

With the implementation of Public Law 94-142, The Education for All Handicapped Children Act in 1975, Congress "guaranteed a free appropriate public education to each child with special needs" (pp. 2-3). This mandate did not, however,

include children with gifts and talents. This setback was only one of multiple awakenings for gifted education proponents. In order to reaffirm commitment to gifted education, in that same year the federal government established the Office of the Gifted and Talented within the U.S. Department of Education.

Concern for gifted education intensified with the publication of *A Nation at Risk* in 1984. This report addressed the issue of America's brightest students and their "failure to compete with international counterparts" (NAGC, 2008, n.p.). It also provided support for "policies and practices in gifted education, raising academic standards, and promoting appropriate curriculum for gifted learners" (NAGC, 2008, n.p.). This was a wakeup call for the nation, and the 1980s and 1990s saw an increase in legislative commitment to gifted education (U. S. Department of Education, 1983). At this same time, internationally, advocates for gifted education established the World Council for Gifted and Talented Children and the European Council for High Ability (Haensly, 1999). With this global focus on gifted issues, the U.S. felt compelled to make some educational commitments.

In 1988, Congress passed the Jacob Javits Gifted and Talented Students Education Act as part of the reauthorization of the ESEA. The Javits Act is an example of an unfunded mandate, which is focused solely on gifted and talented students. Its main focus is on supporting and coordinating scientifically based research, projects, and strategies in order to enhance schools in meeting the needs of gifted and talented students who are traditionally underrepresented (Jacob K. Javits Gifted and Talented Students Education Act, 1988).

The 1990s were engulfed with multiple movements and theoretical developments in gifted education. Continuing its awareness of the challenges in orchestrating gifted programming for states and districts, the U.S. Department of Education (1993) issued the *National Excellence: A Case for Developing America's Talent*. NAGC identified that this report “outlined how America neglects its most talented youth...and that it also made a number of recommendations influencing research in the field of gifted education” (NAGC, 2008, p. 2). The recommendations covered “challenging curriculum standards, high-level learning opportunities, early childhood access for economically disadvantaged and minority children, teacher training, technical assistance and global competition” (Coleman & Gallagher, 1992, p. 9). Each one was specifically focused on the need of “students performing at the highest levels” (Coleman & Gallagher, 1992, p. 9).

In 1998, NAGC took on the task of publishing *Pre-K to Grade 12 Gifted Programming Standards* “to provide guidance in seven key areas for programs serving gifted and talented students” (NAGC, 2008, pp. 2-3). These were the first structured guidelines for gifted programs and offered states and school districts a road map. In 2010, they were revised, condensing them to six standards, including (a) Learning and Development; (b) Assessment; (c) Curriculum, Planning, and Instruction; (d) Learning Environments; (e) Programming; and (f) Professional Development. The revisions retention of Professional Development was a significant statement to the need for knowledgeable professionals working with and making decisions about gifted education (NAGC, 2008).

In 2002, the NCLB Act was passed to incorporate the program authorized under the Javits Act and establish the offering of competitive statewide grants. The Javits Act, up until 2011 when funding was cut, provided a necessary source of “funding to help reduce gaps in achievement and to encourage the establishment of equal educational opportunities for all students” (NAGC, 2003, n.p.)

On Giftedness

With the new millennium, gifted education still needed to establish itself as a necessary educational entity. *A Nation Deceived: How Schools Hold Back America's Brightest Students (Volumes I and II)* (Colangelo et al., 2001; Colangelo, Assouline, & Gross, 2004), is a “national research-based report on acceleration strategies for advanced learners” (Colangelo et al., 2001, p. 1). The editors of this report state that American society views intelligence and high ability negatively. Contrasting the view of gifted versus athletes, they ask for exactly the same consideration: special equipment, programs, specialized teachers (like the athletic coaches), funding, and support. Volume II speaks of acceleration and the need to not hold students back, stressing the differentiation of learning (Colangelo et al., 2004). With this historical fluctuation of funding and recommendations, as with fluctuation of societal support, educators and administrators may develop mixed feelings about putting resources into gifted education. It is important for them to understand giftedness and the development of gifted learners in order to invest their efforts in gifted educational resources.

There are an array of theories about who is gifted, what should be done in gifted education programs, and the multiple encompassing issues involved with giftedness.

Definitions often flow from beliefs and theories, which then influence what is considered appropriate education environments. The previous discussion focused on the history of gifted education, describing the waxing and waning of support for and the establishment of education for gifted students. Ackerman (1997) stated that “one of the most critical problems in gifted identification stems from confusion in the field about what giftedness is and how it should be defined” (p. 230). Sapon-Shevin (2003) argues “that gifted education as is currently defined and implemented in this country is elitist and meritocratic and constitutes a form of educational triage” (p. 1). She believes there are definitely differences in children, but defining a category and establishing a “cut off” lends itself to ethical and political decisions which are “highly influenced by values; beliefs about children, intelligence, and education; and the cultural and economic context” (Sapon-Shevin, 2003, p. 4). Therefore, within the parameters of defining giftedness is included a compilation of definitions, political issues, student developmental issues, and current program models.

Defining Giftedness

As with children with learning problems, the main purpose for defining giftedness is to offer a guide for identification of individuals in order to provide the least restrictive learning environment for these children. Multiple assessment practices and tools are used, reassessed, and refined in order to encompass the changing ideology, theory, and practice of gifted education.

In 1969, the federal government came out with its first definition of giftedness (U.S. Department of Education, 2002). That same year, Congress ordered a study by the

U.S. Commissioner of Education to assess how and if the needs of gifted children were being met. The results of this study created a document known as the Marland Report (Marland, 1972). The Marland Report includes one of the most commonly adopted definitions of giftedness utilized by most education organizations. The report's definition states,

Gifted and talented children are those identified by professionally qualified persons who, by virtue of outstanding abilities, are capable of high performance. These are children who require differential educational programs and/or services beyond those provided by the regular school program in order to realize their contribution to self and the society. (Marland, 1972, p. 8)

This definition is the foundation of most states, and in turn, local school districts' definitions. Reis and Renzulli (1982) considered the Marland definition limiting, and Feldman (1979) stated that it promoted *elitism*. One of the key and most recent additions to this definition of giftedness is the inclusion of cultural and economic factors, thus addressing the previously limited view that giftedness was linked to the dominant culture (Stephens & Karnes, 2000). It now includes the phrase, "Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor" (U.S. Department of Education, 1993, p. 26).

Asynchronous Development and Defining Gifted

As Hollingworth (1927) noted, in order to provide the best resources for educational enhancement, early identification is crucial. The U.S. Department of Education (1993) added to their definition the *earliest signs of giftedness*. There are 16 observable signs that reflect the various stages of development (Silverman, 1992). The recognition of these signs is critical to early identification.

The Education for Economic Security Act of 1984, which has as its focus to support strengthening the skills of teachers and instruction, defines giftedness as “a student identified by various measures, who demonstrate actual or potential high performance capability in the fields of mathematics, science, foreign languages, or computer learning” (p. 297). This definition limits the identification of students with asynchronous development. Asynchronous development can cause frustration for students due to the discrepancy between their ability and performance. Exacerbating the issue is that some highly able children find it nearly impossible to “conform their thinking to the ways in which others think” (Silverman, 1993, p. 314). This can aggravate or discourage students and can lead to withdrawal, loss of motivation, and lower achievement. Often these students feel that being gifted is a handicap. Researchers report that many gifted adolescents feel stigmatized by their giftedness (Coleman & Cross, 1988). Issues of concern for the development of gifted children are labeling (Kerr, Colangelo, & Gaeth, 1988), stress (Baker, 1996), and social problems (Betts, 1985). Linda Silverman (1993) addressed these issues of psychosocial development with her theory of asynchronous development. This is an uneven development, meaning that “gifted children develop cognitively at a much faster rate than they develop physically and emotionally” (Silverman, 1993, p. 312)

In 1991, the Columbus Group developed a definition of giftedness reflecting Silverman’s concept of asynchrony. It was created in response to the issues around raising gifted children. The Columbus Group asserts that the current definitions of gifted miss the “essence of giftedness and how it alters the meaning of life experience for the

gifted individual” (as cited in Morelock, 1992, p. 19). The Group’s definition combines the asynchronous development with cognitive and talent abilities, but adds,

Heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm. The uniqueness of gifted students renders them particularly vulnerable and requires modifications in parenting, teaching and counseling in order for them to develop optimally. (as cited in Morelock, 1992, p. 20)

With these definitions of asynchronous development and student needs, it is challenging for governmental decision makers to know what and how to support gifted students.

Federal and State Views of Gifted Education: Legislation and Regulations

In order for there to be progress in gifted education there needs to be support at all levels. For school districts to find guidance in decision making, federal and state governments need to provide rules, structure, and funding for resources and programs. There also needs to be support for professional development and specific guidelines on licensing of educators and administrators. The federal government has had a direct hand in the ebb and flow of gifted education. Many of its decisions coincide with educational, political, and economic issues. The foundation of funding is based on the established definitions created by various commissioned reports and studies.

Legislation, regulations, and requirements. Since the 1950s the federal government has played a significant role in services provided for the gifted. With the previously mentioned Educational Acts and the Javits Act, equity of services has been driven by availability of funding. The funding has been sporadic and occasionally limited. These circumstances have guided the appropriation of state money to local districts. This ebb and flow of support gives very mixed messages to administrators about

the importance and validity of gifted programs. The one constant has been the ability of the government to establish a definition which has been adapted by multiple states in one form or another.

State of Minnesota and gifted education. Gifted school children have very

...limited protections under state and federal laws. By contrast, children and adults with disabilities have, under federal statutes have comprehensive protections in the following areas not yet applicable to the gifted: identification for screening and program admission or eligibility purposes, educational or other institutional and related services, employment policies and practices, architectural barriers in and about public buildings and transportation facilities and other civil rights protections. (Karnes & Marquardt, 1997, p. 169)

Therefore, gifted students and gifted programs are not actively or adequately supported.

Each state creates its own gifted policy. In 2006, the Minnesota Department of Education recommended the definition created in the *Minnesota Automated Reporting Student System (MARSS) Manual*. It states,

Gifted and talented children and youth are those students with outstanding abilities, identified at preschool, elementary, and secondary levels...capable of high performance when compared to others of similar age, experience, and environment, and represent the diverse populations of our communities...whose potential requires differentiated and challenging educational programs and /or services beyond those provided in the general school program. Students capable of high performance include those with demonstrated achievement or potential ability in any one or more of the following areas: general intellectual, specific academic subjects, creativity, leadership and visual and performing arts. (Minnesota Department of Education, 2006, p. 33)

In order to support gifted programs, state funding is dictated by legislation. In 2007, the Minnesota K-12 Education Omnibus Finance Bill provided

\$13.8 billion in state spending for the following two years, a \$789 million (6.1%) increase. Gifted and Talented Revenue (Section 7), beginning in FY 2008, increased gifted and talented revenue from \$9 to \$12 times a

district's adjusted marginal cost pupil units (AMCPU). Article, 2, Section 8 includes a provision requiring school districts to adopt policies and procedures for the academic acceleration of gifted and talented students. These procedures are to include an assessment of students' readiness and motivation for acceleration and a match between the curriculum and the students' academic needs. (Minnesota Department of Education, 2007, p. 17)

It is recommended that districts may "implement policies that reflect Gifted and Talented best practices," consistent with Minnesota Statute §120B.15 (Minnesota Department of Education, 2007, p. 1). The wording does not require districts to put a high priority on producing active programs for gifted students.

Licensure. In order to provide for best practices in gifted education programs, administrators' decisions need to be grounded in knowledge, understanding, and experience. Until 2007 the state of Minnesota and the Minnesota Department of Education did not provide for specific requirements in gifted education for administrators. In order to guarantee consistency of knowledge of giftedness and gifted education, H.F. 810 was ratified in May of 2008. This bill "establishes licensure and continuing education requirements for teachers and school administrators working with gifted and talented students" and programs (Minnesota State House of Representatives, 2008, p. 2). It specifically refers to the preparation programs for principals and superintendents, requiring that "all programs must incorporate a gifted and talented competency into the knowledge, skills, and abilities required for licensure" (Minnesota State House of Representatives, 2008, p. 2).

Foundations of Beliefs and Attitudes

Attitudes about gifted education and programs have a significant historical foundation as is noted in a previous section. From the earliest history to the present, the love-hate relationship with gifted education reflects a pattern of continual flux. Albert (1969) refers to early attitudes as exemplified by pity and neglect. Eventually, awareness of diversity of learners began to change and developed more positively toward gifted students (Kirk, 1962). This instability is reflected in the revering of giftedness and talent (as seen with the ancient Greeks) to the contemporary concerns about equality and the promotion of elitism. Gallagher (1979) sees this multidirectional affair as the “battle between an aristocratic elite and our concomitant belief in egalitarianism” (p. 44). Tannenbaum (1983) sees the development of gifted education from 1950 to the 1970s as two *peak periods* with a disproportionate valley between, in which attention was focused on disadvantaged and handicapped, neglecting gifted education. During this era of equal and civil rights, President Lyndon Johnson’s *Great Society* encouraged a resurgence of the elitist view of gifted education. Tannenbaum (1983) states, “The cyclical nature of interest in the gifted is probably unique in American education. No other special group of children has been alternately embraced and repelled with so much vigor by educators and laypersons alike” (p. 57).

This emotionally charged interest in giftedness that has existed throughout history reflects attitudes of confusion and more commonly, ambivalence (Gallagher & Gallagher, 1994). Sapon-Shevin (1980) states that

some opponents of gifted education have seen it as politically incorrect to expect something special for children who already seem “over-blessed.”

Others contend that by creating and funding gifted programs, schools engage in a form of “educational triage,” providing high quality education to an elite minority. (p. 1)

The foundation of responses to gifted education is more often than not grounded in perceptions and beliefs. Beliefs are described as the process of our thoughts and experience with or about an object or event/issue. Beliefs are a factor in forming attitudes. Attitudes are formed through a process of affect, behavioral change, and cognition. Beliefs are a foundational part of perception and cognition (Wood et al., 2002). McCright and Dunlap (2003) identified three moderators of belief: “political or psychic involvement (how emotionally or politically involved), educational attainment (belief consistency with highly educated), and issue salience or centrality (how important or prominent the issue is)” (p.351). How giftedness within a district is defined is directly influenced by an administrator’s beliefs which form his/her attitudes. The attitudes are directly affected by federal and state legislation and policy, general and gifted education research, school and public opinion, accurate personal knowledge of and involvement in the issues, and level of educational attainment and personal experience and perceptions.

Beliefs are crucial to the success of gifted education. Research shows that “success is often hinging on the shared vision, logical and appropriate procedures, adequate funding, and a common belief that the chosen goal is a proper one” (Deal & Peterson, 1999). Administrators hold beliefs about the concept of giftedness and what programming is the best fit for students and the district (McCoach & Siegle, 2005). Lack of consistency in beliefs between participants (administrators, regular classroom, and gifted teachers) can ultimately have very negative consequences on the outcome of a

program even before implementation (Callahan & Caldwell, 2003). Although there are many and varied explanations for how attitudes are formed, those reflecting a social-cognitive point of view are most relevant to this discussion. Bandura (1977) emphasized that most of the information we gain comes from our interactions with other people. It is believed that faulty cognition can develop from inaccurate perceptions, overgeneralizations, or incomplete or erroneous information (Hergenhahn & Olson, 1993).

The attitudes of administrators have an effect on the opportunities for gifted within their district. As Ormrod's (2003) social cognitive theory inferred, administrators implicitly and explicitly affect their districts' availability of gifted resources through their behaviors and attitudes. Administrators model support (or lack of) for gifted education programs, provide (or not) financial support, offer facility recommendations, and staff development. Administrators recognize (or not) staff who provide modeling and positive environments for gifted students within schools.

Research on administrators' perceptions of giftedness and gifted programs is very limited. Most of the research that is available centers on teachers' perceptions of gifted students and programs. Melcher (1972), in reference to the knowledge of a decision maker, stated that programs could not succeed if the most immediate educational leaders were uninformed and unknowledgeable. Guerin and Szatlocky's (1974) study corroborated Melcher's (1972) conclusions, stating that teachers' and administrators' attitudes are critical factors for program creation and success. Whitmore's (1980)

findings concurred that there was significance in administrative support and positive attitudes on the success of positive implementation of a program.

An administrator's attitudes and underlying beliefs about gifted education and its necessity and use within the district are reflected throughout the educational community. DeHaan and Havighurst (1978) concluded that educators of the gifted must be flexible, creative, possess high standards, and have a high degree of concern for the gifted and talented. Looking at variables related to attitudes toward gifted education, Nicely, Small, and Furman (1980) concluded that the more educators know and understand the gifted program, the more positive their attitudes will be toward gifted education. Because of the importance of knowledge and positive attitudes toward giftedness, it is recommended that educators examine their personal attitudes and beliefs of educating this diverse group of students.

Renzulli, Gallagher, Van-Tassel, and Colangelo (among others) have voiced concern about the function of a school and its relationship to gifted programming. They all felt that gifted programming was not a consistent and integral part of the whole school, but rather was *tacked on*. Dettmer (1984) wrote that the relationship between all players (regular classroom teacher, administrators, and gifted program teachers) was important in determining the effectiveness of a school.

Stereotypes and Misconceptions of Giftedness

Stereotyping, as described by Lippmann (1922), is when "people create simplified pictures of what they believe to be true and act in accordance with these imagined beliefs, referring to stereotypes as *pictures in our heads*" (p. 213). Categorization and association

are two fundamental concepts involved in stereotyping. “Stereotypes are beliefs about the characteristics of groups of individuals” (Stangor, 2000, p. 1). The stereotyping process as delineated by Hinton (2000) identifies three stages. The first stage is identifying and separating a group based on specific characteristics. Second is the “attribution of additional characteristics to the group” as a whole, even though all may not hold the characteristics (Hinton, 2000, pp. 7-8). The third stage is to apply the generalized stereotype or characteristic to a person because of group membership.

In order for students to receive services at all in our educational systems, they must meet criteria which single them out and attach labels that will remain with them throughout their schooling. Hobbs (1975) stated that the dilemma concerning labeling of children means students are strongly connected with that characterization. “Stereotypic attitudes and beliefs associated with the label can be falsely attributed to each labeled student. This in turn, shapes the way others interact with the student and influences that student’s self-perceptions” (Hobbs, 1975, p. 27). The negative results of labeling are seen when “youngsters are labeled as above-average,” which does not assure acceptance, and often the society, districts, teachers, and peers treat them with disdain or ambivalence (Robinson, 1986, p. 104).

“Myths evolve from some set of beliefs or some interpretation of unexplainable phenomena” (Callahan, 1982, p. 17). Callahan further notes the myth of gifted programming as being a *win or lose* situation. The inclusion of certain children into a gifted program, based on pre-assigned identification methods, seems to be an *all or nothing* approach. Children not chosen (and their families) may feel inadequate, left out

or excluded, and disappointed because they have somehow not met expectations. “These perceptions and feelings (whether justified or not) certainly contribute to the negative charges that gifted programs are elitist and exclusive” (Callahan, 2004, p. 1). Rocamora (1992) states that the general public feels that gifted is an elitist term and that “all children are gifted in some way” (p. 75). She adds that self-limiting beliefs, persistent fears, and oversocialization are some of the psychological issues of giftedness. These issues are exacerbated by misconceptions about these children. Others agree that the effects of myths and the personal beliefs of administrators often drives funding and policy support. Berger (2006) identified 14 common myths and eight contrasting truths about gifted students that administrators and school personnel need to reflect upon to clarify what is misconception and what is knowledge of theory and practice. Berger’s (2006) *myths* included homogeneity of gifted as a group, that all are high achievers who are self-reliant with a positive future full of opportunities and that their social/emotional development matches their intelligence. In contrast, Berger’s (2006) *truths* state that gifted are perfectionists who may have fear of failure, they may have heightened sense of expectations resulting in guilt over achievements, and they have asynchronous development.

Education of the Gifted

The federal government, under SEC 5464 of the Javits Education Act (2001), Authorized Programs section, states that the Secretary is

authorized to make grants to, or enter into contracts with, state educational agencies,...to assist such agencies...in carrying out programs or projects...designed to meet the educational needs of gifted and talented students, including the training of personnel...services, materials.... (n.p.)

The belief that “all children can and should learn is, in essence, at the heart of alternative assessment as an educational movement, and a number of scholars have looked at ways in which this philosophical position can be translated into classroom practice” (Cushner, McClelland, & Safford, 2008, p. 47). This statement is not disputed by theorists, administrators, or practitioners. It is, however, at the crux of the controversial discussions on exactly how to go about achieving this goal.

In *Gifted Children Growing Up*, Freeman (1991) shared the insights of adult gifted and their experiences as gifted in a non-gifted environment, including “boredom, lack of striving and diminished coping resulting in a habitual way of behaving in school” (p. 56). It is crucial to provide appropriate and well supported opportunities for all gifted children, knowing that the way they deal with information is significantly different than with the average learner. It is critical that administrators are aware of gifted education methods and recommended avenues. The implementation of programs to accommodate the diverse abilities of gifted students is important in supporting their development and their right to have equal learning opportunities. When a school district is making the decisions about gifted education, the decision makers need to understand the basic components of giftedness and program selection. Morgan, Tennant, and Gold (1980) point out that an effective program “is part of the mainstream of education and doesn’t rise and fall with public opinions” (p. 2). Tannenbaum (1983) states the need to distinguish between programs and provisions. Morgan et al. (1980) reported that “provisions are fragmentary, unarticulated and temporary activities which are neither

followed up in any meaningful way nor preceded by any meaningful lead-in activity” (p. 2). These provisions often are the first to be eliminated when budget cuts are made.

Borland (1989) described eight components for developing a program for gifted students. These components are “needs assessment; definition of the target population; identification procedures; program goals; program organization and format; staff selection (and development); curricular objectives and development, and program evaluation” (Borland, 1989, p. 21). Van Tassel-Baska (2003) devised a list of *ten things all administrators should know about gifted children*. Within this list she draws upon the expertise and consensus of multiple experts in the field, who agree that there is an array of inaccurate information and bias among educators on giftedness and gifted students. Some of the statements speak directly to the myths and stereotypes held by administrators, such as (a) gifted students are not all alike; (b) they benefit from peer interaction; (c) they need a variety of accommodations throughout their schooling (including but not limited to acceleration and advance placement); (d) gifted need personnel trained in gifted education; (e) they may need special classes, appropriate level work, flexible scheduling, and/or differentiated staffing; (f) due to their psychosocial development they need counseling to meet their affective characteristics; and (g) most gifted are emotionally and socially healthy (Clasen & Clasen, 2003; Colangelo, 2003; Feldhusen, 2003; Renzulli & Reis, 2003; Robinson, 2002; Silverman, 1993; Van Tassel-Baska, 2003).

Models of Gifted Education

There are multiple strategies and methodologies in educating the gifted. Many well-known gifted theorists and educators have provided educational models operationalizing their theories. Robert Sternberg's *triarchic model* (TM) is based upon a broad conception of intelligence and the interaction and use of three elements: (a) the *individual's internal world*, (b) the *individual's experiences*, and (c) the *external world of the individual* (Sternberg, 1999, 2000). Thus, the interaction of the three components creates giftedness as defined by different cultures (Sternberg, 2000). He feels that this model should not be based on test scores and envisions intelligence as "accounting for the bases of success in all of one's life" (Sternberg, 2003, p. 88). Sternberg sees intelligence as a balancing of several factors including *analytical, creative, and practical abilities*. (Sternberg, 2002, 2003).

Renzulli (1999) identified two types of giftedness: (a) *school house giftedness*, which is highly valued in educational settings; and (b) *creative product giftedness*, which is based on "original ideas, products, artistic expression, and areas of knowledge that are purposefully designed to have an impact on one or more target audiences" (p. 3). He supports the use of multiple approaches in education and the identification of multiple types of giftedness. Renzulli (1999) believes that the IQ test is not the only guiding force in programming.

Talent search is a program model that suggests in order to capture the best opportunity for learning for some highly gifted students, it is important to utilize diagnostic testing and linking the results to a very specifically tailored instructional plan.

This method focuses on the *radical* acceleration of students (Brody & Stanley, 2005; Stanley, 1980). This program promotes early admission to college or advanced professional schools for certain students, and is intended to provide benefits nationally and individually (Stanley & Benbow, 1982).

The *schoolwide enrichment model* (SEM) is considered as inclusion. SEM's goal is to promote "both challenging and enjoyable high-end learning across a wide range of school types, levels, and demographic differences" (Renzulli & Reis, 2003, p. 184). It was created to benefit the total school. Although this method is mindful of and responsive to the needs of gifted learners, it emphasizes the right of *all* students to have access to very high quality curriculum (Tomlinson et al., 2002).

The *layered approach to differentiated curriculum* (Layered Curriculum) proponents believe that the needs of the gifted learner can be addressed in the regular classroom. Careful monitoring of gifted learners' time in the regular classroom is important. The goal is to focus on a strong core curriculum and differentiation, as required by student need, theoretically encompassing virtually all students within its scope. Its foundational beliefs are that (a) gifted students should not be exempt from basic regular curriculum, (b) one curricular design will fit students' diverse needs, (c) alternative pathways for learning with flexibility for teacher and learner are important, and finally, (d) SEM structure provides the teacher options for responding to groups and individuals (Kaplan, 2005).

Gardner's (1993) *multiple-intelligence theory* (MI) eschews the notion that early intelligence theory is limited and therefore has identified nine additional types of

intelligence: “verbal/linguistic, logical/mathematical, spatial, musical, bodily/kinesthetic, interpersonal, intrapersonal, naturalistic, and existential” (Ramos-Ford & Gardner, 1997, p. 58). The theory draws a distinction between interests and abilities. For example, a student may have a strong interest in literature but that does not necessarily translate into verbal/linguistic intelligence. Gardner (1993) states that students’ intelligences are apt to change, and instruction provided by teachers will often affect the intelligences over time if not change them entirely. Therefore, identification of intelligence and consistency in developing them are crucial.

Summary

The literature reviewed indicated that identification and education of gifted students dates back centuries. The historical foundations show that support for gifted education is directly affected by political and economic influences. The attitudes and beliefs of administrators toward gifted and talented education has been shown to be significant to the success of gifted programs. Several program types are available. The literature reviewed theoretical concepts and definitions of giftedness as well as the stereotypes, myths, and misconceptions commonly shared by society and educators. The literature review concludes that administrators need to have knowledge of gifted theory, practice, and concepts, and to be cognizant of their beliefs and attitudes toward the gifted. They need to know that these all directly affect the decisions they make about gifted programming and the educational experiences of a diverse learning population.

CHAPTER 3. METHODOLOGY

Introduction

Although multiple studies have addressed predictors of attitudes toward gifted and education of the gifted, many have focused only on teachers and parents. Few studies have attempted to describe the opinions of administrators who determine the financial and curricular directives of programs for the gifted. Up to 50 variables have been examined as potential predictors, and descriptive synthesis of these variables seems to be the best approach in extracting observable relationships of variables.

Research Questions

This research is divided into two components: attitudes and the predictors of attitudes of Minnesota superintendents toward gifted students and gifted education. The first part addresses the attitudes of superintendents in relationship to multiple variables. Second, the survey assesses the factors or predictors which might have an impact on superintendents' attitudes toward gifted. The research is driven by the following questions:

1. What attitudes about intellectually gifted students and education are held by Minnesota superintendents?
2. What factors (Minnesota superintendents' training and experience about gifted education, superintendents' demographic background, and school environment) have an impact on their attitudes toward gifted students and education?

Instrumentation

Superintendents' attitudes toward the gifted and gifted education were measured using a revision of Gagné and Nadeau's (Gagné, 1991) *Opinions About the Gifted and Their Education Survey* instrument (see Appendix A). The survey used in this study was revised in 2005 by McCoach and Siegle. The adaptation of the original survey included the addition of *self-perceptions as gifted* questions. There was an information cover letter stating that participation in the survey constituted consent (see Appendix B). The survey included directions on the response choices and the questions were listed on two pages with check boxes for the Likert-like 1-7 answers. The answers ranged from *strongly agree* to *neither agree nor disagree* to *strongly disagree*. The original instrument by Gagné and Nadeau was designed to measure the direction (positive, negative, or ambivalent) and intensity (strong or weak) of participants' attitudes toward gifted children and their education. Its formation consisted of combining two parallel forms (A and B). These forms contained a total of a 90-item pool, with 30 items common to both scales and used a 5-point Likert-like scale (*strongly disagree* to *strongly agree*). Comparison, homogeneity, and factor analyses were performed. Six factors emerged from a double factor analysis. The results of this factor analysis produced a 34-item scale categorized into six subscales and measuring six subscales reflecting participants' attitudes toward gifted and gifted education. Gagné and Nadeau's six sub-scales are (a) *needs and support* – needs of gifted children and support for special services; (b) *resistance to objectives* – objections to special services for gifted students based on beliefs and priorities; (c) *social value* – social usefulness of gifted persons in society;

(d) *rejection* – rejection of gifted persons by others in the immediate environment;
 (e) *ability grouping* – attitudes toward special homogeneous groups, classes and schools;
 and (f) *school acceleration* – attitudes toward acceleration procedures in schools (Gagné, 1991). Multiple demographic questions provide participant background information with a range of response. Responses include a number of items such as (a) number of years as a superintendent, (b) population of school district, (c) age, (d) gender, and (e) whether the district has a gifted program.

This instrument was revised by McCoach and Siegle in 2005 to address the predictors of teachers' attitudes toward gifted students and gifted education. The revised form identified three subscales, including *support*, *elitism*, and *school acceleration*. An additional 5-item scale was created to measure participants' *self-perceptions as gifted*. This self-perception category was added to indicate if respondents perceived themselves as gifted. Cronbach's alpha reliability was conducted on each of McCoach and Siegle's subscales using a random sample of 1,500 teachers nationwide. The subscales assess the various education and student needs issues related to gifted education.

The subscale, *support*, looks at perceptions toward gifted children's need for special services. High scores on the seven items in this factor indicate support for special services for gifted children and has a Cronbach's reliability of .80 in the McCoach and Siegle's study. The *elitism* subscale assesses respondents' concerns about elitism and the perceived privileged status that the gifted have in schools and society at large. High scores on this subscale indicate more negative attitudes toward the gifted. There are six items in the *elitism* factor and it has a Cronbach's alpha of .80. The *school acceleration* subscale addresses attitudes toward the practice of acceleration of gifted students. High scores indicate negative attitudes toward acceleration of the gifted. This sub-scale has a Cronbach's alpha of .70. Cronbach's alpha reliability of the *self-perception as gifted* subscale was .94. (McCoach & Siegle, 2008, p. 4)

Participants

Invitations to participate were sent to 336 Minnesota public school district superintendents; 116 responded (34.5%). Generalizability of population samples for online surveys is estimated at 10-25% (Sauermann & Roach, 2012). Therefore, a return rate of 34.5% was a substantial response rate for generalizability. The sampling design was a single stage procedure to obtain a direct sample at one point in time (Creswell, 2003). Superintendents were identified through the Minnesota Department of Education directory.

A website link to the survey was emailed statewide to 336 Minnesota public school superintendents. Introductory emails were sent introducing the researcher, purpose, and an internet link to the survey. The introductory email was sent three times as a reminder to participate in the survey. Following the provided link and completing the survey was identified as consent.

Table 1 describes the frequency of the demographics of the respondents. Of the respondents, 86 were male/29 female; years of position >10 = 50, <10 years = 60 as years as superintendents; 22.6% of superintendents reported that their districts did not provide gifted programming. The responses indicated a moderate level of exposure to gifted training and coursework with 37.8% of the sample reported taking courses in gifted education, 57.9% reported attending at least one conference on gifted education, and approximately 8.4% reported having held a position as a teacher of the gifted at some point during their careers. However, one (.8%) of the respondents reported having a

degree or certification in gifted education. In total, just over half of the respondents reported having some training or experience in gifted education.

Table 1

Frequency of Demographic and School Environment Variables

	Variable	n (total 116)	percent
1. Participants' Demographics			
<i>Gender</i>	Male	85	74.6
	Female	29	25.4
	No Response	2	
<i>Ethnicity</i>	White	115	100.0
	No Response	1	
<i>Degree (all that apply)</i>	BA	41	35.3
	MA	56	48.3
	Advanced (Ed.S., CAGS)	68	58.6
	Ph.D. or Ed.D.	35	30.2
	No Response	1	0.9
<i>Years in the position</i>	1	10	9.0
	2	5	4.5
	3	4	3.6
	4	11	9.9
	5	11	9.9
	6	4	3.6
	7	8	7.2
	8	5	4.5
	9	2	1.8
	10 or more	51	45.9
	No Response	5	
2. School Environment			
District has gifted program	Yes	87	76.3
	No	27	23.7
	No Response	2	
Student population	Up to 499	28	24.1
	500-999	22	19.0
	1000-1999	30	25.9
	2000-2999	14	12.1
	3000-4999	11	9.5
	5000-9999	9	7.8
	10,000-19,999	1	0.9
	20,000-39,999	1	0.9
	40,000-59,000	0	0.0
	60,000-100,000	0	0.0
	100,001 and above	0	0.0

Research Methodology

A descriptive method was utilized for this study. The approach reflects prior studies about the predictors of people's attitudes toward the education of the gifted (Bransky, 1987; Brown, 1974; Ferrante, 1983; Gallagher & Weiss, 1979; Griffin, 1984; Malik, Yasin, & Shahzadi, 2013; Mills & Berry, 1973). Both descriptive and inferential statistics were performed. The purpose of using survey research and explanatory design "is to describe, explain or explore phenomenon" (Babbie, 1979, p. 32). The advantage to survey design allows the researcher to "identify attributes of a large population from a small group of individuals" (Babbie, 1990, p. 3). A quantitative study of Minnesota superintendents was performed using a descriptive design. The data were collected in the form of a self-administered questionnaire using Survey Monkey as the host site.

Quantitative Data Collection

The survey was done in a straight survey design. Three invitational emails were sent with the link directly to the Survey Monkey survey. Emails were group generated and sent to all 336 Minnesota public school superintendents. At the end of the email information was provided for anyone wanting further information or to have access to the results when completed. No identifiers were used on collection of data as to keep the survey responses anonymous. The survey itself took approximately 15 minutes to complete and a thank you message was provided upon completion of the survey. A follow-up email was generated to remind superintendents to participate in the survey if they had not already done so. The results were available to the researcher in raw data form from the survey, or offered with a variety of exportable methods including Excel.

Research Design

A survey design, using the 7-point Likert-like scaled survey *Opinions About the Gifted and Their Education* as revised by McCoach and Siegle (2005), was used. The survey included 14 demographic questions which provided a richer understanding of the participants. Survey Monkey was selected as the site for survey link, data collection, and exportation of data into Excel in order to perform Statistical Package for the Social Sciences version 21.0 (SPSS) analysis. Survey Monkey utilizes Secure Sockets Layer (SSL) to protect information with server authentication and data encryption. It is compliant with the Security Standards Council PCI Data Security Standard (PCI DSS). Data are stored in a Service Organization Control 2 (SOC) Type II audited facility. Network security consists of firewall restricting “access to all ports except 80 (http) and 443 (https), intrusion detection systems and other systems” detecting and preventing “interference or access from outside intruders, QualysGuard network security audits were performed weekly, McAfee SECURE scans performed” daily (Survey Monkey, 2013, p. 1). As for storage security, all data are “stored on servers in the U.S., backups occur hourly and daily to a centralized backup system for offsite storage and all backups are encrypted, data is stored on RAID 10 array,” and operating system is “stored on RAID 1 array” (Survey Monkey, 2013, p. 1).

Validity and Reliability

Reliability in this instance emphasizes the design components that enable others to discover similar phenomena or extend the findings to similar situations (Lin, Gorrell, & Silvern, 2001). Reliability of Gagné and Nadeau’s subscales reproduced similar results

in each of its two forms 3.42 (SD = .51) and 3.41 (SD = .50). Since its design, multiple studies have added to support its validity and reliability (Brousseau, Book, & Byer, 1988; Skabe, 1996; Tirri & Tallent-Runnels, 1998). It has been established as a competent tool to “identify a broad spectrum of attitudes and beliefs that teachers have about giftedness, gifted students and their education. It is an invaluable aide in identifying personal perspectives on giftedness” (Skabe, 1996, p. 8).

Data Analysis

Survey Monkey reports were downloaded to Microsoft Excel for review and assessment. The reports listed raw responses, frequency and percentages. Personal information was not identifiable from the survey collection data. Any sensitive material was saved in an encrypted format.

Ethical Considerations

In consideration of providing ethical treatment of the participants of this research, confidentiality of identifiers and responses were protected. In the introductory email the purpose of the participation in the survey was spelled out as a doctoral research project and that participants and their responses would be unidentifiable.

Upon linking to the online survey, page one was a consent form. Again, an introduction to the researcher, the study, and the supporting advisor were given. Procedures explained any foreseen risks and benefits, confidentiality of storage and retention of records, and the volunteer nature of the study. Consent was requested with a check box, and upon compliance the survey opened. If consent was not given, the survey remained locked.

Summary

This chapter described the descriptive and inferential statistical methodology that was used to address the research questions. Description of participant selection and introduction to the study was discussed. The instrument formation, revisions, and research design were described as well as the validity and reliability of the survey used. The data were collected using Survey Monkey downloaded into Excel, and descriptive analysis was performed on attitudes and experience with gifted students and gifted education and training.

CHAPTER 4. RESULTS

Introduction

The purpose of this study was to identify the attitudes and beliefs that comprise the picture of intellectually gifted students as held by superintendents. The following questions guide this study:

1. What attitudes about intellectually gifted students and education are as held by Minnesota superintendents?
2. What factors (Minnesota superintendents' training and experience about gifted education, superintendents' demographic background, and school environment) have an impact on their attitudes toward gifted students and education?

The remainder of this chapter will describe the data results collected through the survey, and will be organized according to the research questions.

Minnesota Superintendents' Attitudes Toward Gifted Education

Of the 336 surveys that were created in Survey Monkey and successfully sent to superintendent email addresses, 116 superintendents actually answered portions of the questions, resulting in response rate of 34.5%. Since the consent form approved by the Institutional Review Board allowed participants to not answer any question, the number of respondents varied by questions. Data files of the responses were exported to Excel and SPSS for analyses.

Table 2 presents the descriptive statistics regarding superintendents' attitudes toward gifted education. The superintendents were mostly supportive of gifted education.

On the 7-point scale with 4 being neutral, the mean of the *Support* factor was 5.39, indicating moderate support of gifted education. This was the highest of all the subscale means, indicating the superintendents were supportive of gifted education. The *Elitism* scale generated a response of 3.50, indicating slight disagreement with the concept that gifted education is elitist. In other words, since the higher scores on this scale indicated more agreement with the negative concept that gifted education is elitist, the mean of 3.50, which is the 0.50 below the midpoint 4 on the 7-point scale, indicates disagreement with the concept of elitism. Superintendents' attitudes toward *Acceleration* were neutral or less strong. This mean was 4.31 on the scale in which the higher scores indicate more agreement with the negative concept of acceleration. Superintendents neither agree nor disagree that acceleration is a negative component in gifted education. Last, the *Gifted Self-Perceptions* subscale mean was 3.65, indicating that superintendents did not perceive themselves as gifted.

Table 2

Means and Standard Deviations for Scores on the Attitude Toward Gifted Education Scale

Subscale* ^a	n	M	SD	Range	
				Potential	Actual
Support	115	5.39	0.89	1-7	2.4-7.0
Elitism	116	3.50* ^b	1.14	1-7	1.0-6.5
Acceleration	116	4.31* ^b	1.06	1-7	1.5-6.5
Self-perceptions	115	3.65	1.52	1-7	1.0-6.8

Note. *^a Higher scores indicate more agreement.

*^b Higher scores indicate more negative attitude in terms of gifted education being elitism and acceleration.

Because the previous research analyzed these data dividing the responses either below the midpoint (which is 4) or above the midpoint, the results of this study also were analyzed in the same way. In the *Support* scale, the proportion of responses 4 or below was 7.8%, and that of above 4, which is interpreted as positive, was 92.2%. In the *Elitism* scale, the proportion of responses 4 or below, which is interpreted as positive, was 67.2%, and that of above 4 was 32.8%. In the *Acceleration* scale, the proportion of responses 4 or below, which is interpreted as positive, was 38.8%, and that of above 4 was 61.2%. In the *Gifted Self-Perceptions* scale, the proportion of responses 4 or below was 67.0%, and that of above 4, which is interpreted positive, was 33.0%.

Table 3

Correlations Between the Subscales

Subscale	Support	Elitism	Acceleration	Self-perceptions
Support (positive)	1.00			
Elitism (negative)	-0.46* *	1.00		
Acceleration (negative)	-0.27**	0.38**	1.00	
Self-perceptions	0.23 *	-0.11	-0.05	1.00

Note. ** $p < .01$ (two-tailed).

The correlations between the four subscales are contained in Table 3. The correlations between the *Gifted Self-perceptions* scale and two attitudinal subscales (*Elitism* and *Acceleration*) were near 0 and nonsignificant. For this reason, in subsequent analyses, a multivariate analysis of variance (MANOVA) was run only for the three

correlated subscales, and univariate analysis of variance (ANOVA) for the *Gifted Self-perceptions* scale.

Table 4 displays means of all 20 items of the scale. The most positive response was from the *Support* subscale, item 5, “All special programs for the gifted should be abolished (Reverse scored)” (strong disagreement shown as $M = 6.16$ on a 7-point scale), followed by item 1, “Our schools should offer special education services for the gifted (strong agreement shown as $M = 5.37$).” The most negative response was from *Acceleration*, item 13, “Children who skip a grade are usually pressured to do so by their parents” (slight agreement shown as $M = 4.95$). Table 4 also reports Cronbach’s alpha reliabilities for the subscales; the internal consistency reliability for *Support* was .74, *Elitism* .85, *Acceleration* .75, and *Gifted Self-perceptions* .95, which were similar to those from McCoach and Siegle (2008).

Factors Affecting the Superintendents’ Attitudes Toward Gifted Education

The factors consisted of two categories: (a) training and experience in gifted education (courses, conferences, degree, and position as a special education teacher); and (b) the demographics of school and superintendent (gender, years in the superintendent position, whether the school district has a gifted program, student population). To compare, dichotomous variables were created: training variables (yes vs. no), gender (male vs. female), years in a superintendent position (less than 10 vs. 10 or longer), a gifted program (yes vs. no), and population (less than 2,000 vs. 2,000 or larger).

Table 4

Means for Scores of Each Item in a 7-point Rating Scale

	Item	M
Subscale 1. <i>Support</i> ($\alpha = .74$)		
1	Our schools should offer special education services for the gifted.	5.37
2	The gifted need special attention to fully develop their talents.	5.09
3	Taxpayers should not have to pay for special education for the minority of children who are gifted. (Reverse scored)	5.30
4	Since we invest supplementary funds for funds for children with difficulties, we should do the same for the gifted.	5.11
5	All special programs for the gifted should be abolished. (Reverse scored)	6.16
Subscale 2. <i>Elitism*</i> ($\alpha = .85$)		
6	Special programs for gifted children have the drawback of creating elitism.	4.05
7	Special educational services for the gifted children are a mark of privilege.	3.04
8	When the gifted are put in special classes, the other children feel devalued.	3.53
9	By separating students into gifted and other groups, we increase the labeling of children as strong-weak, good-less good, etc.	4.28
10	The gifted are already favored in our schools.	3.27
11	Gifted children might become vain or egotistical if they are given special attention.	2.83
Subscale 3. <i>Acceleration*</i> ($\alpha = .75$)		
12	Most gifted children who skip a grade have difficulties in their social adjustment to a group of older students.	4.27
13	Children who skip a grade are usually pressured to do so by their parents.	4.95
14	When skipping a grade, gifted students miss important ideas. (They have holes in their knowledge.)	3.43
15	A greater number of gifted children should be allowed to skip a grade. (Reverse scored)	4.59
Subscale 4. <i>Self-perceptions</i> ($\alpha = .95$)		
16	I was or could have been in a gifted program in school.	3.78
17	Most of my family and friends consider me gifted.	3.69
18	I am gifted.	3.60
19	Most of my family and friends are gifted.	3.44
20	People consider me gifted.	3.73

Note. *Higher scores indicate more negative attitude in *Elitism* and *Acceleration* subscale.

Impact of Training and Experience

In examining the impact of training, four areas of training or experience were identified. Superintendents reported if they had ever (a) taken any courses in gifted education, (b) attended conferences on gifted education, (c) been certified or had a degree in gifted education, or (d) held a position as a gifted education teacher.

Table 5 presents results of the impact of four different training and experiences. Taking a course had significant impact on the superintendents' attitudes toward gifted education; superintendents who have taken courses in gifted education showed more positive attitudes toward gifted education (*Wilk's Lambda*, $F = 3.94$, $p < .01$). Specifically, superintendents who have taken courses in gifted education expressed more positive attitudes toward *Acceleration* for academically gifted students ($n = 45$, $M = 3.92$, $SD = 1.13$) than those who have not taken the courses ($n = 68$, $M = 4.58$, $SD = 0.91$). Again, attending conferences had significant impact on the superintendents' attitudes toward gifted education; superintendents who have attended conferences showed more positive attitudes toward gifted education (*Wilk's Lambda*, $F = 3.00$, $p < .05$). Specifically, they showed more *Support* ($M = 5.52$ vs. $M = 5.17$, $p < .05$), more positive attitudes toward *Acceleration* for academically gifted students ($M = 3.27$ vs. $M = 3.83$, $p < .01$), and less negative attitude toward gifted education as *Elitism* ($M = 4.16$ vs. $M = 4.56$, $p < .05$) than those who have not attended conference. However, holding a position as a special education teacher had no significant impact on the superintendents' attitudes toward gifted education (*Wilk's Lambda*, $F = 0.35$, not significant).

Table 5

Mean Differences in Attitude by Superintendents' Training or Experience

Variable	Subscale	M	SD	M	SD	F	
Courses		Yes (n=45)		No (n=68)			
		Multivariate, Wilk's Lambda for 1, 2, & 3				3.94**	
		1. Support	5.44	1.03	5.35	0.80	0.26
		2. Elitism	3.33	1.24	3.62	1.03	1.75
		3. Acceleration	3.92	1.13	4.58	0.91	11.68**
	Self-perceptions	3.90	1.44	3.53	1.55	1.62	
Conferences		Yes (n=69)		No (n=43)			
		Multivariate, Wilk's Lambda for 1, 2, & 3				3.00*	
		1. Support	5.52	0.91	5.17	0.85	4.13*
		2. Elitism	3.27	1.17	3.83	0.92	7.19**
		3. Acceleration	4.16	1.12	4.56	0.90	3.93*
	Self-perceptions	3.88	1.53	3.34	1.46	3.44	
Degree/Certification		n/a ^a					
Position as a special ed teacher		Yes (n = 10)		No (n = 103)			
		Multivariate, Wilk's Lambda for 1, 2, & 3				0.35	
		1. Support	5.20	1.29	5.41	0.85	0.48
		2. Elitism	3.48	1.06	3.54	1.15	0.02
		3. Acceleration	4.20	1.12	4.36	1.04	0.22
	Self-perceptions	3.86	1.53	3.66	1.52	0.16	

Note. *p<.05, ** p<.01, n/a^an=1 for Yes, so analysis was not applicable.

Impact of Demographics and School Environment

In examining the impact of demographics and school environment, the frequency of those variables were calculated. Among those, four areas were identified for group comparison: gender (male vs. female), years in a superintendent position (less than 10 vs. 10 or longer), a gifted program (yes vs. no), and population (less than 2,000 vs. 2,000 or larger). Table 6 presents results of the comparisons. None of these variables had an impact on the superintendents' attitudes toward gifted education, but *Gender* and *Whether the school district has a gifted program or offers special services for gifted* had a relationship to the superintendents' self-perception; specifically, male superintendents did not perceive themselves as gifted ($M = 3.48$) than female respondents ($M = 4.16$, $p < .05$), and the superintendent whose school district did not have a gifted program disagreed strongly that they considered themselves gifted ($M = 3.10$) than those who had the program ($M = 3.84$, $p < .05$). For two variables whose level of measurement was reduced from continuous to dichotomous for comparison purpose—years in a superintendent position (less than 10 vs. 10 or longer), and population (less than 2,000 vs. 2,000 or larger) —correlations between the original continuous variables and four attitude subscale scores were calculated; none of correlations were significant.

Table 6

Mean Differences of Superintendents' Attitudes by Demographics and Environment

Variable	Subscale	M	SD	M	SD	F
Gender		Male(n=84)		Female (n=29)		
		Multivariate, Wilk's Lambda for 1,2,				1.22
	1. Support	5.32	0.85	5.57	1.00	1.66
	2. Elitism	3.63	1.09	3.24	1.26	2.49
	3. Acceleration	4.43	0.95	4.09	1.30	2.15
	Self-perceptions	3.48	1.45	4.16	1.60	4.50*
Years in the position		Less than 10 (n=60)		10+ (n=50)		
		Multivariate, Wilk's Lambda for 1,2,				0.44
	1. Support	5.35	0.91	5.38	0.87	0.03
	2. Elitism	3.56	1.01	3.44	1.23	0.32
	3. Acceleration	4.46	1.01	4.24	1.02	1.26
	Self-perceptions	3.80	1.52	3.43	1.49	1.65
District has gifted program		Yes (n=87)		No (n=27)		
		Multivariate, Wilk's Lambda for 1,2,				1.90
	1. Support	5.47	0.87	5.13	0.92	3.16
	2. Elitism	3.49	1.12	3.51	1.17	0.01
	3. Acceleration	4.36	1.08	4.14	0.95	0.93
	Self-perceptions	3.84	1.45	3.10	1.62	5.13*
Student population		Less than 2000		2000+ (n=35)		
		Multivariate, Wilk's Lambda for 1,2,				1.02
	1. Support	5.30	0.87	5.59	0.90	2.64
	2. Elitism	3.53	1.15	3.47	1.14	0.06
	3. Acceleration	4.36	1.05	4.23	1.07	0.40
	Self-perceptions	3.51	1.53	3.97	1.46	2.20

Note. *p < .05.

CHAPTER 5. CONCLUSIONS

Introduction

As an educator and counselor I have had years of direct and indirect involvement with students, staff, and administrators in educational systems, providing services from early childhood to geriatrics. I have watched and personally experienced some of the attitudinal negativity and ambivalence toward students of high ability from the educators whose responsibility it is to provide the best and most appropriate learning environment for all students. Some teachers' behaviors reflected their beliefs that gifted students should be learning on their own, that they often require special attention, and that these students have the potential to manipulate, exploit, and disrupt social relationships. It is heartbreaking to see a student glean some hope of motivation and challenge with one good teacher only to be devastated by the next, to have a program available one year and gone the next. This kind of instability in a child's education can very quickly damage a student's overall development and motivation. So, the big question is, where do we start.

The need for this study has strong roots in our educational history, volleying of equity and egalitarianism, and the rights of a select group of high ability learners. Researchers have documented the historic inconsistency by personal, professional, and political factions in relationship to attitudes, behaviors, and support for students labeled gifted. This ambiguous relationship has been chronicled by several groups of researchers. Nicolas Colangelo and Gary Davis (2003) stated that "the love-hate relationship...has led to both an energetic focus on gifted students and a near total ignoring of their needs,"

thus the foundation of this study (p. 375). How do we address the lack of aid and support for gifted students and their education? One of the first steps is to look at the decision makers within the school systems themselves, while addressing the policy and federal and state support afforded to gifted students in their decision-making process.

Attitudes and beliefs have a strong influence on what and how school administrators provide support. Feiman-Nemser (2001) stated that prior beliefs and attitudes have a special significance, in that one brings into decision making and behaviors previous attitudes toward students and education. This idea is supported by Chan (2001), who agrees that personal predispositions are the core to educational success. Ormrod (2003) also supported this theory, inferring that administrators implicitly and explicitly affect their districts' availability of gifted resources through their behaviors and attitudes. Since academic support and programming is crucial to the success of these students, administrators' negative or ambivalent feelings may lead to lack of funds directed toward resources for gifted education. Therefore, the attitudes of superintendents toward giftedness and gifted education can have a significant effect on what school districts offer in programming through the allocation of funds. Hoy and Hoy (2003) referred to the condition of education and programs for gifted students as "poorly served by most public schools" (p. 29). Thus, a closer look at the driving force behind the decisions is important.

Understanding the significance of attitudes and beliefs influencing behaviors, this study addressed those specific to school superintendents in order to understand the foundation of their support for gifted education, programs, and children. The survey

offered administrators an opportunity to assess their opinions and background in relationship to gifted education. This research study utilized McCoach and Siegle's 2005 revision of Gagné and Nadeau's survey, *Opinions About the Gifted and Their Education* to evaluate the Minnesota superintendents' attitudes. The survey included 42 questions measuring four subscales of attitudes and perceptions and 11 demographic questions. The subscales measured were *support*, *elitism*, *school acceleration*, and *self-perception as gifted*. In my opinion utilization of McCoach and Siegle's revised survey, which is one of several measuring attitudes toward gifted education, offered the best assessment of attitudes and the opportunity to connect underlying factors which may influence those attitudes (see Chapter 3). This survey was previously tested and found reliable, which is advantageous for the reliability of the present study. Due to its use in previous similar studies with teachers and principals, it permits comparisons of results with other studies about attitudes toward giftedness and gifted education.

Research Questions

The study investigated Minnesota superintendents' attitudes toward giftedness and gifted education, and examined whether certain factors influence their support. Descriptive data were analyzed to identify the correlations among variables that explain why some superintendents' attitudes were more supportive than others. The discussion of the results will be presented according to the following questions:

1. What attitudes about intellectually gifted students and education are held by Minnesota superintendents?

2. What factors (Minnesota superintendents' training and experience about gifted education, superintendents' demographic background, and school environment) have an impact on their attitudes toward gifted students and education?

I felt it appropriate to include all of the Minnesota public schools, thus giving a more accurate view of the state's school populations. The sample was comprised of the 336 superintendents from all of the Minnesota public school districts. This included rural, suburban, and urban communities. The response rate was 34.5%, which provides a number greater than the 10-20% required for generalizability. The following is a discussion on the strength and direction (positive or negative) of the attitudes of superintendents toward identified subscales relating to giftedness and gifted education, while ascertaining the affect demographic and educational experience indicators have on those attitudes.

Discussion of Results

Polka and Litchka (2008) stated that superintendents have a complex job. There are competing responsibilities and priorities and multiple stakeholders they are held accountable to, as well as the need to be conscious of the influence of their public role. They work and interact with top leaders, speaking for the children they are charged with educating and representing. They must therefore be conscious of their own perspectives toward all diverse learners. Therefore this survey method approach seemed an ideal way of garnering what knowledge and background a large population of superintendents have in relation to gifted education.

In comparing the survey's subscales, administrators' reactions to the *support* subscale had the highest mean of all of the subscales, indicating moderately high *support* for gifted education. The mean for *support* was slightly above the midpoint; however, at least 92% of administrators were in this midpoint or higher range, thus indicating that the majority of administrators state that they *support* the needs of gifted.

The second subscale was *acceleration*. This is a key component offered to gifted students. This gives students a chance to keep pace with their high-ability learning through differentiated curriculum, grade skipping, or special programs. Higher scores on this scale indicate a negative view of *acceleration*. Minnesota superintendents were lower in rating this scale, which indicates they had a somewhat positive attitude toward *acceleration*, with 61.2 % overall agreement that it is a positive alternative. Individually, however, only 38.8% were strongly in support of *acceleration*. *Acceleration* offers some very positive alternatives for students. Several studies in gifted education programming do not support the common belief that *acceleration* has negative effects on children's social or emotional development (Kulik & Kulik, 1984; Southern, Jones, & Fiscus, 1989). Case studies of accelerated children who had skipped at least one grade reported that the children were happier socially and emotionally and reported greater self-confidence and fulfillment after their *acceleration*. These students tended to socialize with older students before they skipped grade(s) (Vialle, Ashton, Carlson, & Rankin, 2001). These studies seem to be reflected in the attitudes of some superintendents sampled, although modestly so. Interestingly, in relation to *acceleration*, superintendents' responses to the statement, *children who skip a grade are usually pressured to do so by*

their parents, showed slight agreement. This seems to indicate that superintendents may have slightly negative attitudes toward the parents of gifted students.

Historically gifted education was seen as *elitist*, as it was originally aimed at the upper class. The present study reflected superintendents' disagreement with the concept of gifted education as *elitist*. Overall attitudes about gifted education being *elitist* were fairly neutral. Superintendents were slightly in disagreement with the concept of gifted education as *elitist*. At least 67% of superintendents reflected an attitude of acceptance of gifted education.

It is interesting to note that often attitudes about a group are formed because one feels akin to the group or no affiliation at all. Superintendents did not perceive themselves as gifted. However, in looking at the subscales, there was a strong correlation between *self-perceived giftedness* and *support*. This may offer hope for funding support for gifted education.

This study also looked at the factors that might influence attitudes toward gifted education, including courses or training in gifted education, special education certification, or teaching experience. Superintendents who had some training or attended courses in gifted education had a more positive attitude toward gifted education. They were more positive toward *acceleration*, less negative toward *elitism*, and stronger in *support* for gifted education. There was, however, no significant impact on attitudes of superintendents who had experience as special education teachers. This is interesting in light of the educational recommendations for the gifted and recommendations with special needs, which tend to parallel each other in establishing educational priorities.

Demographics

Finally, this study looked at the significance of demographic variables on attitudes of superintendents. Although there were no significant correlations between *gender*, *years as superintendent*, *having a gifted education program*, or the *school district's population* and *attitudes toward gifted education*, there was a correlation between two demographic factors and *self-perception as gifted*. Female superintendents more often than males saw themselves as gifted, and superintendents who did not have programs for gifted education in their districts strongly disagreed that they themselves were gifted. These factors are interesting, but further research needs to be done in order to draw any inferences.

Conclusions

This study of superintendents provides a view of the attitudes of the administrators who control and establish the guidelines for provided services to gifted students in Minnesota school districts. Interestingly, the administrators who perceived themselves as gifted had overall more positive attitudes (as reflected by their scores on the attitudinal subscales) than did those who did not perceive themselves as gifted. This may give rise to some causality questions. Are administrators driven more by their own self-perceptions (as being gifted or not), the greater good, or by legal and equity issues?

Although only a few studies have been directed at assessing superintendents' attitudes, there have been several studies focusing on teachers and pre-service teachers, the results reflect some varying degrees of similarity. The present study results are consistent with Buttery's (1979) and Curtis's (2005) longitudinal studies directed toward pre-service teachers' attitudes toward gifted students and education, which indicated

ambivalence or just slightly positive regard for gifted children. Superintendents' attitudes, although similar, reflect overall neutral to moderately positive attitudes toward gifted education, showing superintendents have stronger support for gifted education. This study's finding of superintendents' attitudes is more consistent with McCoach and Siegle's (2005) study of classroom teachers. This may indicate that with experience and practice, educators better understand the educational opportunities and developmental needs of gifted students. Thus, more support requiring courses and training in gifted education is indicated.

Implications and Recommendations

Looking at the void in existing empirical literature regarding senior leaders' decision making within the school systems with regard to gifted education, my research addressed the perceptions of Minnesota superintendents on this topic. The results of this study provided awareness of the need to challenge school leaders' perspectives on giftedness and gifted education. This means creating consistency with government mandates and definitions of giftedness across and within states, and backing these statements with continued stable funding to changing the training requirements of our educators and administrators. It may also mean we need to take a look at the equity of what and how we provide for all students. If differentiation of curriculum is truly aimed at creating an appropriate and unrestrictive environment for all students to learn to their greatest potential, then we should be addressing the education of our teachers and administrators in a way that allows them to understand the developmental needs of this identified group of students and their asynchronous patterns. In the 1960s and 1970s the

movement toward individualized instruction was heading in the direction of understanding and providing for the individual student's needs and educational level (Richards & Esbensen, 1976). Maybe we should relearn this fundamental paradigm and readdress what is the purpose of our educational system.

This study has documented the inconsistency and contentious relationship Americans have had with gifted education. The history of gifted education has been enveloped in negative public opinion, resentment, and misunderstanding, interspersed with periods of intense interest (Gallagher, 2000). The damage of waxing and waning involvement is exacerbated by inconsistent national legislative and financial support for this population of students who are confusingly described by a variety of state definitions. This weak federal support and lack of policy trickles down to the state level. NAGC (2015) reported that there are still strong inconsistencies within and between states. Below are some of the results of that study that pertain to the results of this study and discussion:

- 14 states provided no funding to local districts for gifted education
- Of the 25 states that provided funds to districts
 - 8 provided \$40 million or more
 - 9 states provided between \$1 million and \$10 million
- 9 states have policies specifically permitting acceleration of students; 22 states leave the decision to school districts
- 17 states do not collect demographic data about their gifted student population

- 9 states report on the academic performance / learning growth of gifted students as a separate group on state report cards or other accountability measures. (n.p.).

There has, however, been some support for dual identified students or twice exceptional students. These are the students with exceptionalities including giftedness and a disability or learning difference. Although federal statutes protect these students and require provision of accommodations for their disability, there is no protection offered for their high ability learning and asynchronous developmental needs. This dual exceptionality conflict has been present in many judicial proceedings throughout the U.S. This is seen in the 1995 case of *Hope vs. Cortine*. The suit involved a child who was diagnosed as having dyslexia but gifted as well. The court ruled that the child was eligible for services for dyslexia under IDEA, but the child's giftedness was deemed a peripheral issue and as a result denied the opportunity to receive services for gifted education (Zirkel, 2005). Often the provision of instruction and curricular interventions to maximize student potential is not made available. As Freeman (1991) shared, the greatest waste for these students was of time and motivation. Lack of stimulation and challenge often leads to apathy and underachievement. Rimm (2003) supported this concern, stating that 10-20% of all high school dropouts had been identified as gifted, thus the waste of a valuable resource – economic, social, and psychological.

The quantitative data collected and analyzed in this study do not begin to touch the disparity of this educational loss. But the data do provide one perspective on what and where we may need to engage in further research in order to make the necessary changes

in policy and funding, curriculum, and licensing of professionals in order to give this population of students a chance to have an equal playing field in order to reach their full potential.

In our educational system, teachers are becoming overloaded with larger class sizes, differentiated curriculum, fewer resources, highly scripted curriculum that allows no room for deviation and creativity, and limited funding. In the same vein, superintendents are restricted in funding by the states and federal government. They are given vacillating or unclear guidelines, which may lead to decision making based on overall merit money, graduation standard pressure, overemphasized standardized tests leading to rating of schools for federal support, and the newly adopted Common Core Curriculum Standards.

The implications for the results of this study are somewhat ambiguous when examining the neutral or ambivalent responses or slightly negative and positive responses. It is unclear with this one study if this lack of strength of responses creates ambivalence in providing more stimulating and appropriate opportunities for gifted children. However, it can be viewed as reassuring that the concept of gifted education is still seen as a necessity and administrators do have slightly positive attitudes about gifted education. Also, the correlations between some gifted education and training and more positive attitudes toward *acceleration* and *support* as well as having a less negative view toward *elitism* justifies the call for licensure requirements for all administrators and educators to include gifted education courses.

Issues

The most visible issues involved in our educational systems' treatment of gifted students are (a) the role of gifted education in schools, (b) who is responsible for providing this education, and (c) how equitable is it to provide for this special group of students. Ambiguity of support from federal and state guidelines is foremost among causes creating this bewildering situation. Many school districts and administrators are confused about who is responsible for providing gifted education. The state of Minnesota provides \$13 per pupil earmarked specifically for gifted education within districts, but there are no mandates as to how the funds are to be used or descriptions detailing the requirements for programs for gifted education. Therefore, many districts choose to not provide services or provide minimal services. Federal and state legislation may provide some funding, but lack the supportive funding for facility and staff resources. The lack of mandated guidelines or directives in Minnesota is seen in the Minnesota Department of Education's guidelines set forth in Minnesota Statute 120B.15 Gifted and Talented Students Programs:

- School districts *may* identify students, locally develop programs addressing instructional and affective needs, provide staff development, and evaluate programs to provide gifted and talented students with challenging and appropriate educational programs.
- School districts *must* provide guidelines for assessing and identifying students for participation in gifted and talented programs...

- School districts *must* adopt procedures for the academic acceleration of gifted and talented students.
- School districts *must* adopt procedures consistent with section 124D.02, subdivision 1, for early admission to kindergarten or first grade of gifted and talented learners... (Revisor of Statutes, State of Minnesota, 2014, n.p.)

The wording in this statute leaves many districts in greater confusion. They *may* provide programs. But they *must* create and adopt guidelines and procedures for programs they are not required to create or provide.

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 (Renzulli, 2012). This study found that superintendents who had some training in gifted education had a more positive attitude toward gifted education. Since most superintendents and principals have teacher education training, it seems logical to look at pre-service education programs and licensures. Licensing requirements for Minnesota superintendents state that they must have some exposure to gifted education as part of a graduate program. However, no credit or hour limit is identified.

The following is from the Minnesota statues on licensure requirements for school administrators:

- (1) a specialist or doctoral program or a program consisting of 60 semester credits beyond the bachelor's degree that includes a terminating graduate degree and

topics preparatory for educational administration and the Minnesota competencies identified in part 3512.0510.

3512.0510 Program Requirements for all Administrative Licenses.

Subpart 1. Core leadership competencies for Minnesota administrative licenses.

- Leadership
- Policy
- Political influence and governance
- Diversity leadership
- Communication
- Policy and law
- Political influence and governance
- Curriculum planning and development for the success of all learners

by:

- (1) demonstrating the ability to enhance teaching and learning through curriculum assessment and strategic planning for all learners, including early childhood, elementary, middle and junior high school, high school, special education, gifted and talented, and adult levels. (Revisor of Statutes, State of Minnesota, 2008, n.p.)

Equity and equality of education is another crucial issue plaguing gifted education. The debate continues as to the ethical and equitable use of resources for a

population often viewed as “able to succeed on their own” (Freeman, 1991, p. 54). The historical perspectives toward gifted education have permeated our thinking and this is exemplified in multiple studies of pre-service teachers’, teachers’, and principals’ attitudes (Conlon, 2014; McCoach & Siegle, 2005; Peters, Matthews, McBee, & McCoach, 2013). Each study showed slight to moderately positive attitudes and support for gifted education. The attitudes of the school, staff, and administrators are greatly affected by the top-down attitudes of senior leaders. Having a greater understanding of student development, curriculum offerings, differentiation of learning, and political climate will help the administrators project a stronger support based on knowledge and understanding. This happens with self-improvement, staff education, support, and involvement. The climate of the organization will not change unless it is given the tools and knowledge to empower ownership of the issues. It is all about student success and potential (NAGC, 2009).

Research Recommendations

This research study provided some insight into the issues involved with senior level leaders within school districts of Minnesota. As with many studies, it provides more questions than answers. The confounding issues of federal and state policies and current practices for gifted learners, as well as the capacity of the professional participants in schools to develop an understanding of student needs are most disconcerting for any effective changes. Despite 70-plus years of research, “accountability measures and reform efforts in the wider education arena have focused singly on meeting basic proficiency standards” (Brown, 2008, p. 328). The NCLB Act highlights the federal

emphasis on “bringing students ‘up’ to proficiency – ignoring those students scoring at and above proficient levels” (Brown, 2008, p. 328). In contrast, schools receive support and merit for their best and brightest – such as National Merit finalists...or brag when students exceed standards and norms.

Future research stemming from this current study begs a more in-depth look at all of the stakeholders in gifted education. Selection for the population in this study was focused on higher level administrators, because of their direct influence in Minnesota school districts’ use of funding. It would be of interest to change the size and parameters of the sample. Therefore, replicating this study by expanding the population to surrounding states would enhance the validity of outcomes. Since the confusion with federal and state mandating is a huge issue for school districts, it would be beneficial to conduct a study looking at a comparison between states that mandate and fund gifted education and those that do not mandate, providing a broader understanding of how the mandating itself affects the attitudes and support of administrators.

One of the results of this study stated a positive connection between *training* and *support*, which strengthens the recommendations that educators could benefit from additional training in identifying giftedness in special populations of children and gifted education (Gear, 1978; Korynta, 1982). Further research might address current training of administrators, who often rise to decision-making roles through the teaching ranks. Along this same vein, a qualitative component regarding early training experience might provide insight, thereby helping to improve early training standards in teacher education. A replication of Conlon’s (2014) interview study of superintendents would add a deeper and

richer understanding of this senior administrative roll by exploring previous experiences with gifted students and gifted education to understand how it translates into practice. Minnesota established new policies and requirements for superintendent licensing in 2013, which included minimum course requirements in gifted education. Although this is recognition that training is necessary, it does not offer much hope for attitude changes, unless more concrete requirements are adopted. I believe following the progress in policy and statute changes with regard to attitudes of current and future district administrators is warranted and could further refine the active variables in providing needed resources to the gifted in our state.

Research continues to be needed about the attitudes of superintendents and teachers, drawing from a larger population, and also addressing attitudes of those who set policies and provide funding for gifted education: the federal and state legislative bodies. Additionally, I feel that gathering qualitative and quantitative information from gifted students who either received or did not receive gifted education would offer a more complete story of gifted education. Since Freeman's research in 1991 with gifted adults relating their insights into their early educational experiences, policy, programming, curriculum, and funding have changed. Further research might specifically target undergraduate and graduate gifted students to explore their educational experiences as gifted, providing a better understanding of their attitudes toward gifted education as well as investigating the experiences of post-secondary education.

An exploration of research needs in the field of gifted education creates a long list that continually encompasses more issues. However, some of the current pressing issues include identifying and creating specific parameters around:

- Defining giftedness and creating a universal language for educators in regards to who and how to assess students.
- Setting specific guidelines for responsibility for programs and education of gifted students.
- Specifying the role of administration and staff (professional personnel) in gifted policy, educational programming, and assessment of students.
- Examining Interstate Teacher Assessment and Support Consortium (InTASC) standards and state teaching standards related to gifted students and gifted education, and how college and university teacher education programs incorporate them into their programs.
- Identifying and examining education programs that prepare teachers of the gifted.
- Identifying where and if school districts have coordinators of gifted education.

One of the major obstacles in gifted education is the overall disarray in the field of gifted education at large: the lack of consensus of definition, variation in rules and practice within and among states, the paucity of resources devoted to gifted education at all levels, and lack of united and national efforts. This, along with the unclear delineation of responsibility, stakeholders' roles, and overall attitudes toward provision of services, is foundational for further research, policy changes, and development of professional and

public education to ensure an appropriate education in the least restrictive environment for this population of students.

I acknowledge that educators and the overall field of education in the U.S. are highly committed to the improvement of all learners, including gifted, high ability learners. Although gifted education is embedded in the decisions made by districts, unfortunately this does not transform into implementation of better programs for these students. Excellence in education should be based on personal and individual challenges for higher learning. If our educational goals encompass excellence for all, then we need to remember that “We can’t forget excellence in our effort to achieve equity” (Benbow, 1992, p. 18).

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Appendix A
Survey Instrument

Opinions about the Gifted and their Education
Francoys Gagné & Lorraine Nadeau
(Revised by McCoach and Siegle, 2005)

Instructions: The following statements concern attitudes about gifted children and their education. They were taken from newspaper articles, books, and other sources. We would like to know the extent of your agreement or disagreement with each of them. There are no correct or incorrect answers.

Part I: Please rate how strongly you agree or disagree with the following statements. In answering each question, use a range from **(1)** to **(7)** where **(1)** stands for **strongly disagree** and **(7)** stands for **strongly agree**. Please circle only one response choice per question. Please answer as spontaneously as possible.

Statement	Stron 1	Disagr 2	Slightl 3	Neithe 4	Slightl 5	Agree 6	Strong 7
1. Our schools should offer special education services for the gifted.	1	2	3	4	5	6	7
2. The best way to meet the needs of the gifted is to put them in special classes.	1	2	3	4	5	6	7
3. Children with difficulties have the most need of special education services.	1	2	3	4	5	6	7
4. Special programs for gifted children have the drawback of creating elitism.	1	2	3	4	5	6	7
5. Special educational services for the gifted children are a mark of privilege.	1	2	3	4	5	6	7
6. When the gifted are put in special classes, the other children feel devalued.	1	2	3	4	5	6	7
7. Most gifted children who skip a grade have difficulties in their social adjustment to a group of older students.	1	2	3	4	5	6	7
8. It is more damaging for a gifted child to waste time in class than to adapt to skipping a grade.	1	2	3	4	5	6	7
9. Gifted children are often bored in school.	1	2	3	4	5	6	7
10. Children who skip a grade are usually pressured to do so by their parents.	1	2	3	4	5	6	7
11. The gifted waste their time in regular classes.	1	2	3	4	5	6	7
12. We have a greater moral responsibility to give special help to children with difficulties than to gifted children.	1	2	3	4	5	6	7
13. Gifted persons are a valuable resource for our society.	1	2	3	4	5	6	7

Statement	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
14. The specific educational needs of the gifted are too often ignored in our schools.	1	2	3	4	5	6	7
15. The gifted need special attention in order to fully develop their talents.	1	2	3	4	5	6	7
16. Our schools are already adequate in meeting the needs of the gifted.	1	2	3	4	5	6	7
17. I would very much like to be considered a gifted person.	1	2	3	4	5	6	7
18. It is parents who have the major responsibility for helping gifted children develop their talents.	1	2	3	4	5	6	7
19. A child who has been identified as gifted has more difficulty in making friends.	1	2	3	4	5	6	7
20. Gifted children should be left in regular classes since they serve as an intellectual stimulant for the other children.	1	2	3	4	5	6	7
21. By separating students into gifted and other groups, we increase the labeling of children as strong-weak, good-less good, etc.	1	2	3	4	5	6	7
22. Some teachers feel their authority threatened by gifted children.	1	2	3	4	5	6	7
23. The gifted are already favored in our schools.	1	2	3	4	5	6	7
24. In order to progress, a society must develop the talents of gifted individuals to a maximum.	1	2	3	4	5	6	7
25. By offering special educational services to the gifted, we prepare the future members of a dominant class.	1	2	3	4	5	6	7
26. Tax-payers should not have to pay for special education for the minority of children who are gifted.	1	2	3	4	5	6	7
27. Average children are the major resource of our society, so they should be the focus of our attention.	1	2	3	4	5	6	7
28. Gifted children might become vain or egotistical if they are given special attention.	1	2	3	4	5	6	7
29. When skipping a grade, gifted students miss important ideas. (They have holes in their knowledge.)	1	2	3	4	5	6	7
30. Since we invest supplementary funds for funds for children with difficulties, we should do	1	2	3	4	5	6	7

Statement	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
the same for the gifted.							
31. Often, gifted children are rejected because people are envious of them.	1	2	3	4	5	6	7
32. The regular school program stifles the intellectual curiosity of gifted children.	1	2	3	4	5	6	7
33. The leaders of tomorrow's society will come mostly from the gifted of today.	1	2	3	4	5	6	7
34. A greater number of gifted children should be allowed to skip a grade.	1	2	3	4	5	6	7
35. All special programs for the gifted should be abolished	1	2	3	4	5	6	7
36. Ability grouping provides an effective method to provide instruction to students of different ability or skill levels.	1	2	3	4	5	6	7
1. I was or could have been in a gifted program in school.	1	2	3	4	5	6	7
2. I know many gifted people.	1	2	3	4	5	6	7
3. Most of my family and friends consider me gifted.	1	2	3	4	5	6	7
4. I am gifted.	1	2	3	4	5	6	7
5. Most of my family and friends are gifted.	1	2	3	4	5	6	7
6. People consider me gifted.	1	2	3	4	5	6	7

1. What is the student population of your school district?

- up to 499
- 500 - 999
- 1000 - 1999
- 2000 - 2999
- 3000 - 4999
- 5000 - 9,999
- 10,000 - 19,999
- 20,000 - 39,999
- 40,000 - 59,999
- 60,000 - 100,999
- 100,001 and above

2. How many years have you been a superintendent?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 or more

3. Does your school district have a gifted program or offer special services for gifted

- Yes
- No

4. Check any of the following that apply to programs offered in your district. You may check as many as are appropriate to your school district.

- Special classes for the gifted in one or more major subjects areas
- Subject or grade acceleration for gifted/academically advanced students
- Pull-out program for gifted students
- School-wide enrichment model programs
- Individual educational plans(IEP's, GEP's, or GIEP's, etc) for gifted students
- Push in program/Team teaching with teacher of the gifted

Other (please specify) _____

5. Have you ever taken any courses in gifted education?

- Yes
- No

6. Have you ever attended any conferences on gifted education?

- Yes
- No

7. Do you have a degree or certification in gifted education?

- Yes
- No

8. Have you ever held a position as a special education teacher?

- Yes
- No

9. What is your gender?

- Male
- Female

10. What is your ethnicity?

- African-American, Non-Hispanic
- Asian, Pacific Islander
- Latino, Hispanic
- Native American
- White
- Other

11. Please select all degrees that you possess.

- Bachelor's degree (B.A., B.S, B.Ed.)
- Master's Degree (M.A., M.S., M.Ed.,M.S.W., etc)
- Advanced Certificate (Ed.S., CAGS, etc.)
- Ph.D. or Ed.D.

Other (please specify) _____

Appendix B

Introductory Email and Consent Form

July 22, 2009
RE: Doctoral Research - Gifted Education
Survey Address:

http://www.surveymonkey.com/s.aspx?sm=TXn_2b6kibdb7xUd6j0YPcwA_3d_3d

Dear Superintendent,

Hello, my name is Phyllis Lindberg and I am a doctoral student at the University of Minnesota, working with my advisor, Dr. Frank Guldbrandsen, on my research of giftedness and gifted education. I am hoping to engage your support and participation in the completion this research. I am conducting an online survey to assess the Attitudes and Beliefs of Minnesota Superintendents toward giftedness and gifted education.

Very little is known about administrator's beliefs and opinions which affect their decisions regarding gifted education. However, knowledge of these beliefs is significant in identifying why and what gifted educational programs are selected and implemented within a district. The goal of this research is to gain insight into these opinions and beliefs of giftedness and gifted education. Please help by completing the survey: "Opinions about Gifted and their Education".

ALL RESPONSES ARE CONFIDENTIAL AND NO RESPONSES WILL BE INDIVIDUALLY IDENTIFIED.

A summary of the results will be available upon request.

Please respond to questions based upon your own perceptions and experiences. Please also respond to the open-ended questions candidly.

Simply click on the link below and you will be directed to the survey. If this does not work, "copy and paste" this address into the address bar of your Internet Brower. Your participation is strictly voluntary. Please note that your responses will be used for research purposes only.

SURVEY ADDRESS:

<http://www.surveymonkey.com/s.aspx?sm=TXn_2b6kibdb7xUd6j0YPcwA_3d_3d>

Your participation and submission of the questionnaire indicates your consent to participate in the project (Please read the "Consent Form" linked on the survey for more information).

If you have questions or would like a copy of the results summary, please contact me by phone, email or mail at:

[REDACTED]

plindber@d.umn.edu

Phyllis M. Lindberg
University of MN Duluth
School of Medicine Duluth

[REDACTED]

Duluth, MN 55812-2403

Or you may contact my advisor: Dr. Frank Guldbrandsen fguldbra@d.umn.edu

Thank you for your cooperation in completing my research, and the valuable information you are providing.

Phyllis M. Lindberg
Graduate Student

Opinions about the Gifted and their Education

CONSENT FORM

CONSENT FORM

Survey: OPINIONS ABOUT GIFTED AND THEIR EDUCATION

You are invited to be in a research study of all Superintendents in MN, in order to identify their attitudes and beliefs about intellectually gifted students. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Phyllis M. Lindberg, Educational Policy doctoral student at the University of MN, and Frank Guldbrandsen, doctoral advisor.

Background Information

The purpose of this study is to identify what attitudes and beliefs Superintendents hold toward giftedness and gifted education. Gifted programming is dependent upon many factors including administrative decisions. It is the purpose of this study to identify educational experience, knowledge, background, and attitudes of these decision makers.

Procedures:

If you agree to be in this study, we would ask you to simply click on the button at the bottom of this page (I agree) and begin the survey.

Risks and Benefits of being in the Study

We foresee few if any risks and hope that the online method of surveying eliminates all identifiable connectors to respondents.

The benefit to participation in the survey is to increase awareness of decision makers' understanding of giftedness and gifted education.

Confidentiality

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions

The researchers conducting this study are: Phyllis M. Lindberg (student researcher) and Frank Guldbrandsen (advisor). If you have any questions, you are encouraged to contact them at University Of Minnesota.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researchers, you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455.

I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Appendix C

Subscales Used for Attitudes Study

Subscales used for Attitudes study

Subscale 1. Support (From Gagné & Nadeau, 5 questions, $\alpha=.76$)

1. Our schools should offer special education services for the gifted.
15. The gifted need special attention in order to fully develop their talents.
26. Tax-payers should not have to pay for special education for the minority of children who are gifted. (Reverse scored)
30. Since we invest supplementary funds for funds for children with difficulties, we should do the same for the gifted.
35. All special programs for the gifted should be abolished. (Reverse scored)

Subscale 2. Elitism (From Gagné & Nadeau, 6 questions, $\alpha=.80$)

4. Special programs for gifted children have the drawback of creating elitism.
5. Special educational services for the gifted children are a mark of privilege.
6. When the gifted are put in special classes, the other children feel devalued.
21. By separating students into gifted and other groups, we increase the labeling of children as strong-weak, good-less good, etc.
23. The gifted are already favored in our schools.
28. Gifted children might become vain or egotistical if they are given special attention.

Subscale 3. Acceleration (From Gagné & Nadeau, 4 questions, $\alpha=.71$)

7. Most gifted children who skip a grade have difficulties in their social adjustment to a group of older students.
10. Children who skip a grade are usually pressured to do so by their parents.
29. When skipping a grade, gifted students miss important ideas. (They have holes in their knowledge.)
34. A greater number of gifted children should be allowed to skip a grade. (Reverse scored.)

Subscale 4. Self-perceptions (Researcher created, 5 questions, $\alpha=.94$)

1. I was or could have been in a gifted program in school.
 2. Most of my family and friends consider me gifted.
 3. I am gifted.
 4. Most of my family and friends are gifted.
 5. People consider me gifted.
-