AN EXAMINATION OF ATTITUDES AND ACTIONS OF REGULAR CLASSROOM AND GIFTED TEACHERS TOWARD DIFFERENTIATING FOR GIFTED LEARNERS INVOLVED IN A PULLOUT GIFTED PROGRAM

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ABSTRACT

Bridging the gap in student performance has changed the teaching practice in classrooms across America. Educators have the responsibility to teach all learners. There is a need for instruction to be tailored to boost the higher-level achievers and balance the gaps.

This study examined the attitudes and actions of regular and gifted teachers toward differentiating instruction for gifted learners to find out: (a) the types of differentiated instruction regular classroom teachers use for gifted learners, (b) the differences in gifted teachers' lesson plans from regular teachers' lesson plans, (c) the evidence in lesson plans that demonstrate differentiated instruction, and (d) the comparison of regular teachers and gifted teachers attitudes toward providing differentiation for gifted learners.

The mixed methods design provided both quantitative and qualitative data. Subjects were regular and gifted teachers in grades second through fifth in a rural school district located in the Southeast United States. The quantitative data stated there was a significant difference in the mean attitude between regular and gifted teachers. Thus, the null hypothesis was rejected. A comprehensive look at the individual responses between both groups provided a comparison of the groups' responses to the survey items.

Additional data was collected and analyzed through the qualitative portion of the study. Lesson plans were coded for themes and patterns. Five observations were conducted to determine the types of instructional strategies used to provide

differentiation. Effective differentiation was documented through the observations. However, the weakest component of differentiation documentation was in the lesson plans.

Based on the results of this study for both types of data, it was concluded there is a need for professional development to bridge the gap in understanding and implementation of differentiated instruction.

DEDICATION

This dissertation is dedicated to my husband and my children

Daniel, Grace, and Vince Logan

who have given me the encouragement and support to pursue my passion.

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I would like to thank my husband for his support both financially and emotionally during the process of earning this degree. He has encouraged me to pursue the path I am taking to validate my hard work and determination.

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Chapter 1

INTRODUCTION

Today's classrooms have a variety of diversity issues educators have to address. The socioeconomic gaps, achievement gaps, ethnicity, and accountability are just a few components teachers are expected to improve. The top priority from all levels of government has been to narrow the gap between low performing and high performing students. This is an enormous task for educators. Therefore, since student performance is linked to teacher effectiveness, it is important to evaluate the impact teachers are having on all learners.

Bridging the gaps in student performance has changed the teaching practices in classrooms across America. The No Child Left Behind Act (NCLB) has put pressure on schools to meet the 2014 goals to ensure that all students are performing at the proficient level in reading and mathematics (Farkas & Duffett, 2008). These standards aim to reach minimal competencies and generally have been the main focus in most school settings. The pressure from the government has changed the delivery of instruction in many classrooms (Colangelo, Assouline, & Gross, 2004).

As Van-Tassell-Baska (1997) points out, the same standards, curriculum, and instructional practices does not recognize individual differences and abilities. Therefore, there is not an equal opportunity to excel in the current reform of education since differentiation is not applied in the learning environment of all students. The students with the potential to learn above the basic level standards may have been ignored during the massive reform of equating the grade

level assessments (Loveless, 2008). Most high performing students spend the majority of their school time in a regular classroom. Specialized programs may not be available to all students who exhibit above average behaviors; therefore, differentiated instruction is the most effective way to teach all students. The responsibility and accountability of providing an effective teaching environment lies in the hands of teachers.

The students who have the potential to perform at higher levels are often labeled gifted. The National Association for Gifted (2010) defines a gifted person as, "someone who shows, or has the potential for showing, an exceptional level of performance in one or more areas of expression" (http://www.nagc.org). There are many additional definitions of giftedness presented by researchers and theorists that have varied over the last century. However, the overall consensus of researchers and theorists define giftedness as individuals who are identified as students that have the potential to achieve at higher levels.

The process of identification of gifted learners varies from state to state and a range of abilities is recognized as giftedness. The resources and programs available can be the first step in identifying a child based on the characteristics of being gifted. Characteristics include strong verbal skills, creativity, leadership qualities, and high academic achievement and performance on standardized test (Clark, 2008). However, giftedness is not limited to these characteristics.

Intelligence is commonly defined with behaviors and measured with tests of knowledge and skills. Howard Gardner's theory (1999) on intelligence describes eight intelligences: linguistic, logical-mathematical, spatial, musical, bodily kinesthetic, interpersonal, intrapersonal, and emotional. Gardner's theory supports the interaction of both genetics and environment in the development of intelligence (Garner, 2005). Gardner's theory provides a possible explanation as to how an individual can improve their IQ score through exposure to depth of knowledge.

The term “underachievers” is being used to conduct research on the achievement of students who have the ability to perform at a higher level. Many of these studies target gifted learners because they have been identified through a standardized test designed to predict their ability to achieve. The underachievement and poor performance by gifted students on standardized tests can be linked to the weak instructional practice of teaching test taking skills rather than problem solving skills. Hence, focusing on test taking skills does not provide differentiated instruction to the gifted learner in the classroom (Archambault, Westberg, Brown, Hallmark, Zhang, & Emmons, 1993). Researchers have stated that regular classroom teachers provide more of the same work for higher achieving students rather than providing depth of content when they finish tasks related to test taking skills early.

According to a study by Colangelo, Assouline, and Gross (2004), the instruction in the classroom focuses on more test preparation rather than student interest. No Child Left Behind pressure has altered the delivery of content to more skill and drill strategies. The accountability models have placed a larger emphasis on reading and mathematics and shifted the focus from other content areas. Limiting content and instruction can be a disadvantage to gifted students by not providing rigorous curriculum opportunities.

Without justification of educating gifted students through specialized teaching methods, such as pull out programs, the funding and support of gifted programs could be eliminated. The evidence of the effectiveness of gifted programs and gifted teaching strategies are needed to continue servicing gifted youth. Therefore, research is needed to provide evidence of the effectiveness of gifted programs and differentiated instruction.

Statement of the Problem

Educators have the responsibility to provide opportunities to develop a learning environment that maximizes students' potential. There is a need for instruction to be tailored to boost the higher-level achievers and balance the gaps**.** The label of giftedness has allowed educators to lose focus on providing instruction to meet their needs because gifted students usually meet the grade level standards and do not need extra help. The release of an empirical analysis on the factors influencing the achievement gaps of high ability students on state assessments justifies the need to increase student achievement through better teaching practice (Plucker, Burroughs, &Song, 2010).

Purpose statement

The purpose of this two phase sequential mixed methods study was to determine if differentiated instruction was provided to gifted students. The study surveyed teachers' attitudes toward servicing gifted students who were involved in a pullout program five hours a week. In addition to the attitudes being surveyed, lesson plans and classroom observations were analyzed to determine if differentiated instruction is present in the regular classroom. The goal of this research is to improve the state of gifted education.

Research hypothesis

This mixed methods study determined that the types of differentiation being implemented in the regular classroom as well as the attitudes of the teachers toward educating gifted students. An independent t-test was the statistical procedure used to address the hypothesis. The dependent variable was the teachers' attitudes, and the independent variable was the teachers' status (regular or gifted).

The null hypothesis will be stated as:

There is no significant difference in mean attitudes toward differentiating instruction between regular classroom and gifted teachers.

Research Questions

This study was designed to answer the following questions:

1. What differentiated instructional practices do regular classroom teachers use to differentiate instruction for gifted learners involved in a pullout program?
2. How do gifted teachers' lesson plans differ from regular classroom teachers?
3. What evidence in teachers' lesson plans demonstrates differentiated instruction for gifted learners?
4. How do gifted teachers' attitudes compare to regular classroom teachers' attitudes on differentiating instruction for gifted learners in a pullout program?

Additional questions for qualitative analysis through observations and lesson plans were not needed based on initial survey responses.

Procedures

In the first phase, the quantitative hypothesis addressed the difference between regular classroom teachers' attitudes and gifted teachers' attitudes toward implementing differentiated instruction for gifted learners involved in a pullout gifted program. Grades second through fifth regular and gifted classroom teachers in a rural school district located in the Southeast United States were the convenience sample used. Information from this phase was further explored in a second qualitative phase. In the second phase, data was collected through observations to verify significant survey results by exploring aspects of differentiation with volunteer participants in the school district.

Furthermore, the collection of lesson plans from both regular classroom teachers and gifted teachers were analyzed to determine if differentiated components are in teachers' lesson plans.

Limitations

1. There was a lack of evidence to prove the honesty of teachers' responses on the attitude survey.

2. There was some misunderstanding of using differentiated instruction by teachers. Some may have thought reading groups formed based on students' ability was considered differentiation and met the needs of gifted learners.

3. The lack of training and knowledge on teaching intellectually gifted students did confused the teachers on meeting the needs of gifted students through differentiated instruction.

4. Some teachers had more experience than others in using differentiated instruction to teach gifted students.

Delimitations

1. This study administered surveys to second through fifth grade teachers from nine elementary schools in a district in the southern United States during the spring of 2010.

2. The school district was located in the southeastern United States in a town of 80,625 inhabitants. The district has 7,300 students enrolled. The gifted program services 1,023 students. There are approximately 132 of regular classroom teachers in second through fifth grade and 16 gifted teachers in second through fifth grade employed by the district. Grades sixth through eighth use an elective for the gifted services and do not use the pullout program. The high school curriculum transfers intellectually gifted to academically gifted and uses advanced placement course to meet the needs.

3. The participants completed the surveys on their attitudes toward differentiating instruction for gifted students.

4. Five classroom observations documented teaching practices, which targeted gifted students from volunteer participants who gave consent.

5. Lesson plans were collected at various grade levels and a third party eliminated any names or school locations. The lesson plans were analyzed and coded to show differentiated instruction.

Definition of Terms

Gifted- National Association for Gifted Children (NAGC) defines a gifted person as "someone who shows, or has the potential for showing, an exceptional level of performance in one or more areas of expression". The Elementary and Secondary Education Act (ESEA) repeats the NAGC definition but adds service needed for gifted as " Students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services and activities not ordinarily provided by the school in order to fully develop these capabilities [Title IX, Part A, Definition 22. (2002)]. However, for gifted students to reach their potential the appropriate resources must be available.

Intellectual Quotient (IQ)- Wilhelm Stern developed the term in 1912 to determine a score on an intelligence test (Clark, 2008). The number represents intelligence and is derived from dividing the mental age (result from an intelligence test) by the chronological age times 100. IQ scores are used to determine a person's potential and can be one factor used in labeling a student gifted.

Differentiation- Tomlinson (2005) describes differentiation as "responsive teaching rather than a one size fits all" method of instructing students.

The unique needs of students are met by modifying the curriculum, the pace, and the assessments. Teachers make adjustments to the content and delivery by evaluating the students' needs and planning ways to implement appropriate instruction for individuals.

Pullout program- a special gifted programming method, which takes students out of the regular classroom during the school day to service their gifted needs.

Significance of the Study

Gifted students are identified through intellectual assessments that predict their potential of performing at a higher level. In some schools, specialized programs are available to meet the unique needs of gifted students. Regular classroom teachers play a role in the accountability of educating all learners on a daily basis. It is important to provide differentiated instruction for all students. The instructional methods delivered to gifted learners need to increase their performance in all educational settings.

Gifted educators use specialized instruction to cater to the identified gifted qualities of students involved in the various programs available. In this study, the pullout program was available for gifted learners, which serviced them five hours a week. Regular classroom teachers instructed gifted learners using standards and curriculum guided by the state and local administration for appropriate grade levels. For more advanced learners, the grade level standards and curriculum limit their potential to excel in a classroom without proper differentiation (Plucker, Burroughs, & Song, 2010).

The reform has shifted focus, and educating students with higher potential has declined (Colangelo, Assouline, & Gross, 2004). The trend has led to underachievement of gifted learners. Teachers are responsible for providing differentiated instruction to meet the needs of all students in the classroom.

It is important to identify the differentiated practices of regular classroom teachers and determine if the needs of gifted learners are being meet in all classroom settings. Staff development and collaboration among regular education teachers and gifted educators can help students reach their potential (Loveless, 2008).

The current administration has reviewed the NCLB Act of 2001 and created a blueprint for reform by reauthorizing the Elementary and Secondary Education Act (ESEA) of 1965. The reform builds on the American Recovery and Reinvestment Act of 2009 of improving teacher and administration quality, providing information to families to help improve their children's schools, implementing college and career standards with appropriate assessments, and supporting low performing schools with effective resources (United Stated Department of Education, 2010). However, the blueprint does not include ways to address the gifted learners and the services they are provided. This study will address the gifted learners and the instruction they receive in public schools.

In conclusion, the practice of differentiation is important in reaching the academic needs of all students. Teachers' attitudes toward implementing differentiation toward gifted learners can reflect their teaching practices and lesson planning. Professional development, peer coaching, and collaboration can improve the learning environment. If the overall goal is to improve test scores, then the teaching approach should focus on each student's abilities and interest to motivate high achievement.

Organization of the Study

This study was organized into five chapters. Chapter 1 introduced the study by describing the purpose, stating the problem to be studied and the research questions to be answered, listing the limitations and delimitations, defining terms, and outlining the significance of the study.

Chapter 2 reviewed the literature on gifted education with a historical reflection of intellectual theories, identifying giftedness and their needs, and the instructional practice of programs that teachers use to benefit gifted students. The review of literature discussed programs and how it affects achievement. This chapter concluded with studies involving effective ways to instruct gifted students. Chapter 3 described the methods of selecting participants, the collection of data, and the process of validating the instruments used in analysis. This chapter followed qualitative research and defined the role of the researcher in the study. Chapter 4 analyzed and interpreted the data collected. The surveys were evaluated using the independent t-test statistical method. The observations were coded and discussed. The lesson plans from both regular and gifted teachers were also coded and discussed. Chapter 5 discussed the findings of current differentiated instructional practices in regular classrooms. The researcher proposed instructional strategies to improve the learning environment of gifted students in regular classrooms when students are receiving other services.

Chapter II

REVIEW OF LITERATURE

Gifted education has had a continuous battle to keep its funding and existence during the massive reform of accountability. This literature review begins with an overview of the theory of intelligence and the variations multiple theorists describe as intellectual attributes that lead to giftedness. The emphasis on Renzulli's research on instructing gifted students using differentiation provided direction for this study. Next, the historical background of the government's role in guiding the attention of gifted services for students was followed with needs of gifted learners. An examination of the benefits gifted learners received through gifted programs and services show the importance of effective programs. The effects of No Child Left Behind (NCLB) and accountability reform on gifted learners are discussed in the next section and how educating high achieving students with the current teaching trends can be a disadvantage. The role teachers' attitudes play in their planning efforts and instructional techniques are described by using other attitudinal studies to show the efforts on students. Lastly, the instructional methods used to provide differentiation are examined to show the teachers' role in providing appropriate services to gifted learners.

Intelligence and Theory

The cognitive development of individuals is continuously being researched to find a formula that creates high intelligence. Intelligence is commonly defined with behaviors and measured with tests of knowledge and skills. The Intelligence Quotient (IQ) was developed by Wilhelm Stern in 1912 to determine the score on an intelligence test. The age of an individual

could be taken into account based on their performance. Dividing the mental age of a participant by the chronological age and multiplying by 100 calculates IQ (Clark, 2008).

Just as the reform in education has shifted over the past century, theories on intelligence have shifted. Charles Darwin began the investigation of the concept of intelligence with the belief there is fixed-intelligence marked at birth. The general intelligence (g-factor) developed into a theory by Charles Spearman in 1923 that individuals with the g factor have the ability to perform on any cognitive task (Clark, 2008).

Intelligence theorists have contributed to the ways students are taught such as Jean Piaget, Lev Vygotsky, and Benjamin Bloom. Piaget described intelligence in stages based on an individual's age. Vygotsky argued against Piaget with the importance of a child's cultural background and the effects of their experiences on development and intelligence. Bloom established the interactive intelligence theory by dividing education into three domains: affective, psychomotor, and cognitive. His objectives guided many gifted and talented programs (Clark, 2008).

Howard Gardner's theory on multiple intelligence describes eight intelligences: linguistic, logical-mathematical, spatial, musical, bodily kinesthetic, interpersonal, intrapersonal, and emotional. Gardner's theory supports the interaction of both genetics and environment in the development of intelligence (Gardner, 1999).

Sternberg's triarchic theory (1985) describes three kinds of intelligence: analytic, synthetic, and practical. Intelligence tests do not give adequate measurements of synthetic or practical skills. The creativeness or application of intelligence cannot be measured; therefore, a single IQ score is questionable for labeling an individual. Sternberg and Grogorenko (2002) have

concluded intelligence is flexible and can be influenced by many other factors such as personality, motivation, and environment to demonstrate gifted behaviors.

As Gardner (1983), Bloom (1985), and Sternberg (1985) all state, there are various kinds of intelligence that can play a role of giftedness. These conceptions of giftedness were developed into a theory by Joseph Renzulli that is used as a framework for this research study. Renzulli's thirty plus years of research on giftedness and program development implemented in learning environments gives educators practical applications to use the theory as a basis to improve instruction for gifted learners (Reis, Burns, & Renzulli, 1992). Turkheimer and his colleagues (Turkheimer, Waldron, D'Onofrio, & Gottesman , 2003) conducted a study on the environment of minority twins that concluded with the environment having a larger impact on IQ than genetics.

Giftedness has no single definition, and Renzulli points to the purpose of educating gifted individuals as the suitable environment to promote higher achievement. The environment in which students spend most of their time is school. The first purpose of Renzulli's theory is to provide self-fulfillment, and the second is to increase society's population of problem solvers (Renzulli, 1999). Renzulli's distinction between two types of giftedness: schoolhouse and creative-productive giftedness, support his theory on the individual's pace and pattern to learning. Schoolhouse giftedness is the performance on test and IQ assessments that can often trigger the opportunity to be serviced through a gifted program. However, Renzulli (1999) makes the comparison with athletics of how a targeted score for eligibility can restrict participants. For example, if a height requirement were established to play basketball the talent of an individual not meeting the requirement would be overlooked. Students who do not perform well on IQ assessments may not receive services and miss out on opportunities in gifted programs.

The creative-productive giftedness described by Renzulli is the drive of an individual to solve problems relevant to their surroundings (1999). The application of this type of giftedness demonstrates the knowledge and innovative thinking not always evident in school settings. Individuals who demonstrate this type of giftedness tend to have the three traits Renzulli uses in his theory as the three rings: above average, creative, and task commitment. The Three-Ring Conception of Giftedness also interacts with personality and environment.

Renzulli provides support for his theory with the review of studies that show test scores cannot predict the professional future of students. Wallach (1976) concluded test scores only predict the results students will get on another test. The creative ring of Renzulli's model reflects the findings of Holland and Austin (1962) that good grades are not an indicator of creativity.

The hard work of an individual is the third ring of Renzulli's conception of giftedness. The task commitment of an individual is important in the identification of giftedness. Lewis Terman's (1954) study showed results that indicated giftedness and intelligence need other personality attributes to determine success. One of those attributes is the commitment to accomplish. The motivations both intrinsically and extrinsically can help drive the achievement. Educators have a role in providing both types of motivation. Renzulli (1999) explains educators need to provide the best services to the students taught every day no matter if they have been labeled gifted or not.

Historical development of Gifted Education in the United States

The historical rise and fall of interest in the education of gifted learners has led to a pattern of advocates justifying the funding and advanced research for these exceptional learners.

The French can be accredited for hiring Alfred Binet to develop an assessment to determine the learning deficiencies of mentally challenged individuals. With the help of Simon, a test was developed to compare children's mental abilities to their peers. Lewis Terman modified the test in 1916 to produce the Stanford-Binet Intelligence Scale. The results allowed educators to alter the instruction based on the discrepancy in students' mental age and chronological age. Many revisions have been made to the test but it allowed Terman to conduct a 30-year study on gifted individuals (Clark, 2008).

In 1957, the launch of the Russian rocket, Sputnik, made Americans aware of provisions needed to educate students with high abilities. The establishment of councils and associations were formed to improve curriculum and meet the needs of gifted students especially in math and science. The programs implemented involved acceleration and ability grouping, which focused on academic achievement of students whom excelled in those disciplines (Clark, 2008).

Equity concerns in the 1960s resulted in the decline of support of gifted educational opportunities. A rebound in 1972 credits Sidney Marland, United States Commissioner of Education during the Nixon administration, with a report on providing rationale for educating gifted and talented students. The Jacob K. Javits Gifted and Talented Education Act (Javits Act) passed in 1988 continues to provide support with research and special projects in regards to gifted learners (Boren, 2007).

As funding swayed back and forth in the 1990s, the No Child Left Behind Act at the start of the new millennium brought accountability and equality to the forefront of education policies. However, the Templeton Report on Acceleration, *A Nation Deceived: How Schools Hold Back America's Brightest Students (*2004) provides evidence that challenges the current educational practice for gifted students (Colangelo, Assouline, & Gross, 2004).

Identifying and meeting the needs of Gifted Learners

The process of identification of gifted learners varies from state to state and ranges of abilities are recognized as giftedness. Several individuals can be involved in the identifying gifted children. Teachers, parents, principals, peers, and psychologist can suggest the collection of data to refer an individual for a gifted program. The resources and programs available can initiate the first step of identifying a child based on the characteristics of giftedness. Characteristics of gifted children include strong verbal skills, creativity, leadership qualities, ability to learn quickly, and problem solving skills (Clark, 2002). However, giftedness is not limited to those characteristics. Upon the initial referral with parental consent, a collection of data is compiled with feedback from parents and teachers. If the student meets the criteria needed, a committee makes a recommendation for further testing and obtains parental consent again. A licensed psychologist administers the individual test to determine eligibility or not based on the perimeters the local district sets for services. The parents are given the option of placement in the programs if programs are available by the school.

Intelligence Quotient scores are used to describe a person's potential and are needed to find data on students who do not fit the typical characteristics (Callahan, 2001). However, as Renzulli describes the difference between schoolhouse giftedness and creative-productive giftedness, the IQ score predicts success in school environments. There are other factors to consider when determining whether a child is gifted. According to Goleman (1995), an IQ score is only twenty percent of the factors that lead to success, and emotional intelligence is equally as important.

Gifted children have social and emotional needs as well as cognitive. Salvey and Mayer (1990) were the first researchers to use the term emotional intelligence to describe the emotional connection between motivation and an individual's ability to function with their intelligence. Pfeiffer (2001) suggested if the emotional aspect of a gifted learner is considered when teaching, the learning becomes more positive. The growth of intelligence depends on the climate provided to the learner.

The environment gifted students need to meet their cognitive and emotional needs is referred to the responsive learning environment (RLE) by Clark (2002). The environment described by Clark is student centered. The physical arrangement is inviting and engaging. The social and emotional environment is motivating and encouraging. The students' interest and learning style are all considered in the RLE.

Along with the social and emotional needs of gifted students, the affective domain is crucial in promoting success. Affective characteristics involve the beliefs, feelings, attitudes, and the interaction of these internal sensations in one's self and others. Gardner (1983) describes two of the multiple intelligences relating to affective domain: interpersonal and intrapersonal. School environments may not always address the affective domain. The importance of including the affective domain in a curriculum was recognized found by Landrum, Callahan, and Shaklee (2001) when it was included in the National Association of Gifted Children (NAGC) gifted program standards. The rational for including this component is to enhance cognitive development and teach the whole child. According to Coleman and Gallagher (1995), there has been a gap between the identification and characteristics of gifted learners and the programs available to them.

Gifted children possess some other social and emotional characteristics that can be perceived as positive and negative. The label of giftedness creates expectations. Parents can support and nurture the self-esteem of gifted children. Vasconcellos (1990) reported it is the family's responsibility to establish the self-esteem and personal character. Schools also play a role in the development of self-esteem. Another characteristic that follows gifted children is perfectionism. Parents and teachers can address the healthy and unhealthy aspects of perfectionism. The unhealthy side of a gifted child who exhibits perfectionism traits is the fear of the unknown and can be solved by transitioning them into trying new experiences in a safe environment (Clark, 2008). The healthy side of perfectionism is the extra effort and higher standards set by the student to perform or achieve at a maximum level, which reflects Renzulli's task commitment component of giftedness.

An article by Margaret Mead (1954) described how a "label of giftedness" can give individuals a stereotype that society rejects. Mead's article is timeless in the 21st century because more recent research shows similar attitudes. Teachers have shown the effect of their perception and attitude on gifted students' achievement in several research studies. Rosenthal and Jacobsen (1969) show the level of expectation and attitude can affect student performance. During the 1970s a study conducted by Aspy and Bahler (1975) indicated the teacher's perception of their own ability reflected the success of their students. The studies document over the last 50 years show a negative attitude toward gifted individuals. The Advocate Survey in the 1970s described hostile attitudes toward gifted students (Marland, 1972).

Gifted students face odds when being labeled. The advocates argue for adjustments in the school settings to help them reach their potential. Renzulli, Reis, and Smith (1981) suggest labeling students' behavior rather than labeling them gifted.

There are several traits associated with giftedness. Students that are grouped homogeneously are taught as one group and not instructed to match their interest, strengths, and abilities. Therefore, teachers should be responsible for providing individual instruction to meet the unique traits of gifted students.

Teachers have many demands in the classroom, and providing individualized instruction for gifted learners does not always become a high priority. A study conducted by Dettmer (1985) looked at the attitudes of regular classroom teachers, gifted teachers, principals, and other school personnel. The regular classroom teachers and principals did not support differentiation for gifted learners and the regular classroom teachers did not agree the classroom influenced gifted students' emotional needs. Dettmer suggested in-service training to staff members to try and communicate the need to adjust for gifted learners.

The services provided to gifted learners vary. Only nine of fifty states require Individualized Education Programs (IEPs) for gifted students (Shaunessy, 2003). A survey in 2003 reported 29 of 48 states have legislation mandating gifted education (Clark, 2008). Mandating services is important to ensure the proper education of gifted learners. However, the vision of schools presented in *National Excellence* (Ross, 1993) states, "*All children progress through challenging material at their own pace. Students are grouped and regrouped based on interests and needs. Achieving success for all students is not equated with achieving the same results for all students* (p.29)" The services offered to gifted students need to be relevant to the population they are serving.

Benefits of gifted services

To provide evidence to the critics of gifted programs the empirical data needs to show academic achievement gains of students in the programs with a link to the programs' impact of student improvement. A variety of programs and services exist in today's educational system but with lack of national and state policies and funding, supporting the relevance of these programs, elimination could occur when budget crunches cannot find validity in the link with student achievement and the services provided.

Self-contained classrooms deliver instruction to gifted students all-day or part of the day. Pullout programs allow students to leave their regular classroom for specialized instruction for a specified period of time. Cluster grouping combines students with common abilities to work in a regular classroom arrangement with a specialized teacher. Cross-grade grouping can increase the pace of instruction with a varied age/grade group of students in one classroom (Hearne, 2000). The results from Rogers' (1991) study showed full time grouping, pullout grouping, within-class grouping, cross-grade grouping, cluster grouping, and acceleration all produced positive academic gains on the achievement of gifted learners.

A study evaluating the effects of program arrangements on student learning outcomes showed there are significant differences in the achievement for students in different types of programs (Delcourt, Loyd, Cornell, & Goldberg 1994). Students in the pullout model showed higher achievement levels than students not in programs or identified as gifted. Another study reviewing the effectiveness of pullout programs in gifted education conducted a meta-analysis on nine experimental studies to indicate pull-out programs have significant positive effects of achievement, critical thinking, and creativity (Vaugh, Feldhusen, & Asher, 1991).

The long-term effects of gifted programs show a positive impact on student interest and career goals (Delcourt, 1993).

A recent film, "Two Million Minutes" contrasts high school experiences from the United States, China, and India. The message portrays how the education system in America is failing to serve the brightest in order to be able to compete globally. The film reports the percentage of parents not satisfied with their child's school is 70%, whereas 79% of high school principals feel confidant that their schools are doing a good job. The film suggests that Indian and Chinese students exceed above American students (who have equal abilities) in both the academic challenges they face and in their school work ethic (Rising, 2009). With limited options in most states, New York and North Carolina are rising above the common standards and designing mathematics and science schools, offering collegiate level courses, and implementing International Baccalaureate Programs (IB) (Rising, 2009).

International Baccalaureate is described as a worldwide challenging curriculum with rigorous assessments recognized by universities around the world (Wallis, 2006). International Baccalaureate programs have received negative publicity for being another program that distracts schools from the core academics (Thomas, 2004). Oddly the United States has the largest number of IB programs with 1,029 out of 2,704 (IB website). Funding has been cut in states that have implemented the program because of the international influence of curriculum and low participation (Kranhert, 2009). Howard Gardner supports the IB curriculum because of the thought processes, reflection, and critical analysis students' gain from the program (Gross, 2003).

Another program model receiving research attention is the Schoolwide Enrichment Model (SEM) created by Joseph Renzulli. Reis et, al. (2007) used the SEM in reading as an intervention with 1500 randomly selected students, including gifted students, and compared the scores with a control group. The scores of the students who participated in the Schoolwide Enrichment Model Reading (SEM-R) program showed significantly higher scores. The benefits of programs, which individualize instruction for students, are showing positive results in achievement.

In an analysis of evaluation of gifted programs, VanTassel-Baska found programs must adhere to the accountability standards and make appropriate changes to improve the practice of servicing gifted students (2006). VanTassel-Baska findings mirrored the *National Excellence: A Case for Developing America's Talent* conducted by the United States Department of Education (1993). The need for rigorous curriculum, instruction and assessment matched with teacher development and reaching a broader population of students were the main weaknesses of gifted programs. The lack of alignment of general education standards and curriculum framework with the gifted learners demonstrates weak differentiation practices after students have been grouped. Westberg, Archambault, Dobyns, & Salvin (1993) conducted 92 days of observation in 46 third and fourth grade classrooms and found gifted students experienced no instructional or curricular differentiation in 84% of the activities. There is evidence that instruction is not addressing the unique needs of students. Harris and Harrington (2006) argue the accountability reform has had little impact on achievement of higher achieving students and there is a lack of research on the interventions addressing the gaps in achievement. Nearly three million kindergarten through twelfth grade students are identified as gifted on a national level, but 80% do not receive services (Rivera, 2008). Since services vary from state to state the public support is limited.

Accountability and High-level Achievers

A recent report conducted by the Center for Evaluation and Education Policy titled, *Mind the Other Gap*: *The growing excellence gap in K-12 education* released an empirical analysis on the factors influencing the achievement gaps of the high ability students on state assessments. The purpose of the report was to spark attention among policy makers on ways to increase achievement of the higher performing subgroup. The results from the study suggested that a focus on minimum competencies was not beneficial to reduce the higher achievement gaps (Plucker, Burroughs, & Song, 2010).

There has not been much research conducted on the achievement of students who perform at higher levels. The little research available focused on the gaps of white and black students. Reardon (2008) examined the academic gaps between white and black and high and low achievers in a longitudinal study. The results suggest that black students fall behind their white peers and may be attending schools with less rigorous curriculum. A similar study by Hanushek and Rivkin (2006) suggested teacher experience and school policies contribute to the achievement gaps. Clotfelter, Ladd, and Vigdor (2006) examined the achievement gaps between grades three to eight within different demographic groups in North Carolina. They found the gap among higher achievers increased while the lower achievers decreased. They suggested more research is needed to determine if NCLB is contributing to the excellence gap.

No Child Left Behind may not be entirely responsible for gains made in achievement from both high performing and low performing students. The 2008 Fordham Report, "*High-Achieving Students in the Era NCLB*," shows significant gains from 2000-2003 before NCLB was fully implemented.

These results contrast the report released by the Center for Evaluation and Education Policy, which states NCLB is one of the major factors that created gaps with the higher achievers. In states with accountability standards during the 1990s, the achievement of both high and low achieving students increased with low achieving making more significant gains. However, Tom Lovelace (2008) with Brookings Institute concludes the high-achieving students have not been harmed by the accountability systems, but they have not been helped either. The evaluation of student progress is being measured, but the delivery of instruction for higher achieving students is still being questioned.

Differentiating Instruction for gifted learners

The diversity in the classroom has changed and teacher accountability has increased which draws a need for differentiation (Van Tassell-Baska & Stambaugh, 2005). The investigation in 1993 by the National Research Center on the Gifted and Talented reported the need for more differentiated opportunities within the regular classroom for gifted learners, and the gifted specialists need to support the regular classroom teachers (Archabault et al., 1993). The study conducted on 7300 randomly selected third and fourth grade teachers in both private and public schools reported 61% of the teachers had never had any training in teaching gifted students (Archambault, et al, 1993). In addition, the study found that classroom teachers make minor changes to instructional practices in the regular classroom for gifted students. The lack of professional development for regular classroom teachers on teaching gifted students, collaboration among regular classroom and the gifted teachers, and differentiation in the instructional practices are three areas impacting gifted achievement. The collaboration of the regular classroom teacher and the gifted teacher could increase the awareness of students' needs and provide a joint service to the student (VanTassel-Baska, 2006).

An effective way to teach gifted students involves identifying their strengths and weakness and providing instruction to advance their learning process.

The data collected during the study in 1993 is still relevant more than a decade and half later. In the Fordham Report, 900 teachers were surveyed on the services provided to academically advanced students and 86% feel low-achieving students are the top priority and the resources for all students should be equal (Archambault, et al., 1993). Farkas and Duffett (2008) found teachers want the advanced students to receive the appropriate services. They report 40% of teachers say the curriculum is lacking rigor (2008). The factors limiting teachers' desires to provide appropriate services needs to be addressed.

On the other hand, VanTassel-Baska's (2006) findings of the evaluation of gifted programs acknowledged good teaching and differentiated practice is evident, but there is a need to increase high-level thinking, problem solving, and individual differences. The depth and rate of learning were lacking through the observation of classrooms. The transfer of providing differentiated instruction in the regular classroom to gifted learners is lacking in efforts to benefit the students.

As Tomlinson (1999) has suggested, differentiated instruction matches the content, process, and evaluation with the individual interests and abilities of the student. Tomlison states, " teachers begin where students are" (Tomlinson, 1999, p. 2). The students guide the teaching and learning when differentiated instruction is used effectively. Tomlinson's differentiated instruction matches Clark's (2002) responsive learning environment suggested to maximize potential in the gifted classroom.

Programs implemented to improve the low performing students, such as Response to Intervention (RTI), are being recognized as ways to improve the high performing students in a few states and considered a type of differentiated instruction. Colorado, Wisconsin, Utah, Hawaii and Ohio are leading the innovation of implementing a RTI model for gifted learners (Rollins, Mursky, Shah-Coltran, & Johnsen, 2010). RTI provides high quality instruction to all students based on research-based practice by monitoring their progress and collaborating.

Tomlinson (2005) describes differentiation as having the same components as the RTI framework. Rollins, Mursky, Shah-Coltran, and Johnson (2010) advise researchers, teachers, and community leaders to inform policy makers of the power of RTI and its possibility to improve the regular classroom.

The diversity in a classroom is beyond the teacher's control, but tailoring instructional practice to meet the needs of the students can motivate students to achieve at a higher rate. An experimental study using Renzulli learning for 16 weeks to differentiate reading instruction demonstrated significant growth compared to those who did not participate in the program (Field, 2007). The students involved in the study were from an urban middle school with nearly half of all students at risk and students from a suburban elementary school. The random selection of participants provided validity and reliability to the results. However, Renzulli (1999) points out he would not want the SEM to replace a gifted program. Therefore the use of a model or program does not justify the only differentiated instruction delivered to learners and the teachers make the decisions of how, when, why differentiated instruction is implemented.

However, there is a lack of teacher training to implement specific models targeting high achieving students. The meta-analysis of Vaugh, Feldhusen, and Asher documented the use of higher order process skills and products by gifted programs (1991).

If students do not transfer the same application of skills to the regular classroom, the effectiveness to increase student achievement can be displaced. Reis, Gentry, and Maxfield (1998) investigated the impact of a gifted education teaching method on two urban elementary schools. The teaching practices improved by integrating more challenging content, and performance tasks were more creative. A collaborative effort of gifted services and differentiated instruction from the regular classroom could remedy the underachievement trend of all students.

Entering a new era of reform, educators need to advocate for the high achieving students and acknowledge the instructional practices linked to increase achievement and hold teachers accountable. VanTassel-Baska and Stambaugh (2005) report limited studies are available to demonstrate differentiation for gifted learners in the regular classroom. This dissertation will use the mixed methods approach to find the regular classroom teacher's attitude and actions on differentiating instruction for identified gifted learners. This research hopes to find out the types of differentiated instruction being used and why or why not teachers implement specific strategies.

In conclusion, the soul and spirit of gifted education lies in the hands of educators and parents who want to see gifted programs increase their expectations and the regular classroom teachers responsible to meet the individual needs. Teachers play a major role in providing instruction to meet the needs of gifted learners. It will be the intent of this research to collect the data through surveys and observations. It will be important to find out if differentiated instruction is present in the regular classroom and if regular classroom teachers have attitudes toward providing the differentiated instruction. The attitudes of regular classroom teachers will help the researcher determine the professional development needed to provide training on how to properly teach gifted students.

Chapter III

METHODOLGY

This chapter addressed the research methods used to determine the attitudes of regular classroom teachers and gifted teachers and the actions they use to differentiate for gifted learners in a pullout gifted program. The information was provided in two parts. First, the research questions and hypothesis were explained in the beginning of this section. The rational for using mixed methods was explained along with the mixed methods approach and the foundation of the study. The population and sample were described as well as the methods for gathering the sample. The quantitative method of the study was described with a survey instrument used, and a panel of experts who reviewed the survey for validity. A pilot study was used to determine the reliability of the survey. The second part of the Chapter described the qualitative part of the study. The analysis of the lesson plans collected by the researcher were described as well as the coding process for determining possible themes. The instrument used to conduct the observations and the how the data collected from the observations were described in the analysis. The conclusion of this section discussed how the purpose of the design reinforced the findings of both quantitative and qualitative data.

Through this mixed method study, the researcher determined if teachers had positive or negative attitudes toward differentiating instruction for gifted learners and what teaching practices of differentiation were being implemented in the regular classroom for students identified as gifted and receiving pullout services.

The study was designed to determine if there was a need to improve the training of regular education teachers on instructional practices of gifted students. A recent study on the factors influencing the achievement gaps of high ability students on state assessments justifies the need to increase student achievement through teaching practices (Plucker, Burroughs, & Song, 2010). Van-Tassell-Baska and Avery (1997) point out the same standards, curriculum, and instructional practices does not recognize individual differences and abilities when providing teachers with specific expectations for the regular classroom. This study was designed to answer the following hypothesis and research questions:

Null Hypothesis:

There is no significant difference in mean attitude of differentiating instruction between regular classroom teachers and gifted teachers.

Research questions:

1. What differentiated instructional practices do regular classroom teachers use to differentiate instruction for gifted learners involved in a pullout program?

2. How do gifted teachers' lesson plans differ from regular classroom teachers?

3. What evidence in teachers' lesson plans demonstrates differentiated instruction for gifted learners?

4. How do gifted teachers' attitudes compare to regular classroom teachers' attitudes on differentiating instruction for gifted learners in a pullout program?

Rational for Using Mixed Method Research

Mixed-method research provides researchers with both qualitative and quantitative data and is relatively new in research design. The data collected from both types of research merges together to form a complete picture of the research problem (Ivankova, Creswell, & Stick, 2006).

The strengths of one type of method offset the weaknesses of the other. Quantitative research does not observe the settings or listen to the voices of the participants. On the other hand, qualitative research limits the number of participants and can be biased because of the researcher's active role in interpreting the data collected. Therefore, using both methods can support the collection of data in both numerical form and human behavior. The comparison of the results from both types of research can provide validity to the study. Johnson and Onwuegbuzie (2004) have advocated for using the mixed method design in education with Creswell (2009) as a third advocate for this approach.

Tashakkori and Teddlie (1998) claim a mixed method study can be carried out in sequential steps or parallel to each other. The use of a survey to gather feedback from regular classroom teachers and gifted teachers on their attitudes toward differentiating for gifted students provided data to support the observations performed by the researcher. The lesson plans will give the researcher an opportunity to find themes in the content, process, and assessments used to educate gifted learners involved in a pullout program. Each instrument and process builds on the initial steps to give the analysis more depth. The researcher observed eight willing participant's classrooms for differentiated instruction and analyzing lesson plans of consensual participants. Therefore, the survey will eliminate any biases in the analysis of the large group survey responses'.

Nested method Approach

A nested method in the mixed method study design uses a subsample of the larger group assessed during the quantitative data collection to conduct the qualitative data collection to learn more about the participants (Newton & Rudestam, 2007). Narrowing the sample will provide a rich understanding of the data needed to answer the research questions.

The sequential order of the collection of data will be completed to build on the findings from the larger sample to the smaller sample in the mixed methods design (Creswell, 2009).

Pragmatist Foundation

A practical way to approach or assess a problem is through pragmatic documentation. The research problem in this study is whether or not gifted students are receiving differentiated instruction in the regular classroom, and if there is a difference in gifted teachers' attitude and regular classroom teachers' attitudes toward differentiation. There are many proponents of using either qualitative or quantitative research methods. In many cases, there is a conflict between using the mixed method design. Using pragmatism as the philosophical foundation for mixed method research can connect the two models (Creswell, 2008).

Gifted students need differentiated instruction to meet their needs. Studying the teachers' attitudes and their teaching practices used for gifted learners determined if the gifted learners are being taught using differentiation.

Population and Sample

The state that was researched in this study was located in the southeastern United States and has 152 school districts, services nearly 500,000 students and employs over 32,000 teachers. The state has a mandate for each district to provide gifted education programs for intellectually gifted in grades second through sixth.

The school district selected for this study was in the northern part of the state and in a town of 80,625 inhabitants. The district has 7,300 students enrolled. The gifted program services 1,023 students. There were 132 regular classroom teachers in second through fifth grade employed by the district. There were 21 gifted teachers employed by the district. The results are not generalizable to the population since the study only included one school district.

Sample Selection

Both quantitative and qualitative samples were convenience selected with the researcher playing an active role in the collection of the data. Second through fifth grade regular classroom teachers and gifted teachers in grades second through fifth were given the survey. The reason the sample targets teachers in grades two through five was due to the fact that students are not identified as gifted until second grade and the classrooms are self-contained with pull-out services provided by a gifted specialist. The sixth through eighth grade regular education teachers use advanced courses to provide differentiated instruction.

The researcher attended staff meetings to distribute the surveys to willing participants. At that time, the researcher obtained volunteers for making classroom observations. A consent form explained the purpose of the observations and how the data collected was used. Lesson plans were collected from volunteer participants with a third party eliminating any identification prior to the researcher's analysis.

Instrumentation

A survey was designed by the researcher and was piloted with a small group of teachers to determine the validity and reliability. A panel of experts also reviewed the survey. The panel of experts reviewed the survey questions to analyze the survey content. The reliability was determined by using the coefficient of stability by giving the same survey to the same group on two different occasions. The amount of time between the two testing situations was four weeks.

The researcher used an observation checklist instrument that was used to collect the qualitative data in the classroom. The researcher looked for specific instructional techniques.

Furthermore, additional data related to differentiated instruction was collected through observations of questioning techniques, content, activities, and assessment tools. Field notes recorded the details and concrete observations.

Additionally, lesson plans were coded by looking for patterns or themes. The collection of lesson plans from nine elementary schools and regular and gifted teachers provided a broad variation in format and details in the components included in the written plans. Building leaders generally set up guidelines and expectations for lesson plan documentation. The use of an electronic submission of lesson plans provided the source for obtaining the plans with consent.

Role of the Researcher

The active role of the researcher in the qualitative research design made it important to describe the experiences and biases of the researcher to validate the interpretation of the collected data. Mixing the methods and sequencing the collection of the data benefited the researcher's approach of analyzing the survey results prior to the lesson plans and observations (Rudestam & Newton, 2007). Describing the researchers' exposure to the practice being observed supported the findings.

Background of the Researcher- The researcher has been in the field of education for 12 years. Her first teaching experience was in a seventh grade language arts classroom at a public middle school. She taught accelerated students whom had been in a gifted program at the K-6 school setting. She also taught regular and mainstreamed special needs students during the five years of experience at the middle school level. Additionally, the researcher taught four year olds at a private preschool and pursued an advanced degree in education. For the past two years, she has been teaching second, third, and, fourth grade gifted students in a pullout program in a public school district.

The researcher works collaboratively with the school improvement team, the district-wide technology advisory committee, the association of excellence in education community organization, the gifted leadership curriculum, the arts integration co-coordinator, and the writing representative for her school site. Her experiences in pre-k to middle school have allowed her to observe and practice the various types of instruction for a range of age groups and abilities.

The researcher's interest in gifted education comes from teaching gifted students and reviewing the literature of the achievement of gifted students. She believes every child has a unique way of learning, and it is the teacher's responsibility to provide instruction targeting the needs with the purpose of improving their skills or knowledge. Teachers should reflect upon their teaching practices and make changes to fit the students learning style, ability, and interest. Through experiences of the researcher, she has learned that teaching one-size fits all lesson formats in all the classroom settings can result in underachievement, low self-esteem, and lack of motivation to perform.

Researcher Bias- Due to her current job in gifted education and parenting a gifted child, the researcher brought a bias to the study. She has observed some differentiation in the regular classroom at her school site; however, it has been inconsistent. The researcher wanted to determine if there was a similar instructional pattern at the other schools and grade levels. To render her biases, the researcher used three different data collections techniques. These were a survey, observations, and lesson plans analysis.

Institutional Review Board- The researcher obtained permission from the Institutional Review Board (IRB) at The University of Mississippi after defending her proposal and gaining permission from her district. She submitted her research plan to the IRB in December 2010.

Gaining Access-The first step in gaining access to the participants was to get permission from each building site principal to attend the staff meeting and to distribute the survey (Appendix A) to second through fifth grade regular classroom teachers and gifted teachers.

After administering the survey with written permission (Appendix B) from participants to observe classrooms, the four grades were analyzed. The instrument (Appendix C) used for observations was shown to all participants prior to recruitment of volunteers.

Ethical Considerations- To alleviate the participants' fears that the observations could be used as a job evaluation, a pre-conference was held to describe the purpose of the study and the anonymity they would have when the findings were revealed. The opportunity to review and to confirm the observational findings in a post-conference was planned.

Data Collection and Recording

Participants-The research participants were regular classroom teachers and gifted teachers in second through fifth grade classes during the spring of 2011. The teachers completed a survey rating their attitude of providing services for gifted learners. A select number of participants agreed to be observed by the researcher to document teaching methods used to differentiate with the gifted learners.

Regular classroom teachers and gifted teachers in the second through fifth grade were selected as participants because the pull-out gifted program begins in second grade and students are instructed in self-contained classes through fifth grade. Since there is equal distribution of all abilities in all classrooms, all teachers should have gifted children in their class. The number of participants covered varied experience and diversity.

Data Types-A survey (Appendix A) was given to all second through fifth grade regular classroom and gifted teachers in the school district during a scheduled faculty meeting.

Participants completed the survey and returned it anonymously to the researcher. Participants from each grade level gave consent to be observed using a classroom observation checklist (Appendix C).

Protecting Data- All survey results were printed and filed in a secure location. The observation checklist has only the grade level of the class observed and the number of gifted students in the class. The grade level description on the observation checklist and the school code identifies the location of the interview.

Data Analysis

In a mixed method study, the data analysis was completed in steps. The survey was the first instrument used to gather data from a larger group. The statistical data from the survey guided the observations to see if the researcher observed the behaviors the participants recorded in the survey. The use of both types of research helped the researcher analyze the data and report the patterns and themes.

Generating Categories and Themes- As soon as the data was collected, the researcher evaluated the survey and documented the areas teachers answered consistently. The observations were arranged after the survey was retrieved to eliminate the link of survey results to the researcher. The observation checklist was reviewed after the completion of all to find themes and categories.

Coding- The data was coded using a system that highlights patterns in instruction. The common coded data was reviewed to verify consistency.

Reporting the Findings- The results from the survey are described in a table. The observations reflect the use of differentiation or not with detailed instruction practices used in the classroom and narration.

Trustworthiness

Mixed method studies utilize both types of research. The outcome of the statistical data and the interpretation of the observations were connected. The internal and externally validity was combined in nested analysis to help provide trustworthiness in this study along with the following strategies.

Triangulation- The researcher's background in gifted education was a significant aspect that could have caused biases. Triangulation of the data is one way to eliminate the influence of the researcher. Three types of data were collected: surveys, observations, and lesson plans. The consecutive steps of the data collection guided the researcher to find patterns and themes of differentiated instruction for gifted learners.

Member checking- The participants observed had the chance to review their observation checklist to clarify or make any necessary changes. The participants were able to explain or to give explanations to their teaching practices.

Rich, Thick Description- Detail from the observation was described through narrative reflections from the researcher. The types of instruction and the evidence of differentiation were described in detail.

Peer Debriefing-The use of other observers such as administrators or instructional coaches observing for the same instructional practices was not used to help the researcher provide reliability to the findings.

Conclusion

This mixed method study was designed to give the researcher evidence of the type of instruction gifted learners receive in the regular classroom and the attitudes of teachers differentiating instruction.

The participants were anonymous during the one portion of the study and consensual during the observations. The researcher's background was described as well as biases. The use of triangulation provided reliable data. It was the intent of the researcher to find out if differentiated instruction is provided to gifted students in the regular classroom who are involved in a pull out program.

Chapter IV

RESULTS

Introduction

This chapter presents the results and data analysis for the survey, coding of the lesson plans, and thick descriptions of the observations of this study. Newton and Rudestam's (2007) nested method of using a larger sample to assess quantitative data and a subsample to collect qualitative data was used as the research approach. The survey was a quantitative design that compared regular teachers' means to gifted teachers' means on a 16-item survey. The lesson plans were retrieved by a third party and coded for themes and patterns as part of the qualitative design of the research. Observations were a third part of the data collection to analyze and compare to the lesson plan data and survey data. The quantitative data will be presented first, followed by the lesson plan analysis, and observational data.

Quantitative Results

In the spring of 2011, a panel of experts reviewed and validated the content on the survey instrument developed by the researcher. A comparative teacher group piloted the instrument using the test and retest reliability method. The four-week test retest reliability was reported to range at +. 63 coefficient. Then the survey was given to 159 regular education teachers and 16 gifted teachers in second through fifth grade. Of the 159 regular education teachers 81 returned the survey to the researcher and nine of the sixteen gifted education teachers returned the survey.

The null hypothesis for the quantitative method of this study stated that there is no significant difference in mean attitudes toward differentiating instruction between regular classroom and gifted teachers. In order to test this null hypothesis, data was collected from each participant. The responses to the 16 items on a survey were calculated using a Likert scale. The scale ranges from strongly agrees to strongly disagrees. Strongly agree was voted a "5" and strongly disagree was voted a "1". To test the attitudes of gifted and regular teachers the mean results were compared using an independent t-test with an alpha level of .05. The dependent variable was the teachers' attitudes and the independent variable was the teachers' status (gifted or regular). There was not a significant difference for regular (M=56.55, SD=5.17) and gifted (M=52.88, SD=3.78; t (88)=2.06, p= .258 (see Table 1). These results suggest regular education teachers and gifted teachers are comparable groups based on the Levene's Test for Equality. The p value was greater than .05 to indicate there is no significant difference between the two groups.

Table 1

Comparing the two groups

Groups	N	Mean	Standard Deviation	Standard Error Mean
Regular	81	56.5556	5.17929	.57548
Gifted	9	52.8889	3.78961	1.26320

Levene's Test for Equality of Variances		t-test for Equality of Means	
	F	Sig.	t	df
Assumed	1.294	.258	2.059	88
Not assumed			2.641	11.615

Table 2 shows the analysis of the mean scores, which generated a p value of .042. The p value was less than .05; therefore there was a significant difference between regular and gifted teachers' mean scores on the 16-item survey.

Table 2

Independent t-test comparing the means of regular and gifted teachers

	t-test for Equality of Means		
	Sig. (2-tailed)	Mean Difference	Standard Error Difference
Assumed	.042	3.66667	1.78097
Not assumed	.022	3.66667	1.38811

	95% Confidence Interval of the Difference	
	Lower	Upper
Assumed	.12737	7.20596
Not assumed	.63108	6.70225

Each survey item was compared with each group to determine which statements the participants showed a large difference in their responses. Some items were reversed in the scoring to demonstrate the opposite response of the participants. There was a larger difference in eight questions between the regular teachers and the gifted teachers. The differences above 0.60 were identified as major discrepancies in the two groups responses. The 0.60 was determined as a major discrepancy because it is over half the median score.

Table 3

Survey Item Analyses

Gifted	Regular	Survey Questions	Difference
5.00	4.72	1. Our schools should offer special programs for gifted students.	0.28
3.48	4.33	2. Pull out gifted programs cost valuable instruction time when the students are not in the regular classrooms.	0.85
4.78	4.50	3. The pullout gifted program provides for the instructional needs of gifted learners.	0.28
4.56	4.52	4. The pullout program allows regular classroom teachers to provide in-depth instruction/interventions for non-gifted students.	0.04
4.89	4.67	5. Schools have the responsibility to provide differentiated instruction to gifted learners in the regular classroom.	0.22
4.00	4.59	6. Ability grouping provides effective methods for instruction of students with different abilities or skill levels.	0.59
4.11	2.77	*7. Gifted students would be academically successful without a gifted program.	1.34
5.00	4.31	*8. Allowing students to work on differentiated assignments creates an unfair learning environment.	0.69
4.78	3.74	9. Higher achieving students pace the learning in the classroom and need outlets such as specialized programs.	1.04
1.22	1.91	10. Removing students from the regular classroom is disruptive to other students.	0.69
3.22	3.00	11. Support is provided for regular classroom teachers to differentiate instruction for gifted learners.	0.22
5.00	4.12	12. Gifted students have unique needs other than academic achievement that need to be met through a pull out program.	0.88
4.22	3.69	13. All teachers should provide evidence in lesson plans that differentiation is being provided to gifted learners.	0.53
3.67	2.41	*14. Gifted teachers should be responsible for providing extension for gifted learners in the regular classroom.	1.26
2.33	3.91	15. The tested content should be covered in both gifted and regular classrooms for gifted learners.	1.58
3.44	2.92	*16. The gifted services need to provide inclusion in the regular classroom as support.	0.52

* Scores were reversed to show the opposite response of the item

The percentage of each question was calculated to provide specific comparisons on the responses of each group on all questions (see Tables 4 and 5).

The percentages for each question provided a more comprehensive comparison of the actual responses for each item. Table 4 was compared to Table 5 in the discussion of Chapter 5 and provided a contrast of groups on specific items. Table 6 displays a more comprehensive comparison of the eight questions that showed a discrepancy.

Table 4

Percentages of each question for regular education teachers

Questions	5	4	3	2	1
1. Our schools should offer special programs for gifted students.	78%	17%	5%	0%	0%
2. Pull out gifted programs for gifted cost valuable instruction time when the students are not in the regular classroom.	14%	16%	17%	21%	33%
3. The pullout gifted program provides the instructional needs for gifted learners.	46%	38%	19%	6%	1%
4. The pullout program allows regular classroom teachers to provide in-depth instruction/interventions for non-gifted students.	63%	30%	5%	1%	1%
5. Schools have the responsibility to provide differentiated instruction to gifted learners in the regular classroom.	75%	17%	6%	1%	0%
6. Ability grouping provides effective methods to provide instructions to students of different abilities or skill levels.	64%	30%	5%	2%	0%
7. Gifted students would be academically successful without a gifted program.	19%	26%	22%	20%	12%
8. Allowing students to work on assignments different than others creates an unfair learning environment.	1%	6%	11%	17%	63%
9. Higher achieving students pace the learning in the classroom and need outlets such as specialized programs.	30%	23%	41%	4%	2%
10. Removing students from the regular classroom is disruptive to other students.	4%	7%	11%	30%	51%
11. Support is provided for regular classroom teachers to differentiate for gifted learners.	15%	21%	32%	16%	14%
12. Gifted students have unique needs other than academic achievement that need to be met through a pull out program.	42%	36%	14%	9%	1%
13. All teachers should provide evidence in lesson plans that differentiation is being provided to gifted learners.	30%	30%	28%	6%	5%
14. Gifted teachers should be responsible for providing extension for gifted learners in the regular classroom.	25%	36%	20%	14%	6%

15. The tested content should be covered in both gifted and regular classrooms for gifted learners.	49%	19%	14%	11%	7%
*16. The gifted services need to provide inclusion in the regular classroom as support.	19%	23%	25%	14%	20%

Table 5

Percentages of each question for gifted education teachers

Questions	5	4	3	2	1
1. Our schools should offer special programs for gifted students.	100%	0%	0%	0%	0%
2. Pull out gifted programs for gifted cost valuable instruction time when the students are not in the regular classroom.	0%	0%	0%	11%	89%
3. The pullout gifted program provides the instructional needs for gifted learners.	78%	22%	0%	0%	0%
4. The pullout program allows regular classroom teachers to provide in-depth instruction/interventions for non-gifted students.	78%	0%	22%	0%	0%
5. Schools have the responsibility to provide differentiated instruction to gifted learners in the regular classroom.	89%	11%	0%	0%	0%
6. Ability grouping provides effective methods to provide instructions to students of different abilities or skill levels.	33%	33%	33%	0%	0%
7. Gifted students would be academically successful without a gifted program.	0%	0%	22%	44%	33%
8. Allowing students to work on assignments different than others creates an unfair learning environment.	0%	0%	0%	0%	100%
9. Higher achieving students pace the learning in the classroom and need outlets such as specialized programs.	78%	22%	0%	0%	0%
10. Removing students from the regular classroom is disruptive to other students.	0%	0%	11%	0%	89%
11. Support is provided for regular classroom teachers to differentiate for gifted learners.	22%	0%	56%	22%	0%
12. Gifted students have unique needs other than academic achievement that need to be met through a pull out program.	100%	0%	0%	0%	0%
13. All teachers should provide evidence in lesson plans that differentiation is being provided to gifted learners.	67%	0%	22%	11%	0%
14. Gifted teachers should be responsible for providing extension for gifted learners in the regular classroom.	0%	22%	44%	22%	11%
15. The tested content should be covered in both gifted and regular classrooms for gifted learners.	0%	33%	0%	33%	33%

16. The gifted services need to provide inclusion in the regular classroom as support.	22%	11%	11%	11%	44%

Table 6

Comprehensive Comparison of Differences between the groups

Questions	Regular	Gifted
2. Pull out gifted programs for gifted cost valuable instruction time when the students are not in the regular classroom.	54% Agree	100% Disagree
7. Gifted students would be academically successful without a gifted program.	45% Agree 32% Disagree	77% Disagree
8. Allowing students to work on assignments different than others creates an unfair learning environment.	80% Disagree	100% Disagree
9. Higher achieving students pace the learning in the classroom and need outlets such as specialized programs.	53% Agree	100% Agree
10. Removing students from the regular classroom is disruptive to other students.	81% Disagree	89% Disagree
12. Gifted students have unique needs other than academic achievement that need to be met through a pull out program.	78% Agree	100% Agree
14. Gifted teachers should be responsible for providing extensions for gifted learners in the regular classroom.	61% Agree	22% Agree
15. The tested content should be covered in both gifted and regular classrooms for gifted learners.	68% Agree	66% Disagree

The quantitative survey provided a qualitative analysis for answering the research question, “how do gifted teachers’ attitudes compare to regular classroom teachers’ attitudes on differentiating instruction for gifted learners in a pullout program?” The eight questions that showed a discrepancy were compared using percentages. Regular and gifted teachers disagree on the instructional time lost while gifted students are involved in a pullout program with question two.

Question seven possibly shows confusion among the regular teachers. The responses are split on whether gifted students would be academically successful without a gifted program.

There could have been a misunderstanding in the question or the regular teachers could be in agreement gifted students will be successful without a program. Both the groups of teachers disagreed with question eight "allowing others to work on different assignments creates an unfair learning environment."

There is a gap in agreement between the groups of teachers on question nine. Only 53% of the regular teachers agreed high achieving students need a specialized program compared to 100% gifted teachers. Question ten showed an agreement between both groups by disagreeing it is disruptive to remove students from a classroom. The use of a pullout services for speech and interventions could have attributed to the agreement that removing students is not a distraction to others.

The regular teachers agree (61%) that gifted teachers should be responsible for providing extensions for gifted learners while in the regular classroom in response to question fourteen. On the other hand, only 22% of the gifted teachers agreed. Therefore the response to question fifteen shows a similar balance in the responses.

Regular teachers agree (68%) tested content should be covered by both teachers and 66% of gifted teachers disagree.

In conclusion, the quantitative results show there is a significant difference in the mean attitudes toward differentiating instruction between regular and gifted teachers. Thus, the null hypothesis was rejected. The null hypothesis answered the research question through the quantitative data was "How do gifted teachers' attitudes compare to regular classroom teachers' attitudes on differentiating instruction for gifted learners in a pullout program?" The two groups having different attitudes toward gifted learners answered the question.

The comparison of means of each item on the survey provided a more comprehensive look at the individual responses from each group and is discussed in Chapter five.

Qualitative Data Results for Lesson Plans

The nested method (Newton & Rudestam, 2007) was used to take the larger group for the quantitative and collect more qualitative data to learn more about the participants. The additional data collected was analyzed to verify the type of differentiated instruction implemented with students through lesson plans and observations. The lesson plans were retrieved by a third party and all identifying factors were eliminated.

By collecting lesson plans from second through fifth grade teachers and comparing the elements of a lesson plan, themes and patterns emerged. These themes and patterns provided evidence of the similarities in the data collected (See Table 7). The sixteen regular teachers' lesson plans were coded, and the eight gifted teachers' lesson plans were coded as well. The observations and survey results provided a different perspective on how differentiated instruction was implemented in comparison to the plans.

Table 7

Number of Lesson Plans Showing Evidence of the Identified Themes

Themes	Regular Lesson Plans	Gifted Lesson Plans
Essential Questions	81%	63%
Differentiated Strategies	56%	13%
Activating Strategies	44%	50%
Thinking Maps	31%	25%
Assessments	38%	13%

Rich, Thick description for Observations

The observations provided additional analysis into the implementation of the lesson plans and teaching strategies in the classrooms. The observations showed variation in teaching methods and in addressing of all learners. Five observations were conducted in second to fifth grade with consent from the volunteers.

The first observation was in a fourth grade classroom (Appendix H) and provided evidence of no differentiated instruction being implemented. With multiple interruptions from outside the instructional environment the lesson lost its effectiveness. The essential questions were not linked to instruction and the objectives were not made clear to the learners. However, the lesson was being taught in a whole group situation and there was problem solving and questioning techniques used to acquire information of each student's mastery of content. A thinking map was used with a whole group as a learning tool with examples provided for students to categorize the information based on prior knowledge.

The classroom was arranged with students sitting in groups of two. This provided peer support for lower level learning and personal interest or progress on content. Students were engaged in the lesson and showed evidence of structure and procedural knowledge taught by the teacher.

Students did not appear to have any involvement in the planning or monitoring of the lesson. Reflections from the material were not observed because the lesson was interrupted and students were told to pull out reading material and read while the teacher conversed in the hall.

The content taught was not varied and instruction needed improvement along with accommodations of student differences.

The assessment of checking for understanding was never achieved due to interruptions and lack of teacher focus. The students were respectful in their classroom management skills although their interests were never considered.

The second observation was a fifth grade classroom (Appendix E) in the same building as the fourth grade observation on the same day. The observation was hindered with an uncontrollable element of the grade level administering a practice test for the upcoming state exam. However, data was collected and analyzed from the classroom arrangement and content displayed.

The learning centers provided evidence that there are a variety of resources available to all learners. The centers consisted of art, library, technology, and word work (spelling). The essential question posted on the board demonstrated the class met the planning expectation of the differentiated instruction observation tool.

Question one stated, “How do you know when you need to delete a sentence?”

Question two stated, “What are reading strategies and how do they help us?”

The objectives and goals were understandable to the learners. Students could reflect upon their learning by answering the questions posted on the board.

The classroom was arranged in a U shape with students on the inside and outside of the U. The teacher explained her guiding reading table is used for guided reading instruction for students who need that type of instruction. At the fifth grade level the use of guided reading instruction exceeds the expectations of accommodating differences as identified on the observation tool.

There was not any evidence provided for variation in the products used to assess students’ learning. In this classroom there is room for improvement.

The overall observation provided evidence of meeting differentiated expectations in lesson planning, curriculum content, and accommodating differences in assignments. The weakness was visible in the products or evaluations students used.

The second grade observation A (Appendix F) exceeded the expectations identified on the observation tool. The essential questions were visible and linked to instruction. The students were engaged in the planning and monitoring of the lesson. The lesson observed was on "wind "and the teacher provided visual pictures from her personal experience with hurricane Katrina. Students took special interest in the force of the wind based on the prior knowledge built by the teacher.

The teacher divided the class into two groups of seven students. Each group had magnifying glasses and scales with different objects for investigation. Each group recorded their findings of how many breaths it took to move an object the specified distance. The students made predictions and determined if their predictions were accurate or not.

The content, process, and product of the lesson all exceeded the expectations. Students were engaged and were able to assess their own learning. Students demonstrated problem solving skills by analyzing their own predictions and discussing the common results within the flexible group they were assigned.

While observing the classroom there was other evidence of differentiation. The teacher used a reading strategy, which focuses on comprehension, accuracy, fluency, and expanding vocabulary (CAFÉ). It is also titled the "daily five". The purpose of implementing the "daily five" is to provide independence toward lifelong literacy. The students' choice in the selection of books and the process of reading demonstrates strong differentiated instruction. Overall, the classroom provided sufficient evidence of differentiated instructional methods.

The observation from the third grade classroom (Appendix G) provided solid evidence of differentiated instruction. The class was a single gender group of male students taught by a male teacher. Upon entering the classroom, differentiation was immediately identified by the four groups working on four different skills. The students were grouped after the teacher reviewed the results of the nine weeks assessment.

Each group clearly understood the goals of the lesson and all students were engaged in their activities. Students could visibly see the objectives on the board. Their interest was evident in the classroom by having sports memorabilia all around the classroom and the use of a football field to track their progress on multiplication facts.

A variety of resources were available to all learners. One group was using the promethean board. While another group was tracing manipulatives and a third group had a multiplication chart learning how to multiply two and three digit numbers.
The fourth group was working on a worksheet from a free worksheet website downloaded by the teacher. Therefore, the researcher identified all the assignments were tiered.

The teacher demonstrated ways he accommodated for individual differences. Data was written in Spanish for an English Language Learner (ELL). Students' work was on display throughout the room. Students were involved in a vote of naming the frog they were going to dissect which tapped into students' interest.

The teacher was able to assess the students' progress based on their performance on the assignments with a quick check or self-reflection questioning technique. Within the group environment students were able to evaluate their own learning and the work was relevant to their needs.

Differentiation was evident in other areas of the classroom environment. Although the implementation was not observed, the use of CAFÉ reading was displayed as a literature teaching method. The same teaching method was observed in a second grade classroom, too. Although a math lesson was observed, the use of differentiation appeared to be across content areas.

The fifth observation in second grade B (Appendix H) met the expectations identified on the observation tool with exceeding in one area. The general planning of the lesson provided evidence of essential questions, objectives, goals, and students' interests. The only area that could improve was allowing students to reflect upon the learning goals.

The content taught during the observation met the expectations. However, the variety of resources available to students exceeded the expectations. Students were using ipads, computers, money, the floor map, visual arts, thinking maps, and actual coins during their individualized instruction. The teacher was providing direct instruction during a guided reading lesson at a horseshoe shaped table.

The process of accommodating individual differences exceeded the expectation of the observation by implementing the resources to tap into students' interests and support instructional differences. The math skill being taught or reinforced was on money. Students became interested in the detail of various states on the back of quarters. The teacher utilized their interest and began challenging students to find all 50 states. As the quarters came in from students they were taped to the United States floor map. Students were using the ipad to use an app to search the specifics of the state quarters. The higher-level learners were using the technology to provided depth to the understanding and background of the state quarters. Thinking maps were being implemented through comparing and contrasting two art pictures.

In a math center, students were counting money and answering word problems related to money. The use of flexible grouping was evident in the lesson and provided evidence of effective differentiation.

The use of assessments and application of the learning acquired met the expectations. However, the use of allowing the students' interests to guide instruction with the quarters exceeded the relevance to the assessment of money. Students were learning in various ways in this classroom and making progress with multiple forms of evaluation.

A summary of the results (see Table 5) from the five observations shows the grade levels observed and their score from the researcher. Two of the five observations demonstrated use of effective differentiation methods. Four of the five met or exceeded the expectations identified on the observation tool.

Table 8

Observation Tool Results

Evidence	4th	5th	2nd A	3rd	2nd B
General	1	2	3	3	2
Content	1	2	3	3	2
Process	1	2	3	3	3
Product	1	1	3	3	2

(3= Exceeds expectations, 2= Meets expectations, 1= Needs Improvement)

Summary

In this chapter, the quantitative results of the survey and the qualitative results of the lesson plans and observations are reported in conjunction with the research questions and hypothesis. Sequential mixed methods with the nested approach were used to validate the results.

Overall, both gifted and regular teachers have a different attitude toward providing differentiated instruction for gifted learners. The observations gave evidence that differentiation is implemented in the classroom by regular classroom teachers. However, lesson planning is not providing documentation of the implementation techniques of differentiation. Teachers seem to have a lack of understanding of how to document their teaching strategies or techniques. In the following chapter, the findings are discussed and recommendations made for further studies.

Chapter V

DISCUSSION

This chapter presents a summary of the findings of the actions and attitudes of gifted and regular teachers toward differentiating instruction for gifted learners. In addition, recommendations of the study and suggestions for future studies are discussed. Because this study was mixed methods, the two phase sequential method of collecting data with quantitative first and qualitative second and third provided a nested approach to validate the results. The discussion elaborates on the data and recommends ways to benefit the services provided to gifted learners.

The purpose of this study was to determine if differentiated instruction was provided to gifted learners. Gifted students are usually taught using the same standards, curriculum, and assessments as all other learners. This study focused on the teachers' attitudes and actions for providing differentiated instruction. Teachers play an important role in the assurance that each student reaches their maximum potential from year to year. It is important to examine the teachers' attitudes in the classroom to evaluate the effectiveness of teachers' willingness to teach all learners.

Researchers, teachers, and professors have stated every individual learns differently in the same learning environment (VanTassell Baska, 1997). Differentiated instruction can improve the learning goals within a classroom. It is important to identify the type of instruction implemented and the teaching practices that promote differentiation.

This study has helped identify strengths and weaknesses in the field of education toward differentiating instruction for all learners. Although the study specifically looked at gifted learners, the methods used and documented were beneficial to all learners. The analysis of lesson plans gave insight into the weakest component of data retrieved by the researcher. The patterns that emerged demonstrated a weak understanding of differentiation. There was a lack of specifics in the content being taught and variation in the assessments used to evaluate the knowledge gained from instruction.

Quantitative Findings and Discussion

The survey results indicated there was a significant difference in the attitudes of gifted or regular education teachers. The null hypothesis was rejected. There was a weakness in the study by only having nine responses from the gifted teachers. In order for the survey results to be more reliable, ten or more participants would have been a better sample to compare to the regular teachers.

An analysis of the survey results agreed with Dettmer (1985) as documented in a previous chapter. Dettmer's study reported regular classroom teachers and principals did not support differentiation for gifted learners. However, the suggestions by Dettmer do match the implications from this research. There is a need to provide in-service training to staff members to communicate ways to meet the needs for gifted learners. The survey results did match research conducted by Farkas and Duffett (2008), which found teachers want higher-level students to receive appropriate services. Although there is a lack of rigor in the curriculum, the teachers have the desire to provide the best learning environment. Again, the factors limiting teachers from providing these services needs to be addressed through professional development.

The eight questions that suggested a disagreement between the two groups follow a similar pattern from the previous research mentioned. Question two on the survey states "Pull out gifted programs for gifted students cost valuable instruction time when the students are not in the regular classroom." A large percentage, 54% ,of regular teachers agreed to the statement suggesting they think gifted students miss instruction when in another learning environment. Whereas, the gifted teachers disagree 100% to the statement. The regular teachers split their response to question seven, "gifted students will be successful without a specialized program", by 45 % agreeing with the statement and 32% disagreeing. A larger percentage, 77%, of the gifted teachers disagreed with the success of gifted students without a program. Furthermore, the regular teachers' response of 80% compared to 100% response from gifted teachers in agreement to question eight suggests it is fair to provide different assignments to students.

The regular teachers were inconsistent in their responses. Question seven suggested 45% of regular teachers agreed gifted students would be successful without gifted programs. However, question nine provided a different response with 53% of regular teachers agreeing gifted students need specialized programs. Also, 81% of regular education teachers and 89% of gifted teachers agree it is not disruptive to remove students from the classroom. Therefore, regular education (78%) and gifted (100%) teachers agreed to question twelve that gifted students have unique needs other than academic achievement that need to be met through a gifted program.

Gifted teachers implied they are responsible for providing gifted services and not responsible for the content or products implemented in the regular classroom. Question fourteen reported 22% of gifted teachers do not want to provide extensions for gifted students in the regular classroom.

However, 61% of regular education teachers agree gifted teachers should have some responsibility for providing extension for gifted learners in the regular classroom. Also in regards to question fifteen, gifted teachers (66%) do not want to teach tested content in the gifted classroom as support. On the other hand, regular education teachers (68%) agree tested content needs to be provided as support.

These findings imply regular and gifted teachers want to teach their students without outside resources or differentiation methods. Therefore, training on how to document and implement differentiation for all learners needs to be an area of focus for the school district involved in the study. The eight research questions from the survey showed a disagreement related to both groups of teachers, according to the qualitative data.

Qualitative Findings and Discussion

One of the most evident consistencies in the lesson plans was the use of essential questions to guide instruction for regular education teachers. Thirteen out of sixteen lesson plans included essential questions. The lesson plan formats varied, although all the teachers used a common website to submit plans. The amount of detail provided in each plan varied. Nine of the regular education teachers included some type of differentiation for an identified population. The differentiated methods are listed below:

1. Group by academic need.
2. Remediation.
3. Three groups will use scaffolding in the writing process.
4. Assign students to small groups based on assessment data.
5. Offer extra help to low students.
6. Teach tier students.

7. One on one peer tutoring.
8. Below level, on level, and challenge groups.
9. Put students in small groups.

Although the detail was limited in the plans, these methods were coded as a type of differentiated instruction based on the use of grouping and varied ability as mentioned by Tomlinson (2005). This evidence answered the research question, "What evidence in teachers' lesson plans demonstrates differentiated instruction for gifted learners?"

A few other patterns emerged from the regular education teachers' plans. Seven out of sixteen plans included strategies that were going to be used to activate learning. Five lesson plans documented a thinking map to be used as an assessment tool or a prewriting method. Six lesson plans recorded assessments to be used to evaluate learning. There were only two formal assessments used. The other four were observations or a quick check items.

Eight gifted lesson plans were analyzed and coded. Again, a larger number of plans from the gifted teachers may have benefited the analysis. The eight lesson plans collected from the third party were one short of the participants involved in the survey. Five of the eight lesson plans included essential questions. Four included strategies used to activate learning. Two documented the use of a thinking map. One used an assessment to evaluate learning. The assessment was an observation. One plan documented a choice of activities, which is a differentiated activity and contributes to answering the research question of providing evidence for differentiated instruction for gifted learners.

There were some common themes and the use of the essential questions was the dominating pattern.

The use of specific guidelines in the lesson plans by the school district may have attributed to common patterns in both regular and gifted. However, there are major inconsistencies across the lesson plans. Effective differentiation is lacking as one of the common themes. The differentiated methods used never addressed the content being taught as described by Tomlinson (1999). The differentiated methods identified focused on the process as individual differences and accommodations but not individual student's interest. The products or assessments used in both the gifted and regular teachers' lesson plans did not allow students to reflect upon their own learning or provide multiple forms of evaluation. Therefore, there is a major weakness in lesson planning for both regular and gifted teachers on providing evidence of differentiation for any or all learners.

The research question of "How do gifted teachers' lesson plans differ from regular classroom teachers?" was answered when the regular teachers provided more detail toward accommodating for individual academic levels. However, the gifted teachers' plans rarely addressed differentiation. The regular teachers' lesson plans provided more differentiated evidence and more assessments. However, neither group of teachers' plans focused on differentiated instructional strategies by combining content, process, and product (Tomlinson, 1999). Lesson plan documentation was inconsistent for both groups of teachers with the exception of providing an essential question to guide the lesson. Both regular and gifted teachers established a weak component to the delivery of differentiated instruction through their lesson plans.

The observations provided a different perspective to the type of instructional practices regular classroom teachers use to differentiate for all learners.

The use of flexible grouping, students' interests, data driven instruction, variety of resources, and student choice were all found in the majority of the observations. The research question addressing the type of instructional practices geared toward differentiation was answered through the observations. However, the differentiation practices were for all learners and not specifically for gifted learners.

The observations provided evidence of effective teaching practices implementing differentiated instruction. Although there were a few gaps in the observations, the overall picture described by the researcher indicated differentiated teaching was present in the observed classrooms. However, there was minimal evidence the teaching practices observed were targeting the higher-level learners. The effective practices were targeting all learners. These findings are similar to VanTassel-Baska's (2006) findings. VanTassel-Baska found good teaching and differentiation practiced but there is still a need to increase thinking and problem solving. Therefore, depth is still a missing link in the instructional practices.

The limitation of a lack of training and knowledge on teaching intellectually gifted students was evident in the findings. The observed teaching strategies were good solid teaching strategies that may have been data driven or experienced based learning from the teacher. The lack of the term, differentiation, in the lesson plans indicated the observations were effective teaching strategies that appeared to be differentiation from the researcher's role. Therefore, more observations matching the lesson plans would indicate whether differentiation is evident in the classrooms.

Identifying the teachers' attitudes and actions toward differentiation is the first initiative toward finding the gaps in the instruction received by gifted learners.

The next step is to provide professional development to close the gaps in understanding how to effectively teach higher-level learners. This chapter focuses on the recommendations for continuing to research this topic and the training needed to improve the teaching practices in this school district.

Recommendations

The attitudes toward servicing gifted learners were not similar so there is a need to convince the stakeholders of the importance of using differentiation with higher-level learners. The weakness lies within the documentation of teaching strategies and consistencies within the implementation of these strategies. The first set of recommendations from this research are related to the training and professional development of staff members is as follows:

1. Define differentiation and provide video examples of what it looks like in the classroom. If teachers can see the use of flexible grouping and varied assessments they can visualize how to implement the strategy in their classroom.
2. Provide examples and/or a template for lesson plans and include a checkbox for differentiation techniques to help teachers understand the various ways to differentiate instruction for varied learning styles.
3. Increase the rigor and depth of the content taught within the curriculum to provide opportunities for the higher-level students to explore the content with more project-based learning.
4. Hold teachers accountable for providing extended services for gifted learners. For example, establish an Individual Education Plan as a legal document similar to special education to assure teachers accommodate for students' learning differences.

5. Allow opportunities for gifted and regular education teachers to collaborate on ways to differentiate for higher-level learners. The gifted teachers could extend the content for the gifted students in the pullout program and be a valuable resource to the regular education teachers.

Additional research should repeat this mixed methods design and use inclusion gifted teachers as the services provided to determine if inclusion provides better support for the lesson planning and implementation of differentiation. Also, finding more gifted participants to be involved in the study would help provide more reliability to the results.

Conclusion

The quantitative data provided evidence that the teachers are not in agreement on how to provide services to gifted learners. Since the regular classroom teachers did document differentiation in their lesson plans mainly for the middle and lower level learners, it was noted they know how to differentiate. If the gifted teacher would document for the higher-level learners it would cover all learners. The regular education teachers would like to see inclusion from the gifted teacher in order to improve the instruction for the high level learners. However, the gifted teachers have legal time they are required to service gifted students in a pullout program and can not offer extra assistance to regular teachers unless there is additional staff hired. The ownership of providing a unique instructional method to higher-level learners is lacking.

Therefore, the benefit of providing differentiation for higher-level learners was not observed in either qualitative data. The question analysis suggested the focus remains on teaching the lower to middle level students while providing an extra service for gifted learners. Both groups of teachers need training on how to differentiate for higher-level learners.

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List of Appendices

Appendix: A

Instructions: Please answer the following questions by rating on a scale of 5 to 1 with 5 meaning strongly agree and 1 meaning strongly disagree. The information gathered from the survey will be used to provide professional development opportunities.

What grade do you teach?_____

How many years have you been teaching?____

Have you ever taken any courses in gifted education?_____

Have you ever attended any conferences on gifted education?_____

Do you have a degree or endorsement in gifted education?_____

1. Our schools should offer special programs for gifted students.
2. Pull out gifted programs for gifted cost valuable instruction time when the students are not in the regular classroom.
3. The pullout-gifted program provides the instructional needs for gifted learners.
4. The pullout program allows regular classroom teachers to provide in-depth instruction/interventions for non-gifted students.
5. Schools have the responsibility to provide differentiated instruction to gifted learners in the regular classroom.
6. Ability grouping provides effective methods to provide instruction to students of different abilities or skill levels.
7. Gifted students would be academically successful without a gifted program.
8. Allowing students to work on assignments different than others creates an unfair learning environment.
9. Higher achieving students pace the learning in the classroom and need outlets such as specialized programs.
10. Removing students from the regular classroom is disruptive to other students.
11. Support is provided for the regular classroom teacher to differentiate for gifted learners.
12. Gifted students have unique needs other than academic achievement that need to be met through a pullout program.
13. All teachers should provide evidence in lesson plans that differentiation is being provided to gifted learners.
14. Gifted teachers should be responsible for providing extension for gifted learners in the regular classroom.
15. The tested content should be covered in both gifted and regular classrooms for gifted learners.
16. The gifted services need to provide inclusion in the regular classroom as support.

Appendix: B

Information about a Research Study

Title: An Examination of Attitudes and Actions of Regular Classroom Teachers and Gifted Teachers toward Differentiating for Gifted Learners Involved in a Pullout Gifted Program

Investigator
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Description
The observations will be used to determine what differentiation teaching techniques are being used for gifted students. There will be 8 observations and the common factors will be coded. The observations will be used to probe significant survey results from the first phase of the study. The collection of lesson plans from both regular classroom teachers and gifted teachers will be analyzed and coded to verify if differentiated components are in teachers' lesson plans.

Risks and Benefits
You may be nervous that your classroom and lessons are going to be analyzed by a researcher. However, your name will not be linked to the coded information. The benefit of having an effective plans and classroom will be noted in the research.

Cost and Payments
The observation will take about 30 minutes. The researcher will provide you with a copy of the observation form and give you an opportunity to discuss the results. There are no other costs for helping with the study.

Confidentiality
Your name will not appear on the observation forms. The only information that will be on observation forms will be your classification of regular or gifted teacher and grade level. Therefore, the researcher does not believe that you can be identified from any of the forms.

Right to Withdraw
You do not have to take part in this study. If you start the study and decide that you do not want to finish, all you have to do is to tell Melissa N. Logan or Dr. Sumrall in person, by letter, or by telephone at the School of Education, 317 Guyton Hall, The University of Mississippi, University MS 38677, or 915-7350. Whether or not you choose to participate or to withdraw will not affect your standing with the school district or with the University, and it will not cause you to lose any benefits to which you are entitled.

IRB Approval
This study has been reviewed by The University of Mississippi's Institutional Review Board (IRB). The IRB has determined that this study fulfills the human research subject protections obligations required by state and federal law and University policies.

If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact the IRB at (662) 915-7482.

Appendix: C

Differentiation Observation Tool

The following scale will be used to rate each of the checklist items. Each item will be rated on the evidence observed by the researcher during the observation. Each item is evaluated on the classroom instruction presented during the observation for all students.

3 = Exceeds	2= Meets	1=Needs improvement	N/O=Not observed
The item provides evidence that exceeds the expectations by demonstrating focus on the purpose of achievement for all students.	The item provides evidence that meets the expectations by demonstrating focus on the purpose of achievement for all learners.	The item provides little or no evidences and needs improvement by focusing on the purpose of achievement for all learners.	The item was not observed during the observation period. (NOTE: There must be an attempt to find evidence for an item before it can be rated needs improvement instead of not observed.)

GENERAL	3	2	1	N/O
Lesson Planning				
1. Essential questions are visible and linked to instruction.				
2. Objectives and goals are understandable to all learners.				
3. Students are engaged in the planning, modifying, and monitoring of the lesson.				
4. Students' interest and needs are evident in the lesson delivery.				
5. Reflections are incorporated in the instructional delivery through learning goals.				

Comments/Evidence:

CONTENT	3	2	1	N/O
Curriculum and Depth of Knowledge				
1. Variety of resources and material are available to all learners.				
2. Alternative content is present for varied learners. (Tiered assignments)				
3. Curriculum is used to pace the content and level of mastery.				
4. Pre-assessments are visible to check for student readiness.				
5. Questioning techniques encourage problem solving and critical thinking.				

Comments/Evidence:

PROCESS	3	2	1	N/O

Accommodating Individual Differences				
1. Opportunities are provided for independent or group learning to promote depth.				
2. Accommodations are made for individuals' differences in material or assignments.				
3. Learning is supported through varied instructional strategies.				
4. Assignments and tasks tap into students' interest.				
5. Flexible grouping strategies are visible in the learning environment.				

Comments/Evidence:

PRODUCT	3	2	1	N/O
Assessing progress and application of learning				
1. Students are able to assess their own learning.				
2. Multiple forms of evaluation are present.				
3. Criteria is provided to students to allow for varied audiences and products.				
4. Students' products/tasks or relevant to their interest and needs.				
5. Application of knowledge gained is evident through multiple interpretations.				

Comments/Evidence:

Appendix: D

Differentiation Observation Tool (4th grade observation)

The following scale will be used to rate each of the checklist items. Each item will be rated on the evidence observed by the researcher during the observation. Each item is evaluated on the classroom instruction presented during the observation for all students.

3 = Exceeds	2= Meets	1=Needs improvement	N/O=Not observed
The item provides evidence that exceeds the expectations by demonstrating focus on the purpose of achievement for all students.	The item provides evidence that meets the expectations by demonstrating focus on the purpose of achievement for all learners.	The item provides little or no evidences and needs improvement by focusing on the purpose of achievement for all learners.	The item was not observed during the observation period. (NOTE: There must be an attempt to find evidence for an item before it can be rated needs improvement instead of not observed.)

GENERAL	3	2	1	N/O
Lesson Planning				
1. Essential questions are visible and linked to instruction.			x	
2. Objectives and goals are understandable to all learners.			x	
3. Students are engaged in the planning, modifying, and monitoring of the lesson.			x	
4. Students' interest and needs are evident in the lesson delivery.		x		
5. Reflections are incorporated in the instructional delivery through learning goals.			x	

Comments/Evidence:

CONTENT	3	2	1	N/O
Curriculum and Depth of Knowledge				
1. Variety of resources and material are available to all learners.			x	
2. Alternative content is present for varied learners. (Tiered assignments)			x	
3. Curriculum is used to pace the content and level of mastery.			x	
4. Pre-assessments are visible to check for student readiness.			x	
5. Questioning techniques encourage problem solving and critical thinking.			x	

Comments/Evidence:

PROCESS	3	2	1	N/O
Accommodating Individual Differences				
1. Opportunities are provided for independent or group learning to promote depth.			x	
2. Accommodations are made for individuals' differences in material or assignments.			x	
3. Learning is supported through varied instructional strategies.			x	
4. Assignments and tasks tap into students' interest.			x	
5. Flexible grouping strategies are visible in the learning environment.			x	

Comments/Evidence:

PRODUCT	3	2	1	N/O
Assessing progress and application of learning				
1. Students are able to assess their own learning.			x	
2. Multiple forms of evaluation are present.			x	
3. Criteria is provided to students to allow for varied audiences and products.			x	
4. Students' products/tasks or relevant to their interest and needs.			x	
5. Application of knowledge gained is evident through multiple interpretations.			x	

Comments/Evidence:

Appendix: E

Differentiation Observation Tool (5th grade observation)

The following scale will be used to rate each of the checklist items. Each item will be rated on the evidence observed by the researcher during the observation. Each item is evaluated on the classroom instruction presented during the observation for all students.

3 = Exceeds	2= Meets	1=Needs improvement	N/O=Not observed
The item provides evidence that exceeds the expectations by demonstrating focus on the purpose of achievement for all students.	The item provides evidence that meets the expectations by demonstrating focus on the purpose of achievement for all learners.	The item provides little or no evidences and needs improvement by focusing on the purpose of achievement for all learners.	The item was not observed during the observation period. (NOTE: There must be an attempt to find evidence for an item before it can be rated needs improvement instead of not observed.)

GENERAL	3	2	1	N/O
Lesson Planning				
1. Essential questions are visible and linked to instruction.		x		
2. Objectives and goals are understandable to all learners.		x		
3. Students are engaged in the planning, modifying, and monitoring of the lesson.		x		
4. Students' interest and needs are evident in the lesson delivery.		x		
5. Reflections are incorporated in the instructional delivery through learning goals.		x		

Comments/Evidence:

CONTENT	3	2	1	N/O
Curriculum and Depth of Knowledge				
1. Variety of resources and material are available to all learners.		x		
2. Alternative content is present for varied learners. (Tiered assignments)		x		
3. Curriculum is used to pace the content and level of mastery.		x		
4. Pre-assessments are visible to check for student readiness.		x		
5. Questioning techniques encourage problem solving and critical thinking.		x		

Comments/Evidence:

PROCESS	3	2	1	N/O
Accommodating Individual Differences				
1. Opportunities are provided for independent or group learning to promote depth.		x		
2. Accommodations are made for individuals' differences in material or assignments.		x		
3. Learning is supported through varied instructional strategies.		x		
4. Assignments and tasks tap into students' interest.			x	
5. Flexible grouping strategies are visible in the learning environment.		x		

Comments/Evidence:

PRODUCT	3	2	1	N/O
Assessing progress and application of learning				
1. Students are able to assess their own learning.		x		
2. Multiple forms of evaluation are present.			x	
3. Criteria is provided to students to allow for varied audiences and products.			x	
4. Students' products/tasks or relevant to their interest and needs.			x	
5. Application of knowledge gained is evident through multiple interpretations.			x	

Comments/Evidence:

Appendix: F

Differentiation Observation Tool (2nd grade observation)

The following scale will be used to rate each of the checklist items. Each item will be rated on the evidence observed by the researcher during the observation. Each item is evaluated on the classroom instruction presented during the observation for all students.

3 = Exceeds	2= Meets	1=Needs improvement	N/O=Not observed
The item provides evidence that exceeds the expectations by demonstrating focus on the purpose of achievement for all students.	The item provides evidence that meets the expectations by demonstrating focus on the purpose of achievement for all learners.	The item provides little or no evidences and needs improvement by focusing on the purpose of achievement for all learners.	The item was not observed during the observation period. (NOTE: There must be an attempt to find evidence for an item before it can be rated needs improvement instead of not observed.)

GENERAL	3	2	1	N/O
Lesson Planning				
1. Essential questions are visible and linked to instruction.	x			
2. Objectives and goals are understandable to all learners.	x			
3. Students are engaged in the planning, modifying, and monitoring of the lesson.	x			
4. Students' interest and needs are evident in the lesson delivery.	x			
5. Reflections are incorporated in the instructional delivery through learning goals.	x			

Comments/Evidence:

CONTENT	3	2	1	N/O
Curriculum and Depth of Knowledge				
1. Variety of resources and material are available to all learners.	x			
2. Alternative content is present for varied learners. (Tiered assignments)		x		
3. Curriculum is used to pace the content and level of mastery.	x			
4. Pre-assessments are visible to check for student readiness.	x			
5. Questioning techniques encourage problem solving and critical thinking.	x			

Comments/Evidence:

PROCESS	3	2	1	N/O
Accommodating Individual Differences				

1. Opportunities are provided for independent or group learning to promote depth.	x			
2. Accommodations are made for individuals' differences in material or assignments.	x			
3. Learning is supported through varied instructional strategies.	x			
4. Assignments and tasks tap into students' interest.	x			
5. Flexible grouping strategies are visible in the learning environment.	x			

Comments/Evidence:

PRODUCT	3	2	1	N/O
Assessing progress and application of learning				
1. Students are able to assess their own learning.	x			
2. Multiple forms of evaluation are present.	x			
3. Criteria is provided to students to allow for varied audiences and products.		x		
4. Students' products/tasks or relevant to their interest and needs.	x			
5. Application of knowledge gained is evident through multiple interpretations.	x			

Comments/Evidence:

Appendix: G

Differentiation Observation Tool (3rd Grade observation-single gender class)

The following scale will be used to rate each of the checklist items. Each item will be rated on the evidence observed by the researcher during the observation. Each item is evaluated on the classroom instruction presented during the observation for all students.

3 = Exceeds	2= Meets	1=Needs improvement	N/O=Not observed
The item provides evidence that exceeds the expectations by demonstrating focus on the purpose of achievement for all students.	The item provides evidence that meets the expectations by demonstrating focus on the purpose of achievement for all learners.	The item provides little or no evidences and needs improvement by focusing on the purpose of achievement for all learners.	The item was not observed during the observation period. (NOTE: There must be an attempt to find evidence for an item before it can be rated needs improvement instead of not observed.)

GENERAL	3	2	1	N/O
Lesson Planning				
1. Essential questions are visible and linked to instruction.	x			
2. Objectives and goals are understandable to all learners.	x			
3. Students are engaged in the planning, modifying, and monitoring of the lesson.	x			
4. Students' interest and needs are evident in the lesson delivery.	x			
5. Reflections are incorporated in the instructional delivery through learning goals.	x			

Comments/Evidence:

CONTENT	3	2	1	N/O
Curriculum and Depth of Knowledge				
1. Variety of resources and material are available to all learners.	x			
2. Alternative content is present for varied learners. (Tiered assignments)	x			
3. Curriculum is used to pace the content and level of mastery.	x			
4. Pre-assessments are visible to check for student readiness.	x			
5. Questioning techniques encourage problem solving and critical thinking.	x			

Comments/Evidence:

PROCESS	3	2	1	N/O
Accommodating Individual Differences				
1. Opportunities are provided for independent or group learning to promote depth.	x			
2. Accommodations are made for individuals' differences in material or assignments.	x			
3. Learning is supported through varied instructional strategies.	x			
4. Assignments and tasks tap into students' interest.	x			
5. Flexible grouping strategies are visible in the learning environment.	x			

Comments/Evidence:

PRODUCT	3	2	1	N/O
Assessing progress and application of learning				
1. Students are able to assess their own learning.	x			
2. Multiple forms of evaluation are present.	x			
3. Criteria is provided to students to allow for varied audiences and products.	x			
4. Students' products/tasks or relevant to their interest and needs.	x			
5. Application of knowledge gained is evident through multiple interpretations.	x			

Comments/Evidence:

Appendix: H

Differentiation Observation Tool (2nd grade observation B)

The following scale will be used to rate each of the checklist items. Each item will be rated on the evidence observed by the researcher during the observation. Each item is evaluated on the classroom instruction presented during the observation for all students.

3 = Exceeds	2= Meets	1=Needs improvement	N/O=Not observed
The item provides evidence that exceeds the expectations by demonstrating focus on the purpose of achievement for all students.	The item provides evidence that meets the expectations by demonstrating focus on the purpose of achievement for all learners.	The item provides little or no evidences and needs improvement by focusing on the purpose of achievement for all learners.	The item was not observed during the observation period. (NOTE: There must be an attempt to find evidence for an item before it can be rated needs improvement instead of not observed.)

GENERAL	3	2	1	N/O
Lesson Planning				
1. Essential questions are visible and linked to instruction.		x		
2. Objectives and goals are understandable to all learners.		x		
3. Students are engaged in the planning, modifying, and monitoring of the lesson.		x		
4. Students' interest and needs are evident in the lesson delivery.		x		
5. Reflections are incorporated in the instructional delivery through learning goals.			x	

Comments/Evidence:

CONTENT	3	2	1	N/O
Curriculum and Depth of Knowledge				
1. Variety of resources and material are available to all learners.	x			
2. Alternative content is present for varied learners. (Tiered assignments)		x		
3. Curriculum is used to pace the content and level of mastery.		x		
4. Pre-assessments are visible to check for student readiness.		x		
5. Questioning techniques encourage problem solving and critical thinking.		x		

Comments/Evidence:

PROCESS	3	2	1	N/O
Accommodating Individual Differences				
1. Opportunities are provided for independent or group learning to promote depth.	x			
2. Accommodations are made for individuals' differences in material or assignments.	x			
3. Learning is supported through varied instructional strategies.	x			
4. Assignments and tasks tap into students' interest.	x			
5. Flexible grouping strategies are visible in the learning environment.	x			

Comments/Evidence:

PRODUCT	3	2	1	N/O
Assessing progress and application of learning				
1. Students are able to assess their own learning.		x		
2. Multiple forms of evaluation are present.		x		
3. Criteria is provided to students to allow for varied audiences and products.		x		
4. Students' products/tasks or relevant to their interest and needs.	x			
5. Application of knowledge gained is evident through multiple interpretations.		x		

Comments/Evidence:

VITA

Melissa Nicole Logan was born on April 22, 1976 in Tucson, Arizona to Mr. and Mrs. Scott Hammons. She graduated from Franklin County High School in Frankfort, Kentucky in 1994. Mrs. Logan received her Bachelor of Science Degree in Middle Grade Education with emphasizes in language arts and social studies from Eastern Kentucky University in 1998. She worked in Woodford County Public School District as a seventh grade language arts teacher and department chair from 1998 to 2003. She completed her Masters of Science Degree in Middle Grade Education from Georgetown College in 2001. She moved to Alabama with her husband's job and stayed home with her daughter, Grace, born in 2002 and son, Vince, born in 2004 until moving to Tupelo in November 2004.

Mrs. Logan worked part time as a preschool teacher at First United Methodist Church. She enrolled in the University of Mississippi during the Spring 2007 to pursue a doctorate degree in curriculum and instruction. She began working for Tupelo Public School District in 2008 as a gifted educator. While obtaining her degree at Ole Miss, Mrs. Logan completed an internship under Dr. Thea Williams-Black during the summer of 2008.

Mrs. Logan has been recognized for her innovative teaching style through many media outlets. She was Joyner Elementary Teacher of the Year for the 2010-2011 school year. Mrs. Logan's newspaper and WTVA coverage included, "Hot enough to fry an egg" in 2010, "Who walked the halls of Joyner" in 2009, and " Mississippi students vote" in 2008. In May of 2009, Mrs. Logan was awarded Association for Excellence in Education Innovative Teaching Award for comparing and contrasting the 1930's to current times and rewarded a stipend to use in the

classroom. In Mrs. Logan's first year of teaching, she was given a 1999 Certificate of commendation from The American Association of School Administrators and Sallie Mae as a nominee for Sallie Mae First Class Teacher Award.

Mrs. Logan has exhibited a strong leadership role and active involvement in professional development in her career as an educator. She was involved in the Tupelo Public School District curriculum writing process as a team leader during the summer of 2011. During the role, she helped align the pacing guides and curriculum guides with common core standards. She also consulted with administrators and lead educators on the Tupelo Public School District Profession Development Team, which will implement their plan during the 2011-2012 school year. At her current school site, Mrs. Logan plays a part on many committees as the Gumtree writing school coordinator, technology school representative, school improvement team, interview committee, and the hospitality committee.

Mrs. Logan has presented her knowledge and experiences through conferences while also attending many conferences to obtain more knowledge. In 2009, Mrs. Logan presented best practices techniques learned from the Arts in the Classroom conference in Oxford, MS. She was co-director of the implementation of Arts in the Classroom for the 2009-2010 school year. She also attended the Arts in the Classroom training in Meridan, MS in 2010. In 2008, Mrs. Logan attended the Mississippi Association of Gifted Children Conference in Choctaw, MS. In 2007, Mrs. Logan was a presenter at the Kentucky Middle School Association Annual Conference. Her presentation was titled "*Using Open Response as a Common Assessment"* and was designed to improve instruction for state assessments.

Mrs. Logan has joined many professional organizations.

She is a member of National Science Teachers Association, National Association of Gifted Children, and Mississippi Association of Gifted Children. Mrs. Logan is a philanthropist. She has been a St. Jude Hero for the St. Jude Research Hospital. She ran the Chicago Marathon in 2008 to raise over $2,000 for St. Jude.