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Designing a Middle School Gifted Education Program of Excellence Using Current
Gifted Programming Models

by

Samantha Ann Miller

A Dissertation submitted to the Education Faculty of Lindenwood University
in partial fulfillment of the requirements for the
degree of

Doctor of Education

School of Education

Designing a Middle School Gifted Education Program of Excellence Using Current
Gifted Programming Models

by

Samantha Ann Miller

This dissertation has been approved as partial fulfillment of the requirements for the

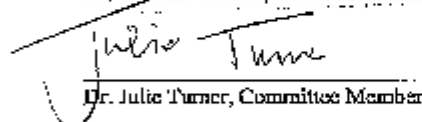
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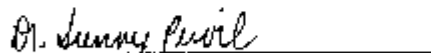
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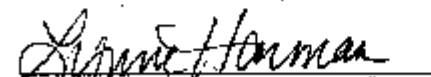
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Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Linderwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

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Abstract

In 2004, the National Association for Gifted Children and the National Middle School Association collaborated to create a joint position statement supporting the educational needs of all middle school students, including those of high potential and ability. Since the creation of this position statement, research demonstrates that little has been done to further the understanding and development of middle school gifted adolescents and corresponding educational programming that meets the gifted adolescents' needs.

This study sought to provide clarity concerning the organization of middle school gifted programming and the components that contribute to the excellence of programs according to the perceptions of middle school gifted students, middle school educators of gifted students, and gifted education leaders. This study focused on six school districts' middle school gifted education programs within a major midwestern metropolitan area. The study programs differed on delivery method of gifted services, time allotment for providing gifted services, curriculum employed within the classroom, and instruments used to evaluate student work and program excellence. Surveys, consisting of Likert scale items and open-ended response items; interviews; and observational data were used in this study to better understand the various middle school gifted programs. Data collection focused on student needs and delivery methods.

The findings of this study illustrate the critical components of a middle school gifted program in relation to the delivery method, curriculum, and evaluation. The

author will use the findings of this research to make recommendations to those districts supplementing or modifying gifted middle school programs. The author suggests direction for future research in the field of gifted education at the middle school level in order to provide a better understanding of middle school gifted education programming while meeting the needs of all stakeholders.

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Chapter One: Introduction

Background of the Problem

Ideas concerning giftedness vary; however, all definitions agree that the gifted student exceeds grade level and age expectations. Typically more advanced than their age and grade level peers, gifted students require additional assistance to receive the most from their educational experience (Hoagies Gifted Education Page, 2009; National Association of Gifted Children, 2008b; Rakow, 2005; Walker, 2002). Cycling in and out of the educational forefront, educating the gifted and talented child in the United States has been a highly controversial topic, particularly during the past 50 years.

The United States entered into competition with the Soviet Union during the late 1950s to launch unmanned spacecraft. Due to this competition, in 1958, the U.S. Congress passed and the president signed into law the National Defense Education Act to promote and enhance the study of mathematics and science in the nation's schools. Gifted education funds were made available to the states through the National Defense Education Act. However, even with available funding, gifted students were not formally classified.

Then in 1972, the term "*gifted*" was defined in the *Marland* report and an Office for Gifted and Talented Students was formed at the federal level in 1974. The *Nation at Risk* report (1983) raised awareness of the problems with educating American students and the nation's problems with global competitiveness based on the education of its students. In 1988, the Jacob K. Javits Act provided federal funding for the purpose of educating gifted and talented children. By 1993, however, the *National Excellence* report

outlined the failure of the American education system to properly meet the needs of gifted and talented students. In 2002, gifted education was again addressed with the introduction and passage of No Child Left Behind (NCLB). NCLB included limited funding for gifted education under the provisions of the Jacob K. Javits Act. *A Nation Deceived* reported in 2004 that America's schools were still failing to meet the needs of its gifted students stating, "When they [gifted students] ask for challenge they are held back. When they want to fly, they are told to stay in their seats" (Colangelo, Assouline, & Gross, 2004, p.1).

With the constant need for global competitiveness, at the heart of American society is "the commitment to a set of values and to a system of education that affords all members the opportunity to stretch their minds to full capacity, from early childhood through adulthood, learning more as the world itself changes" (The National Commission on Excellence in Education, 1983, para. 1). Since 1957 and the notable achievement in science and technology by the Russians when they launched the *Sputnik* satellite, sparking a competition to launch spacecraft with the United States of America, American education has focused on meeting the needs of America's brightest and gifted students. Yet, attention to America's brightest students has been intermittent, and many students continue to work below their level of capability in schools. Accordingly, the "belief espoused in school reform that children from all economic and cultural backgrounds must reach their full potential has not been extended to America's most talented students" (U.S. Department of Education, 1993, para. 2).

Gifted education programs in the absence of federal guidelines have lacked consistent expectations, support, and evaluation of effectiveness. School districts across the country must create and implement gifted programming with limited funding. In the absence of clearly written guidelines, gifted education can fluctuate from state to state, district to district, and school to school. The variance of programs and standards for gifted programming, in conjunction with precarious levels of funding, places gifted education on the educational backburner. States typically spend more on educating those requiring remedial special education services than those requiring gifted special education services. Cloud (2007) stated, “American schools spend more than \$8 billion a year educating the mentally retarded. Spending on the gifted isn't even tabulated in some states, but by the most generous calculation, we spend no more than \$800 million on gifted programs” (para. 7). Students with high IQs need as much financial backing to learn at their optimal level as those students who require remedial services. *A Nation at Risk* (1983) reported that America’s goal must be the following:

To develop the talents of all to their fullest. Attaining that goal requires that we expect and assist all students to work to the limits of their capabilities. We should expect schools to have genuinely high standards rather than minimum ones...

(NCEE, Excellence in education, para. 3)

Therefore, even by today’s standards, Cloud suggested that it is not reasonable to spend more money to “bring low-achieving students to mere proficiency than we do to nurture those with the greatest potential” (2007, para. 6). As of 2007, “.026% of the federal K-12 education budget” went to the education of gifted students (National Association of

Gifted Children, 2008b, para. 11). The National Association for Gifted Children (NAGC) estimates that approximately 3 million students are academically gifted in the United States, totaling 6% of the student population (NAGC, 2008, para. 3). With the limited funding available to service gifted students, many districts must determine what type of services to offer; choosing options that appear to meet the needs of the greatest number of gifted students or those options that require the least amount of funding.

In spite of the reality that guidelines remain unclear and funding remains low, districts across the nation continue to offer gifted services to their student populations. Services for the gifted are largely acquired due in part to parental and national advocacy groups, supportive educators who work to obtain funding, school board acceptance, and gifted program development at the local and state level (Walker, 2002). The NAGC (2008b) recommended that a continuum of services be offered to gifted and talented students within the district, providing options that are “respectful of individual student differences and mindful of classroom and community resources” (para. 7). Degrees of programming range from and may include, but are not limited to, pull-out programs, advanced classes, acceleration practices, differentiation options, and self-contained gifted classrooms or schools for the gifted.

Although a variety of gifted programming options are available, many school districts make their greatest efforts to service the elementary population. Research on gifted education at the elementary level is well developed, providing districts with sound evidence as to what works. The elementary level provides more flexible scheduling opportunities than at the middle school level due to one teacher daily versus four to eight.

Students at the middle school level, therefore, are left to rely on course selection to provide what they deem to be an appropriate level of challenge and to meet their individual learning needs. According to the report *National Excellence: A Case for Developing America's Talent* (1993), the opportunities for middle school students to participate in gifted services are few and scattered. Districts that do provide services to the middle school level offer the services in varying degrees. Middle school gifted education can range from, but is not limited to, after-school programming, enrichment classes, challenge classes, self-contained classes or schools, and differentiation and acceleration of the curriculum.

The philosophy of middle school education has been to focus on the social and emotional needs of the middle school child. Advocates of middle school education generally believe that middle school education should espouse the principles of equity and argue that gifted education interferes with equitable learning and therefore contradicts middle school philosophy.

Gifted education programming at the middle school level is often viewed as another form of “*tracking*”. Tracking is the process of meeting all student needs through placing students according to their ability. It is also termed “*ability grouping*” (Yecke, 2003). The groups are then maintained for extended periods so that educational learning differences are noticeable. Tracking also promotes different educational opportunities for students dependent on the track to which the student was assigned (Erb, Gibson, & Aubin, 1996). Erb et. al. (1996) found that “it does not make sense to put together a heterogeneous group of young adolescents and teach them all in the same way” (p. 134).

Proponents of gifted programming insist on specialized education for middle school gifted students. Yet, schools across the nation have worked to eliminate tracking due to the stigma placed on students in “lower” tracks. Carol Ann Tomlinson (1995) found that opponents of gifted education believe that in labeling gifted students, some find favor in the label and others are stigmatized. Whether the gifted label brings prestige or stigma, an experiment of inequality is created, and therefore, the middle school philosophy of equitable education is violated. The stigma sometimes associated with gifted programs can be damaging to student self-esteem and academic success.

Categorizing students with labels, especially at the middle school level, can have negative consequences. McIntire (1998) found that “identification of a gift or talent can lead to identity confusion or underachievement” (para. 5). For some students, segregation of classes as gifted and non-gifted can be healthy. Nevertheless, for other students, segregation can lead to problems of identity when friends find themselves separated due to labels. When student identity is forming at the middle school level, being identified as a gifted student can place undue pressure on the student, contribute to underachievement, and lead the student to struggle with a sense of belonging. At the middle school level, students are trying to figure out where they belong. What is their label? Are they nerds, comedians, jocks, losers, brains, or just normal kids? Often the middle school students’ social groups define how they see themselves, how others see them, and how they believe others perceive them. A large component of middle school education is finding one’s sense of belonging. The belonging issue needs to be addressed concerning gifted education programming.

Gifted education programming at the middle school level, however, is believed by many to be essential to the success of the gifted middle school child. In 2004, the National Middle School Association (NMSA) and the NAGC began working with their various constituencies to raise awareness about adequately and successfully challenging the middle school child. The NMSA and NAGC urged schools to do the following:

Implement appropriate identification, assessment, and curriculum and instruction programs for students with advanced abilities and/or advanced potential.

Additionally, schools should build partnerships with adults key to these students' development, and focus on the development of these youngsters. Finally, the position statement calls for increased pre-service and in-service staff development for middle level teachers dealing with gifted students. (NAGC, 2004, para. 3)

Finally, two organizations have joined forces to recognize the need to challenge all students and address the fact that a one-size-fits-all approach to middle school education does not adequately service the needs of all students. According to Davidson and Davidson (2004), "gifted kids are acutely aware they are different" (p. 95) and the curriculum in the middle school, centered on student discovery and reflection, must allow for these differences.

Gifted education programming must address the needs of advanced learners, which differ from the needs of other middle school students. Regular middle school curriculum "does not academically challenge students because of the middle school's focus on affective needs" (Tomlinson, 1995, para. 13) instead of academic needs. If the educational system of the United States continues to ignore the needs of its most

advanced learners, it will be unable to prepare itself to compete in the global society (Cloud, 2007; Davidson & Davidson, 2004; The National Commission on Excellence in Education, 1983; United States Department of Education, 1993).

Schools across the nation take varied approaches in working with middle school gifted children; some choose to do nothing while others implement special curriculum and programming. Schultz and Delisle (2003) stated that “a curricular slot must be provided in the school schedule where gifted adolescents meet with others of like ability to discuss experiences and be accepted for who they are” (p. 491). The ability to meet with like peers academically in a safe environment allows the gifted middle school child the opportunity to grow and become successful. Davidson and Davidson (2004) stated strongly that “until every gifted child can attend a school where the brightest are appropriately challenged in an environment with their intellectual peers, America can’t claim that it’s leaving no child behind” (p.125).

Problem Statement

In the United States, gifted programming varies among states and districts. In the state of Missouri, many differences exist among school districts in their middle school education programs for the gifted. Within the chosen midwestern metropolitan area, middle school gifted programming is varied in structure, curriculum, and implementation. There is limited research available on middle school education programs for the gifted. With the variance found in gifted program implementation at the middle school level, it appears important to the researcher that a model illustrating the components of an excellent middle school program for gifted students be developed.

Rationale

Education at the middle school level has traditionally focused on meeting the affective needs of the middle school child. According to Yecke (2005), this meant that academics took a back seat to the ideas of “self-exploration, socialization, and group learning” (p. 2). This traditional model has distracted educators so that all students, especially gifted students, are intellectually under-challenged (Clark, 2002). With the NAGC and the NMSA uniting to prioritize the goal of meeting the needs of students with advanced academic capabilities, gifted education at the middle school level must experience a renaissance. The lack of guidelines concerning gifted education programming at the middle school level magnifies the need for research on excellent practices for middle school gifted education. Specifically, school districts with gifted middle school education programs already in place or those districts interested in implementing a middle school gifted program would benefit by basing their practices on quantified research describing components and characteristics of excellent middle school gifted education programs (Rakow, 2005; Rosselli, 1997).

Purpose of Study

The purpose of this research study was to assess the current literature on gifted education at the middle school level and the literature examining the general middle school program, as well as to assess current middle school gifted programs for the components that contribute to the impact of the program on the child, school, and district. The data collected will be used to develop a middle school gifted program. Data from surveys, interviews, and observations will be added to quantify the success of a middle

school program for students, schools, and districts within a metropolitan area of a major midwestern city. The researcher sought to determine excellence in middle school gifted programs to design a middle school gifted program utilizing her findings.

Research Question

Can a gifted education program for middle school students be developed that meets the needs of the child, the school, and the district?

In order to answer the main research question, this study will strive to answer three supporting questions.

1. How can a middle school gifted education program support the transition from elementary to high school gifted education programs?
2. Can a “best practices” middle school gifted education program result in greater high school gifted program readiness as evidenced by current high school assessment resources?
3. What design model can be created for educators of the gifted to aid in developing and/or modifying gifted education programs at the middle school level?

Limitations of the Study

Selection of sample. All districts were presented with the same definition of gifted by the researcher. For the purpose of this study and to retain uniformity, the researcher utilized the state of Missouri’s definition.

Section 162.675. RSMo, defines gifted children as "those children who exhibit precocious development of mental capacity and learning potential as determined

by competent professional evaluation to the extent that continued educational growth and stimulation could best be served by an academic environment beyond that offered through a standard grade level curriculum" (Department of Elementary and Secondary Education, 2005, p. 2).

Although the researcher took precautions to obtain a sample selection representative of the middle school gifted population, differences in subject characteristics were unavoidable. Even though all students and teachers surveyed at the time of participation in this study were involved in a middle school gifted education program, variability remained in the length of time participants have spent in a middle school gifted program.

Implementation. A second threat to this study was the implementation of the middle school gifted program. The same teacher was not used to teach the different school district curricula. Therefore, this study could not control variables in gifted education curriculum, teacher or leader styles, attitudes toward gifted education, confidence in teacher understanding of gifted education, education in the field of gifted education, school climate, or personal life factors. To uphold some standards, middle school gifted program educators must maintain certification in gifted education through the Department of Secondary and Elementary Education in the state of Missouri. All teachers participating in the study have certification in gifted education.

Participant Experience. A third threat to this study was the participants' possible participation in other middle school gifted programs that were not studied. The data of this study was largely based on student, teacher, and gifted education leader perception. Although the length of time spent in gifted programs was not measured as part of this

study, it is important to note that the amount of time spent in middle school gifted programs and level of involvement in middle school gifted programs by all study participants could affect the study.

Location. Another limitation to this study was the location. The focus of this study in one geographic location in the United States could affect the results of this study. In addition, the instruments and interviews were administered to the participants in a specified location but the location varied for study participants. Instruments were administered within the individual school districts utilized for this study, but the classroom and office space varied among schools and districts.

Definition of Terms

Advisory Programs. Advisory programs allow adults the opportunity to meet regularly with an arranged group of students to build relationships, mentor, guide, and provide support. Advisory programs are not meant to affect student achievement, but rather to contribute to a positive climate (Juvonen, Le, Kaganoff, Augustine, & Constant, 2004).

Best Practices. The term “best practices” identifies what contributes to the success of an organization or service. “Best practices” typically originate from scientific or research-based theories (State Education Resource Center, 2010). For the purpose of this study, “best practices” denotes research-based theories that contribute to the development of an excellent middle school gifted program from the perspective of the middle school gifted adolescent, middle school teacher of gifted, and gifted education leader.

Brain Periodization. Brain periodization is a scientific theory also known as the “plateau learning theory.” Brain periodization was introduced to educators in the late 1970s. Brain periodization claimed, “brain growth in children ages 12 to 14 reaches a plateau, at which time ‘the brain virtually ceases to grow,’ and that teaching complex material during that period will have damaging effects on children” (Yecke, 2005, p. 9). Although brain periodization was discredited as a concept, Yecke (2005) believed that the theory allowed middle school educators to lower expectations at the middle school level.

Early Adolescence. Early adolescence is a defined time period in the development of a child. It is typically characterized by changes occurring within the child who is emerging from childhood to adolescence. Early adolescence is a phase when children are known by various names: preadolescence, transescents, or middle schoolers. Research utilizes a definition for early adolescence to account for the group’s unique needs: students between the ages of 10-14 who experience the physical, psychological, and cognitive changes associated with the early adolescence development period, yet who also exhibit tremendous cultural, gender, developmental, and individual diversity (Brown, 1994; Manning & Buchner, 2001). Early adolescent children are full of contradictions; they desire risk but want to be supported (Tomlinson & Doughty, 2006).

Flexible Scheduling. Flexible scheduling is recommended by middle school educators and advocates to provide for a more fluid middle school daily schedule, moving away from a rigid period-by-period format to one that more readily meets individual student needs. Flexible scheduling, when implemented correctly without fixed

class periods, allows students the opportunity to make connections across the curriculum (Juvonen, et al., 2004).

Gifted. Gifted is not concretely defined. The definition of gifted varies from state to state and person to person. Therefore, when defining “gifted” there is no single description that is used definitively nationwide to adequately identify the special population. Gifted education started with Lewis Terman, deemed the father of gifted education, who defined gifted as “the top one percent level in general intelligence ability as measured by the Stanford-Binet Intelligence Scale or comparable instrument” (as cited in Walker, 2002, p.16).

As research and gifted education continued to grow, Joseph Renzulli defined giftedness as “an interaction among three basic clusters of human traits--these clusters being above average general abilities, high levels of task commitment, and high levels of creativity” (as cited in Walker, 2002, p.17).

A comprehensive study of the gifted population began with the *Marland* report in 1972. The *Marland* report, according to Hoagies Gifted Education Page (2009), defined gifted:

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 differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society. (para. 3)

With the release of the *Marland* report in 1972, many used the government's definition to help identify those students deemed gifted and in need of quality services to meet their academic intellectual needs.

With subsequent reports, the definition of gifted was refined to that now used by the United States (NAGC, 2008b):

The term "gifted and talented", when used with respect to students, children, or youth, means students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific fields, and who need services or activities not ordinarily provided by the school in order to develop these capabilities. (para. 2)

Although the federal government has clearly defined what it means to be gifted, no state is required to adopt the definition of gifted within its educational systems. The state of Missouri, however, with the enactment of the 1973 Special Education Law, developed a state definition for gifted:

Section 162.675. RSMo, defines gifted children as "those children who exhibit precocious development of mental capacity and learning potential as determined by competent professional evaluation to the extent that continued educational growth and stimulation could best be served by an academic environment beyond that offered through a standard grade level curriculum." (Department of Elementary and Secondary Education, 2005, p. 2)

For the basis of this study, the definition developed and implemented by the state of Missouri will be used due to the fulfillment of the study in a metropolitan location within

Missouri. It is important to note, however, that in the state of Missouri, individual school districts do not need to adopt the definition created by the state when identifying and offering gifted services.

Inclusive Classroom. Inclusive classrooms are classrooms that have a heterogeneous grouping of students within the walls of one classroom (Calhoun & Casey, 1995). Students within the inclusive classroom receive all services within the regular classroom without leaving. The inclusive classroom teacher is responsible for providing the necessary education to meet each student's individual needs.

Interdisciplinary Team Teaching. Interdisciplinary team teaching is the practice of grouping teachers together in the same area of the building and making them responsible for planning, teaching, and evaluating students in all academic areas. According to research, teams have helped to form connections and relationships between the teachers and students (Juvonen, et al., 2004).

Junior High. Junior high schools were established in 1909 in Columbus, Ohio. Junior high schools were initially established to meet the unique needs of the adolescent child and served as a social transition experience between elementary and high school. Junior high schools, at the onset, provided enriched academics for college and vocational bound students. As the junior high model gained popularity, the unique affective needs of the students became the priority and the junior high system was focused on meeting the individual social and emotional needs of the students (Brown & Knowles, 2007; Manning & Bucher, 2001; Yecke, 2003).

Looping. Looping is a practice utilized by some middle school programs. Looping occurs when a teacher moves, or loops, with a group of students; the teacher stays with a particular group of students for two to three years. Looping is not a commonly used practice by educators, although it is believed to promote teacher-student relationships, promoting the recognition and maximization of a student's strengths (Juvonen, et al., 2004).

Middle School. The current middle school concept within the United States education system became widespread during the 1980s. It was during the 1980s and 1990s that the educational system in the United States moved away from the junior high model to educate children at the middle grades and to adopt the idea of a middle school. This shift from junior high to middle school occurred because of previously defined beliefs that at the middle school level students should focus on socialization and not academic rigor (Yecke, 2005). Middle school advocates, educators, and researchers began to voice concerns that middle school level students were forgotten by society. This uprising and push encouraged society to promote the education of the "whole child" and thus the idea of middle school became set in the educational system of the United States (Juvonen, Le, Kaganoff, Augustine, & Constant, 2004). Middle schools are characterized by a focus on the social and emotional aspects framing the teenage years, in addition to meeting students' academic needs. Interdisciplinary team teaching, flexible scheduling, student advisory programs, and in some situations, looping are organizational strategies employed in the middle school setting. Middle schools typically consist of students in grades six through eight (Juvonen et al, 2004 & Yecke, 2005).

NAGC. The National Association of Gifted Children is a national organization of parents, teachers, educational leaders, and other members whose mission is supporting the needs of high ability learners (NAGC, 2008c). NAGC has existed for over 50 years with the purpose of fostering understanding and awareness of gifted learners, addressing issues and questions surrounding this unique population, and providing advocacy for gifted children.

NMSA. The National Middle School Association is the only national organization solely constructed to support those educators working in the middle level grades. The NMSA is comprised of principals, teachers, educational leaders, counselors, and other educational professionals in the United States and forty-seven countries. In 1973, NMSA was created as “a voice for those committed to the educational and developmental needs of young adolescents” (NMSA, 2010, para.1).

Pull-Out Programs. Pull-out programs in the state of Missouri usually follow one of two models. One model, Resource Room Teacher, is evidenced when the gifted education teacher works full time in the gifted resource classroom. Students participating in this type of program receive gifted services and instruction from the gifted certified teacher only when they are in the gifted resource classroom. In the other model, Educational Resource Teacher, the gifted certified teacher spends 80% of the school day in the gifted resource classroom and 20% of the school day providing support to gifted students as a classroom resource teacher. Implementation of either model may be seen at the middle school level, although pull-out programs are more typical at the elementary level (Department of Elementary and Secondary Education, 2009, p.3).

Special Classes. Special classes are those classes that a gifted student would participate in that are part of their regular schedule and are often a product of choice or special talent, such as music, art, or foreign language. According to the Department of Elementary and Secondary Education (DESE) in the state of Missouri, “special classes are often interdisciplinary in nature, but may focus on a specific subject area” (p.4).

Summary

With the push to educate and foster globally competitive students in American society, a focus must be placed on educating each student to achieve at his or her individual best. The current state of gifted education lacks cohesion; each state and district independently determines what method, if any method, to utilize when educating the gifted population. According to Davidson and Davidson (2004), only 29 states fund gifted education, while Yecke (2002) found that only 26 states have laws or rules mandating gifted services. Even among the states that have laws and rules mandating services, like the State of Georgia, variance is observed among districts as different counties allow for funding and the implementation of gifted services (Turner, 2009). Research has identified excellent gifted education program implementation at the elementary level; however, there is insufficient research and data to illustrate excellence at the middle school level. Until American schools appropriately challenge each student to reach his or her individual potential, students will be left behind. This study intended to assess current middle school gifted programs in order to establish the foundation for gifted education excellence at the middle school level. Once the key components of a

successful middle school gifted program are identified, schools can utilize the data when implementing or updating a middle school gifted program.

Chapter Two: Literature Review

The middle school movement took hold in the education system in the United States as an alternative to the junior high school during the 1970s and 1980s. Focus on middle school education was particularly necessary as “historically, young adolescents have been neglected in the K-12 spectrum with little interest shown to this group” (Brazee, 1997, p. 188). Gifted students, a subset of this under recognized population, were largely ignored as middle school educational philosophy developed to meet the needs of the “whole” adolescent child. Vacillating interest in education for gifted students, coupled with the “one-size-fits-all” model of middle school philosophy, relegated the adolescent gifted students’ needs at the middle school level to the back burner.

In an era fixated on test scores and accountability, education in America today focuses on increasing the performance of lower achieving students. Advanced learners at all levels are feeling the results of neglect, but the effect is particularly poignant for advanced learners at the middle school level. The joint position statement by the National Middle School Association (NMSA) and the National Association for Gifted Children (NAGC) in 2004 stressed that meeting the needs of high ability learners, has become paramount to the education of gifted adolescent learners. Little research conducted to determine excellence in middle school gifted education programs exists. If middle schools are to meet the needs of gifted learners within the educational system, studies designed and carried out to define excellence in middle school gifted education are imperative. This review of literature will focus on key information in understanding

gifted education at the middle school level. The information includes: (a) historical development of gifted education; (b) philosophies of educating the middle school child; (c) beliefs on gifted education; (d) the current state of middle school gifted education; and (e) effectiveness of middle school gifted programming options.

History of United States Middle Schools

In the 1960s, educators in the United States conducted a thorough review of the junior high school organizational model. The Middle School Movement, a phrase coined by educational professionals, addressed the social and emotional needs of adolescents that the junior high model failed to address. As the concept of the middle school model evolved into practice, the education that pre-adolescents experienced evolved as well. Yecke (2005) stated that the concept of “brain periodization” was introduced to education in the late 1970s claiming that “brain growth in children ages 12 to 14 reaches a plateau, at which time ‘the brain virtually ceases to grow’” (p.9). Brain periodization provided middle school advocates with justification for placing a focus on social and emotional skills in middle school at the expense of academics. The philosophy of middle school once again evolved in the 1980s as the focus of educating the adolescent child began to appear in research literature. In 1989, Paul George defined the middle school concept and the Carnegie Council on Adolescent Development released the report labeled *Turning Points: Preparing American Youth for the 21st Century*. The Carnegie Council on Adolescent Development reported the following:

Middle grade schools--junior high, intermediate, or middle schools--are potentially society’s most powerful force to recapture millions of youth adrift. Yet

too often they exacerbate the problems the youth face. A volatile mismatch exists between the organization and curriculum of middle grade schools, and the intellectual, emotional, and interpersonal needs of young adolescents. (as cited in Juvonen, Le, Kaganoff, Augustine, & Constant, 2004, p. 14)

In the 1990s, middle schools focused on developmental rather than cognitive needs of the students. Although “students’ cognitive capabilities improved during the middle grades in terms of their ability to think abstractly, consider different perspectives, and take multiple factors into account at once, the instructional strategies became less cognitively demanding” (Juvonen, et al., 2004, p. 16). Therefore, as students became more adept at handling new tasks and complex concepts, the work that was required of them did not offer them new challenges. In fact Rounds and Osaki (as cited in Juvonen et al., 2004) found that “the work required in the first year of middle school was less demanding than that of the last year of elementary school” (p. 16).

Research has shown that with the philosophical change from junior high to middle school, and the modification in the concept of middle school, middle schools continue to fail to deliver (Juvonen et al., 2004; Manzo, 2000; Yecke, 2005). Yecke (2003) believed that the failure of American middle schools can somewhat be attributed to the theory of brain periodization, “although the theory of brain periodization was discredited in the mid-1990s, it still maintains a firm hold on the belief system of many educators” (p. 56). Beane (1997) agreed that the middle schools failed and attributed this failure to the curriculum. With the onset of the middle schools and the ambiguous curriculum, decisions on what to teach remained up in the air. Little has changed with the curriculum

development in today's middle schools. The middle school movement, to avoid the continued disservice for many students, must set high expectations and require success for all students (Manning & Bucher, 2001).

The Middle School Age Child

Adults typically label middle school children as an undesirable population to work with because of the various needs and changes happening during adolescence. Early adolescents are full of contradictions: wanting freedom but unable to make appropriate choices, taking risks but desiring protection, etc. (Thiers, 2005). Adolescence is the stage between childhood and adulthood accompanied by biological, social, and psychological changes.

One of the most marked changes of adolescence is the occurrence of puberty, which can happen at various ages, and which introduces body and hormonal changes to the adolescent child. During adolescence, puberty can produce periods of rapid growth, a change in body structure, and noticeable gender differences. The changes with the body, due to puberty, can result in self-conscious behaviors while also promoting risk-taking (McDevitt & Ormrod, 2004). These marked changes represented in all adolescents at some point in their development also accompany other changes that can affect the learning of the early adolescent child.

Another change during the adolescent years pertains to the developmental stages of adolescence, which may manifest in having a more mature view of events and situations as well as a preoccupation with how one appears to others. The brain itself experiences significant developmental changes during adolescence. The front part of the

cortex continues to develop and the brain is able to see the future and analyze emotions and produce higher-level thinking (Ormrod, 2004; McDevitt & Ormrod, 2004). Due to brain evolution and progression in the developmental stages, the middle school age child begins to wonder how the peer group perceives him or her and looks toward the peer group for approval.

The middle school child experiences cognitive advances that change thought processes and the depth to which thinking can occur. Cognitive advances include “expansion in abilities to think logically, abstractly, and exhaustively” (McDevitt & Ormrod, 2004, p. 21). These changes marking the period between childhood and adulthood attest to the need for a tailored educational setting for middle school students that is unlike the elementary or high school setting.

Educating the Middle School Age Child

“Today in the United States there are nearly 9 million students in public middle schools” (Juvonen, et al., 2004, p.iii). Students across the nation are receiving their education at the middle school level while the “best practices” concerning how to educate the middle school child have been altered to accommodate the standards set forth by the No Child Left Behind legislation. With No Child Left Behind, the “best practices” were deemed those that fostered the attainment of a certain standard by all students. Yet ACT (2009) reported that “less attention has been paid to the importance of the upper elementary grades and middle school and the role they must play in the preparation of students for life after high school” (p.37).

Researchers believe that the middle school years are the most critical in predicting future success and failures (ACT, 2009; Juvonen et al., 2004; Mizelle, 2005; Tomlinson & Eidson, 2003; Yecke, 2005). Based on the necessity of middle school to help set students up as successful high school students and adults, middle school should reflect a significant component in the education of a child. Unfortunately, middle school has not held this role in the education of American children; middle schools are “where U.S. student achievement begins its fateful plunge and where a growing number of other nations begin to outpace us in the contest for a well-educated population, a skilled workforce, and a long-term prosperity” (Yecke, 2005, p. I). Educating the middle school child is a task that requires the highest standards, achievement goals, and accountability (Juvonen et al., 2004; Manzo, 2000; Yecke, 2005).

Practices for Educating the Middle School Child

Academic and social needs of middle school students differ from those children in elementary and high school grades. Therefore, the educational program that addresses the needs of the adolescent learner must be distinctively unique to accommodate those differences. Current middle school programs, according to Schroeder (1995), have moved from the “stagnant 1970s version to the student-centered concept” (para. 4). Various components: interdisciplinary team teaching, flexible scheduling, advisors/advisory periods, curriculum, and occasionally looping contribute to the concept of the organizational philosophy of the middle school.

Interdisciplinary Team Teaching. Interdisciplinary team teaching is a component that research has shown to be beneficial at the middle school level. Providing teams or

“houses” of learning allows for an elementary concept of student-teacher closeness/proximity to meld with the academic needs of the adolescent learner. Teaming also allows for a collaborative climate. The use of teams creates a climate that promotes learning (Brown & Knowles, 2007; Manning & Bucher, 2007). The benefits of this type of climate include the ability for increased engagement time, increased achievement and attendance, as well as a sense of belonging (Arhar, 1997, p. 51). As cited in Juvonen et al. (2005), George and Alexander define interdisciplinary team teaching as:

A way of organizing the faculty so that a group of teachers share: (1) the same group of students; (2) the responsibility for planning, teaching, and evaluating curriculum and instruction in more than one academic area; (3) the same schedule; and (4) the same area of the building. (p. 21)

Middle school educators think of interdisciplinary team teaching as essential in meeting the needs of the adolescent learner (Arhar, 1997, p. 49). Team teaching allows the same group of teachers to work with the same group of children and transfer the “home” feeling of elementary school to the middle school setting, where subject area content and ideas become more rigorous. Rigor in curriculum can be defined as curriculum that provides challenge in a subject area via the depth covered and immersion in the subject (Center for Comprehensive School Reform and Improvement, 2006; Matusevich, O’Connor, & Hargett, 2009; Washor & Mojkowski, 2006/2007).

Truly rigorous curriculum challenges students to use the “full range of their talents and intellectual abilities to address authentic and complex academic tasks in professional and real-life events” (Matusevich, et al., 2009, p. 46). Studies have found

that middle schools utilizing a team approach tend to group students in a heterogeneous configuration. This type of heterogeneous grouping by middle schools suggests a philosophy based on a “commitment to equity and opportunity for all students” (Arhar, 1997, p. 50) instead of a focus on rigor. The use of teaming can address the needs of the adolescent learner, the changes initiated by an influx of hormones, and the desire to belong. Teaming can meet the students’ social needs while pushing them academically. Teaming is particularly effective at the middle school because of the built-in collaboration between teachers and students that is fostered within the teams. The teaming approach allows teachers the opportunity to share strategies with other teachers, assist with connections across subjects, and promote student belonging (Arhar, 1997; Juvonen, et al., 2004).

Flexible Scheduling. Flexible scheduling is another component critical to the middle school structure (Brown & Knowles, 2007; Juvonen et al., 2005; Manning & Bucher, 2001). Flexible scheduling was originally designed to improve the quality of student learning by providing a more in-depth look at a subject and allowing more time to encourage higher-level thinking skills (Canady & Rettig, 1995; Juvonen et al., 2005). Some middle school programs in the United States require students to have a fragmented day, requiring their attendance in six to eight unrelated classes per day (Canady & Rettig, 1995, para. 5). “Students can’t learn and understand the material in seven or eight unrelated classes a day with four-minute passing times. Where else in our society do we learn like this?” (Rubinstein, 1994, p. 66). Middle schools can accommodate the individual student learning styles with the use of flexible scheduling. Flexible scheduling

can help meet student needs by providing ample time for thorough examination of a subject or topic of study.

Advisory Programs. Juvonen et al. (2005) recommended the use of advisory programs at the middle school level. Advisory programs are “arrangements in which adults meet regularly with groups of students to mentor, guide, and provide support” (p. 24). An advisory program consists of class time devoted to developing and working on the adult/child relationship, providing time for the advisor and advisee to meet within the schedule of the school day (Coleman, 2001, p. 21). The involvement of adult advocates or advisors is a practice that helps students to feel connected to the school and their surroundings (Brown & Knowles, 2007; Manning & Bucher, 2001). When students know that they have a place where they can go, and an adult role model on whom they can rely, the learning environment appears comfortable and safe, assisting all students in success (Brown, 1999). During the transition period from childhood to adulthood, early adolescents can benefit from close relationships with adult role models; when advisor and adolescent meet on a consistent basis in a familiar setting during this influential time in the adolescents’ development, positive results are noted.

Curriculum. Research indicates that educators should focus on a curriculum that challenges and meets the needs of students academically while supporting their affective needs (Manzo, 2000; Mizelle, 2005; Tomlinson, 1995b; Tomlinson & Doubet, 2006); this curriculum can provide more access to advanced courses and electives (ASCD, 1975; Yecke, 2005). Middle school advocates assert that curricula at the middle school level “should be challenging, integrated, exploratory, and designed specifically to ensure the

healthy development of young adolescent learners” (Rakow, 2005, p. 98) while supporting rigorous academic standards, focusing on essential questions, authentic learning, community contexts, and developmentally and socially responsive curriculum. The teachers who work to develop curricula, according to Tomlinson and Doughty (2006), “help young adolescents, do more than ‘teach well’; they are catalysts for student involvement in fulfilling a future” (p.36). The curriculum must be empowering and assist in all-around development of young adolescent students (Moon & Tomlinson & Callahan, 1995). Rubinstein (1994) believed that “our traditional school curriculum, through--the way we teach and the way students learn--doesn’t allow for failure or emphasize the value of failure, the important learning that can be gained from a failure” (p. 24).

Therefore, middle school educators must create, implement, and assess curriculum geared to the early adolescent child that is relevant and real-world, contains a purpose, includes key concepts and essential understandings, and provides choice (ASCD, 1975; Brazee, 1997; Manning & Bucher, 2007; Tomlinson & Doughty, 2006). Choice is one of the key components of a successful curriculum according to Tomlinson and Doughty (2006) who found that choice “dignifies their [students] status as decision makers, enables teachers to work directly with students on what it means to make wise choices, and focuses their [student] work on areas of budding interest or existing passion” (p. 48). Offering choice within the challenging curriculum allows teachers to ensure that they are meeting the needs of individual students (Rakow, 2005; Westberg, 1995).

Choice is not the only component of the curricula that is essential. Manning and Bucher (2001) noted the importance of curriculum in equipping students with continuous learning skills, teaching organization and planning, aiding in the formation or growth of a world view, and developing thinking, reasoning, and reflective skills. Curriculum is important in connecting students to a successful middle school career or in disengaging them from the middle school learning environment.

Looping. Looping, occasionally used by some middle schools, fosters relationship building that can contribute to a stronger social connection at the middle school level. Looping provides the opportunity for the same teacher and student groups to stay together for two or more years. Teachers have reported that looping helps them to identify student strengths and weaknesses, allowing them to tailor the learning experience to fit each student. The research of Juvonen et al. (2004) found that “after the implementation of looping, student attendance and retention rates increased, disciplinary actions and suspensions decreased, and staff attendance improved” (p. 26). Therefore, looping accentuates the middle school philosophy by fostering student social and emotional growth.

The middle schools years must not be “throw away” years in the educational lives of American children. The “transition from middle school to high school should become just as important as the transition from high school to postsecondary education” (ACT, 2009, p. 41). Researchers and advocates believe that if teaming, flexible scheduling, advisory groups, and challenging individualized curriculum are implemented completely, then middle school programs can adequately meet the needs of the adolescent child.

Beliefs about Gifted Education

Ideas on how to best educate the gifted child within America's classrooms vary. Advocates of gifted education present the necessity of gifted programming for gifted students, whereas opponents maintain that gifted programming is an elitist option available only to some students. There are many definitions of elitism, but one that Clark (2002) believed must be considered when evaluating gifted programs is "a group chosen because of some special talent, skill, or ability, which, if fostered, could become truly outstanding" (p. 13). Gifted education advocates believe that gifted programming is the opportunity gifted students need to develop their talents into something truly outstanding. The attitude of American society toward gifted children is that it "wants to make use of their gifts, but doesn't want to make the investment in nurturing them" (Walker, 2002, p. 121). The ambiguity that accompanies the nation's feelings on gifted education demonstrates the mixed opinions on intelligence. "We know Alex Rodriguez had to practice to become a great baseball player, and we don't think of special schools for gymnasts or tennis prodigies as elitist" (Cloud, 2007, para. 14), yet schools designed to meet the needs of gifted students are presumed, by some, to be elitist. Intellectual giftedness in American society is both praised and criticized, desired and resented (Yecke, 2003).

The thinking and processing skills of the gifted student are far different from that of any other student in the educational system. "The gifted student is one who has a richer and more complex knowledge structure and, more important, the meta-thinking skills necessary to continue building those structures" (Gallagher, 2003, p. 11). If a gifted

child is left in an unenriched classroom the child, according to Davidson and Davidson (2004), may lose a year of challenges that could enhance their intellectual capabilities.

Quality Education for All

Gifted education advocates believe that the gifted population in American middle schools should receive a quality education. “We, in America seem to be infatuated with making everyone equal and middle class. We are so concerned about being non-elitist that we overlook the value in being different” (Burton-Szabo, 1996, p. 12). Gifted education, therefore, is a service deserved for the students who require more from their educational system. The United States educational system proposes that all students be allowed to reach and achieve their full potential as a nation however, the goal is the equal treatment of all people (Walker, 2002). “Equity typically is translated as helping slow-learning, disadvantaged, and other at-risk students become more equal” (Colangelo & Davis, 2003). This ignores the needs of the gifted, forgetting that they require additional assistance to receive a quality education. However, Clark (2002) believed that equity is making sure that the “experiences available are uniquely appropriate for each individual” (p. 5). “Our goal must be to develop the talents of all to their fullest” (NCEE, 1983, Excellence in Education, para. 3) and in order to develop each child’s talents to the fullest, an education must be provided that is challenging and pushes students to work toward their limits to the highest standards. By encouraging the talent and growth of every child to their fullest potential, outcomes will be beneficial “not only for the individual but for the benefit of all” (Clark, 2002, p. 4). Walker (2002) stated that “educational fairness does not mean that all students need to be on the same page on the

same day” (p. 14). Davidson and Davidson (2004) agreed with Walker stating, “Schools should not discriminate against gifted kids. All kids--low achievers, high achievers, and those in the middle--deserve to have their educational needs met” (p. 3). It is foolish for society to believe that “gifted students are learning because they achieve acceptable standards on state assessments” (Winebrenner, 2000, para. 10); the achievement of gifted students cannot adequately be measured on state achievement tests because they meet or exceed the minimum standards. Furthermore, there is a common misconception in the United States that the educational system should not “worry about the bright and capable students because they are achieving well in school” (Callahan, 1994, p. 6). These students are not, however, being asked to work to their limits, but rather the lower limits put in place by the educational system. Therefore, educators and the educational system must set high standards and hold the gifted students responsible for meeting those expectations. Clark (2002) stated the following:

Excellence for all will not be realized unless middle school teachers can find a way to provide a climate where both social and academic needs are met, and competence and excellence are available to every student’s level of learning. The needs of the gifted learner cannot be ignored without a loss of equity and excellence. (p. 285)

Equality can be interpreted as every student receiving the same education so that it is equal; or it can stand for every child receiving the instruction deserved.

The educational system in the United States must start adhering to the mission statements that so many districts hold--a quality education for all students--if it desires

success at any level. As a nation the United States is based on democratic principles; therefore because the educational system is an extension of these principles, all children should “be educated at their level of development, it is then undemocratic to refuse to allow gifted children the right to educational experiences appropriate to their developed level of ability” (Clark, 2002, p. 6). Servicing gifted children follows the principles of democracy and the mission statement adopted by school districts. One common reason cited for not servicing the gifted population is that educators believe that the gifted students do not require support because they will do just fine on their own without any curricular modifications (Colangelo & Davis, 2003; NAGC, 2008a; Winebrenner, 2000). According to Winebrenner (2000), “those at the greatest risk of learning the least in classrooms are those at the top range of ability” (para. 11). Instead, the children at the top level of achievement are left unchallenged, do not understand how to approach a difficult task, and thus take the easy way in order to postpone the challenge.

The Gifted Middle School Child

Abundant research exists on the characteristics exhibited by gifted children. However, gifted adolescents do not possess the same characteristics. Gifted adolescents, in addition to characteristics that may be different from those of other adolescents, face similar problems common to all of their peers. Giftedness carries with it unique pressures and obstacles for the adolescent child. Research evidences that gifted adolescents exhibit various characteristics including but not limited to the following:

1. Need to belong and achieve among various social groups. This needing to belong is often felt by gifted adolescents; often telling others that they feel different from their classmates (Tomlinson, 1994b).
2. Uneven development. As the gifted child develops physically during early adolescence, this development does not coincide with intellectual development.
3. Perfectionism. Gifted adolescents typically feel extreme pressure to do everything perfectly. Gifted students have “learned to set their standards high, to expect to do more and be more than their abilities might allow” (Buescher & Higham, 1990, para.5).
4. Lack of study skills due to the ability to accomplish tasks with little to no studying. At the elementary level, students are typically able to achieve with little effort. Middle school brings on the need to study and use skills previously not developed.
5. Sense of difference from peer group. Gifted students begin to notice the differences between themselves and their peer group, often leading to feelings of isolation.
6. Lack of awareness of own possibilities. Gifted students typically do not realize their own potential. “Some will say they knew they were smart but didn’t know what to do about it” (Tomlinson & Doubet, 2006, p. 27).
7. Alienation feelings. Gifted students typically feel alienated from academics at the middle school level because learning does not

necessarily come as easy as it once had and their interests may be different from that of their age mates. Alienation may also occur because “gifted adolescents have few role models of their own age to emulate and they seldom find peer guides” (Clark, 2002, p. 198).

8. Ability to learn new material in far less time than their age mates, often remembering information learned. The repetition of concepts that typically occurs at the middle school level is boring to gifted students and, when not challenged appropriately, can lead to classroom disengagement.

Although these characteristics can contribute to academic and personal concerns, with the right programs in place and an awareness of the unique needs of gifted adolescents, the gifted child can thrive and succeed in middle school (Buescher & Higham, 1990).

Tomlinson and Doubet (2006) suggested that teachers utilize advanced resources, reflection, pace variation, and making connections when meeting the needs of the gifted adolescent. Middle school teachers who understand that the middle school gifted child has unique academic social needs can assist the child in overcoming the problems that can arise for a gifted student at the middle school level (Tomlinson, 1994b; Tomlinson & Doubet, 2006).

Gifted Education Beliefs in Middle School

Gifted education at the middle school level was lost in the transition as the middle school movement replaced the junior high philosophy. Although the middle school environment with longer periods of learning, teaming, and flexible scheduling would appear to complement the learning needs of gifted students, the middle school has

become “something to be endured--time spent, at best, treading academic water” (Rakow, 2005, p. 53). Therefore the push of the middle school concept and the lessening of importance on academics and gifted education in middle schools “is nothing less than a declaration of war against academic excellence and against those children who possess high academic abilities” (Yecke, 2003, p. 1). It is unwise to think that either students lose their giftedness upon entrance to middle school and so gifted education is not necessary, or that middle school education can meet the needs of all learners across the spectrum.

Meeting the needs of the gifted child requires a special educational approach that differs from approaches used with other populations of students. Gifted students require “more opportunities for divergent and associative thinking than most students” (Wright, 1983, p. 18). Gifted students also need programs that “provide[s] pathways by which these students may venture away from the basic curriculum in areas in which they excel” (Strip, 2000, p. 70). Gifted learners need “different pace of instruction, different content, and even different levels of application of heuristics and thought processes than many of their age mates” (Tomlinson, 1994a, p. 179). Gifted students also need to feel supported and accepted. Those responsible for gifted programming must be cognizant of the fact that gifted students feel a “...push/pull of special classes” (Clark, 2002, p. 203), desiring to be a part of them while also wanting to be socially accepted.

Considering the varying needs of middle school age children, middle schools can only adequately provide the educational environment needed by all learners to succeed by offering special services and modifications for those students who need them. With a lack of gifted programming options in districts across the nation, gifted students often realize

that they are different from their peers (Wright, 1983); “no student learns well who feels invisible, inconvenient, odd, or out of step” (Tomlinson & Doughty, 2006, p. 15). It is this alienation, an “awareness of their unusual abilities or interests...as though they do not, should not, or cannot fit in” (Rosselli, 1997, p. 97), which often leads to their disengagement in the academic environment.

Ability Grouping. Some researchers and professionals in the educational field argue that homogeneous grouping of students for gifted education programming is at odds with the middle school philosophy. Founded on the principle that all students would receive an equal education, the middle school movement focused on the social and emotional milieu in which early adolescents could develop the requisite skills to become successful and functioning adults. Renzulli stated “that when all is said and done that a good job can be done in regular classrooms up to a given point” (Knobel & Shaughnessy, 2002, p. 11). Renzulli also stressed, however, that the teacher in the regular classroom must have special training in gifted education or the ability to work closely with a gifted specialist in order to meet the needs of the gifted student (Knobel & Shaughnessy, 2002). Much of the available research supported Renzulli’s ideas regarding the implementation of heterogeneous grouping practices and the need for students to be grouped with peers who are different from themselves (Mills, 1997).

Other research, however, suggested homogeneous grouping allows for “the fulfillment of individual potential” (Yecke, 2003, p. 72). When surrounded by like peers, students gather new perspectives and are able to share interests, problems, and develop friendships (Wright, 1983). Shared interest is most noticeably seen in core subject areas

where students are grouped with peers who have similar proclivity to excel in that area. Research supported the use of ability grouping for the academically talented students in mathematics (Mills, 1997, p. 88). Not only did research support the use of ability grouping in mathematics but also gifted learners “fare better academically in special classes and accelerated programs than in heterogeneous settings” (Tomlinson, 1994b, p. 53). Tomlinson (1994a) also noted that when gifted learners are heterogeneously grouped, instead of homogeneously grouped, the learning expectations likely fall. Ability grouping of students who require academically advanced services is a current best practice to help gifted students perform at their fullest potential.

Ability grouping not only meets students’ needs, but also influences their outlook on school. Shields (2002) evaluated the research on homogeneous grouping while conducting a study to compare student attitudes and perceptions in homogeneous and heterogeneous classrooms. This study utilized two schools within a Canadian school district. Shields suggested as a result of the study, that homogeneous grouping serves the needs of gifted students without negative effects to other students. Gamoran and Weinstein’s (1998) results directly related to Shields with their study conducted on 24 highly restructured schools in the United States. The study schools were selected based on criteria determined by the Center on the Organization and Restructuring of Schools. Their research found that the removal of ability grouping “brings no guarantee of high-quality instruction for all students” and in some cases brought a low level of education to all (p.410). Many gifted students find that by participating in homogeneous grouping, a

realization occurs that they are not the smartest, often producing a humbling experience.

Yecke (2003) stated the following:

Advocates for the gifted point out that if high achieving students are removed from the classroom, the achievement of neither average nor below average students suffers, and gifted learners are allowed to experience instruction with peers who accept them as they are, who will not ridicule or ostracize them. (p. 84)

Therefore, homogeneous grouping of gifted students in gifted programming is advantageous for the gifted population and does not harm any other middle school population. Burton–Szabo (1996) also believed that with the elimination of homogenous grouping of gifted students, the implication is that mediocrity is okay--a grave injustice to American society and its future.

Peer Tutoring. When teachers ask gifted students to remain in heterogeneous groups, other practices emerge with this inclusion in the regular classroom. Peer tutoring is one method that teachers employ. Educators postulate that by utilizing the gifted student as a peer tutor for another student, the gifted student has greater mastery of the content because of the depth of understanding needed to teach a subject.

Researchers and gifted education proponents see peer tutoring as a hindrance to the gifted child's learning. Advocates "have expressed concerns about whether it is ethical to use gifted children as junior teachers" (Yecke, 2003, p. 146); if a teacher cannot reach the students within the classroom, the gifted student should not be expected to do that work. Gifted students typically complain about having to learn a subject and then re-teach it to another student, contributing to the gifted students' resentment of group work.

Clark (2002) stated that using the gifted child as a peer tutor may actually result in "...mediocre performance by them and a lack of challenge in their learning" (p. 284). Therefore, peer tutoring is not a method utilized or deemed effective by proponents of gifted education for the early adolescent gifted student.

Cooperative Learning. Cooperative learning is a grouping practice used in middle schools to meet the needs of gifted students, as well as other groups of students. Cooperative learning is an instructional strategy used by educators to utilize small groups of students for instructional purposes. Yecke (2003) discovered, however, that gifted students feel used and disrespected when having to work in cooperative learning groups. Cooperative learning groups typically include gifted students placed with other students because they are bright and the thought is that "they will be able to teach and motivate less able or less willing students in their groups and to do so with considerable finesse without being pushy, impatient or intrusive..." (Tomlinson, 1994a, p. 178). It is this type of grouping and expectations that leads gifted students to complain about cooperative heterogeneous grouping because in many cases the gifted student will do the majority of work for the group, promoting "social loafing" (Yecke, 2003, p. 126). Gifted adolescents often express a sense of frustration within inappropriately managed cooperative learning groups (Clark, 2002). Cooperative learning groups, however, appear effectively utilized in homogeneous grouping of gifted students, as gifted students report more positive feelings regarding the homogeneous cooperative learning group (Yecke, 2003).

Assessments. Assessments provide one method that educators can utilize when meeting the needs of the middle school gifted student. The use of both pre and post

assessments is effective. The use of these instruments provides an accurate picture of, and presents opportunities for differentiation within the content area (Tomlinson & Doughty, 2006). Pre and post assessments are tests that the teacher can develop to determine what information a student already knows and has retained on a topic. Making a student spend time rehashing concepts that he or she has already mastered is pedagogically unsound. Pre-assessments provide the teacher with information regarding what content and concepts require more or less coverage.

Another form of assessment used by educators of gifted is authentic assessments, also referred to as performance assessments. Authentic assessments focus on the big ideas and concepts, are real-world and relevant, and allow students to utilize multiple methods to demonstrate learning. Assessment tasks range from “performances, projects, writings, demonstrations, debates, simulations, presentations or other sorts of open-ended tasks” (Moon, Brighton, Callahan, & Robinson, 2005, p. 120). Authentic assessments provide students the opportunity to work toward a real result, simulating the real world (Biemer, 1993; Wiggins, 1998).

Curriculum Compacting. Curriculum compacting is another way to meet the needs of and educate the individual middle school gifted student, moving away from the “one-size-fits-all” method of instruction. Curriculum compacting is an instructional pacing and weeding tool that maximizes time for learning new material. Compacting curriculum allows educators the opportunity to restructure grade-level curriculum in order to provide for appropriate challenge and interest within the curriculum (Ries &

Renzulli, 2005). Reis and Renzulli (2005) recommended that the process of compacting curriculum involve

- (1) defining the goals and outcomes of a particular block of instruction;
- (2) determining and documenting the students who have already mastered most or all of a specified set of learning outcomes; and
- (3) providing replacement strategies for material already mastered through the use of instructional options that enable a more challenging, interesting, and productive use of the student's time. (p. 5)

The use of curriculum compacting permits the gifted student to learn content and concepts in far less time than non-gifted peers; gifted learners describe the middle school experience as more academically fulfilling when curriculum compacting is applied to their educational programs. According to Tomlinson and Doughty (2006), compacting allows teachers the opportunity to help a gifted child work independently and successfully to cover the necessary material. Curriculum compacting, therefore, benefits the gifted child by accommodating the child's advanced academic needs.

Educators of Gifted

Educators who teach gifted education must acquire gifted certification. In the state of Missouri, gifted educators must currently hold a valid Missouri permanent or professional teaching certification, have taught for at least two years, have successfully completed a course titled Psychology or Education of the Exceptional Child, have undergone nine credit hours in state approved fields of knowledge and research procedures, and have participated in a practicum or gifted teaching experience (DESE, 2005). Students, administrators, and parents agree that regardless of a student's level in

the intelligence spectrum, teachers make a difference in the educational life of a child. Croft (2003) noted, "The single most important factor in the academic growth of students is teacher effectiveness" (p. 559). Therefore, gifted students deserve "...a well-trained teacher who can inspire and motivate them, as well as challenging them to excel" (NAGC, 2008d, para. 1). All students, and especially the gifted, need an opportunity to work to their limits with a teacher trained adequately to meet their needs (Walker, 2002; Willis, 1995). Working with gifted students, teachers often find that students are brighter than themselves. Teachers of the gifted "have a desire to teach students who may be brighter than they are, and they must not feel threatened by that" (Walker, 2002, p. 113). Intelligence aside, the teacher's love of learning should match or surpass the love of learning exhibited by gifted students.

Teachers of the gifted adolescent must have the fortitude, flexibility, and passion to support specialized learning for gifted students "in the classroom and in the politically charged arena in which gifted education must often fight for survival" (Rakow, 2005, p. 78). The position as a middle school gifted education teacher or specialist requires the management of both the middle school world and the gifted world.

Teachers of the gifted adolescent must possess varying skills and the ability to understand and empathize with the characteristics of a middle school gifted learner. Westburg (1995) noted that particularly successful teachers would reflect on "best practices" in order to maximize student learning and achievement. The reflection necessary requires teachers of the gifted to understand that working with gifted students requires an understanding and acceptance of the unique needs that gifted students

possess. It is paramount that educators working with gifted students “understand that the highly gifted child thinks and reacts differently than the moderately gifted child.

Likewise, the moderately gifted child thinks differently than the average child” (Walker, 2002, p. 100) and therefore the variance among students in the gifted population is as large as that among non-gifted children. Success in the classroom is unlikely when a gifted student is placed with a teacher who does not adequately understand the unique needs of individual learners or fails to reflect on the effectiveness of utilized strategies.

Teachers of middle school students need special abilities to work with the early adolescent child; teachers of gifted early adolescents need those same skills as well as additional skills in understanding and educating the gifted early adolescent child. Clark (2002) declared that teachers of gifted

Must know how to differ the pace of instruction, to accelerate or provide in-depth learning and advanced content, because these are common needs of gifted students. Teachers must know how to develop high degrees of complexity and an interrelationship in the content, as well as provide novelty and enrichment to accept and extend intensity, divergence, and creative solutions. These special added teaching abilities are needed by teachers of gifted students because those students have specific needs, require additional challenges, and are different both in quantity and the quality of their educational performance. (p. 16)

Being gifted carries its own set of challenges and when in the class “gifted students say they want their teachers to understand them” (Strip, 2000, p. 59). Tomlinson and Doubet (2006) maintained that in order for each student to reach his or her full potential, a

teacher is required who understands the students' individual needs while pushing him or her to achieve and succeed. In fact, the National Research Center on Gifted and Talented "found that 61% of classroom teachers had no training in teaching highly able students, limiting the challenging educational opportunities offered to advanced learners" (as cited in NAGC, 2008a, para. 4). The opportunity to work with a teacher specially trained in educating the gifted child can positively affect the learning outcome for this unique group of students within the school environment.

The use of gifted education teachers/specialists in middle school provides more than just educators for the gifted adolescent child. "The use of specialized personnel (i.e. special education, gifted education, technology, and so forth) is designed to provide both direct support to the students and the teachers" (Coleman, 2001, p. 21) at the middle school level. Gifted education teachers serve as a valuable resource for all teachers at the middle school by providing expertise in gifted adolescent development, lesson differentiation, acceleration, independent learning opportunities, and specialized teaching methods for use with the gifted population. The gifted specialist can also provide the opportunity for team teaching within the regular classroom. The gifted educator must be skilled in facilitating collaborative working relationships among faculty, staff, administration, students, and parents to create a positive, productive, and appropriately challenging learning environment for the gifted adolescent. Therefore, the gifted education specialist provides a unique perspective at the middle school level, which ensures that necessary and appropriate services are available to all students.

The Importance of Gifted Education to the Gifted Early Adolescent

The United States has been highly focused on helping to meet the needs of those students requiring the most remediation in order to succeed and consequently the gifted early adolescent has been largely ignored (Winebrenner, 2000). Clark (2002) concluded that the middle school's overemphasis on social development has led to devaluation of academic growth. Clark regarded the middle school gifted child as an invisible entity, largely ignored. Tomlinson (1994) argued that due to the lack of attention, "gifted learners may be the boomerang kids of the middle school, finding that self-concepts diminish, and that the transition between elementary school and high school is made more troublesome rather than less so" (p177).

Gifted proponents also reason that gifted services at the middle school level are important if the gifted child is to obtain the education that he or she deserves. In order to reach each learner's potential, the best learning environment must be in place for each student. Strip (2000) believed that gifted education is about providing the best environment for the gifted child to achieve success by "providing students who learn in a different way with the curriculum that helps them learn best, just as schools provide different curriculum for students who are slower learners" (p. 88). When all curricular components are in place, the gifted student can fit and excel in a classroom that provides the opportunity for deeper and broader learning. To those removed from the situation, it may appear that gifted students do fine in an undifferentiated, teach-to-the-middle school environment. From the student's perspective, "Even the students who appear to do 'fine'

with little support have a middle school experience that is, in fact, impoverished” (Tomlinson & Doughty, 2006, p. 128).

Davidson and Davidson (2004) recounted an example of the lack of support gifted students receive in middle school through the eyes of two students named Rachel and Brennan. Rachel was always a little different from her peers and received gifted services in elementary school, but her fateful plunge into academic disconnectedness occurred in middle school. Rachel was writing a saga of more than 400 pages but was forced to underline verbs and circle nouns along with her classmates in English class. Brennan’s story is similar to Rachel’s: earning straight A’s in middle school with little effort. Brennan endured time in science classes with no hands-on application and suffered through literature classes where the books were read paragraph by paragraph when she could complete these books in one night. This lack of challenge frustrated Brennan along with her entire middle school experience. Gifted students warrant the same middle school experience as any child at the middle level, a challenging curricula and supportive environment.

Accommodating the anomalous needs of the gifted early adolescent is one way to provide an academically rich middle school experience. According to Clark (2002), gifted students placed and nurtured in gifted programming fare better academically than gifted students placed in the regular classroom without any gifted programming. Stephenson (1994) believed that gifted students placed without like peers in mainstreamed (placing gifted students in regular education classrooms) classes results in these students performing below their potential, doing what is “necessary to be at the top

or get the top score or grade in a less challenging class, and no more” (p.19). The study conducted by Rogers (2002) using the perceptions of students in two Canadian schools at the fifth and eighth grade level, found that “students in heterogeneous classes reported lower teacher expectations, less academic learning time, less homework, and less teacher feedback” (para. 24). The homogeneously grouped gifted students reported the opposite due to the in-depth, research-style projects required. The use of mainstreaming often triggers teachers to use the gifted child as a model for the other students within the class, placing unrealistic expectations on the student (Rosselli, 1997). Research evidences a strong case for not using gifted students as models for other students; the gifted students deserve a quality education like students of any ability (Stephenson, 1994). In addition, gifted education classes can provide the safe environment needed for risk taking.

Tomlinson and Doubet (2006) believed

Safe and nourishing environments provide the setting in which highly able middle level learners can balance the dual gravities of achieving and belonging. Powerful curriculum provides the catalyst for bright middle schoolers to understand and develop their talents and interests while seeing beyond them to a deeper understanding of the disciplines they study. Personalized challenge provides the impetus and support that bright middle schoolers need to extend their abilities.

Dynamic instruction provides the vehicle that transports bright middle schoolers through the terrain of personally challenging curriculum. (p. 83)

The use of gifted programming can meet the varied needs of the gifted early adolescent. Allowing regular classroom teachers the ability to utilize the gifted specialist for input

regarding the needs of the gifted student can aid in providing a quality educational experience for the gifted learner (Manning & Bucher, 2007; Rubinstein, 1994).

Gifted programming at the middle school level also provides a place for students to be themselves and grow in ways they might not have otherwise grown. During adolescence, comfort, respect, and safety are essential because “just like realtors, gifted adolescents are on a constant quest to find space where their actions and emotions are accepted without judgment” (Schultz & Delisle, 2003, p. 484). If the gifted option is not made available to gifted students, they often explore many activities, looking for a place and space where a fit occurs, and often lose a sense of themselves in the process.

The Current State of Middle School Gifted Education

According to research and advocates of gifted education, the current state of middle school gifted education is not promising. Across the nation, few educators have the necessary qualifications to work with gifted students. According to Croft (2003), eight states mandating gifted education programming require no special training of teachers, and 19 states that do not mandate gifted services do not require any training, even when the teacher works primarily with gifted students (p. 566). With few, if any gifted education classes taken in teacher preparation undergraduate work, educators find themselves trying to teach students whom they do not understand. Teachers must have special certification to teach in a curricular subject area or to work with physically or mentally impaired special education students; however, in most states, there is no requisite to work with the gifted child. Having teachers who are ignorant of their needs and unable to develop and carry out individualized social and academic education plans,

many middle school gifted students get lost trying to find a place to belong and often become disengaged in the process. Carol Ann Tomlinson (1995a) stated, “If the middle school does not celebrate and extend the talent of high-end learners, it is at risk as an institution” (para 20). In fact Clark (2002) stated

Even if they were identified and had special programs in the elementary grades, by middle school, gifted learners will often find few special provisions made to modify their programs. During or after sixth grade, most schools departmentalize their curriculum, and the concepts of differentiation and continuous progress are seldom used. (p. 282)

As the middle school movement has progressed, with the emphasis placed on the social and emotional aspects of early adolescence, the focus on gifted education has blurred.

The most significant obstacles that gifted educators face at the middle school level are the philosophy of the middle school movement and the idea that gifted education is unnecessary at the secondary level. The beliefs that led to a devaluation of gifted education created discord between middle school philosophers and gifted education advocates. This division manifested itself because “many middle schools do not actually deliver the kinds of curriculum and instruction that meet the needs of diverse learners” (Guerrero, 1995, p. 5).

As a nation, the United States adopted the unspoken policy of reverse discrimination concerning the education of the brightest students at the middle school level. In the current system, “services that address the needs of high ability learners are sometimes suspect and equated with social discrimination” (Rosselli, 1997, p. 99). In

order to progress from the current state in which no child is left behind except the gifted student, the focus of the United States should be to appropriately meet the needs of all its children (Davidson & Davidson, 2004; National Commission on Excellence, 1983).

Some believe that gifted education services have not been equally available to all students. “Although there is agreement that gifted children can be found in every level of society and in every cultural and ethnic group, minority students are not found in gifted programs proportionate to their representation in the school age population” (Fraiser, Garcia, & Passow, 1995, p. viii). The underrepresentation of minority groups in many school districts’ gifted programs is prevalent throughout the United States. For decades, gifted programs have underrepresented African American, Hispanic, and American Indians while typically over representing Asian Americans (Ford, 1998).

Experts tout two main reasons for the underrepresentation of minority groups in gifted programs: recruitment and personnel. Recruitment of minorities is limited due to a broad definition of giftedness, arbitrary cutoff scores for program entrance, and standardized achievement tests that are frequently viewed as biased when identifying gifted students. Many districts also use referrals for gifted identification, ranging from student, parent, or teacher nominations. Teachers in the regular education classroom are not required to have taken courses related to the gifted student and therefore do not accurately understand the gifted child (Borland, 2004; Fraiser, 1995; Ford, 1998; Ford, Grantham, & Whiting, 2008).

Gifted education is not a priority in the United States. This is made evident by the lack of funding available for meeting the educational needs of the gifted student. There

are no federal guidelines, standards, or policies on gifted education funding. The result from unclear policy is that funding for gifted education at the federal or state level is tenuous. Davidson and Davidson (2004) found, “state budgets for gifted education vary widely, ranging from roughly \$100 million a year to nothing” (p. 36). Funding provided to one group of special needs students while overlooking the other group of special needs students is deplorable. Each group of students has its own special needs and gifted students require financial support in order to foster and develop their individual talents (NAGC, 2008d).

Gifted program services currently offered in many school districts do not effectively meet the needs of students (Clark, 2002; Cloud, 2007; Davidson & Davidson, 2004). When students are gifted all day, everyday, fragmented gifted services can seem haphazard in the education of the middle school student. Within the state of Missouri, middle school and high school programs “may be pull-out programs but often consist of a special class that is part of a student’s daily schedule. Special classes are often interdisciplinary in nature, but may focus on a specific subject area” (DESE, 2009, p. 4).

Identification procedures within Missouri are also varied dependent on the district. Specifically within the state of Missouri in the area of gifted education, identification procedures range from a matrix of identification characteristics to test scores. School districts that utilize a matrix for identification typically evaluate students based on an intelligent quotient (IQ) score and a behavioral rating score, among other district specific criteria. The additional criteria used in districts varies from parent, teacher, and student nomination forms, to a standardized nationally normed measure of

academic achievement in select categories and the student's grade point average. Districts that do not rely on a matrix of characteristics for identification rely solely on the student's IQ score as a means for determining placement in the gifted program. Intelligence tests used vary from district to district and may include the Stanford-Binet: Fifth Edition, Wechsler Abbreviated Scale of Intelligence (WASI), Wechsler Intelligence Scale for Children: Fourth Edition (WISC-IV), and Otis Lennon School Ability Test (OLSAT). Each district also has individual IQ cutoff scores related to their identification procedures ranging from 125 to 135, with one district accepting any score that qualifies the student in the district's top five percent of the population.

With each state, district, and school making decisions about what constitutes gifted education programming, Davidson and Davidson (2004) determined that gifted education does not operate at the level needed to meet the needs of the gifted student; instead, gifted programming is haphazardly fashioned, ineffective in creating challenges, and underfunded. The lack of effective secondary gifted programming is evident when "gifted students [often] find their secondary programs either inadequate or having specific defects" (Clark, 2002, p. 293). Students complain about various deficits in middle school gifted programming; the most evident being the lack of challenge, quantity of work, and the similarity of gifted programming to the regular education curriculum (Clark, 2002).

Moon, et al. (1995) showed similar findings in their study of middle school gifted education. One principal noted that "his school had money and several programs for learning disabled students...[and] would tell parents of the advanced learner that 'we will

challenge their child as best we can” (p. 56). This study also elaborated on other researchers’ findings that learning-disabled students were always provided with extra support while advanced learners, if served, were placed in advanced classes or pull-out programs. The teacher perspective is not much more promising as the study found that sixty-eight percent of teachers believed that special classes for the gifted were appropriate at least some of the time. The lack of support from the state trickles down to the school, administration, and teachers, leaving gifted students to eke out whatever intellectual stimulation they can in an undifferentiated school environment.

However, some schools have tried to utilize some form of gifted programming to meet the needs of the early adolescent gifted learner. Coleman and Gallagher (1995) conducted research on the successful blending of middle schools and gifted education programming and cooperative learning programs and gifted education. For the purpose of this study, the researchers utilized five exemplary sites as recommended by professionals in the field of education for each concurrent research exploration. This case study approach found that, in reference to middle school reform and gifted education, successful blending occurs and includes some form of instructional grouping and enrichment and the presence of at least one professional on staff with expertise in gifted education.

This research complimented other studies regarding the grouping of gifted students for academic gain. Burton-Szabo (1996) compared two of her classes; one being honors English and the other a heterogeneous science class. She found that the students in the honors class were able to use their creativity and complete projects at a higher level

due to the complementary learning styles and preferences exhibited by their intellectual peers. When comparing the two classes, she noted “it is extremely difficult for one teacher to meet the needs of all students in such a diverse class [the heterogeneous science class]” (p.12).

Gifted programming can provide advantages and challenges for any district, depending on the various needs of individual students. Gifted programming, done effectively in any school, will “have a variety of options for different types of gifted learners, rather than just having one type of program” (Strip, 2000, p. 91) designed to meet the gifted learner’s needs.

Our nation, according to gifted education advocates, is at risk of wasting America’s greatest talent, gifted students. There is no reason to neglect any group of children. “Until every gifted child can attend a school where the brightest are appropriately challenged in an environment with their intellectual peers, America can’t claim it’s leaving no child behind” (Davidson & Davidson, 2004, p. 125).

Middle School Gifted Education Programming Options

There are multiple methods at the middle school level utilized to meet the needs of gifted early adolescents. Therefore, when considering the gifted education options, “gifted programming should not exist in a vacuum” (Rakow, 2005, p. 100). Each method carries its own strengths and weaknesses depending on the school, district, student, and teacher. Gallagher (1994) recommended “some change, or school adaptation, that allows these students to interact with each other--to be challenged by material at their developmental level--and to acquire skills useful in independent learning” (p. 87). The

argument is, therefore, not the implementation or lack thereof of gifted programs, but rather what pieces are most beneficial with regard to gifted programming. According to Merriam-Webster (2010), something is beneficial if it is “conferring benefits: conducive to personal or social well-being” (para.2). Therefore, a program, or a piece of the gifted program, is beneficial if it produces improved student achievement results within the gifted program. The gifted program can also prove to be beneficial based on student, teacher, leader, and/or parent perceptions. Districts must also consider the cost effectiveness of any program put in place; therefore, if a program is proven to be cost effective for all involved it would be beneficial to the stakeholders. Research has shown that there is not one best method for educating the gifted child because middle school structures and organizations change from district to district, suggesting that each gifted program should find “...a good ‘fit’ for the overall context” (Rakow, 2005, p. 53) while maximizing individual student ability. The present study is attempting to find a baseline consisting of gifted program practices and strategies that can serve as a model for creating an excellent gifted program.

Gifted programming exists “to provide children with appropriate educational opportunities that meet their needs so they can reach their potential” (Walker, 2002, p. 95). Currently there is limited research on the programs that are available to the early adolescent gifted child. Clark (2002) created a videotaped series about the feelings of a group of diverse gifted students towards their gifted program. In the research, Clark found that gifted students generally found their secondary programs to be inadequate or lacking in at least one area. Programs were found lacking in at least one of the following

areas: time allotment for gifted services, challenge of the program, curriculum, or emotional and social considerations (Clark, 2002; Davidson & Davidson, 2004; Rakow, 2005). Considering the inadequacy of gifted programming in the past, the design of future gifted programming to meet the needs of the student, school, and district is imperative. Rogers (2002) meta-analysis on the research concerning grouping of gifted students found that there are a variety of options available and beneficial for the grouping of gifted students. According to the intensity of the research findings, Rogers suggested that a full-time gifted program is the most supported method of grouping gifted students followed by cluster grouping within heterogeneous classes, grouping for acceleration, regrouping for enriched learning in specific subject areas, cross-grade grouping, enrichment or pull-out programs, within class ability grouping, and finishing with cooperative grouping for regular instruction. Although it appears that every district should follow the full-time gifted programming model, Rogers noted that differences might exist from district to district because of variations in population, structure, personnel, and culture and gifted programming options must be able to meet the needs of the individual in order to be successful and adequate.

The structure of gifted programming occurs in various ways. “Some programs for gifted students, especially those designed for the academically talented and intellectually gifted, stress advanced content skills. These programs differentiate instruction by level of application and quality of work, rather than by quantity” (Wright, 1983, p.18). Rakow (2005) recommended, “all middle schools need to provide both cognitive and affective support services and programming for gifted students. These services should include

specially trained teachers and counselors in every middle school” (p. 15). Rakow also believed that gifted programming must constitute a range of services and require more than one hour a week. Although there are various beliefs regarding the best gifted program, several gifted programming options exist and are used in schools.

Magnet Schools

One option of gifted programming made available to students at every level is the magnet school. Magnet schools are public schools, typically within large districts, that pull gifted students together throughout the district for an enriched learning environment. Magnet schools are often based on a particular theme, curriculum, or instructional focus and have their own admission and identification criteria (Gilman, 2008; Mencher, 1997; Rakow, 2005; Walker, 2002). Magnet schools are optimal learning environments for gifted children because the building contains specially trained educators to work with the gifted population. All staff shares the “...common goal of providing appropriately challenging curricula and instruction” (Rakow, 2005, p. 56). Magnet schools provide the opportunity for students to experience the traditional middle school curriculum, while also providing the opportunity for teachers to tailor the curriculum to meet the needs of the gifted child. The magnet school setup allows for the continuation of the middle school model with interdisciplinary team teaching, flexible scheduling, advisory groups, etc. and the opportunity to challenge students at their appropriate level. Magnet schools have the established peer group necessary for middle school children to grow while providing the flexible scheduling opportunities recommended at the middle school level.

Magnet schools are utilized primarily in large districts due to the high operating expenditures needed to run the school. Transporting students to and from the school, as well as paying for the specialty staff and building costs, contribute to the expense of such a program. Magnet schools also assume that the gifted child is gifted in every subject; some students struggle in the magnet school setting due to the advanced level of all subjects (Rakow, 2005).

School Within a School

School within a school setting offers another gifted programming option. School within a school is only composed of staff with training in gifted education. This type of programming provides a cost-effective means of offering full-day services to the gifted adolescent. A set of classrooms, or a wing of one school, is utilized by school personnel with gifted training to educate the gifted student (Rakow, 2005; Walker, 2002). This type of model affords the opportunity to work within the middle school model while also providing the opportunity for educators to challenge students appropriately. Students receive the traditional curriculum, but the level of instruction meets their learning needs. School within a school allows students the opportunity to experience diversity with other students at lunch, in exploratory classes, and during extra-curricular activities. This type of gifted programming affords students the option to move in and out of the gifted classes to meet their individual learning and social needs.

Typically not found within smaller districts, school within a school is often only achievable in large districts with the capacity to operate such a program. The challenges of school within a school programming are similar to those of magnet schools (Mencher,

1997). The cost of transportation is a significant expense of this type of program since all gifted students must be transported to the school that houses the gifted school setup.

Since most states establish class size recommendations for gifted classes, schedulers must be equitable in establishing class sizes for gifted students; gifted and non-gifted class size must be proportionate. Therefore, gifted class sizes should not remain small due to the fact that it is a gifted class but rather should equate to a normal class size. If the state sets a recommendation of 15 gifted students per class and the typical classroom has a fill capacity of 30 students, the gifted class should maintain a 1:2 student ratio or one gifted student in a gifted class for every two students in a regular education class.

Homogeneous Teams or Clusters

Homogeneous grouping, at the team level, is an option for providing a full-day experience for gifted adolescent learners where their individual needs may be met. Homogeneous teams will only work, however, in a middle school environment where the school is large enough to support at least three teams, one being the “honors” team. Homogeneous teaming allows middle school teachers with core content knowledge the opportunity to work in depth with gifted students in the teacher’s content area. These teachers need to be trained in strategies that may be effective when working with a gifted adolescent. Rakow (2002) recommended the additional use of a gifted resource specialist on the homogeneous team. Homogeneous teaming allows students to be part of the regular middle school environment, participating in whole school activities and separated only for instruction. This model allows for more integration of students and can therefore

meet the middle school social mission while also meeting the academic needs of the gifted student (Holloway, 2003).

Homogeneous teaming also carries its disadvantages. Homogeneous teaming causes unease in some parents who believe that there is a “‘smart’ team where the ‘best’ kids and teachers are and where there are no behavior problems” (Rakow, 2005, p. 60). Another disadvantage lies with the possibility of racial segregation. Due to the identification procedures and tests used in many districts, often the make-up of the gifted population within a school does not adequately represent the regular population. According to Ford (1998), African Americans, Hispanic Americans, and American Indians are underrepresented in gifted programs. This underrepresentation can be magnified with the use of homogeneous teaming. Therefore, keeping equality at the forefront is essential, especially when identifying the gifted population.

Homogeneous clusters creation within a team may occur, particularly if there are too few identified gifted students to form a complete team (Strip, 2000; Walker & Seymour, 2002). Clustering gifted students together on one team and special education students on another team ensures that one team does not bear both extremes of intellect and asserts that all students’ needs are met (Rakow, 2005). Clustering allows the placement of a resource person on the same team providing the opportunity for the gifted specialist to work closely with the regular curriculum teachers to meet individual student needs (Rogers, 2002).

Homogeneous Classes

Homogeneous classes are one of the most common ways that middle schools meet the needs of the gifted adolescent; typically, the middle schools group students in language arts and mathematics (Rakow, 2005, p. 61). The grouping of students in these two subjects occurs because acceleration of students is typically based on standardized test scores and these two subjects are the most frequently tested. Students in homogeneous classes can participate in as many or as few subjects as necessary to meet their individual needs. The students also have the opportunity to learn from a content expert in the area while being placed with like intellectual peers. According to Kulik (2003), the Michigan meta-analyses looked at 25 studies on enriched classes for talented students. Of the 25 studies, 22 found that talented students achieved more in enriched classes as opposed to mixed-ability classes. “Students in enriched classes outperformed equivalent students in mixed classes by 0.41 standard deviations, equivalent to about 4 months on a grade-equivalent scale” (p. 275). This information illustrates the need for gifted programming, within homogeneous classes, and the academic benefits of gifted programming for gifted students.

A homogeneous class may have some disadvantages. One of the most obvious is that not every student who participates in the homogeneous class is gifted. Gifted students still require an opportunity to work with like peers and explore their unique social and emotional differences (Strip, 2000). Homogeneous classes are often regarded by many as “tracking” or the student being in classes throughout the school day with the same set of peers. Tracking has been referred to in research as the practice of placing

students together in classes based on ability (Loveless, 1998, 2009; Kulik, 2003). This practice is often common in middle and high schools. Although at one point tracking referenced only high school programs where students chose between college preparatory, general, or vocational tracks, tracking has been more widely used in recent years.

Currently tracking represents the placement of students in classes on a subject-by-subject basis where the rigidity of the system requires students to follow the “track” until the completion of their schooling (Loveless, 2009).

Grade Level Acceleration

Grade level acceleration, or the advancement of a student at least one grade level in all areas, is an under-utilized method in gifted education (Rakow, 2005, p. 68).

Acceleration is the match between student and curriculum in complexity, level, and pace (Colangelo, Assouline, & Gross, 2004). Grade level acceleration is a unique option and does not work for every student; each individual student’s needs and personality must be considered when contemplating grade level acceleration. At the middle school level, grade level acceleration can occur. It is possible that a student skips a grade or completes the three year enrollment in a compacted time frame. *A Nation Deceived: How Schools Hold Back America’s Brightest Students* (Colangelo et. al., 2004) was a national report on acceleration created by scholars and educators from around the country. The report reviewed the wealth of research available on acceleration to present the facts of acceleration in order to disprove the myths. Highlighted in the report was that acceleration, as a gifted programming option, “is the most effective curriculum intervention for gifted children” (Colangelo et. al., 2004, p. 2). Acceleration is one of the

most cost-effective programming options because, with no additional staffing or transportation costs, the program meets gifted students' needs.

Acceleration is thought to have disadvantages. Some argue that the social and emotional impact acceleration plays in a student's life can negatively affect the child's self-concept. Acceleration can also contribute to increased cost when students are subject skipped and must travel to another school, typically a high school, to receive their instruction (Rakow, 2005). However, researchers found that the impact of the social aspect of acceleration is more positive than negative in regard to student perceptions and ability to make friends (Colangelo et. al., 2004; NAGC, 2008a; Strip, 2000).

Although some researchers make claims about the negativity of acceleration, Walker (2002) stated that "many studies show that when children are allowed to learn at their own pace, they feel better about themselves, they're motivated and creative, they have higher aspirations, and they're more socially with it" (p. 108). Colangelo et al. (2004) concurred with Walker, believing that educators should never ask if acceleration should be an option for students, but rather how acceleration is best accomplished.

Pull-Out Resource/Programs

Pull-out programs, which pull students away from their regular classroom for gifted services, exist in a variety of forms. Pull-out programs typically allow the gifted education teachers the opportunity to work with gifted students once a day to once a week, dependent on the type of program. They provide the opportunity for theme-based, real-world experiences while the students also participate in the regular education curriculum. Pull-out programs provide gifted students with the opportunity to work with

other gifted children. For pull-out programs to be successful, however, they must be connected to and extend the learning opportunities that are part of the regular curriculum (Rafferty, 1996; Walker, 2002). A pull-out program must have substance and should not be made of single activities that do not contribute to students' understanding of their primary curricula. Pull-out programs should not only enhance the regular curricula, they should also provide an opportunity for the gifted students' special needs to be met. Strip (2000) stated that "some students who are silent in their regular classroom become talkative in the gifted resource room" due to the comfort level (p. 87). Therefore, pull-out programs can complement and expand upon regular classroom curricula while providing a safe environment in which the gifted student can take risks and experience challenge.

Pull-out programming, however, is not philosophically consistent with the middle school movement. Removing gifted students from their heterogeneous regular classrooms to experience learning with homogeneous peers goes against the middle school philosophy. The removal from the "norm" is at odds with the social and emotional aspects that are highly valued in adolescent development and middle school philosophies. Rakow (2005) noted, "gifted students who leave for pull-out services are often forced to make up class work and homework" (p. 67). Some teachers dislike the fact that students have the option to leave their class for another opportunity and may require students to complete more work due to their absence. Pull-out programs may be embarrassing to the students due to the special attention they receive. Adolescents typically do not want to feel singled out or different from the norm. The social implications with pull-out programming may be perceived as negative rather than positive. Not only can the pull-out

program erode the positive perception of being gifted, Walker (2002) found that “one hour a week is not sufficient programming for students who are gifted all day, every day” (p. 102). When pull-out programs occur inconsistently and focus on enrichment, instead of curriculum extension, gifted programming can be considered elitist; all students can benefit from enrichment (Davidson & Davidson, 2004). Enrichment supports students’ needs by focusing on student interest and learning strengths. Curriculum extension is when the pull-out gifted program is coordinated with the regular curriculum to provide substance and increase the regular classroom curriculum (Rakow, 2005). Concurrently, Rafferty (1996) stated

If the pull-out model type of service to students is to continue then it needs to have a connectedness to the regular classroom and be a clearly articulated event among all parties concerned including student, classroom teacher, parents and administrators. (p. 26)

Pull-out programs have strengths and weaknesses that must be considered when implementing or modifying any gifted programming. Consideration of student needs must weigh against the benefits and weakness of this type of program.

Schoolwide Enrichment Model

The Schoolwide Enrichment Model (SEM) has expanded since its original conception as the Enrichment Triad Model. Joseph Renzulli and Sally Ries developed this model for gifted services and programming. The major goal of SEM, according to Renzulli and Ries (2003), is

To promote both challenging and enjoyable high-end learning across a wide range of school types, levels, and demographic differences. The idea is to create a repertoire of services that can be integrated to create ‘a rising tide lifts all ships’ approach. (p. 184)

Rakow (2005) added that the SEM was envisioned “to develop a broad range of students’ talents and enhance curricula and opportunities for all students in a school community” (p. 64). The Schoolwide Enrichment Model relies on the premise that defining giftedness would place high cutoffs of entrance into the gifted program based on IQ. Defining giftedness in the traditional sense, therefore limits educational opportunities for some students.

The SEM involves the entire school community and is set up to work with the school’s already created organization and structure. Based on a broad concept of giftedness, SEM provides gifted services to a larger population. Differentiation is dependent on student need and interest in a topic at a given time. The idea of providing services to a “Talent Pool” of students developed the SEM. Ries and Renzulli (1985) and Renzulli and Ries (2003) believed that the talent pool was the top 15 to 20 percent of the general population of average to high ability students. The identification of the Talent Pool uses multiple measures of ability including achievement tests, teacher nominations, and assessments for creativity, task commitment, and past performances.

After identification of students within the Talent Pool, a variety of services is available through the SEM. First, student identification of interest and participation is encouraged. Curriculum compacting, a second option, is made available to those students

who are eligible and have demonstrated mastery of a concept. The third level is that of enrichment, offered to all students, bringing learners in contact with new learning opportunities and experiences not part of the typical school curriculum. The SEM is a revolving gifted program where students “revolve into and out of different types and levels of enrichment based on ways in which they respond to regular curricular experiences and specifically planned enrichment activities” (Ries & Renzulli, 1985, p. 14).

There are three components to SEM: (a) type I enrichment, (b) type II enrichment, (c) type III enrichment. Type I enrichment is “designed to expose students to a wide variety of disciplines, topics, occupations, hobbies, persons, places, and events that would not ordinarily be covered in the regular classroom” (Renzulli & Ries, 2003, p. 186). Type I enrichment involves the entire community when providing the educational experience via many delivery options from field trips to guest speakers. Type I enrichment provides students with the opportunity to determine if they would like to study a specific topic more in-depth (Reis & Renzulli, 1985). Type II enrichment consists of materials and methods to promote the thinking and feeling process (Reis & Renzulli, 1985; Renzulli & Reis, 2003). Type II enrichment activities are more open-ended to promote individual student thinking processes and techniques while introducing students to high-level concepts. Type II activities can be specific, not planned in advanced, or more abstract; the variance of Type II level activities are truly dependent upon the students and their learning needs. Type III enrichment requires the interest and study in a self-selected, real-

world topic; students must be willing to commit the necessary time to see projects through completion (Reis & Renzulli, 1985; Renzulli & Reis, 2003).

Although middle school advocates like the SEM model, the application of the model occurs selectively. Gifted advocates are concerned with the broad spectrum of students serviced and the heterogeneous classes for the enrichment experiences. Renzulli and Ries (2003) addressed these concerns after initial implementation of the SEM by creating ability grouped classes and requiring a gifted specialist as part of this program's implementation. Both researchers noted that although a large pool of candidates participate in the SEM, "the concentration of services necessary for the development of high level potentials cannot take place without targeting and documenting individual student abilities" (p. 195). Maker and Nielson (1995) suggested that the SEM programming was beneficial due to the design for gifted children, which provided an overall framework, and allowed the use of excellent resources. Many educators, however, have implemented the model without complete consideration of the scope of the program, a lack of research based on students instead of adult learners, and the idea that the model is simple. Rakow (2005) believed that when all parts of the SEM are conscientiously implemented "this model has great potential to blend the goals of middle school and gifted education" (p. 66).

Differentiation in Heterogeneous Classes

Differentiation within the heterogeneous class can afford gifted students challenging learning opportunities while being part of the regular curriculum and classroom environment. Differentiation, however, should not become a substitute for

other gifted programming options (Rakow, 2005). Differentiation is the adaptation of class work to individual student needs. There are four ways that teachers typically differentiate within the regular education classroom: (a) content, (b) process, (c) product, and (d) learning environment.

Content differentiation, constructed by the teacher, allows the student to experience a different spin on the subject matter studied. Content differentiation is specifically “what we teach and how we give students access to the information and ideas that matter” (Tomlinson & Eidson, 2003, p. 3). Teachers can allow for a more abstract or complex coverage of the material, depending on student need and desire. Depth is one way to make learning the content more complex. Depth can provide the necessary differentiation but will only work effectively when coordinated with future teachers to avoid repetition of information. The variety of substance or perspectives and the organization of the learning material is also a way that differentiation can occur within the regular classroom. Perspectives can bring a concept to a more abstract level while providing the variety. Differentiation provides the variety, the perspectives, and the real-world application that gifted students need.

Process is another form of differentiation when the teacher varies the content, thinking skills required, and acquisition of skills. Process differentiation becomes “how students come to understand and ‘own’ the knowledge, understanding, and skills essential to a topic” (Tomlinson & Eidson, 2003, p. 3). Teachers can vary the process when they allow students to choose or develop their own methods to use in the process (Walker, 2000).

The third method of differentiation pertains to the product, or how a student demonstrates what he or she has learned, what he or she knows, understands and is able to do (Tomlinson & Eidson, 2003, p. 3). Product differentiation simply requires that teachers offer students choices that are critical to good curriculum (Tomlinson and Doubet, 2006). The products demonstrating what a student has learned can vary and should not always be limited to a paper or test. Choice provides students with the opportunity to explore their learning styles, spark interest, and take on personal responsibility (Walker, 2002). The option of choice requires that teachers spell out the criteria for evaluation and outline clear expectations.

The last of the most commonly used methods of differentiation by teachers is that of learning environment; the “way the classroom feels and functions” (Tomlinson & Eidson, 2003, p. 3). Learning environment requires an actual change in the place that the student learns. Learning environments can vary from physically moving the students, to calling in a specialist related to the studied topic, or providing students with the opportunity to learn in the field.

The concept of differentiation has common misconceptions by educators. Rakow (2005) illustrated the misconceptions of differentiation. One idea is that differentiation is one set of strategies instead of instruction that begins with the student. Another misconception is that differentiation is simply student choice; many educators do not realize the intentionality behind the selection and assignment of learning activities.

Appropriately developed and implemented differentiation can provide the necessary accommodations a gifted child would need within the regular education

classroom; no child is left in a “one-size-fits-all” setting. Tomlinson (2004) noted the benefit of differentiation for all learners, “academically diverse youngsters (e.g., advanced and struggling learners) report that they often do not find appropriate levels of challenge in a one-size-fits-all class(es)” (p. 227). Differentiation helps all learners’ needs to be met. Educators must remember, however, that differentiation is a tool and not a replacement for gifted education programming.

Summary

The NMSA and NAGC highlighted, in 2004, the need for middle school proponents and gifted education advocates to collaboratively work together in order to meet the needs of the gifted child. With many philosophies in educating the adolescent child in common, the NMSA and NAGC recommend that the nation as a whole should work together to ensure that all students’ academic needs are being met.

The current state of gifted education programming at the middle school level is dismal (Rakow, 2005; Yecke, 2003). Research evidences that the middle school gifted child and regular middle school child face similar challenges. Though there may appear to be a striking social and emotional resemblance between the groups, the gifted child also has unique obstacles, such as advanced thinking and processing skills, which create changes at the middle school level (Gallagher, 2003; Tomlinson, 1994b; Tomlinson & Doubet, 2006; Walker, 2002). In a nation founded on equality, the gifted student is receiving a sub-standard education. As elitist beliefs towards gifted education programming by middle school advocates flourish, our educational system treats the

brightest students with contempt while offering an education of intellectual poverty (Clark, 2002; Davidson & Davidson, 2004; Tomlinson, 1994; Winebrenner, 2000).

Although many states do not fund or require special training for gifted education programs, some school districts try to meet the needs of their most advanced learners (Croft, 2003; Davidson & Davidson, 2004). Many programs, however, that are offered to the gifted early adolescent do not satisfy the needs that the middle school gifted child possesses (Clark, 2002; Tomlinson & Doubet, 2006). Schools, districts, and states that offer gifted programming at the middle school level evidence disconnected educational offerings (Clark, 2002; Davidson & Davidson, 2004; Moon, et al., 1995).

The Middle School Movement and gifted education share some common beliefs-- all learners deserve the opportunity to learn and reach their potential. In theory, the concept of the middle school matches well with the viewpoints in gifted education (Coleman & Gallagher, 1995). The lack of specific curriculum has diminished the middle school experience for the gifted learner. Tomlinson (1994a) described this as a pitfall to the Middle School Movement stating that it is the “uncertainty in the middle school regarding what constitutes appropriate curriculum for the middle school” (p. 179) that has led to the disengagement of many gifted students.

There are many gifted programming options available to gifted educators and middle schools that satisfy various stakeholder needs regarding educating the middle school child (Strip, 2000; Rakow, 2005; Rogers, 2002; Wright, 1983). The individual school and students must dictate gifted programming; what works in one location may not work and meet the student’s needs in another location. No matter where the location

of the middle school, however, the middle school gifted learner deserves access to gifted programming. As an educational community not only must the floor be raised, but also the ceiling (Davidson & Davidson, 2004). Every child, no matter what his or her learning potential, deserves the opportunity to work to maximize that potential, even at the middle school level (Clark, 2002; Walker, 2002).

Chapter Three: Methodology

On the middle school level, either gifted education has been non-existent or it has been implemented with minimal research to support current gifted programming options. In the era of No Child Left Behind, the middle school gifted child deserves an education that is appropriately challenging, as do all students who find themselves in the middle school setting. Therefore, it is pertinent that data be compiled to provide districts and gifted coordinators with a comprehensive approach concerning excellence in middle school gifted programming models and methods.

This chapter provides a thorough description of the methods and procedures used to identify characteristics of excellence in gifted education at the middle school level. The chapter contains the purpose of the study, research questions, the sample selection, and data analysis procedures.

Purpose of Study

A change in the educational structure from the junior high model to the middle school concept resulted in a loss for middle school gifted education. Advocates for the middle school believe that it philosophically addresses the needs of all learners: placing emphasis on the social and emotional aspects of adolescence and deemphasizing academic components. Gifted education advocates, however, believe that the middle school education system in the United States does not adequately meet the needs of the gifted learner, often resulting in the gifted child fending for him or herself or disengaging from the schooling experience. The NMSA and the NAGC united in purpose in 2004, to

support every middle school child, including those with high ability and high potential deserving of an education that meets their individual needs.

Gifted education programs that currently service the needs of middle school students operate with limited available research in support of their coherence or effectiveness. As districts work to design and implement gifted middle school programs, they have minimal guidance. The body of research on best practices in middle school gifted education programs is negligible. Rakow (2005) stated “little has been done on a broad scale to bridge the gap with thorough, realistic, and well-supported approaches to understanding and meeting gifted students’ needs” (p. xi) which illustrates the need for research on gifted education at the middle school level. The lack of research concerning successful practices at the middle school level is a significant detriment as districts strive to design and implement gifted middle school programs.

The call to action by the NMAS and NAGC to meet individual student needs, federal laws that promised that no child would be left behind, and the increasing need to become competitive in a global society have placed increasing importance on educating each student so that he or she may reach his or her highest potential. The lack of attention historically paid to middle school gifted education programming illustrates the need to focus attention on identifying programming that meets the unique needs of the gifted adolescent learner. Therefore, there is a need to identify and communicate the characteristics of excellence in middle school gifted education programs and develop models that will inform gifted educators as they form new middle school programs and/or

modify existing programs to meet the needs of gifted adolescents, educators of gifted, and school systems.

Research Questions

The overarching question for this study was “Can a gifted education program for middle school students be developed that meets the needs of the child, the school, and the district?” The research was conducted to answer three questions relating to the overarching question.

1. How can a middle school gifted education program support the transition from elementary to high school gifted education programs?
2. Can a “best practices” middle school gifted education program result in greater high school gifted program readiness as evidenced by current high school assessment resources?
3. What design model can be created for educators of the gifted to aid in developing and/or modifying gifted education programs at the middle school level?

Sample Selection

The population for this study consisted of middle school gifted students, middle school gifted education teachers, and gifted education leaders participating in, and/or implementing, their district’s middle school gifted education program. The school districts participating in this survey are located in the metropolitan area of a major midwestern city. The researcher chose to conduct a qualitative study of these six particular gifted programs due to the unevenness of sample size from each district and the

use of a Likert Scale employed for the survey, which provided only a process for categorical analysis. The researcher selected the six represented school districts for a variety of reasons. First, the researcher wanted to ensure that an accurate representation of the county area was covered; therefore, the researcher chose districts from the north, east, west, and south of the county. Districts willing to participate in the study created another factor in district selection for this research. Finally, the researcher wanted representation of the various implementation models of gifted education in the county; consequently, the six districts selected offer different gifted education programming models and different time allocation for gifted education, as shown in Table 1.

Gifted Middle School Students. The student population consisted of middle school students in five gifted programs grades six through eight, and one gifted program with students only in grades seven and eight. Student participants were selected based on their participation in one of the six middle school gifted programs. Students participated in survey and interview data collection on a voluntary basis. It is important to note that only the students who qualified for and participated in each school district's middle school gifted component were asked to participate in the data collection related to this study. Students who qualified for but who did not participate in their district's gifted program were not included in this study. Student involvement was also dependent on the participation and willingness of the middle school gifted education teachers to provide classroom time for distribution of permission slips and surveys.

Middle School Gifted Education Teachers. The middle school gifted education teachers were selected based on their delivery of particular gifted programming models

within the selected school districts. Gifted education teachers participated in surveys and interviews and allowed the researcher to observe students and teachers at work in their classrooms. The participation of educators of gifted in surveys, interviews, and observations was voluntary.

Gifted Education Leaders. Gifted education leaders were selected for participation in this study based on their involvement with program design and implementation of gifted programming within the selected districts. Gifted education leaders voluntarily participated in this study and contributed to the body of data by completing surveys and responding to interview questions.

Table 1

Research School District Gifted Programming Data

	Gifted Students Served	Staff Working with Gifted Students	Weekly Instructional Minutes
School District A	150	2	150-180
School District B	431	6	90-330
School District C	256	3	180 +/-
School District D	87	2	134 +/-
School District E	974	13	180-270
School District F	193	4	240 +/-

Note. The values represent numbers as reported by the individual districts.

School District A. School District A is located in the eastern part of the county. In the 2009-2010 school year, School District A reported 573 students enrolled at the middle

school level. For the purpose of this study, all gifted middle school students in the gifted program in grades six through eight were invited to participate in data collection for the study within School District A's one middle school. The gifted programming option in School District A allows students to enroll in the gifted class as an elective. Although not all identified students participate in the elective gifted class at the middle school level, the middle school gifted educators bring the gifted students together to participate in high-level activities while also focusing on the gifted students' affective needs.

School District B. School District B is located in the northern part of the county. In the 2009-2010 school year, School District B reported 4,378 students enrolled at the middle school level. For the purpose of this study, all gifted middle school students in the gifted program in grades six through eight were invited to participate in data collection for this study within School District B's three middle schools. Students of School District B have three options for gifted programming at the middle school level. Option one provides students the opportunity during their study hall time to substitute the study time with gifted programming in the format of independent research or competition-based curriculum. The competition-based curriculum requires students to work within a group facilitated by a teacher of gifted education. Students practice and compete in school-wide activities such as chess competitions and in regional activities such as robotics or Odyssey of the Mind. Option two for School District B's students allows the students to replace an elective class with a gifted education class and curriculum. The elective classes are split into trimesters and students focus on one real-world topic per trimester. This option requires students to utilize one of their two electives as the gifted class. The

last option for the students of School District B is to enroll in both gifted programming options.

School District C. School District C is located in the eastern part of the county. In the 2009-2010 school year, School District C reported 861 students enrolled at the middle school level. For the purpose of this study, all gifted middle school students in the gifted program in grades six through eight were invited to participate in data collection for this study within School District C's one middle school. Students involved in School District C's gifted program participate in a unit-based extension class, investigating real-world topics and problems, or a compacted challenge language arts class, attending language arts only one period instead of the traditional two-period format. Students who participate in the unit-based section also enroll in regular language arts, receiving language arts instruction for one period every day in addition to their unit-based class.

School District D. School District D is located in the northern part of the county. In the 2009-2010 school year, School District D reported 1,822 students enrolled at the middle school level. For the purpose of this study, all gifted middle school students in the gifted program in grades seven and eight were invited to participate in data collection for this study within School District D's three middle schools. Students involved in the middle school component of gifted education in School District D participate in gifted services in the format of a pull-out program. One day a week students participate in gifted programming during their three elective blocks instead of participating in the elective classes. In this delivery format, if a quiz, test, field trip, or special event occurs during

elective time the students participate in the elective class for that time period rather than their gifted block.

School District E. School District E is located in the western part of the county. In the 2009-2010 school year, School District E reported 5,348 students enrolled at the middle school level. For the purpose of this study, all gifted middle school students in the gifted program in grades six through eight were invited to participate in data collection for this study within School District E's six middle schools. The middle school program of School District E serviced 974 students at the time of data collection. Students involved in the middle school component of gifted education in School District E's gifted program must also participate in compacted challenge language arts classes, receiving their language arts instruction for one period every other day. Therefore, students participating in School District E's gifted programming participate in language arts one day and the gifted course the next. Students are required to qualify for the compacted challenge language arts course so that dual-enrollment in the middle school compacted challenge language arts and gifted class may occur.

School District F. School District F is located in the southern part of the county. In the 2009-2010 school year, School District F reported 2,541 students enrolled at the middle school level. For the purpose of this study, all gifted middle school students in the gifted program in grades six through eight were invited to participate in data collection for this study within School District F's four middle schools. Students involved in the middle school component of gifted education in School District F participate in gifted services in which a core class is compacted into half its typical allocated time and the

gifted component fills the provided time. One school provided gifted programming as part of communication arts. Communication arts, in this school, contain two sections of classes, and the gifted programming utilizes one of those sections. Gifted programming in another school, however, is connected to social studies where compacting of the social studies curriculum occurs. Gifted programming, at this district is tied to a core class, compacting the core class and supplementing the time with gifted services.

Research Design

The format of this study involved the researcher gathering data from existing middle school gifted education programs in six school districts. The researcher sought to find excellence in middle school gifted education programs through a study of the literature, interviews with those individuals involved in the middle school gifted experience, site visits to middle school gifted education programs, and surveys of individuals participating in some capacity in the middle school gifted program. In order to accomplish this, the researcher visited current middle school gifted education programs in the metropolitan area of a major midwestern city. During these visits, the study of the programs included surveys and interviews of leaders, teachers, and students in the programs and observations of the implementation of the middle school gifted curriculum. The observation visits provided insight concerning the gifted programming delivery model at the middle school level. These visits supplied qualitative data, used by the researcher for the purpose of extrapolating the components of the middle school gifted program.

Data Collection Methods

To obtain data for this study, the researcher developed a survey to gather information defining the current middle school programs in the selected school districts. Each survey statement contained a Likert Scale rating followed by an open-ended prompt requesting survey participants to explain their ratings. The researcher developed surveys for each participating group involved in the study: gifted students (Appendix A), teachers of the gifted (Appendix B), and gifted education leaders (Appendix C). Survey distribution and collection occurred during the months of February, March, April, and May 2010.

In another component of this research study, the researcher interviewed participants using questions developed by the researcher for the purpose of analyzing current middle school gifted program practices in the six school districts. Interview questions addressed the various population groups involved in the study: gifted students (Appendix D), teachers of the gifted (Appendix E), and gifted education leaders (Appendix F). The researcher arranged interviews with randomly selected individuals at each participant's convenience. Interviews occurred with participants in the study districts during February, March, and April 2010.

Curriculum implementation within select middle school gifted classrooms was observed, and the researcher recorded findings. At least one observation of middle school gifted curriculum implementation was conducted in each of the study schools during February, March, and April 2010.

Permission for participation in this study was first obtained from the six school districts. Each school district has a policy in place to approve research involving staff and students. After receiving permission from the participating school districts, a note describing this study with a parental permission slip (Appendix G) was sent home with the middle school students involved in the selected middle school gifted education programs. All permission slips had a two week turn-around return date.

For educators of the gifted participating in the study, the researcher provided a survey and accompanying explanatory note (Appendix B). Teachers were asked to return completed surveys within the specified period of time. A random sampling of gifted program educators in the six school districts agreed to participate in a one-on-one interview with this researcher. Interviews were scheduled between the researcher and educator and were conducted at the educator's work site.

Gifted education leaders also contributed to this study. The researcher provided each gifted education leader with a survey accompanied by an explanatory note (Appendix C). The researcher arranged to distribute and collect the surveys at each leader's work location. Additionally, gifted education leaders participated in individual interviews scheduled by the researcher in accordance with the availability of each leader.

The final piece of data collection involved school site observations. The researcher explained to the teachers participating in site visits that the observations carried no connection to any evaluation process. The data collection procedure was introduced; the researcher utilized the class site visits as a means to collect anecdotal notes on gifted curriculum implementation at the school level. Observation times were

prearranged between the researcher and the individual teachers. The researcher scheduled one observation within each district; districts with more than one middle school did not have all middle schools represented in classroom observations for this study.

Data Analysis Procedures

School district and population groups within each district categorized survey data. Each category was analyzed descriptively using Likert Scale responses to obtain a score for each survey item. The Likert Scale data was analyzed categorically because a higher rating on the response scale indicated that the respondent was more in agreement with the statement than with a lower rating. Therefore, since there was no interval separation between responses, the mode of the data was used to understand responses. Responses to open-ended prompts, which followed the survey statements, were analyzed to pinpoint specific components found to be most prevalent and descriptive of middle school gifted education programming. Analysis of the data allowed the researcher to compare responses of the various sample populations within the school districts in order to ascertain emergence of similar themes and practices that appeared to be effective in educating middle school gifted students. Interview data was organized and analyzed in the same manner. The researcher sought to find common themes within interview responses. Survey and interview data were compared to establish similarities.

Anecdotal data obtained by the researcher from the gifted program site visits was utilized to identify how curriculum was implemented in each classroom. The researcher used observation notes to compare the intended gifted curriculum based on district documents with the implemented gifted curriculum.

Ethical Considerations

There was no anticipated risk to any participants of this study. All individuals involved in gifted education at the middle school level (i.e. leaders, educators, and students) were asked to participate, and participation was voluntary. Anonymity was assured as neither survey nor interview responses requested identifying information. Surveys and interviews were not in any way used as an evaluation instrument. Students, teachers, and gifted education leaders had the opportunity to withdraw their participation in the study at any time.

Reliability and Validity

In order to ensure validity and reliability a number of individuals analyzed the survey and provided feedback and suggestions to the researcher. Each individual who reviewed the survey had experience in gifted education. These individuals provided insight into the types of questions required to ascertain the needed information regarding middle school gifted programming. The first reviewer has served as a teacher and a leader in gifted education for 20 years. She teaches gifted education courses at the university level and has expertise in curriculum design. The second reviewer held a position overseeing the gifted education program within a school district located in the research study area. This individual taught curriculum and design at the university level. The third reviewer currently holds the position as a coordinator of gifted services for a school district within the research study area. She has been in the coordinator position for two years and has taught gifted education for four years.

Summary

This study was conducted to identify and analyze the components of middle school education that participants judged to best meet the needs of middle school gifted education students, teachers, and leaders. Since the researcher found a limited body of research on the subject of creating and implementing a middle school gifted education program, the researcher's findings will contribute to the field of gifted education and provide a model for implementing new programs or modifying existing middle school gifted education programs.

This research study sought to utilize surveys, interviews, and observations to identify the components that contribute to excellence in gifted programming at the middle school level. All instruments were developed by the researcher to meet the unique requirements of the study. All data collection was used to identify recurring themes within population groups in six districts and to provide an assessment of the components that best meet the needs of gifted students, teachers of gifted, and gifted education leaders in each school district.

Chapter Four: Results

This research study examined six middle school gifted education programs within a metropolitan area of a major midwestern city to determine the components of an excellent middle school gifted program. In order to evaluate the excellence of the program components, the researcher surveyed and interviewed gifted middle school students, educators of gifted students at the middle school level, and leaders of gifted education within the study districts. All students, teachers, and leaders in gifted education within the study districts were asked to participate in the study. Classroom observations were also employed as a means to gather information on the implemented curriculum within each school district. The researcher observed at least one classroom in each participating district for the purpose of this study. The design of this research study was meant to address three research questions:

1. How can a middle school gifted education program support the transition from elementary to high school gifted education programs?
2. Can a “best practices” middle school gifted education program result in greater high school gifted program readiness as evidenced by current high school assessment resources?
3. What design model can be created for educators of the gifted to aid in developing and/or modifying gifted education programs at the middle school level?

Description of Sample: Survey

The primary instruments designed for this study focused on the gifted middle school students, middle school teachers of the gifted, and gifted education leaders. For the purpose of this study, six gifted education leaders were invited to participate, of which 100% responded to the survey. The survey was sent to 29 middle school teachers of gifted within the six cooperating school districts. Fifteen, or 52%, responded to the survey questions. From the 2,091 middle school gifted students of the six districts who were invited to participate in the survey, 362 students, or 17% submitted responses.

Each survey contained nine questions regarding the program delivery model and affective/academic components. Each survey question contained a Likert Scale response item and an open-ended response section asking participants to explain their ratings.

As shown in Table 2, participation varied by district. Although District A's program services gifted students outside of the gifted classroom at the middle school level, the only students allowed to participate in this study were those involved in the gifted class. Multiple attempts were made to obtain a larger data sample from gifted students in District C. This included teachers passing out paper copies of permission slips to students as well as the gifted education leader of District C sending an email to the parents about District C's participation in the study. Even with these varied attempts at contact, only two percent of students returned parental permission slips to participate in this study.

Table 2

Research School District Gifted Programming Participation Data

	Gifted Students	Educators of Gifted
School District A	15	100
School District B	12	33
School District C	2	33
School District D	30	100
School District E	19	46
School District F	38	50

Note. The values represent percentage of participants responding to survey data.

Description of Sample: Interview

Another mode of gathering information involved interviewing middle school gifted students, educators of the gifted, and gifted education leaders. Each interview consisted of five questions regarding the program delivery model and affective and academic components. The affective components consisted of the program's ability to meet the adolescent students' social and emotional needs, while academically meeting students' needs through the gifted curriculum. The researcher utilized interviews as a source for more in-depth information; therefore, the sample size was not as large for interviews as for surveys. She established a goal of interviewing a minimum of two students and one gifted educator from each district. Students and educators were randomly selected for interviews. The researcher also attempted to interview each gifted

education leader. Due to the unavailability of some leaders, not all district gifted education leaders were able to be interviewed for this study.

For the purpose of this study, the researcher sought to obtain equal distribution of interviews from each participating district. She discovered that some teachers were more comfortable than others in allowing the researcher into their classroom and in providing access to students for the purpose of the interview. Therefore, School Districts A, B, and C did not have any students interviewed as part of this study. In addition, teachers from Districts A and C did not make themselves available to be interviewed. Teachers in District A initially informed the researcher that they were uncomfortable with the scope of the study being conducted and therefore created a limited time for the researcher to work in the classroom. Within District C, the original teacher who agreed to assist with the study withdrew participation shortly before the end of the school year. Therefore, another teacher was utilized for surveys, but parental permission and time were a noteworthy problem for this district. The researcher was also unable to secure interviews with gifted education leaders for Districts A and F due to time and schedules.

Description of Sample: Observation

Observations were integrated into this study for the purpose of gathering anecdotal information about the implemented curriculum within each participating school district. The researcher scheduled one observation per school district. The participating educators were selected on their individual willingness to welcome the researcher into their classrooms. While visiting each classroom, the researcher took notes on the physical classroom arrangements, the implemented curriculum, and the questions asked by the

teacher. Upon entering the classroom, the researcher sat in the back of the classroom to minimize intrusion in the learning environment. The educators who were observed for this study had experience in the field of gifted education ranging from three years to thirteen years.

Delivery Model: Observations

Currently there is no standard delivery model for gifted education at the middle school level. Each school district has the option to design and employ any format of gifted programming at the middle school level. Individual districts implement a delivery model for gifted education services that meets the constraints and demands of the middle school structure.

As part of this research study, the researcher made observations in each of the six participating districts, observing in one classroom per district. The following observations were noted as part of this study.

School District A. The educator observed within School District A had nine years of experience in gifted education. She taught in two different program models--the current program and in a program out-of-state. School District A's classroom contained 22 computers and was not specifically set up as the gifted education classroom; the teacher utilized this particular room for only one class period daily. The computers were located on the side of the classroom with tables pushed together in the center of the room.

The gifted classroom within School District A was buzzing as the students entered class and began their work. The teacher did not provide instruction, yet the students knew the tasks they should be working on. The students were developing real ideas to save the

planet using a social networking site for social change. Students visited the online website to play games and earn points. To earn points in the game, students conducted research and communicated with others by writing opinions, commenting, and collaborating. Students were working with others, exchanging ideas, and talking wildly about the progress of their individual projects. One student commented, "I have created an herb garden at home and I want to share about it." The students of District A appeared to know the goal they were pursuing. The teacher's role within this class was more of a facilitator as she moved from group to group pushing and challenging student thinking with questioning.

School District B. The educator observed within School District B had been teaching in gifted education for three years. Within School District B, the classroom was used specifically for gifted education. The gifted classroom had four computers, and desks were grouped in pods of four to five. Since gifted education was the only class taught in this classroom, the room included books, games, and other resources related to the topics studied by the students.

The first class in District B was observed midway through the period. The room was silent as students watched a movie, with some students on task while others were off task. After the movie, the class was structured with low-level questions to draw out the data of the movie. The students had a worksheet relating to the movie to fill out and they were completing the sheet as the teacher reviewed the answers. Questions consisted of, but were not limited to, "What are the three main types of bridges?" and "What are bridges constructed of?" The accompanying bridge activity had students working at a

low-level using a template to create a bridge from toothpicks instead of synthesizing their knowledge on bridges to create their own bridge structure. The teacher provided task-related instructions throughout the class, such as the appropriate amount of glue to use when connecting toothpicks. The students in this class appeared to know what goal they were pursuing.

During the second classroom observation of the same teacher in District B, students worked independently on a worksheet while the teacher read a book aloud and asked comprehension level questions of the students. At one point in the story, the teacher asked students, “Has she found the water yet?” After completing a chapter, the students formed groups to engage in a challenge relating to the food pyramid. They worked in groups; some students worked more cohesively and were on task more than others. Students then shared their product related to the challenge; many students became disengaged and shared little information. This class appeared to have no over-arching goal but was instead constructed of mini-activities; classroom management dominated the teacher’s verbal instruction.

School District C. The educator observed in School District C has taught gifted students for nine years. She gained experience in gifted education through service in several Missouri school districts. The classroom in School District C was used only for gifted education classes. It had eight computers that line the walls, and five round tables situated in the middle of the classroom. The classroom contained lesson material and a graphic organizer demonstrating student input in a recent lesson was displayed on one wall.

Within District C, students were conducting various forensic experiments. The teacher established five different forensic stations for student groups to choose and rotate through together. The stations included a Powder Station, DNA Fingerprinting, Secret Note, Tape Life, and PH Testing. Students worked within their groups at the provided stations to complete the task. The teacher positioned herself at one station to work with students and ask questions. Students, after completing several stations, discussed with the teacher their results. The teacher provided neutral feedback and repeatedly stated, “What evidence do you have to support you?” The students worked feverishly at analyzing information toward their goal of solving the crime.

School District D. In School District D, the educator observed had six years of experience in gifted education in one program delivery model. The classes taught in School District D’s gifted classroom were solely gifted education. This particular classroom held eight computers. On the periphery of the classroom, three round tables and one large rectangular table were situated where students worked. Since this room was only utilized for gifted services, the classroom contained college posters on the wall, unit specific information, and student-created projects.

Students in School District D entered and exited the classroom during elective class periods. Students stayed for one or more elective periods depending on teacher and student discretion. As students worked, a conversation developed and the teacher and several students discussed boy and girl relationships and appropriate behavior in school. Topics of study varied between elective class periods, but students appeared to understand the ultimate goal. From the observation day, one period focused on

relationships and critical thinking, another on a big unit about the Stock Market, and yet another on Scholar Bowl preparation. The teacher facilitated the beginning of the lesson, and then the students worked individually and in groups, dependent on the task, to accomplish their work.

School District E. The educator observed in School District E has taught in gifted education for thirteen years. She has held a position in middle school gifted education in multiple districts within the state of Missouri. School District E's observed classroom was utilized solely for the purpose of gifted education classes. This gifted education classroom housed eight computers and several laptops. There were six rectangular tables, one couch, and several pillows and beanbags on the floor. The classroom displayed a variety of student projects and information related to units of study.

Within School District E some of the students were missing during the class observation due to a conflict with another school-sponsored activity; the remaining students were sitting in various locations throughout the classroom working individually, or with other students, on projects and classroom related tasks. The teacher used this time to check-in with students on personal and school-related issues. All students worked at their own pace and no student strayed off-task during the entire observation. Students used this work-time to challenge each other and the teacher when class work was complete. At one point during the observation, a student commented about Sudoku and the teacher asked what the difference was in difficulty. Two students and the teacher created an impromptu experiment to determine difficulty differences. Students and

teacher worked on Sudoku puzzles to determine time needed for each level while other students continued to work on other work until the bell rang.

School District F. Within School District F, the gifted education educator had four years of experience in gifted education in one program delivery model. The observed classroom in School District F was devoted for use by gifted programming services. This particular classroom contained four computers and five round tables. The classroom contained student materials and information on the dry erase board related to the topic of study.

Students in the classroom in District F entered class and immediately begin working, moving from one task to the next without direction. Students worked in teams to complete their major project for the class dedicated to an over-arching theme. In various intervals, the teacher stopped students to provide instruction about particular aspects of the project, but the instruction was brief and task-related.

Delivery Model: Survey and Interviews

In order to understand the various methods and models employed by the participating districts, the researcher utilized survey and interview questions, as well as observational data. For the purpose of this study, the researcher categorized the Likert Scale items into two categories: favorable (*Always* and *Most of the time*) and unfavorable (*Some of the time* and *Infrequently*).

Item 1 on the student survey (I believe that the way we receive our gifted education meets my needs.) and Item 1 on the teacher and leader survey (I believe that our current method of gifted services meets the needs of students.) was designed to

determine the stakeholders' perceptions of the delivery format in each district's middle school gifted program. (See Figures 1-2)

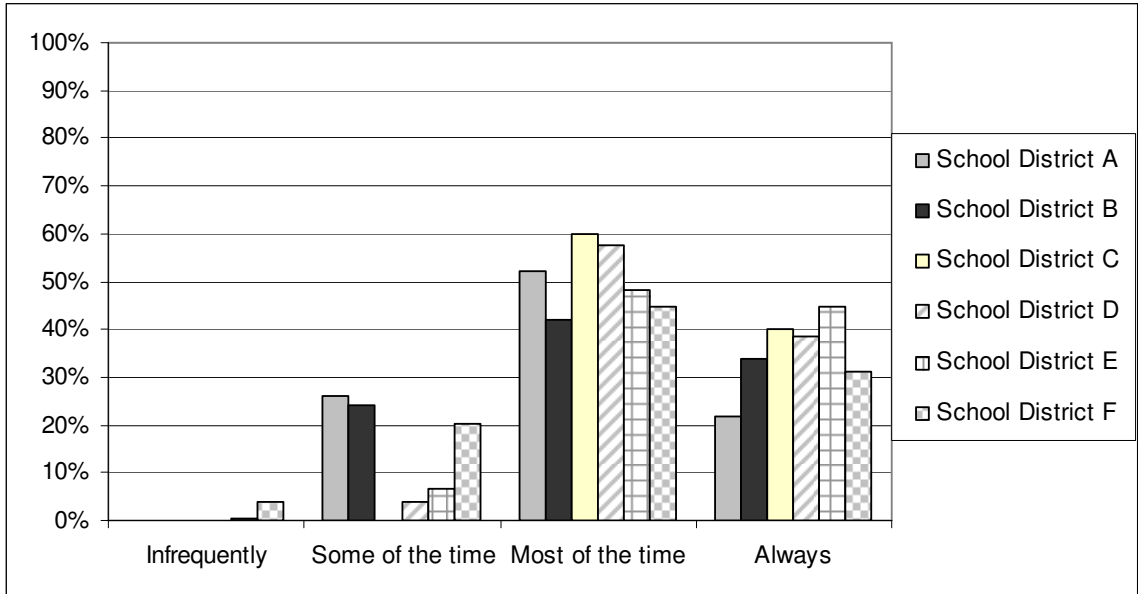


Figure 1. Student Perception: I believe that the way we receive our gifted education meets my needs.

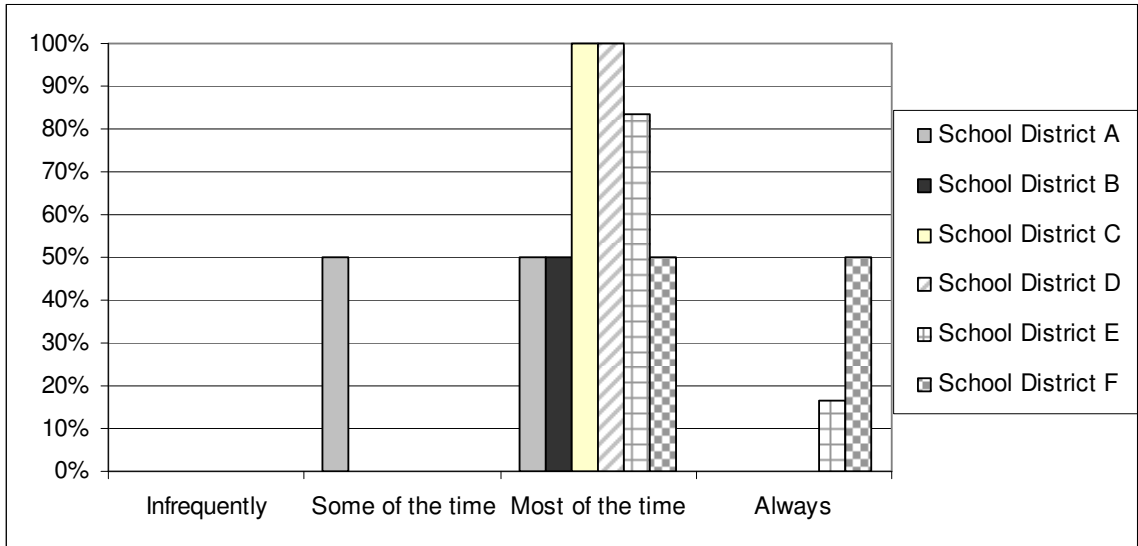


Figure 2. Teacher Perception: I believe that our current method of gifted services meets the needs of the students.

Item 1 identified the percentage of stakeholders who believed the current method employed by the district meets the needs of the gifted student. Categorizing the results into favorable (*Most of the time* and *Always*) versus unfavorable (*Some of the time* and *Infrequently*) leaders reported 100% favorable response while 87% of teachers reported favorable responses to their current gifted programming option. Fifty percent of the teachers responding in District A reported an unfavorable response to the current method of programming. Students in all districts reported 86% favorable versus 14% unfavorable responses to their current gifted programming options. Student perception toward the current delivery model also varied in favorable versus unfavorable responses according to each district. Favorable student responses toward the current implemented gifted program delivery model were 74% in School District A, 76% in School District B, 100% in

School District C, 96% in School District D, 76% in School District E, and 86% in School District F.

Item 1 also included an open-ended response option. Respondents were asked about the gifted programming services currently offered (What services does your district currently provide at the middle school level?). In response to item 1's open-ended prompt, students, teachers, and leaders typically provided a description of the gifted program that is offered in their school district. Descriptions ranged among districts because of the variance in program delivery models and within individual districts. District gifted education leaders and teachers responded similarly to item 1. The leaders and teachers gave specifics as to the type of program at their individual school. Students' descriptive comments differed from leaders' and teachers' comments. Students frequently did not elaborate on the gifted program but instead simply named the program. Students commonly referred to "challenge classes" and "accelerated/advanced math" as a service provided under gifted education. School District A's students also frequently and specifically mentioned "team time" as a service provided by gifted education.

Question 1 of the interview asked respondents to describe the services offered by the district. Leaders and teachers were asked "What services does your middle school gifted education program provide to students?" while students responded to "What services does your middle school gifted education program provide to you?" Leaders and teachers referred the researcher back to their survey, stating details about the specific district program. Students, however, had various responses to this question. Students in District D described the program's effectiveness in contributing to their knowledge.

Students in District E were in favor of homogeneous grouping in their classrooms, which allowed them to engage in different activities. District F participants referenced their school's extra-curricular activities as important.

The leaders were also asked to reflect on the models of gifted programming that their district has implemented and what they liked and disliked. Leaders were asked, "What are the various models of middle school gifted education programming that your district has tried? What have you tried that you like and dislike?" In District B, gifted programming has occurred in either the "drop-in" format where students could "drop-in" to the gifted class if all their work was completed in another class, as an elective class, or as an elective class or study-hall alternative. The leader in District B noted, "I don't think that [drop-in component] works well with block scheduling. The other thing is, gifted or not, I think they learned how to be manipulative."

A pull-out program which had been modified from a reading/writing workshop, provides students with a total of one and a half hours per week of gifted services in District D. District D switched to a pull-out program because the reading/writing workshop gave the appearance of tracking. The leader of District D noted, "We have contemplated a center approach [pulling students out of regular classes for the entire day], but it wouldn't work to take them out the whole day."

In District E, there had been two approaches to servicing the gifted adolescent. The leader sums up the major challenge as "having to deal with where do we find the freed up time." District E previously required a language arts course and reading course of all middle school students. The gifted program was offered in lieu of the reading

course, which “was not a stress with others because our kids are good readers.” Later, language arts and reading were combined into a single course. To address the needs of gifted learners, District E kept the same schedule and compacted the language arts curriculum for gifted middle school students. District E’s leader commented,

The reason we haven’t tried any other way is because there is no other clearer program. It’s hard enough to get one group on board. It’s just simpler with the kids’ schedule. For us, as far as what I can envision, everything would be more compromised with another schedule. Here we don’t have an extra period, yet.

Regardless of the district, each leader had a reason explaining why the school district was operating utilizing the current middle school model. The model for each district, according to the leaders, met the schedule demands of the middle school and district.

One of the differences in gifted programming delivery is the amount of time provided by each district for gifted education. Since the amount of time varied by district, item 2 on the student survey (I have adequate time to receive my gifted education services.), teacher survey (I have adequate time to provide gifted services to my students.), and leader survey (Our program allows for adequate time to service the gifted student.) was designed to determine stakeholder perceptions concerning the amount of time currently available for delivery of gifted services and if that time meets the needs of the students. (See Figures 3-4)

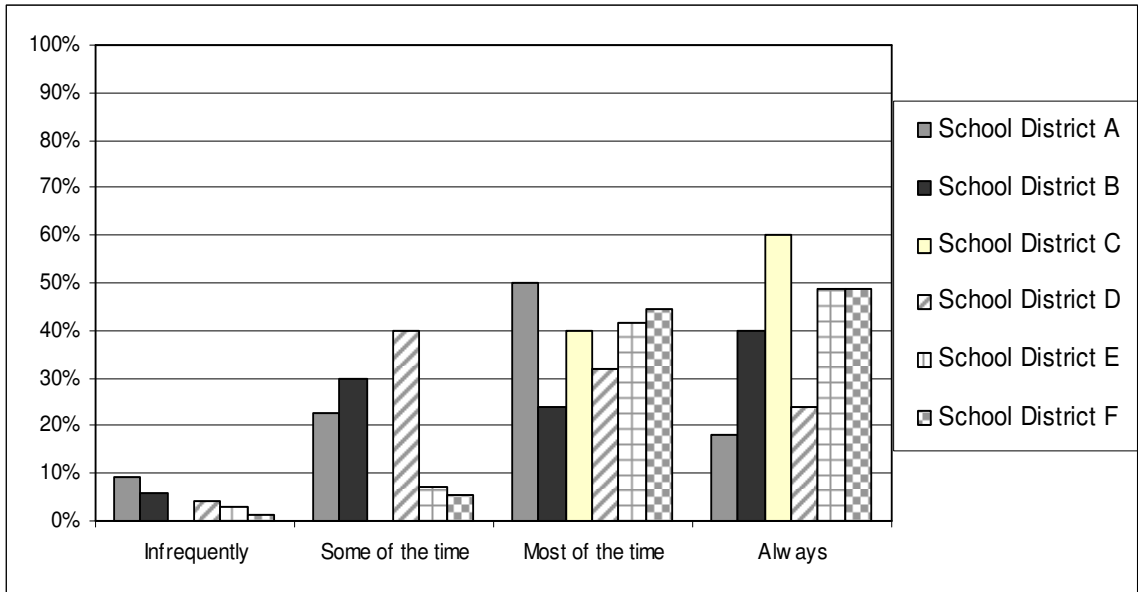


Figure 3. Student Perception: I have adequate time to receive my gifted education services.

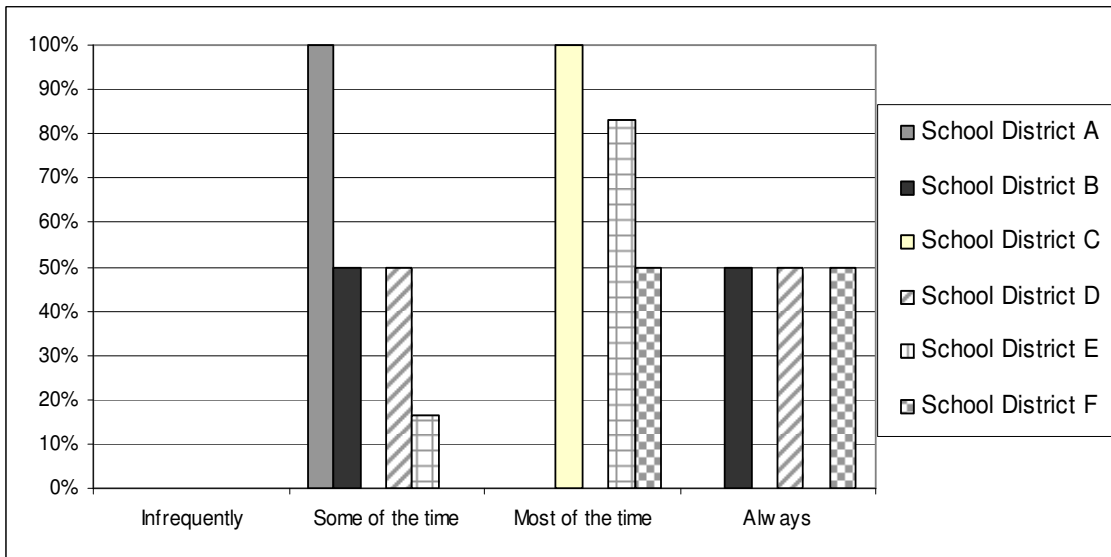


Figure 4. Teacher Perception: I have adequate time to provide gifted services to my students.

Item 2 identified the percentage of stakeholders that believed the current allotted time to receive gifted services is adequate. Categorizing the results into favorable (*Most of the time* and *Always*) versus unfavorable (*Some of the time* and *Infrequently*). All leaders reported favorable results to the time allotment for gifted services except for the leader of District F who reported an unfavorable response. Student and teacher perceptions regarding the time allotted for gifted services varied in favorable versus unfavorable responses by each district. Variances in teacher responses were reported for School Districts B, D, and F with 50% of teachers reporting a favorable response. In School District E, 83% of teachers report a favorable response concerning current gifted program time allotments. The majority of students in all districts reported favorable responses regarding the current time allotted for receiving gifted services. In School District A, favorable responses were 68%, School District B 64%, School District C 100%, School District D 56%, School District E 90%, and School District F 93%.

Item 2 included an open-ended prompt allowing respondents to identify the amount of time each believed would be necessary to adequately provide or receive gifted services. Each group, leaders (What is the appropriate amount of time needed for the students to receive gifted services?), teachers (What is the appropriate amount of time you need to provide services to your students?), and students (What is the appropriate amount of time you need to receive your gifted education services?) had a unique prompt, written for the purpose of ascertaining respondent opinion regarding the amount of time necessary for adequate delivery of gifted education services. Within each district, student perceptions most consistently demonstrated that the current time allotment for gifted

service delivery provided by the district was adequate; student groups across districts typically desired at least one hour of gifted services. The largest variances from the current delivery system appeared in some of the responses of the leaders and teachers. Leaders and teachers consistently desired more time to meet the needs of the gifted middle school student.

Within School District A, there was disparity among the groups involved in gifted education. The leader of District A referenced that gifted services are not provided merely through pull-out or gifted classes but also offered indirectly through push-in and team-time services. Teachers noted the need for more time in order to meet with all gifted students, even those not in the gifted program, as well as opportunities to work with the teachers who work with gifted students. Students of District A most commonly responded that one hour of gifted services daily would adequately meet their needs.

School District B's participants all commented on the option to choose the method of services, gifted class versus elective. The leader of District B believed that the time allotment concern was addressed by providing a choice. The teachers of District B liked the allotment of time, but they believed that the shorter elective period limited services. The predominant students' response was that gifted services should be one hour in length.

Participants within School District C varied in responses to time allotment. Leaders of District C believed that more was needed to fully service a gifted student than what the district could currently provide. Teachers of District C preferred a block

schedule to allow for additional time, while students most consistently asked for a period 45 minutes in length.

Teachers and leaders in School District D agreed that gifted services should be provided daily. Student responses reflected the desire for gifted services for an entire school day, with several students believing that the current time allotment was appropriate for receiving gifted services.

Each group within School District E agreed that the current method of delivery already in place in the district was appropriate. Leaders, teachers, and students most commonly commented that 90 minutes every other day was adequate time to receive gifted services.

Within School District F, with the exception of the students, a specific time frame was not mentioned. Leaders and teachers recommended that the gifted education class receive the same amount of time as any other class and be a stand-alone class instead of compacting core curriculum. Students typically responded that “one hour” was needed for gifted services.

Item 3 on the survey sought to find student (I believe my gifted education teachers are important in my education.) and teacher (I believe I am an important member in the education of the gifted middle school child.) perceptions on the importance of the gifted education teacher. Item 3 on the leader survey sought to obtain the perceptions of gifted education leaders regarding their importance in the education of the gifted middle school child (I believe I am an important member in the education of the middle school child.). (See Figures 5-6)

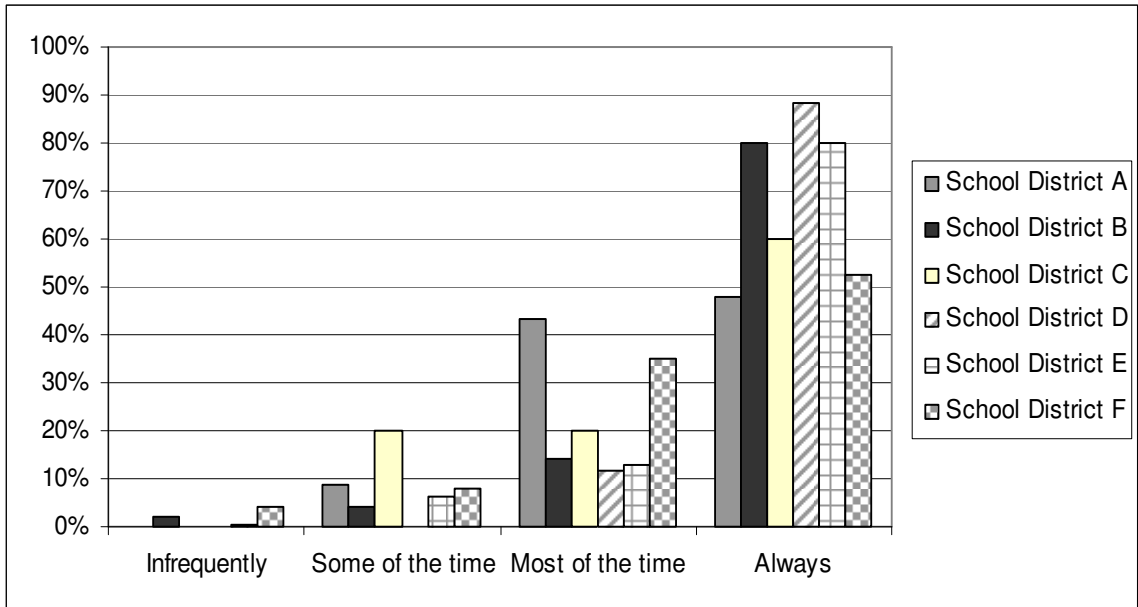


Figure 5. Student Perception: I believe my gifted education teachers are important in my education.

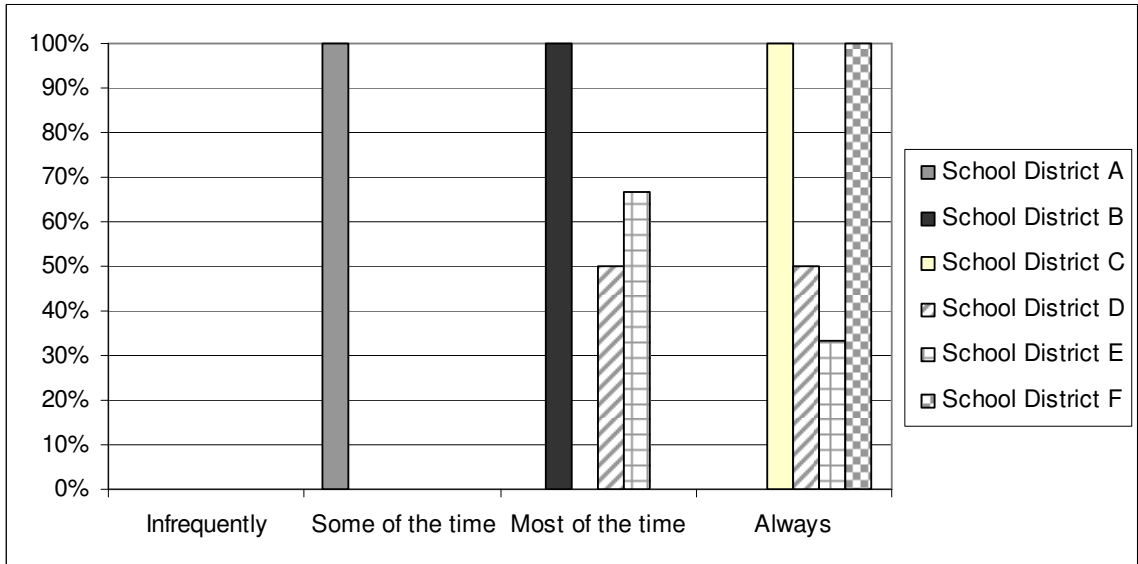


Figure 6. Teacher Perception: I believe I am an important member in the education of the gifted middle school child.

Categorizing the results into favorable (*Most of the time* and *Always*) versus unfavorable (*Some of the time* and *Infrequently*) all leaders, except for School District D, reported a favorable response to the importance of their role in the education of the gifted middle school students. Teachers, in all districts except School District A where 0% reported a favorable response to their role in gifted education, reported 100% favorable response to their role in the gifted middle school students' education. Students reported 92% favorable versus 8% unfavorable response to the role of the gifted education teacher in their education. Student perception regarding the importance of the middle school gifted teacher varied among districts, but the variance on this item was far less than any other category. Percentages of students who reported favorable responses were 91% in School District A, 94% in School District B, 80% in School District C, 100% in School District D, 93% in School District E, and 88% in School District F.

Item 3 allowed participants to respond to an open-ended prompt in regard to teacher and leader importance in the field of gifted education. Teachers and leaders were asked to elaborate on their level of participation in the education of the gifted child (In what ways do you participate in the education of the gifted child?) while students were asked to provide evidence of their gifted teacher's contribution to their education (In what ways do your gifted teachers contribute to your education?). Gifted education leaders in all participating districts discussed their role as one who oversees the program, works with teachers on curriculum to meet student needs, and evaluates the program implementation. Teachers across the six districts most commonly referred to their role as a teacher in the way they participate in the gifted child's education. Teachers in every

district most commonly referred to their role as the introduction and development of new learning, skills, and higher-level thinking. Teachers in District D and E believed that their role in addressing the affective domain of the middle school gifted child was equally as important as meeting the academic needs of the students. Students in all participating districts commented about the role of the gifted educator in teaching new content and skills. School Districts A, B, C, and F had this particular theme addressed most frequently while School Districts D and E had new learning and skills as the second most common response. Students commented about the variety and depth of topics and new knowledge introduced in the gifted class. Students in School Districts D and E identified some form of the teacher being helpful as the most frequent response to item 3. School District B students mentioned teacher helpfulness as the second most frequent response. Students of District B referred to the teacher's willingness and ability to help with school, academics, and personal problems. Another teacher role students commonly identified was the academic challenge that the teacher provides. School Districts A and F had "challenge" rated second in frequency of responses while Districts B, D, and E identified "challenge" as the third most common response.

Within each school district, the middle school gifted education component is an elective part of each student's school day. Therefore, it is imperative that the gifted program contribute to a student's life, is meaningful, and allows students to see the value of their gifted education and remain enrolled in the gifted program. Item 4 on the student survey (I believe my middle school gifted program is an essential, valuable piece of my education.) and teacher and leader survey (I believe our middle school gifted

programming is an essential, valuable component of the middle school student’s life.)
 addressed each participant’s perception on the value and necessity of the middle school
 gifted program. (See Figures 7-8)

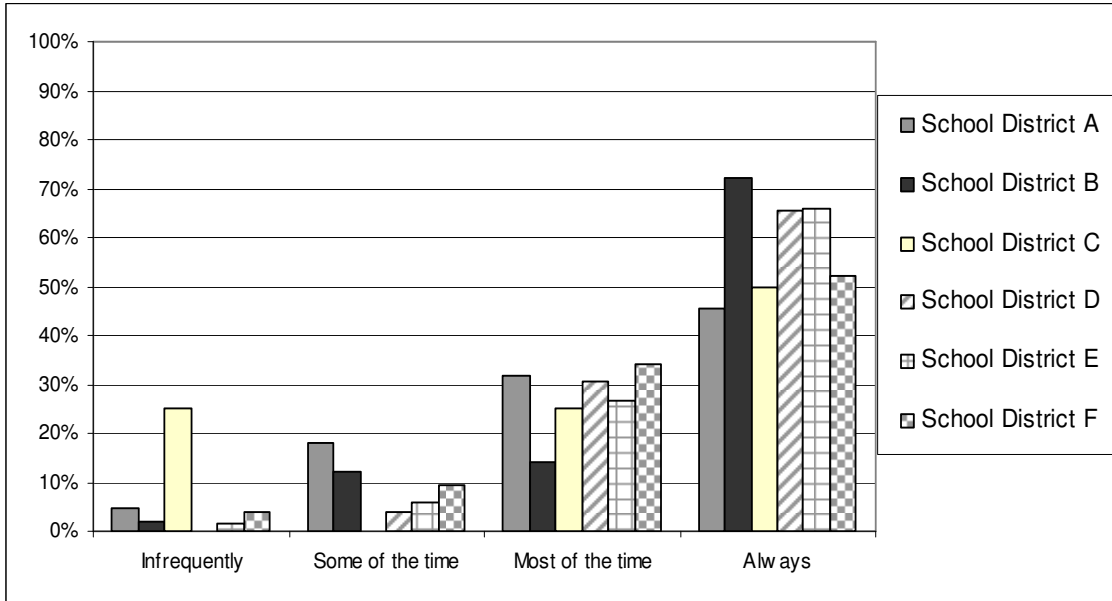


Figure 7. Student Perception: I believe my middle school gifted program is an essential, valuable piece of my education.

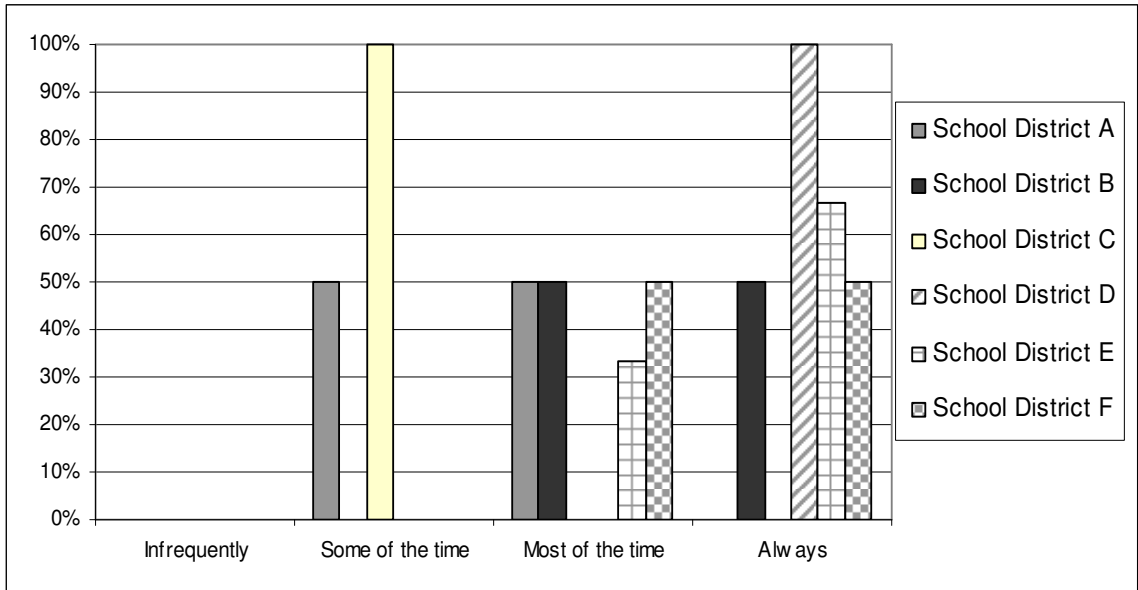


Figure 8. Teacher Perception: I believe our middle school gifted programming is an essential, valuable component of the middle school student’s life.

Item 4 asked participants to identify their feelings regarding how essential and valuable the gifted middle school program is to the student’s life. Categorizing the results into favorable (*Most of the time* and *Always*) versus unfavorable (*Some of the time* and *Infrequently*) the leaders reported 100% favorable responses to the value and necessity of gifted programming in a student’s life. Overall, teachers reported an 87% favorable response to the value and necessity of gifted programming. Fifty percent of School District A teachers reported a favorable response to the necessity of the gifted program, while Districts B, D, E, and F recorded 100% favorable response. School District C teachers did not respond. The students averaged 90% favorable and 10% unfavorable responses. The necessity of the gifted program in a student’s life varied according to district. Favorable responses regarding the value and necessity of gifted programming in

the students' lives were 77% in School District A, 86% in School District B, 75% in School District C, 96% in School District D, 93% in School District E, and 86% in School District F.

Item 4 asked respondents to evaluate the components of the gifted program that contribute to the program's value. Leaders and teachers responded to the same question regarding the components (What are the key parts of your program that contribute to its value and why do you believe they are each important?) while students responded to a prompt relating to valuable pieces of the gifted program (What parts of your gifted education program are valuable and why?). Leader responses varied greatly from district to district. District A's leader referenced the highly gifted and exceptional piece as adding value to their gifted program. School District B's leader referenced the choice available within their gifted program, noting the block of instructional time being negotiable, as well as curriculum units taught being based on student interest. School District C's leader commented on the social/emotional component as a successful and important piece of the program. The leader in School District D responded with five key components: affective needs, creative problem-solving, logic/strategic thinking, research/writing, and technology. School District E's leader, in reference to the valuable components, added that the structures put in place for time, teachers, and curriculum contributed to the value. District F's leader referenced promoting higher-level thinking, fostering creative thinking skills, and developing research skills as key to the value of their gifted program.

Although there was great variation among leaders in gifted education about the valuable components, teacher and student comments were more consistent across

districts. The most common response among teachers and students related to new learning/challenge and the value of this component to the gifted education program. Every district, with the exception of Districts A and C had the majority of teacher responses related to the new learning or challenge that occurs within the gifted program at the middle school level. Teachers in School District A referenced the identification procedures as important and the time available to communicate with students' parents and core subject teachers. School District C's teachers discussed the importance of enrichment, time for addressing affective needs, and the choice of curriculum available to engage the students. Students most frequently commented on new learning/challenge as one of the most important and valuable components of their gifted education program. Every district, with the exception of District C, most frequently touted new learning or challenge as a valuable essential piece to the gifted education program. Student responses reflected learning skills and content that are not typically covered in other middle school classes and the challenges offered in gifted classes as important elements of the gifted program. The next most frequently mentioned response related to the life preparation students believed that they were receiving in the gifted program. School Districts E and F had the strongest concentration of this response type. School District D had a unique finding in which the vast majority of the surveyed student population deemed the entire program important and valuable, frequently commenting "All" was important. Although teachers and students agreed that new learning or challenge was the most important piece that contributed to the gifted programs value, only the leader in District F referenced this

as an important piece to the program's value. The leaders in the other districts did not mention this component.

During the interview, participants in all groups were asked what they thought were the strengths and weaknesses of their program. Leaders and teachers responded to one prompt, "What are the strengths and weaknesses of your middle school gifted education program?" while students responded to "What are the strengths and weaknesses of your middle school gifted education?" According to all participants, the current time allotted for the gifted program is a weakness to any program setup, no matter what district.

When evaluating merits of the gifted program, leaders had various opinions regarding the strengths and weaknesses of their own program. In District B, the leader commented on student choice as a major strength. The curricula available to students are tied to the Grade Level Expectations (GLE's) and provide structure. The leader also noted the choice of time could be a weakness if a student chose the 40-minute option to receive gifted services instead of the longer elective period. In District D, the leader noted the teachers' ability to meet students' affective needs as strength, as well as the option for students to come to the gifted class at any time. The leader commented that the "open door policy" for students to receive gifted services has created a sanctuary for gifted students where their uniqueness can be celebrated. Thematic units is another strength according to District D's leader. The weaknesses according to the leader in District D were transportation, time, and a lack of parent and administrative involvement. According to District E's leader, the ability for the students to work with quality teachers

who understand gifted students year after year is positive while the isolation of the gifted teachers at the middle school level is a downfall. Even within a district, the gifted program looks unique in its particular school setting. Based on the gifted program offered in each school, leaders held a unique perspective on the strengths and weaknesses of each school's gifted service implementation.

Each teacher interviewed had a distinctive response to the strengths of the program. The most common responses across teacher groups with regard to weaknesses was the concept of time. In School District B, the interviewed teacher noted time, curriculum, and a lack of support as weaknesses to the current program while the students were the definite strength to the program. In School District D, the teacher thought that time was a weakness of the program, wanting more time to work with the students. This teacher, however, named many strengths associated with the gifted program: uniqueness of the program, having individual autonomy, individualized attention, the variety of teaching approaches (i.e. field trips, discussions, debates, etc.), meeting students' intellectual and affective needs, and the real life aspect of the program. School District E's teacher noted relationships as a strength to District E's gifted program while commenting that a weakness was compacting language arts because the language arts teachers did not necessarily always understand gifted students. The teacher also noted a weakness to be a lack of training in gifted for other teachers who teach gifted students. In District F, the teacher explained that having a program for gifted students was a strength while the isolation and lack of staff was the weakness of the program.

In analyzing student responses, strengths varied by district. When evaluating the weakness, however, time was consistently mentioned by all participants. In School District D, students held a very positive opinion of their gifted program with only one primary concern, a lack of consistent time within their gifted program. Students in District E positively evaluated their gifted program and believed the program had a weakness of time. In School District F, students' concerns centered on the amount of time, homework, and difficulty level of assignments they received in the gifted program.

In addition to being questioned about the strengths and weaknesses of the gifted program, students were asked about their continued participation in the gifted program. Students were asked in the interview to respond to the question, "What is it about your gifted classes that make you want to continue to participate in them?" There were three typical responses offered by the students, and the responses were largely consistent among students in the same district. District D's students reflected on the social and emotional aspect of the gifted program. One student commented, "People are nice, they're, um, helpful. Like on my sad days they bring me up. My teachers always give advice that can help us. Every day is a challenge!" Students in District E mentioned the relationships. One student stated, "I like that the teachers relate to the students and the students relate to each other. We all get along well and can work together." In School District F, the students indicated that the projects were their inspiration for continued participation in the gifted program. One student explained, "Some of the fun projects that we do that don't involve homework [are what motivate me to be in the gifted program]."

Leaders, teachers, and students were asked about the gifted program's role in preparing students for high school. Leaders and teachers were asked, "How does the gifted education program prepare students for high school?" Students were specifically asked, "How do you feel the middle school gifted program prepares you for high school?" In response to this question, there were typically commonalities among respondents in the same district, whether student, teacher or leader. District B was the exception.

In School District B, the teacher and leader interviewed differed in their opinion as to how the gifted program prepares students for high school. The leader commented, "Well, I think because of the strong STEM [science, technology, engineering, and mathematics] focus if [students] do want to move farther in Science or Math, they have a strong foundation. Two, real world problems [in the gifted program] open up career choices." The teacher, however, commented more about the demands of schoolwork and learning to push oneself. The teacher explained,

[The students are] Learning to push themselves. Learning to make demands on their abilities. Striving for excellence. If you can do what I expect of you here, you'll have no problem. What's demanded of them in here helps them... organization, time management, push themselves. Things most kids don't have to do. Realizing, gee, they can do this stuff.

Comments from students, teachers, and the leader in School District D focused on a theme that thinking was an essential component of the middle school program that would benefit students in high school. The leader of District D commented that goals

involve “Always trying to add rigor [and develop] more independent thinkers. They teach kids how to think.”

Within the subgroups of School District E, commonalities among responses were observed. Students, teachers, and the leader stated that the type of work that students must produce in the middle school gifted program, and self-advocacy that students learn at the middle school level, would help them in high school. One teacher stated,

In middle school it’s really important that they [the students] become ok with who they are, their gifts, their weaknesses. That self-confidence helps them in high school if they have struggles in classes, the solid background of advocating for self needs to start in middle school, and as well as the ability to navigate over walls, academic walls. If those things are solidly covered and supported in middle school, they make better decisions and deal with high school stuff better.

In School District F, the students and teacher interviewed commented on the challenges provided by the gifted program. One student noted, “I think it will do a good job [in preparing us for high school] because there are a lot of hard projects you’ll have to get used to.” The teacher interviewed made a similar comment but noted that the private school students received more from the gifted program than the public school students, “It’s more, it’s more of a challenge, the kids tell me that. The ones that go on to private schools say it was helpful, the others, not so much.”

Student Needs

Adolescents have a unique set of needs and middle school has traditionally been organized to meet the social and emotional needs of the middle school age child.

Although middle school gifted students have similar needs to those of any adolescent, gifted adolescents have unique needs. Gifted programming at the middle school level can be structured to help meet the special needs of the middle school age gifted child. Items 5-9 on the survey were established to determine the effectiveness of the gifted program in meeting the academic and social needs of the gifted adolescent. Responses to the Likert Scale items were separated into two categories: favorable (*Always* and *Most of the time*) and unfavorable (*Some of the time* and *Infrequently*).

Item 5 on the survey asked participants to evaluate the organization of the gifted program in meeting the needs of the gifted middle school age child. Since the six districts in this study had differing structures and organizational components to their gifted programming, item 5 asked the students (I believe the way our gifted program is set up meets my needs.) and teachers and leaders (I believe the way our middle school gifted program is structured adequately addresses the needs of a gifted middle school age child.) to evaluate their current gifted programming structure with regards to meeting student needs. (See Figures 9-10)

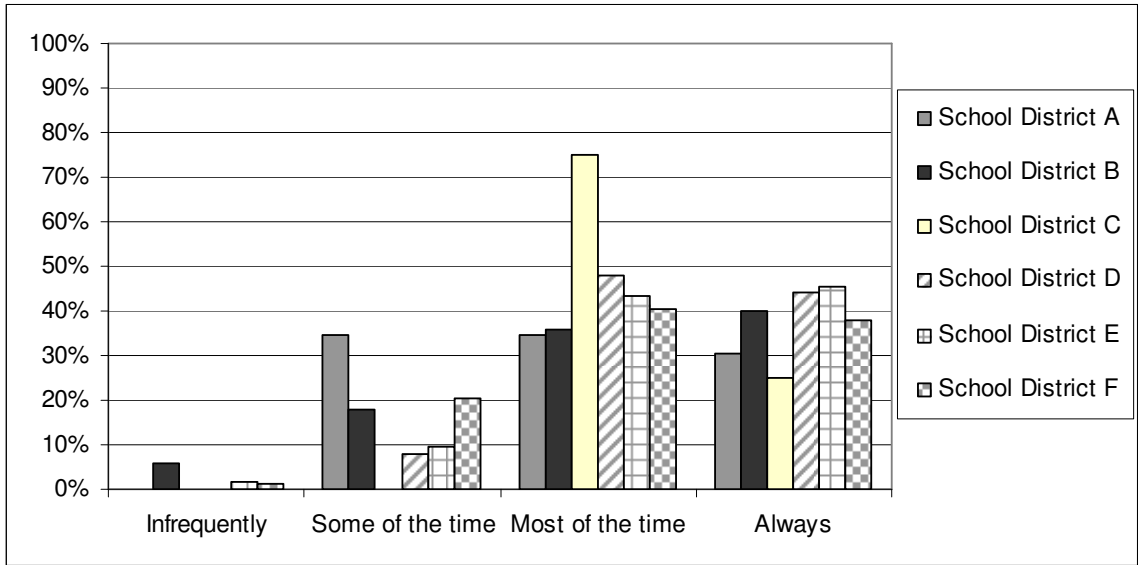


Figure 9. Student Perception: I believe the way our gifted program is set up meets my needs.

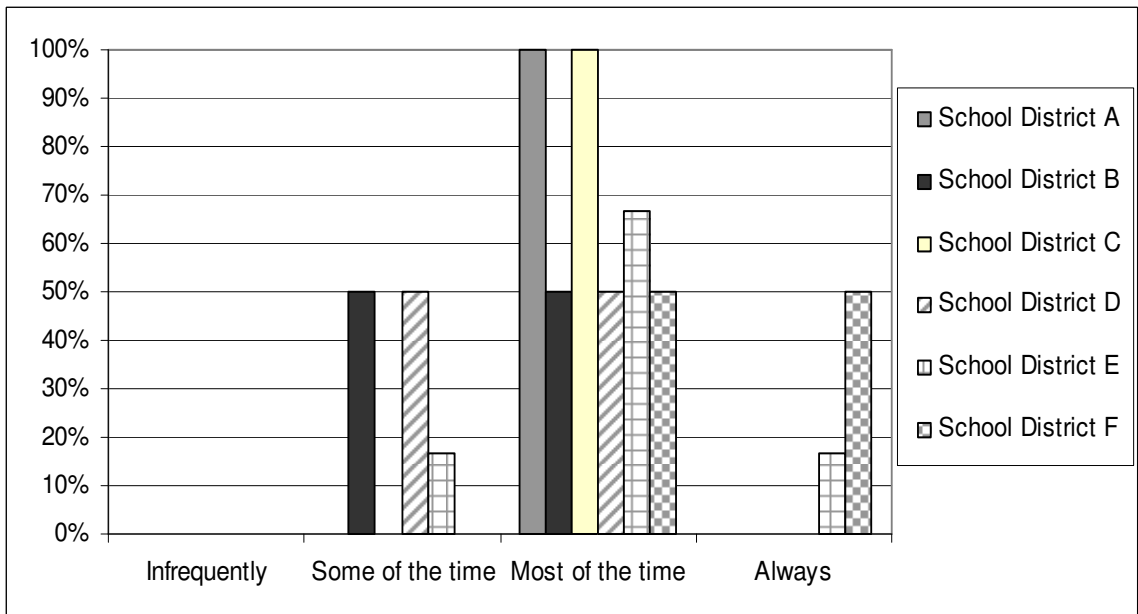


Figure 10. Teacher Perception: I believe the way our middle school gifted program is structured adequately addresses the needs of a gifted middle school age child.

Item 5 asked participants to evaluate their current gifted programming structure or organization and the extent to which the program meets student needs. Within the six participating districts, teachers evidenced 79% favorable versus a 21% unfavorable response to students' needs being met in the current gifted program structure. Three districts reported 100% favorable responses from teachers to item 5, while School Districts B and D reported 50% favorable and School District E reported 83% favorable responses. Among the gifted education leaders, 83% responded favorably while 17% responded unfavorably. The unfavorable response was elicited from the leader in School District F. Eighty-four percent of students were favorable to the structure of their current programs, while 16% were not. By district, the percentages of favorable student responses regarding the value and necessity of gifted programming to a student's life were 65% in School District A, 76% in School District B, 100% in School District C, 92% in School District D, 89% in School District E, and 78% in School District F.

Item 5 asked participants to explain how they know that student needs are being met. Leaders and teachers reflected on meeting student needs (How do you know that the students' needs are being met?) while students were asked to reflect on their own needs being met (How do you know that your needs are being met?). Among leaders, the responses given followed one of two lines of thinking. Leaders in Districts B and F commented that they did not currently know whether students' needs are being met as they believed that they needed to be more diligent at assessing their program's effectiveness. Leaders in the remaining districts referenced student, parent, and sometimes teacher feedback as sources of information assuring that students' needs are

being met. The most common response among teachers in Districts A, C, D, and E was the role communication plays in assuring that student needs are being met. Teachers in these districts utilize surveys, discussions, and conversations with students and parents to assess whether student needs are being met. Students in School Districts B, D, E, and F all agreed that they know their needs are being met when they feel they are learning something new. Additionally the students in these four districts mentioned challenge as a critical component to knowing that their needs are being met. Therefore, among teachers and students, the easiest way to know the students' needs are being met is when something new is being learned. School District A's students appeared to not understand their needs or how the gifted program meet their needs, providing responses including, "I don't know" or "What are my needs?"

Curriculum is a component of sound educational programs and was therefore evaluated as part of this survey. Item 6 of the survey asked participants to evaluate the gifted program curriculum in meeting the learning needs of the gifted adolescent. Students (The gifted middle school curriculum meets my learning needs.), teachers, and leaders (The gifted middle school curriculum effectively meets the learning needs of the gifted child.) were asked to assess the curriculum's effectiveness in meeting the specific learning needs of the middle school gifted student. (See Figures 11-12)

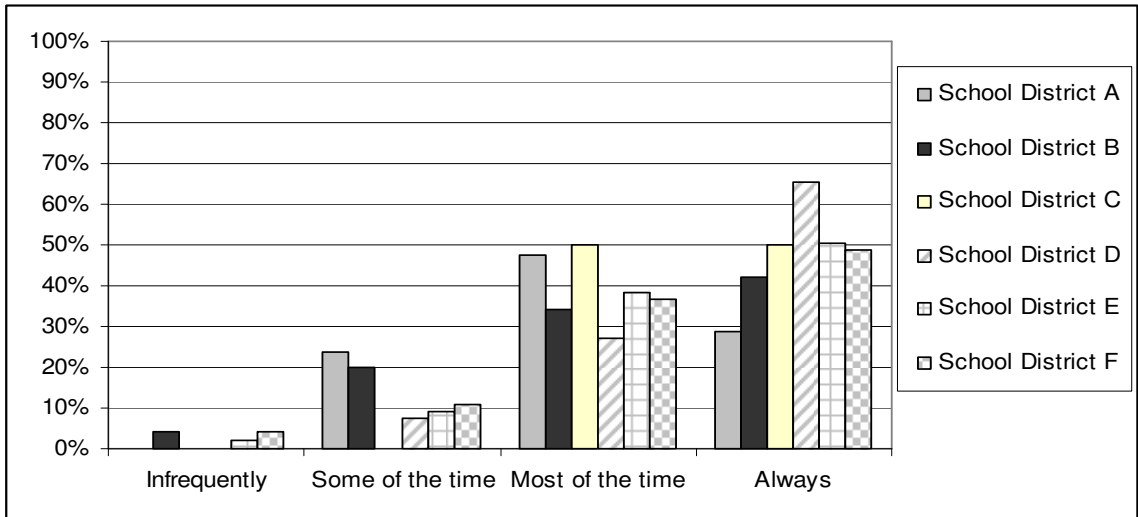


Figure 11. Student Perception: The gifted middle school curriculum meets my learning needs.

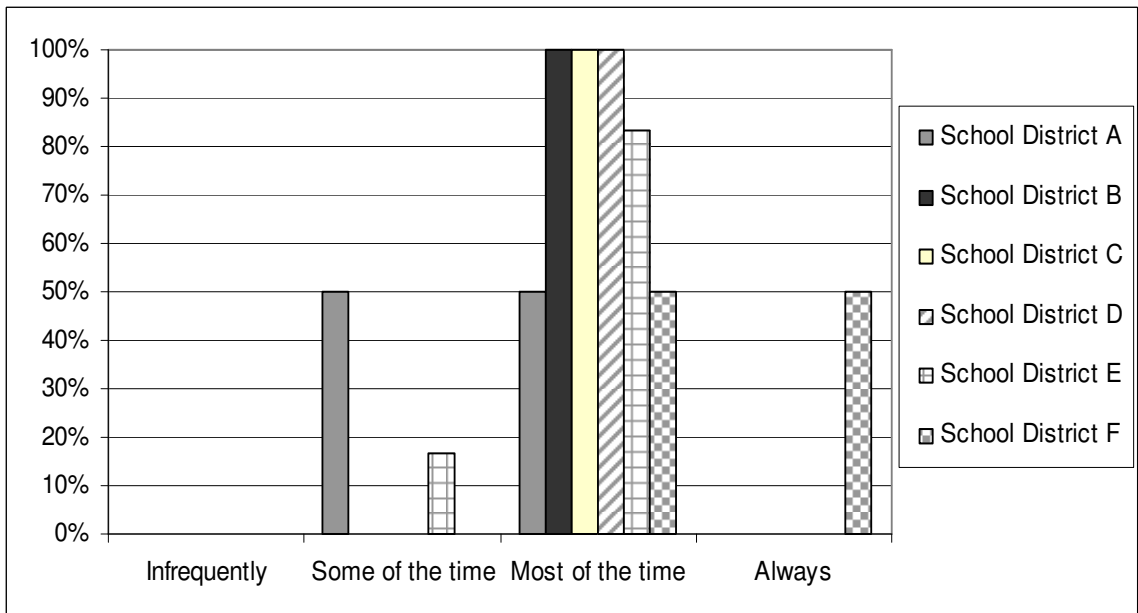


Figure 12. Teacher Perception: The gifted middle school curriculum effectively meets the learning needs of the gifted child.

Item 6 asked students, teachers, and leaders to evaluate the effectiveness of the middle school gifted program's curriculum to meet learning needs of students. Eighty-six percent of students evidenced a favorable response, while 14% of responses were unfavorable to the curriculum's ability to meet their learning needs. Eighty-seven percent of teachers' responses were favorable and leaders evidenced 67% favorable responses concerning the gifted curriculum's potential to meet student learning needs. School Districts A and F were the districts where leaders recorded an unfavorable response to item 6. Within each district, variations occurred among teachers and students regarding the curriculum's ability to meet student learning needs. Favorable responses regarding the curriculum's ability to meet the learning needs of gifted middle school students were 76% in School District A, 76% School District B, 100% in School District C, 92% in School District D, 89% in School District E, and 85% in School District F. School District A teachers recorded a 50% favorable response. School District E teachers were 83% favorable. Participating teachers in the other four districts showed a 100% favorable response with regard to the curriculum meeting student needs.

Item 6, in an open-ended response item, asked participant groups to explain how their gifted program's curriculum is evaluated for effectiveness at meeting student needs. Leaders (How does the program evaluate effectiveness of curriculum?), teachers (What do you use to measure the curriculum's effectiveness?), and students (How do you know that the curriculum is meeting your needs for learning?) all had group-specific questions to address curriculum effectiveness.

Leaders typically responded that assessments, evaluations, or rubrics were used as tools to evaluate their program's curricula effectiveness. Leaders also mentioned collaborative work time or the use of Professional Learning Communities as indicators of effective practices. District F, however, stated that the compacting of the curriculum with a core subject ensures consistent evaluation.

Teachers largely focused around two areas on the survey when reflecting on measurements utilized to evaluate the gifted program's curriculum effectiveness. One idea commonly mentioned by teachers was the use of student projects and performance events as a way to measure the curriculum's effectiveness. Scoring guides and assessments were the other tools mentioned by teachers as a means of evaluating the curriculum's effectiveness.

According to responses of students in Districts A, D, E, and F newly acquired learning was the students' evidence that the curriculum was meeting their needs. In Districts B and C, students most frequently mentioned challenge as a way that they knew the curriculum was meeting their needs. Students in Districts A, E, and F named challenge as the second most frequent indication that the curriculum was meeting their needs.

Teacher interviews focused on comparing the gifted curriculum to the regular education curriculum. Teachers were asked, "What have you tried in your classroom that is different from the regular education curriculum? What have you tried that you liked and disliked?" According to the teachers, what they are working on in their gifted classroom is far different from the regular education classroom. One teacher stated,

“Everything I do is different.” The gifted education teachers mentioned documentaries, foreign languages, games, and competitions as curriculum components. One teacher commented, “All the things we do are so different. How they’re doing it, what they’re doing, is what matters.” In response to attempting something unfavorable, most teachers commented that if they did not like something, they would not try it. One teacher noted, “I don’t do what I dislike. I don’t give them stuff to do that I don’t enjoy myself or that isn’t meaningful.” The teachers provide lessons for the students to do that they themselves enjoy because it is all about finding “...something to spark their interest.” One teacher did state that with the district’s new gifted curriculum, the teacher felt locked into a unit even if it is not necessarily a passion. This teacher also noted the fluctuations in class size due to students having the choice between two different ways to participate in gifted programming. He believed this situation was problematic.

Gifted students in the study school districts participated in a gifted program but were not enrolled in gifted programming for the entire school day. Item 7 asked participants to evaluate the classes outside the gifted program, and their ability to meet the needs of the gifted student. Students (I believe that classes, other than those in the gifted program, work to meet my individual needs.) and teachers and leaders (I believe that classes, other than those in the gifted program differentiate to meet the needs of the gifted child.) were asked to assess whether classes outside of the gifted program meet the gifted middle school age child’s needs. (See Figures 13-14)

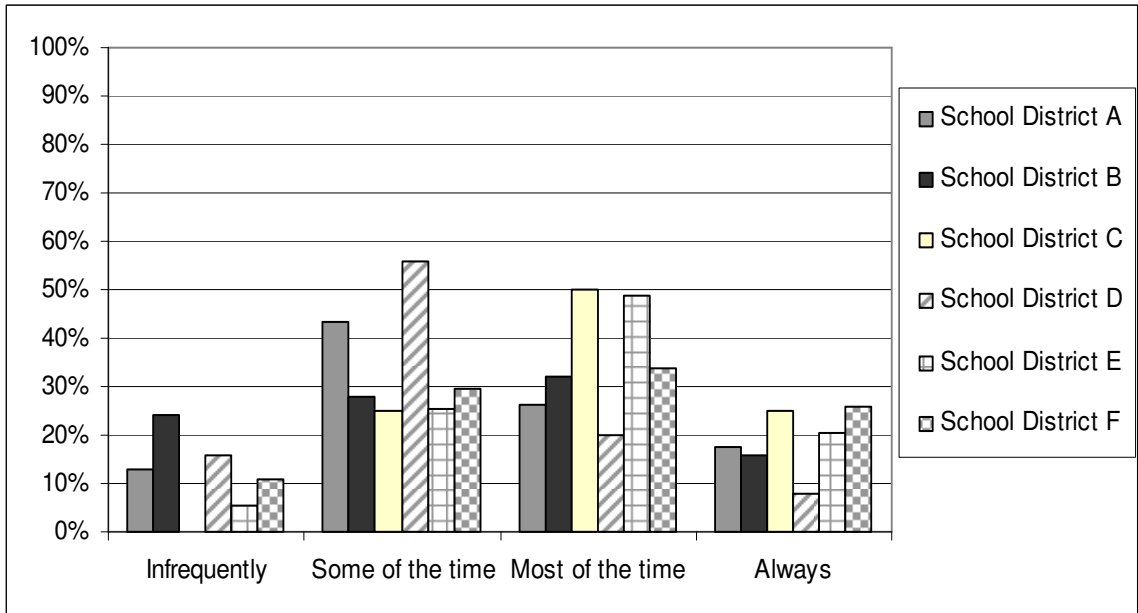


Figure 13. Student Perception: I believe that classes, other than those in the gifted program, work to meet my individual needs.

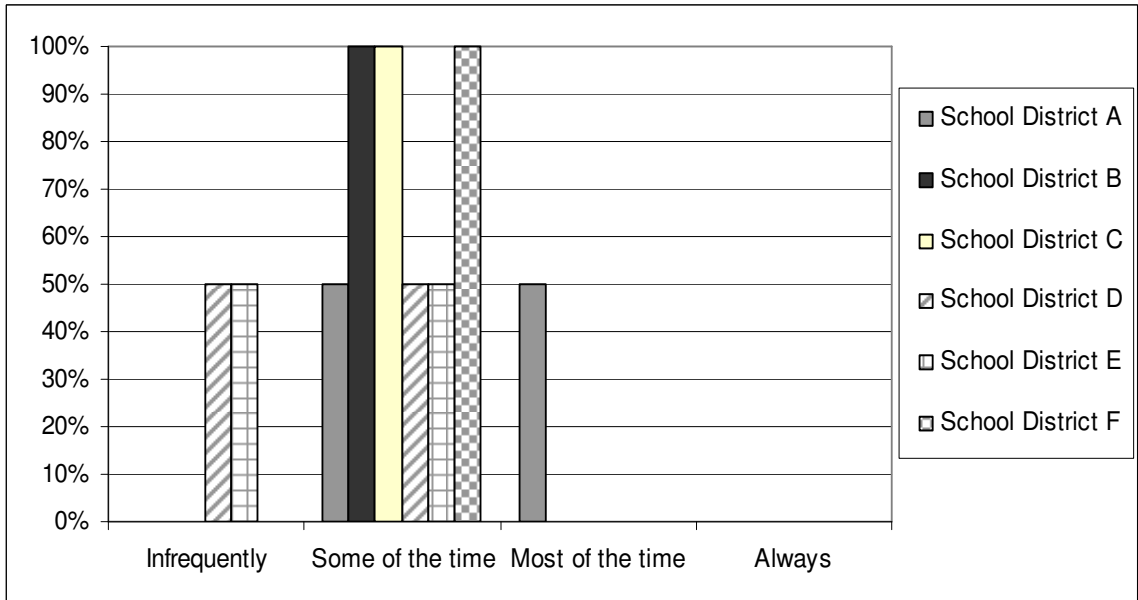


Figure 14. Teacher Perception: I believe that classes, other than those in the gifted program differentiate to meet the needs of the gifted child.

Item 7 asked participants to assess whether the classes outside of the gifted program met the gifted adolescents' needs. Within the six study districts, 60% of students responded favorably, while 40% of students responded unfavorably to the idea that classes outside of the gifted program met their needs. Ninety-three percent of teachers responded unfavorably to item 7, with all districts showing 100% unfavorable response except for District A where 50% of teachers evidenced a favorable response. In analyzing leader reaction, 50% responded favorably to non-gifted classes differentiating to meet student needs. Leader opinions in Districts B, D, and F resulted in an unfavorable response to item 7. Among the six districts, student responses differed regarding the idea of non-gifted classes meeting student needs. Favorable responses regarding classes outside of the gifted program meeting the needs of the gifted middle school child were 43% in School District A, 48% in School District B, 75% in School District C, 28% in School District D, 69% in School District E, and 59% in School District F.

Participants responded to an open-ended prompt related to non-gifted middle school classes and their ability to meet student needs. Item 7 had leaders (How do other classes/departments differentiate?), teachers (How do you know that other classes are differentiated?), and students (How do you see that other classes meet your needs?) responding individually to sub-group specific prompts.

Leaders had very distinct opinions about how other classes and departments differentiate. Every leader, however, believed that the other classes and departments were differentiating to meet student needs. School District A's leader remarked that the current program is much farther reaching than the gifted class and so therefore other classes

differentiate. The leader of District C referenced enrichment as a way in which other classes, outside of gifted education, work to meet the needs of the gifted learner.

According to the leader in District D, the use of clustering and ability grouping of students allows other classes to differentiate. Challenge classes were a method that other departments employed to meet the needs of students in District E. District F is currently utilizing Professional Learning Communities and Response to Intervention to meet all students' needs.

Teachers had varying opinions on differentiation practices in non-gifted middle school courses. Variances appeared among districts and among individual schools within the same district. Teachers in District A evidenced that other classes were differentiated with the use of pull-out, tiered assignments, extension classes, and special interest projects. District B's teachers did not believe other classes were differentiating to meet student needs. In District C, teachers commented that differentiation varied from teacher to teacher, but typically occurred as enrichment activities. District D's teachers recognized that some classes ability group and offer independent projects for gifted students, but there are no honors courses offered. In District E, some teachers saw challenge classes as a means by which the other classes were differentiated, while other teachers did not feel other classes were differentiated at all. Teachers of District E also noted that differentiation was truly dependent on the teacher. District F's teachers believed that to some extent, challenging work was provided in some assignments and in challenge math.

Students also had a wide range of opinions regarding their other classes' ability to meet their needs. The response occurring with the most frequency in Districts A, B, D, and F, was that the other classes are not meeting gifted students' needs because they are too easy, too slow, and focus on the students who are behind. This response was the second most common response for District E. The most frequently occurring response for District E was that students thought they saw other classes meeting their needs when they learned something new.

Although the students did not believe that the classes outside of their gifted program met their needs, two districts did agree among leaders and teachers. In District E, teachers and leaders agreed that challenge courses were able to differentiate to meet students' needs. Leaders and teachers in District C also agreed that enrichment was a utilized method to differentiate by other departments. No other district showed similarities across participant groups.

Middle school philosophy places high value on the social and emotional needs of the adolescent child. Gifted middle school students have social and emotional needs similar to, yet unique from those of their non-gifted peers. Item 8 addressed the students, (I believe the gifted program meets my social and emotional needs.), teachers' and leaders' (I believe the gifted middle school students' social and emotional needs are being met by our school's gifted programming.) perceptions on the gifted program's ability to meet the social and emotional needs of the middle school gifted population. (See Figures 15-16)

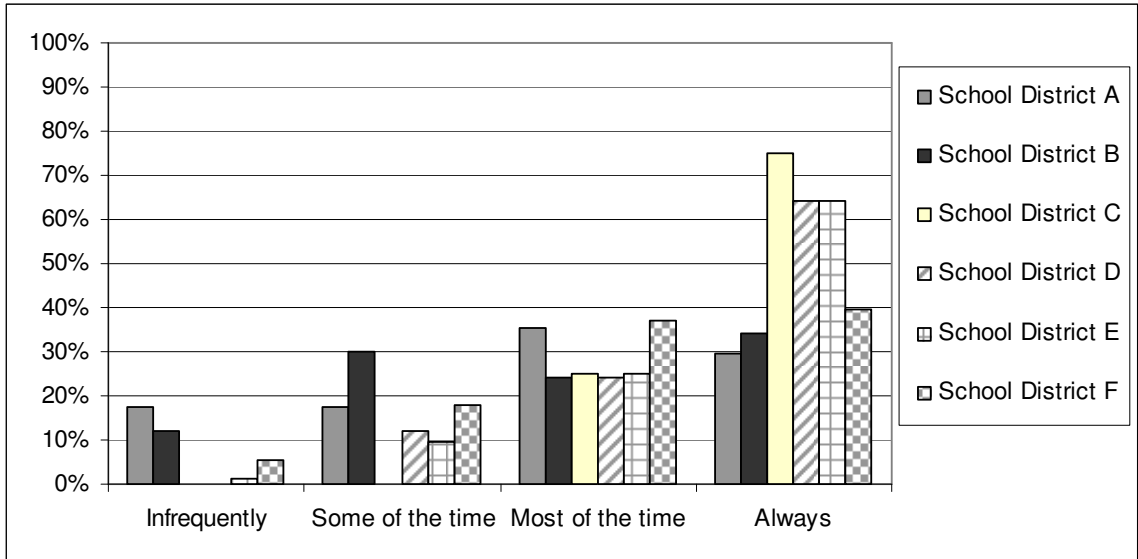


Figure 15. Student Perception: I believe the gifted program meets my social and emotional needs.

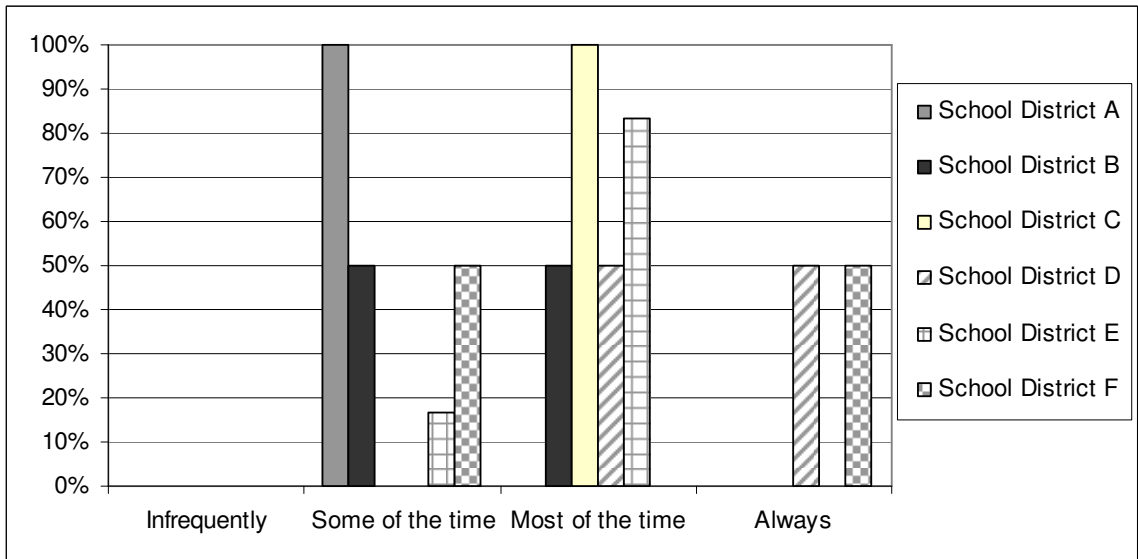


Figure 16. Teacher Perception: I believe the gifted middle school students' social and emotional needs are being met by our school's gifted programming.

Item 8 asked respondents to reflect on the capacity of the district gifted program to meet the social and emotional needs of the gifted middle school student. Overall, students held an 81% favorable versus a 19% unfavorable response to district gifted programming meeting their social and emotional needs. Teacher percentages were 67% favorable versus 33% unfavorable response. Leaders held a 67% favorable versus a 33% unfavorable response to the district gifted program's ability to meet student social and emotional needs. Leaders in Districts B and F responded unfavorably to item 8, however all other leaders reported favorable responses to the gifted program's ability to meet the social and emotional needs of the students. In response to item eight, all surveyed teachers in School District A responded unfavorably while School District B evidenced a 50% favorable response. School Districts C and D had a 100% favorable response, School District E an 83% favorable response, and School District F a 67% favorable response. Favorable responses to the gifted program's ability to meet student social and emotional needs were recorded by students as 65% in School District A, 58% in School District B, 100% in School District C, 88% in School District D, 89% in School District E, and 77% in School District F.

Leaders (How does the program meet the social and emotional needs of the gifted middle school child?), teachers (How do you/the program meet the social and emotional needs of the gifted middle school child?), and students (What does the gifted program do to meet your social and emotional needs?) had distinctive, open-ended prompts allowing respondents to provide explanations regarding item 8. Among the population of leaders participating in this study, two opposing viewpoints were expressed concerning the gifted

program's ability to meet the social and emotional needs of the gifted middle school child. Leaders in School Districts B and F believed that the current gifted curriculum and focus of the district on other components is not conducive in providing a framework in which students' social and emotional needs can be met. The other group of leaders believed that the gifted program successfully addressed the gifted middle school students' social and emotional needs due to the nature of the curriculum and professional development provided for school personnel.

Teachers had a wide array of comments regarding their ability to meet the social and emotional needs of students. Teachers in Districts A and B believed that they do not have adequate time to effectively meet the social and emotional needs of the students. Teachers in all districts, except District A, reflected on the ability to meet social and emotional needs through the use of curriculum, conversations, social time, and even "looping" so that the teacher is with the students for multiple years.

In Districts B and D, students most frequently identified meeting new people and making friends as a way the gifted program works to address their social and emotional needs. In District E, the students most frequently remarked that communication was the way that their social and emotional needs were being met. Communication consisted of in class discussions and activities regarding academic and personal subjects. The students in District F commented that partners and group work were ways that their teachers helped meet their social and emotional needs. In District A, students most commonly stated, "I don't know" while in District C, there were not enough responses to the open-ended prompt to identify commonalities.

Although all student groups were able to identify some aspect in which the gifted program met their social and emotional needs, District B teachers and leaders commonly agreed that there is not enough allotted time in the schedule and curriculum to accomplish this goal.

Item 9 on the survey asked participants to reflect on the gifted program’s ability to meet the students’ academic needs. Students (I believe that the gifted program meets my academic needs.) and teachers (I believe that the gifted middle school students’ academic needs are being met by our school’s gifted programming.), and leaders (I believe that the academic needs of our gifted students are being met through current programming.) responded to the program’s ability to meet students academic needs. (See Figures 17-18)

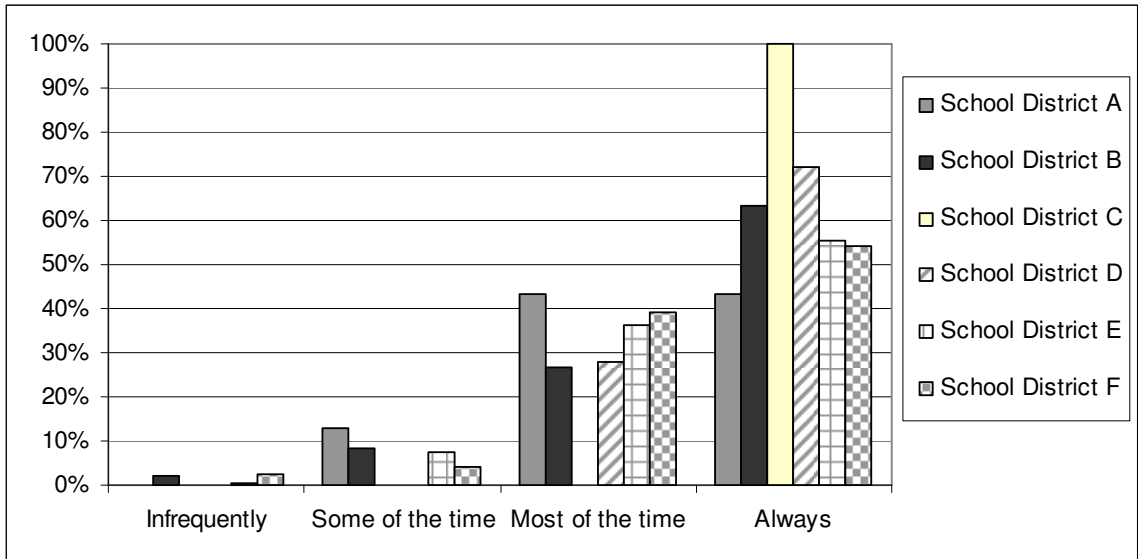


Figure 17. Student Perception: I believe that the gifted program meets my academic needs

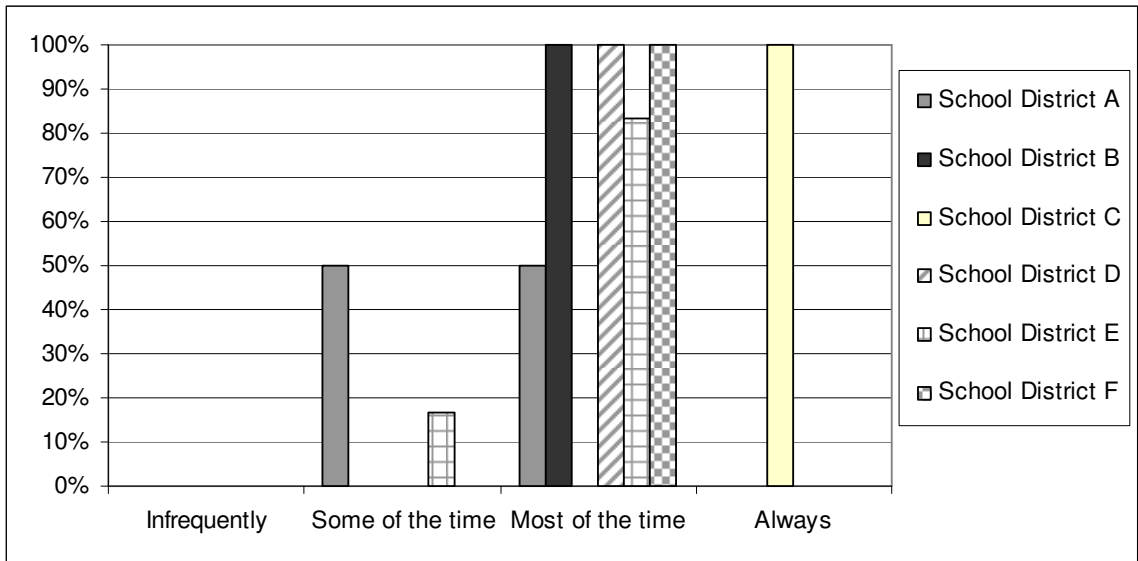


Figure 18. Teacher Perception: I believe that the gifted middle school students’ academic needs are being met by our school’s gifted programming.

Overall, students held a 92% favorable response versus an 8% unfavorable response to the gifted program’s ability to meet their academic needs. Teachers had an 87% favorable versus a 13% unfavorable response. Gifted education leaders had 83% respond favorably and 17% respond unfavorably to the gifted program’s ability to meet students’ academic needs. Students had differing viewpoints on their specific gifted program’s ability to meet their academic needs. Favorable responses to the gifted program’s ability to meet the students’ academic needs were 87% in School District A, 90% in School District B, 100% in School District C, 100% in School District D, 92% in School District E, and 93% in School District F. Although most districts reported a 100% favorable response with regard to teacher perception on the gifted program’s ability to meet students’ academic needs, 50% of School District A and 83% of School District E

teachers responded favorably. Only the leader in School District F had an unfavorable response to item 9 of the survey.

Item 9 sought participant reflection on the program's ability to meet the academic needs of the gifted middle school student. Leaders (How do you know that the students' academic needs are being met?), teachers (How do you know, and what do you/the program do, to ensure that the students' academic needs are being met?), and students (How does the gifted program meet your academic needs?) were asked to reflect individually on the open-ended prompt. Four out of six leaders referenced the use of data in evaluating whether or not the program meets the needs of the gifted learner. Leaders identified standardized test scores and grades as indicators of the program's effectiveness in meeting students' academic needs. Leaders referenced parent, teacher, and student input as an important element in assessing the effectiveness of the academic component. Three leaders referenced the programs ability to meet the needs of the "average" gifted learner, or the inability to meet the gifted middle school students' academic needs.

Teachers referenced multiple ways in which they meet the academic needs of the middle school gifted student. Teachers in Districts A, C, and E noted the use of conversations, discussions, and feedback as a form of identifying the effectiveness of the gifted program in meeting the students' academic needs. A response common among teachers in District E was the use of assessments, both standardized and district-based, to determine whether or not the students' needs are being met. Student enthusiasm was another indication of academics meeting student needs mentioned by teachers in Districts B and E.

Students across all districts had a common response when reflecting on how their academic needs were being met. The most frequent response students provided was that their educational needs were being met when they learned new information or when they believed that the program was educational. In all six districts, students mentioned this response more frequently than any other response. The second most frequently mentioned response in all districts, except School District C, was challenge as a way that students knew that their academic needs were being met.

As part of the interview, interviewees were asked to evaluate how the middle school gifted program meets the various needs of the students. Leaders and teachers were asked, “How does your gifted middle school program meet the academic and social needs of the students?” and students were asked, “How do you see the gifted middle school services meeting all of your needs?”

Leaders’ comments about the gifted program meeting all of the gifted adolescents’ needs were focused on the goal of always keeping the student at the center of all decisions. Offering choice and opportunities for learning, finding students’ likes and dislikes, helping students appreciate current events, fostering relationships, and understanding the gifted student were all referenced in leader responses. One leader stated, “I really talk a lot to the kids and the parents of kids!” Another recommended, “By having a student focus, you know that is such a big deal. It isn’t all about conforming, but rather about developing uniqueness.”

According to the teachers, there were two ways that the gifted program met the students' needs, academically and emotionally. Teachers discussed the importance of a peer group within the gifted program. One teacher commented,

Well, the social and emotional needs are met, in my classroom anyway, by the acceptance, being who we are, being honest, and getting honest feedback, which includes me telling them if they're rude. It's a comfortable place for them to be creative and explore and to be comfortable learning new things. At the same time, I think their academic needs are met in my class because what I teach them is new and unfamiliar at first, like foreign languages, binary number systems, etc. This gives them a chance to learn how to learn difficult things with less risks than high school or college.

Each teacher mentioned the safe environment of the gifted classroom, a place where students are able to come in and "...be goofy and not worry about ridicule..." the gifted classroom is a place where they "...don't have to play a role."

The students interviewed for this survey in Districts D, E, and F all believed that the gifted program met their needs by providing a challenge and helping them with skills. To these students the gifted program met their needs by providing a learning environment. One student commented, "I have struggles with writing. I feel like I can be more creative and come out of my shell. It's also helped with my presenting skills." Another student noted, "It teaches me stuff I'll need to know that like might help me for a lot of the jobs in life." Regardless of school district, students agreed that new learning and skills were the way they saw gifted middle school services meeting their needs.

Summary

Chapter four examined six School Districts within a metropolitan area of a major midwestern city. Surveys, interviews, and observations centered on the delivery model of the participating gifted program and the ability of the program to meet the various needs of the gifted, adolescent, middle school student. Leaders, teachers, and students shared opinions and perspectives on each question or statement in the survey and interview. The respondents' input demonstrated whether stakeholders in a given school district's gifted program agreed on specific facets of the program. Groups of students, teachers, and leaders as study participants provided three unique angles from which to analyze data. Chapter Five reflects on the results obtained from this study, contains recommendations for necessary components of an excellent middle school gifted program, and provides suggestions for future studies in the field of middle school gifted education.

Chapter Five: Discussion

Since the issuance of the collaborative statement between the NAGC and the NMSA in 2004, little research has been conducted in the field of gifted education at the middle school level. In an effort to better understand the field of gifted education and the programs already in place at the middle school level, this study utilized middle school gifted education programs in six metropolitan school districts in a major midwestern city.

This chapter includes the implications, themes, recommendations, future considerations, and conclusions in connection to this research. The purpose of this study was to assess current middle school gifted programs for the components that contribute to excellence of gifted programming for the student, school, and district. Data in the study was acquired from surveys containing statements evaluated by participants using ratings on a Likert Scale. Each survey statement was followed with an open-ended question requiring participants to explain their understanding of and rating for the statement. Interviews of participants in this study were conducted and the researcher completed classroom observations to analyze the elements judged by gifted education teachers, leaders, and students as components of excellence in a gifted middle school education program for students, schools, and districts. This study sought to determine excellence in middle school gifted programs and to make recommendations of best practices in middle school gifted program development, utilizing the findings. It is intended to add to a body of research in the area of gifted education. As school districts are implementing or revising gifted programming, this study can inform decision-makers concerning components that comprise excellent gifted programs at the middle school level.

In order to answer the question, “Can a gifted education program for middle school students be developed that meets the needs of the child, the school, and the district?” this research study sought to gain data through addressing three particular questions:

1. How can a middle school gifted education program support the transition from elementary to high school gifted education programs?
2. Can a “best practices” middle school gifted education program result in greater high school gifted program readiness as evidenced by current high school assessment resources?
3. What design model can be created for educators of the gifted to aid in developing and/or modifying gifted education programs at the middle school level?

The researcher purposely separated study data relative to a gifted program delivery model from a program’s success in meeting student needs in order to maintain objectivity when addressing three questions.

Transition from Elementary School to High School

Middle school gifted education programs support the middle school child by providing a continuation of services to the middle school gifted student. The data illustrate that all three groups of stakeholders find the middle school gifted program a critical component in the education of the gifted adolescent student. The middle school gifted program addresses the unique needs of the gifted students by providing academic

and affective support while ensuring that the program provides new learning, challenge, and peer group interaction.

High School Gifted Readiness

Although this study did not evaluate high school assessment resources, a “best practices” middle school gifted program model has been developed as a result of this study. The “best practices” that have been developed as part of this study are based on research and what works according to students, teachers, and leaders in middle school gifted education. The continuation of this study with the use of the developed middle school gifted model, high school student perception on middle school gifted services, and high school readiness data will assist in the understanding of a “best practices” middle school gifted program.

Design Model

Based on this study, several design components became evident as critical in creating a model at the middle school level. The best practices design model of middle school gifted programming emanating from data obtained by this survey will be further explained in the chapter discussion.

Implications

The major projected outcome of this study was the development of a “best practices” model for middle school gifted education programming. After analyzing the literature and data collected for the purpose of this study, the researcher concluded that particular essential components should be integrated into a middle school gifted program in order for the program to be comprehensive for the students, the school, and the district.

Gifted programming at the middle school level is valuable and necessary.

Students, teachers, and leaders who participated in this study concluded that the middle school gifted program was a valuable necessity to the education of the middle school gifted adolescent. The middle school program also helps prepare students for high school by providing students with new learning and challenges.

Each participating district in this study had similar as well as unique components comprising the gifted program at the middle school level. In all districts, specific constraints contribute to the type of program offered to the gifted adolescent. It is imperative that the middle school gifted program work within the expected parameters of the district structure, but the program must also provide new learning, skill development, and challenge for the students. The program, while functioning within district constraints and middle school structure, is obligated to be student-centered. The data demonstrated that at least one hour per day of gifted programming is necessary to effectively meet the needs of students and provide adequate time for implementation of gifted services.

Educators who understand and appreciate the needs of the gifted student are crucial to the successful delivery of the gifted program at the middle school level. Gifted education leaders function in the role of administering the gifted program. The leader's role involves overseeing curriculum development, implementation, and evaluation, hiring of certified gifted teachers, program evaluation, and other program-specific tasks. Teachers certified in gifted education are an essential element of the middle school gifted program. The certified gifted teachers are trained to provide new learning opportunities and skill development for the gifted adolescent. The utilization of pedagogical skills,

which enhance learning for gifted students, is not always occurring in classes taught by teachers who do not possess gifted certification.

Middle school gifted curriculum is often different from that offered in a regular education curriculum. These differences are usually reflected in the topics, challenges, and scope of the gifted education curriculum. In addition, a major focus of the curriculum within gifted education is on meeting the affective (social) as well as academic needs of students. This study found various concepts of curriculum ranging from a standardized district curriculum based on identified end results, a curriculum based on skill attainment rather than specific knowledge concepts, and a generalized curriculum outline, to the absence of a guiding curriculum. According to the observations and data obtained from this study, the curriculum that received the most favorable review was a skills-based curriculum. A skills-based curriculum allows the teacher to present concepts that are in the teacher's preferred areas of concentration while focusing on the same set of skills across the district. Based on data from this study, when a teacher is enthusiastic and comfortable with a topic or theme the curriculum implemented in that teacher's classroom will be more consistently evidenced through student learning than when a teacher is following a standardized curriculum with minimal personal involvement. This study also shows that class work outside gifted programming may not meet students' affective and academic needs. Some districts offer advanced and challenge classes to meet needs but this is not a general occurrence in most districts.

Finally, when evaluating how effectively the gifted program is meeting student needs, the most successful programs utilize assessment data combined with survey,

interview, and observational data. Gifted programming should periodically be evaluated to ensure that stakeholder needs are being addressed and to inform decision-makers when modifications to the gifted program are needed.

It is important to note, however, that not every program observed for the purpose of this study truly represented a program of excellence in the field of gifted education. For example, one of the observed programs had a large disconnect between students, teachers, and leaders for the majority of the interview questions and survey data. This disconnect permeated throughout everything occurring in this particular gifted program from the services offered, or believed to be offered, to the curriculum; the teacher teaching what appeared to be a good fit for the moment. Another study program recently revamped the entire curriculum documents for the entire program, standardizing the curriculum and delivery in every gifted program classroom. The implemented curriculum when observed, however, appeared to lack the depth necessary in a gifted program at the middle school level. When students would typically be analyzing and synthesizing information, the students were instead recalling facts and demonstrating what they had learned with simple experiments.

Themes

Within the qualitative portion of this study, three themes emerged in relation to gifted education at the middle school level. The emergence of these themes helped the researcher to identify the key elements of excellence in middle school gifted programs that are a necessity no matter what programming model is in place.

The first theme involves new learning. Students cite the acquisition of new learning as a critical factor when determining whether the gifted program is meeting their needs. New learning consists of an educational environment, skill development, and content. New learning was identified by all participants in this study as helping to prepare students for the rigors of high school.

Challenge was another theme identified as part of this study. Challenge was an element identified by participants of all subgroups to know that the gifted program meets students' needs. Students described a desire to experience a challenge as part of their learning. Teachers believed that challenge was important for students academically. Leaders associated the critical element of challenge with gifted programs that meet students' academic needs.

The third theme emerging from this study was the importance of peer groups. Students frequently elaborated on the enjoyment they experienced when working with their intellectual peers. Teachers and leaders also commented on the need for students to be with others who are like them. Group work, peer collaboration, and peer groups are an important part of the middle school gifted program.

Components of an Excellent Middle School Gifted Program

The following recommendations are based on data obtained during this study and are based on the conclusions. One recommendation in the study is that middle schools offer gifted programming in all grades. The gifted program has been shown to provide new learning opportunities and meet the various needs of the middle school gifted adolescent. The middle school gifted program has been shown to help prepare students

for high school by providing the students with challenges and helping them to understand the workload expected at the high school level. This study supports Missouri State Law that those teachers working solely with the gifted population have gifted teacher certification. The study also provides a research base that can be employed in continuing professional development for gifted teachers as they work together to design curriculum with common components across the field of gifted education. Finally, the findings of this study evidence elements of gifted education programming that can form the basis for a program of studies leading to a masters degree in gifted education.

The purpose of this study was to develop a model for gifted education at the middle school level. Although each district must work to create and implement a gifted program at the middle school level that meets the unique needs of the district and middle school structure, there are several components that should be included as part of any middle school gifted program. The data obtained from this study demonstrate that a gifted program at the middle school level should include the following:

1. Curriculum
 - a. Identified, structured, skill-based curriculum, but preferably not standardized
 - b. Unique in scope, topic, depth, and level from curriculum taught in the regular education classroom
 - c. Thematic-based units
 - d. Student focused
 - e. Affective and academic needs met

- f. New learning promoted
 - g. Challenge as an integral component
 - h. Problem-solving skills encouraged and developed
 - i. Creative thinking skills developed and supported
 - j. Life preparation skills cultivated for future successes
 - k. Research and writing skills fostered and developed
 - l. Technology incorporated and utilized
 - m. Debate promoted to increase learning
 - n. Projects utilized to assist in deeper understanding
2. Structure
- a. Services for at least one hour daily
 - b. Opportunity to work with intellectual peers
 - c. Taught by gifted certified teachers
3. Evaluation
- a. Stakeholder communication via surveys, interviews, and observations
 - b. Assessment data analysis

Recommendations for Future Research

This study considered six unique middle school gifted education programs within a major midwestern metropolitan area in order to better understand the components that contribute to an excellent middle school gifted education program. Although this study does not make specific recommendations to each participating district regarding their individual gifted programming at the middle school level, the researcher does encourage

each district to compare and make changes to their current model with the recommended model of this study.

An area for future research could concentrate on gifted students who choose not to participate in a middle school gifted program to determine their reasons. Another consideration for future research would be to ask high school students who participated in a middle school gifted program to reflect on their experience in the middle school gifted program. The perception of these individuals could provide specific examples concerning how the middle school program has prepared the gifted students for high school.

A continuation of this study would be to statistically analyze the collected data in order to test individual hypothesis regarding each survey question. Creating a longitudinal study to follow the same students from middle school to high school would be another continuation to this study that would provide data regarding the success of the middle school program to prepare students for high school. The involvement of more participants in each group would also contribute to a more data rich continuation of this study. A final continuation would be to utilize data from a district that implemented all of the researcher's recommended components. Information gained could provide validity to the practice of implementing the recommended components. This continuation could also help determine if any additional necessary elements surface.

Conclusions

In the field of education, every decision must remain student-centered. When considering the implications of gifted education the focus must remain on the needs of the gifted student. Gifted students are the nation's most precious resource with the ability

to remain competitive in a global society. In order for the talents and gifts of the gifted student to remain strong, the gifted learner must be nurtured within the educational system.

Gifted programming at the middle school level should be a natural progression for students leaving elementary school and anticipating entrance to high school in order to fill a need at the middle school level. The middle school program prepares students for high school while also providing the academic and affective support gifted adolescents need at the middle school level. Although each district must consider its unique needs and the organizational structure of the middle school, gifted middle school students should be afforded the opportunity to learn new information in a gifted program with gifted certified educators.

The recommendations made in this study cannot be the comprehensive blueprint for all middle school gifted education programming. However, when establishing or modifying middle school gifted programs, district decision-makers are encouraged to consider the findings and recommendations of this study. In complementing the addition of this study, the field of gifted education at the middle school level would greatly benefit from further research.

It is vital that American educators have the support needed to successfully work with gifted students in our schools. This component of our population can be challenged to work to their abilities with a curriculum that provides them with opportunities to produce and perform to the limits of their capabilities. A program of gifted education should involve students in developing their highest thinking skills as they strive to

successfully solve problems, create products, and engage in complex performances. This study was based on providing the base for a common curriculum for gifted education to provide gifted students with maximum support.

Appendix A

Dear Middle School Student:

I am a doctoral graduate student from Lindenwood University in St. Charles, Missouri. I am conducting a survey on middle school gifted programs and the components that contribute to their effectiveness. The information collected will be anonymous and will be used to complete my dissertation. In no way will any of this information be used for grading purposes. Therefore, you do not need to put your name on this form and please be very honest when completing the answers. After you have answered each question, please take your time to add comments that you believe would be beneficial to my understanding of your gifted program middle school experience.

Thank you for your help!

Sincerely,

Samantha Miller

Doctoral Graduate Student

Lindenwood University College of Education

Student Survey-Middle School Gifted Services

<p>1. I believe that the way we receive our gifted education meets my needs.</p>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">Infrequently</td> <td style="width: 25%;">Some of the time</td> <td style="width: 25%;">Most of the time</td> <td style="width: 25%;">Always</td> </tr> <tr> <td style="height: 30px;"></td> <td></td> <td></td> <td></td> </tr> </table>	Infrequently	Some of the time	Most of the time	Always				
Infrequently	Some of the time	Most of the time	Always						
<p>What gifted education services does your school currently provide to you at the middle school level?</p>									
<p>2. I have adequate time to receive my gifted education services.</p>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">Infrequently</td> <td style="width: 25%;">Some of the time</td> <td style="width: 25%;">Most of the time</td> <td style="width: 25%;">Always</td> </tr> <tr> <td style="height: 30px;"></td> <td></td> <td></td> <td></td> </tr> </table>	Infrequently	Some of the time	Most of the time	Always				
Infrequently	Some of the time	Most of the time	Always						
<p>What is the appropriate amount of time you would need to receive your gifted education services?</p>									
<p>3. I believe my gifted education teachers are an important in my education.</p>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">Infrequently</td> <td style="width: 25%;">Some of the time</td> <td style="width: 25%;">Most of the time</td> <td style="width: 25%;">Always</td> </tr> <tr> <td style="height: 30px;"></td> <td></td> <td></td> <td></td> </tr> </table>	Infrequently	Some of the time	Most of the time	Always				
Infrequently	Some of the time	Most of the time	Always						
<p>In what ways do your gifted teachers contribute to your education?</p>									
<p>4. I believe my middle school gifted program is an essential, valuable piece to my education.</p>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">Infrequently</td> <td style="width: 25%;">Some of the time</td> <td style="width: 25%;">Most of the time</td> <td style="width: 25%;">Always</td> </tr> <tr> <td style="height: 30px;"></td> <td></td> <td></td> <td></td> </tr> </table>	Infrequently	Some of the time	Most of the time	Always				
Infrequently	Some of the time	Most of the time	Always						
<p>What parts of your gifted education program are valuable and why?</p>									

MIDDLE SCHOOL GIFTED PROGRAMMING 157

5. I believe the way our gifted program is set up meets my needs.	Infrequently	Some of the time	Most of the time	Always
How do you know that your needs are being met?				
6. The gifted middle school curriculum meets my learning needs	Infrequently	Some of the time	Most of the time	Always
How do you know that the curriculum is meeting your needs for learning?				
7. I believe that classes, other than those in the gifted program, work to meet my individual needs.	Infrequently	Some of the time	Most of the time	Always
How do you see that the other classes meet your needs?				
8. I believe the gifted program meets my social and emotional needs.	Infrequently	Some of the time	Most of the time	Always
What does the gifted program do to meet your social and emotional needs?				
9. I believe that the gifted program meets my academic needs.	Infrequently	Some of the time	Most of the time	Always
How does the gifted program meet your academic needs?				

Appendix B

Dear Middle School Teacher of Gifted:

I am a doctoral graduate student from Lindenwood University in St. Charles, Missouri. I am conducting a survey on middle school gifted programs and the components that contribute to their effectiveness. The information collected will be anonymous and will be used to complete my dissertation. In no way will any of this information be used in evaluation procedures. Therefore, you do not need to put your name on this form and please be very honest when completing the answers. After you have answered each question, please take your time to add comments that you believe would be beneficial to my understanding of your gifted program.

Thank you for your help!

Sincerely,

Samantha Miller

Doctoral Graduate Student

Lindenwood University College of Education

Teacher Survey-Middle School Gifted Services

<p>1. I believe that our current method of gifted services meets the needs of the students.</p>	<p>Infrequently</p>	<p>Some of the time</p>	<p>Most of the time</p>	<p>Always</p>
<p>What services does your district currently provide at the middle school level?</p>				
<p>2. I have adequate time to service my students.</p>	<p>Infrequently</p>	<p>Some of the time</p>	<p>Most of the time</p>	<p>Always</p>
<p>What is an appropriate amount of time you need to provide gifted services to your students?</p>				
<p>3. I believe I am an important member in the education of the gifted middle school child.</p>	<p>Infrequently</p>	<p>Some of the time</p>	<p>Most of the time</p>	<p>Always</p>
<p>In what ways do you participate in the education of the gifted child?</p>				
<p>4. I believe our middle school gifted programming is an essential, valuable component to the middle school student's life.</p>	<p>Infrequently</p>	<p>Some of the time</p>	<p>Most of the time</p>	<p>Always</p>
<p>What are the key parts of your program that contribute to its value and why do you believe they are each important.</p>				

MIDDLE SCHOOL GIFTED PROGRAMMING 160

<p>5. I believe the way our middle school gifted program is structured adequately addresses the needs of a gifted middle school age child.</p>	<p>Infrequently</p>	<p>Some of the time</p>	<p>Most of the time</p>	<p>Always</p>
<p>How do you know that the students' needs are being met?</p>				
<p>6. The gifted middle school curriculum effectively meets the learning needs of the gifted child.</p>	<p>Infrequently</p>	<p>Some of the time</p>	<p>Most of the time</p>	<p>Always</p>
<p>What do you use to measure the curriculum's effectiveness?</p>				
<p>7. I believe that classes, other than those in the gifted program, differentiate to meet the needs of the gifted child.</p>	<p>Infrequently</p>	<p>Some of the time</p>	<p>Most of the time</p>	<p>Always</p>
<p>How do you know that the other classes are differentiated?</p>				
<p>8. I believe the gifted middle school students' social and emotional needs are being met by our school's gifted programming.</p>	<p>Infrequently</p>	<p>Some of the time</p>	<p>Most of the time</p>	<p>Always</p>
<p>How do you/the program meet the social and emotional needs of the gifted middle school child?</p>				

MIDDLE SCHOOL GIFTED PROGRAMMING 161

9. I believe that the gifted middle schools students' academic needs are being met by our school's gifted programming.	Infrequently	Some of the time	Most of the time	Always
How do you know, and what do you and/or the program do to ensure that the students' academic needs are being met?				

Appendix C

Dear Gifted Education Leader:

I am a doctoral graduate student from Lindenwood University in St. Charles, Missouri. I am conducting a survey on middle school gifted programs and the components that contribute to their effectiveness. The information collected will be anonymous and will be used to complete my dissertation. In no way will any of this information be used in evaluation procedures. Therefore, you do not need to put your name on this form and please be very honest when completing the answers. After you have answered each question, please take your time to add comments that you believe would be beneficial to my understanding of your gifted program.

Thank you for your help!

Sincerely,

Samantha Miller

Doctoral Graduate Student

Lindenwood University College of Education

Leader Survey-Middle School Gifted Services

<p>1. I believe that our current method of gifted services meets the needs of the students.</p>	Infrequently	Some of the time	Most of the time	Always
<p>What services does your district currently provide at the middle school level?</p>				
<p>2. Our program allows for adequate time to service the gifted students.</p>	Infrequently	Some of the time	Most of the time	Always
<p>What is the appropriate amount of time needed for the students to receive gifted services?</p>				
<p>3. I believe I am an important member in the education of the gifted middle school child.</p>	Infrequently	Some of the time	Most of the time	Always
<p>In what ways do you participate in the education of the gifted child?</p>				
<p>4. I believe our middle school gifted programming is an essential, valuable component to the middle school student's life.</p>	Infrequently	Some of the time	Most of the time	Always
<p>What are the key parts of your program that contribute to its value and why do you believe they are each important?</p>				

MIDDLE SCHOOL GIFTED PROGRAMMING 164

<p>5. I believe the way our middle school gifted program is structured adequately addresses the needs of a gifted middle school age child.</p>	<p>Infrequently</p>	<p>Some of the time</p>	<p>Most of the time</p>	<p>Always</p>
<p>How do you know that the students' needs are being met?</p>				
<p>6. The gifted middle school curriculum effectively meets the learning needs of the gifted child.</p>	<p>Infrequently</p>	<p>Some of the time</p>	<p>Most of the time</p>	<p>Always</p>
<p>How does the program evaluate the effectiveness of curriculum?</p>				
<p>7. I believe that classes, other than those in the gifted program, differentiate to meet the needs of the gifted child.</p>	<p>Infrequently</p>	<p>Some of the time</p>	<p>Most of the time</p>	<p>Always</p>
<p>How do the other classes/departments differentiate?</p>				
<p>8. I believe the gifted middle school students' social and emotional needs are being met by our school's gifted programming.</p>	<p>Infrequently</p>	<p>Some of the time</p>	<p>Most of the time</p>	<p>Always</p>
<p>How does the program meet the social and emotional needs of the gifted middle school child?</p>				

MIDDLE SCHOOL GIFTED PROGRAMMING 165

9. I believe that academic needs of our gifted students are being met through current programming.	Infrequently	Some of the time	Most of the time	Always
How do you know that the students' academic needs are being met?				

Appendix D

Student Interview-Middle School Gifted Services

1. What services does the middle school gifted education program provide to you?
2. What are the strengths and weakness of your middle school gifted education program?
3. How do you believe the middle school gifted program prepares you for high school?
4. How do you see the middle school gifted services meeting all of your needs?
5. What is it about your gifted classes that makes you want to continue to participate in them?

Appendix E

Teacher Interview-Middle School Gifted Services

1. What services does your middle school gifted education program provide to students?
2. What are the strengths and weaknesses of your middle school gifted education program?
3. How does the gifted education program prepare students for high school?
4. How does the gifted program meet the academic and social needs of the students?
5. What have you tried in your classroom that is different from the regular education curriculum? What have you tried that you liked and disliked?

Appendix F

Leader Interview-Middle School Gifted Services

1. What services does your middle school gifted education program provide to students?
2. What are the strengths and weaknesses of your middle school gifted education program?
3. How does your middle school gifted education program prepare students for high school?
4. How does your middle school gifted programming meet the academic and social needs of the students?
5. What are the various models of middle school gifted education that your district has tried? What have you tried that you liked and disliked?

Appendix G

Dear Parent/Guardian:

Your child is invited to participate in a research study conducted through Lindenwood University’s School of Education. By conducting this study I hope to learn the most effective method of gifted education to meet the needs of a middle school child. Your child was selected as a participant of this study due to his/her participation in the gifted program in your school district.

If your child participates, he/she will be asked to complete an anonymous student survey or participate in an interview with myself on his/her gifted education experiences. Possible benefits of this study include a higher understanding of gifted education by your current school district, as well as other districts across the nation. However, I cannot guarantee that your child will personally receive any benefits from this study.

Any information that is obtained in conjunction with this study will remain confidential. Student survey information will be collected anonymously and the answers to the questions will remain anonymous. Student interview information, after collection, will be used in the doctoral dissertation.

Your child’s participation is voluntary and will not affect any relationships with your current school. If you should decide to allow your child to participate, you may withdraw participation at anytime.

If you should have any questions regarding this study or participation in this study, please feel free to contact me at samantha2348@sbcglobal.net or 616-821-6565. Thank you in advance for your consideration.

Sincerely,

Samantha Miller
Doctoral Graduate Student
Lindenwood University

Please fill out the attached form and return it to your gifted education teacher.

_____ I **DO** give consent for my student, _____, to participate in this study

_____ I **DO NOT** give consent for my student, _____, to
participate in this study

Print Parent/Legal Guardian name:

Parent/Legal Guardian Signature: _____ Date _____

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Vitae

Samantha Ann Miller is a teacher of gifted in the Rockwood School District in St. Louis, Missouri. She graduated with a Bachelor's Degree in Elementary Education in 2004 from Western Michigan University. She then proceeded to earn a Master's Degree in Education with an emphasis in Gifted Education in 2007 from the University of Missouri-Columbia. While in Rockwood, Samantha has taught for seven years in gifted education at the third, fourth, fifth, and sixth grade level and she also functioned in the role of an In School Suspension teacher. Samantha is a Rockwood Administrative Leadership Development Graduate. She was also named a Rockwood Outstanding Service Excellence nominee for the 2009-2010 school year and was named Teacher of the Year at the building level for the 2010-2011 school year. Samantha is the yearbook advisor for her school, the team leader for her team, and the summer program coordinator.