

GENERAL EDUCATION TEACHERS' PERCEPTIONS REGARDING INCLUSION  
IN NORTHEAST GEORGIA MIDDLE SCHOOLS

By  
Kelly Lynn Whitaker  
Liberty University

A Dissertation Presented in Partial Fulfillment  
Of the Requirements for the Degree  
Doctor of Education

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## ABSTRACT

Kelly Lynn Whitaker. GENERAL EDUCATION TEACHERS' PERCEPTIONS REGARDING INCLUSION IN NORTHEAST GEORGIA MIDDLE SCHOOLS.

(Under the direction of Dr. Craig B. Bailey), School of Education, October, 2011.

The purpose of this study was to determine if there was a difference in middle school general education teachers' perception of the inclusion of students with disabilities in general education classes. A survey was sent to general education teachers at 14 middle schools in the Northeast Georgia Pioneer Regional Education Services Agency (RESA). The answers to the survey were compiled and analyzed for the differences in teacher perceptions of inclusion. The two groups were comprised of general education teachers who have taught in inclusive middle school settings and general education teachers who have taught only in traditional middle school settings. The general question addressed in this study was: Are there statistically significant differences in the perceptions of general education teachers that teach in inclusive middle school settings and general education teachers that teach only in traditional middle school settings towards the inclusion of students with disabilities? The researcher used a *t*-test to determine the statistical significance between the two groups.

Descriptors: inclusion, general education

## **Dedication**

To my parents who instilled in me a love of learning and an attitude of “Why not?” To Mrs. Edith who taught me how to teach. And to my students, who have taught me so much more than I ever could have taught them.

## **Acknowledgements**

Thank you to my chair, Dr. Craig Bailey, a constant source of encouragement and guidance. Thank you. Thank you to Dr. Angela Smith for expanding my work and making it better. Thank you to Dr. Simpson for being there through panic attacks, meltdowns, and moments of pure, unadulterated joy. You got me into this! Thanks Doug for holding my hand. Thank you Craig. You improved my paper. Your presence and counsel have made this journey manageable. And thanks to my 38 Rats who have laughed with me, cried with me, and pulled me through this process kicking and screaming. We'll be friends forever.

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## **List of Abbreviations**

Americans with Disabilities Act (ADA)

Attention Deficit Hyperactivity Disorder (ADHD)

Board of Control (BOC)

Council for Exceptional Children (CEC)

Free and Appropriate Public Education (FAPE)

General Education Teachers in Inclusive Settings (GI)

General Education Teachers in Traditional Settings (GT)

Georgia Performance Standards (GPS)

Individuals with Disabilities Education Act (IDEA)

Individual Education Plan (IEP)

Institutional Review Board (IRB)

Least Restrictive Environment (LRE)

No Child Left Behind Act of 2004 (NCLB)

Opinions Relative to Integration (ORI)

Opinions Relative to Mainstreaming (ORM)

Regional Education Services Agency (RESA)

Specifically Designed Instruction (SDI)

Specific Learning Disability (SLD)

Statistics Package for the Social Sciences (SPSS)

Students with Disabilities (SWD)

## **CHAPTER ONE: INTRODUCTION AND RATIONALE FOR THE STUDY**

Generally, the inclusion of students with disabilities in the general education setting has been proven to be successful for these students. Students with disabilities who are educated alongside their peers have been shown to excel academically, behaviorally, and socially (Carter & Hughes, 2005; Ryndak & Fisher, 2003). Because of the demands of the Individuals with Disabilities Act (IDEA 2004) and No Child Left Behind (NCLB; 2001), teachers are looking at different ways to include students with disabilities in the mainstream classroom and increase these students' successes in school.

This study examined the perceptions of inclusion held by general education middle school teachers in rural Northeast Georgia. The participants came from 14 middle schools in the Northeast Georgia Pioneer Regional Educational Services Agency (RESA). This study primarily investigated the perceptions of general education teachers who have taught in inclusive middle school settings (GI) compared to general education teachers who have only taught in traditional middle school settings (GT). The first chapter of this dissertation examines the background of the study, presents a statement of the problem, and describes the significance of the study. Research questions, limitations and delimitations are set forth, along with an overview of the methodology. The chapter concludes by defining specific terms that are used in the study.

### **Background of the Study**

Special education began in the United States in 1975 with the introduction of the Education for All Handicapped Children Act of 1975, otherwise known as PL 94-142. This law was reauthorized in 1990, 1997, and 2004 as the Individuals with Disabilities

Education Act (IDEA). IDEA provided school-aged children and youth (aged 3 through 21) special education and related services through the public school system. Not only did IDEA mandate specialized instruction for students with disabilities, but it also mandated related services, such as interpreters for students with hearing impairments and computer-assisted technology, for students with physical disabilities. These services can be very important in helping children with disabilities develop, learn, and succeed in school and in the community.

IDEA (2004) sets forth several basic tenets including, but not limited to, the rights of students with disabilities to have access to a free and appropriate public education (FAPE) and the right to be served in the least restrictive environment (LRE). This legislation recognizes a number of different disability categories that qualify a student for special education services; however, for a student to be eligible, his or her educational performance must be affected by the disability. These categories include autism, deaf-blindness, emotional disturbance, hearing impairment (including deafness), mental retardation, multiple disabilities, orthopedic impairment, other health impairments, specific learning disabilities, speech or language impairments, traumatic brain injuries, and visual impairments (IDEA, 2004). According to the United States Department of Education (2009), almost seven million students in the United States are currently being served through special education.

Since the introduction of the Education for All Handicapped Children Act of 1975 and its subsequent reauthorizations as IDEA, public schools have been grappling with special education issues, such as the Individualized Education Program (IEP), access to general education, and LRE. LRE for students with disabilities follows a continuum of

alternative placements, which ranges from homebound services to full inclusion (Taylor, 1988). For students with disabilities who are served through the homebound program, all services are provided in the home. The other end of the spectrum represents full inclusion. With full inclusion, students with disabilities are served alongside their non-disabled peers in their neighborhood schools. These students receive special education support and services within the general education classroom (Janney & Snell, 1997).

**Models of delivery.** Each student in special education is served through an IEP. This IEP is required by law through the IDEA and is developed by the IEP team. The IEP team is made up of the student, parents, special education teachers, general education teachers, administrators, related service providers, and others necessary to the IEP process. The IEP team uses a number of different factors to determine the appropriate placement for each student (IDEA, 2004). First of all, the IEP team considers whether the student can be educated satisfactorily in the regular classroom. At this point, the IEP team compares the benefits provided in the regular education classroom with the benefits provided in a segregated setting. The IEP team also considers the potentially beneficial or harmful effects that a regular class placement may have on the students with a disability or the other students in the class (New Mexico Department of Education, 2003). According to IDEA (2004), the IEP team cannot use the following factors in order to determine placement: category of the exceptionality, severity of the exceptionality, language and communication needs, needed modifications in curriculum, configuration of the public service agency, availability of space, or administrative convenience.

The IEP team considers a myriad of options, from homebound instruction to full inclusion. For instance, a student with a disability may spend part of the day in a self-

contained special education resource room and part of the day in the general education setting. One student may spend all day with peers without disabilities except for a learning strategies class one period a day. Some districts have a special school where students with significant disabilities spend the entire school day. Although schools must follow federal and state guidelines, there is some difference in interpretation when it comes to “accessing the general education curriculum” (Taylor, 1988). These different interpretations contribute to the ambiguity of the concept of inclusion.

Students with disabilities who are served in their school setting are generally served in a collaborative special education setting. Including students with disabilities in the general education classrooms can take on a number of different delivery forms. These include natural supports, individualized support, co-teaching, supported instruction, or consultation. Since teachers must address the individual needs of each child, it is helpful to have a variety of models available (Hammond & Ingalls, 2003). Idol (2006) identified four different types of collaborative special education service delivery. The first model is the consulting teacher model, an indirect model in which a special education teacher serves as a consultant to the general education teacher. In the cooperative teacher model, the special education and general education teachers work together in the same classroom to provide services for all students. Next, the supportive resource program is a pull-out program, which provides specific instruction on a regularly scheduled basis. Lastly, Idol identified instructional assistants, or supported instruction, as the fourth type of service delivery. When the supported instruction service model is in use, a paraprofessional accompanies the special education student to the general education classroom. These options are all available to the student with a disability, and are considered by the IEP

team.

When Lipsky and Gartner (1998) reviewed the National Study of Inclusive Education report, they discovered seven factors shared by successful inclusive schools. These factors include visionary leadership, collaboration, refocused use of assessment, support for staff and students, funding, effective parental involvement, and use of effective program models. In studying these factors, Lindsay (2003) determined that these general factors are unclear and in need of further clarification.

Inclusion is not defined by the Department of Education, nor is it mentioned in IDEA or NCLB. However, the concept of LRE is one of the important fundamentals of IDEA. The intent of LRE is that students with disabilities be educated alongside their same-age peers (Alper, 2003). There are a number of advantages of inclusion for students with disabilities. First of all there are many opportunities for social interaction in inclusive settings. Social interaction allows students with disabilities to improve communication skills. Secondly, students with disabilities who are in inclusive settings are exposed to students who can model appropriate behavior. Another benefit of inclusion is that teachers often have higher expectations for students with disabilities who are served in general education classrooms (Alper & Ryndak, 1992).

Successful inclusion is beneficial to the students with disabilities, students without disabilities, the school, and the community at large (Downing, 2002). M. K. Smith and K. E. Smith (2000) hold the view that the issue is not whether inclusion works; the issue is how and why inclusion works. There are, however, conflicting opinions on the issue of inclusion. There are those who forcefully advocate for full inclusion and there are those who believe that there is not enough empirical data to support the idea of full inclusion

(Kavale & Forness, 2000). Equality for children with disabilities is not the only issue driving inclusion. Under NCLB, each teacher must be *highly qualified*. In order to be considered highly qualified, special education teachers have to be certified in special education and pass a state licensure exam. Teachers also must hold a bachelor's degree and demonstrate knowledge in each core subject for which they are the primary teacher. Because special education teachers are often responsible for teaching more than one subject, especially in rural areas, they are the ones who are affected the most by these requirements.

Although this qualification seems like a reasonable goal, there are several issues that must be considered for implementation in rural areas. First of all, the majority of special education teachers currently teaching content classes are not considered highly qualified under NCLB. Secondly, attrition rates already keep many classrooms from being staffed by traditionally qualified special education teachers. Lastly, the demand for entering special education teachers exceeds the supply of graduates from teacher preparation programs. Because of these issues, the highly qualified mandate has a greater impact on special education in rural areas than in other areas. Because teachers in rural areas generally teach more than one subject, these teachers need to demonstrate proficiency in multiple areas. This mandate places more obstacles in prospective teachers' paths. It also encourages alternative routes to licensure at the expense of quality (Therrien & Wasburn-Moses, 2009).

Currently, special education departments in rural areas are striving to find novel ways to comply with NCLB. One of the ways that they are able to comply with the law is to include children with disabilities in general education coteaching classes. The

general education teacher is the primary teacher of record for the core subject, and the special education teacher fulfills the requirements of IDEA. With coteaching, students with disabilities gain greater access to the general curriculum while school districts comply with the mandate of NCLB.

**Teacher perceptions.** It is generally accepted that teacher perceptions play an important role in the success of educational practices (Antonak & Larrivee, 1995); therefore, positive perceptions of inclusion by teachers are critical prerequisites to the implementation of successful inclusion (Cook, Semmel, & Gerber, 1999; M.K. Smith & K.E. Smith, 2000). Most researchers agree that the most important condition for successful inclusion of students with disabilities in the general education classroom is a change by general education teachers from negative to positive attitudes towards students with disabilities and their inclusion in the general education classroom (Talmor, Reiter, & Feigin, 2005).

In order for inclusive schools to be welcoming and accommodating for all students, a positive culture of inclusion must exist (Janney & Snell, 2004). In their landmark research synthesis on teacher perceptions of inclusion, Scruggs and Mastropieri (1996) determined that it is vital for general education teachers to be receptive to the principles and demands of inclusion. Because teacher opinions strongly influence inclusion practices, negative teacher perspectives can undermine inclusion (Miller, Fullmer, & Walls, 1996; Worrell, 2008). Inclusion and complete acceptance of students with disabilities can only be accomplished through long-term changes in the perceptions of teachers (Antonak & Larrivee, 1995). Research supports the reality that teacher perceptions influence student achievement, behavior, and self-esteem (Daam, Burne-

Smith, & Latham, 2000). According to Giangreco and Doyle (2000), the attitudes, decisions, and actions of general education teachers are critical factors in the success of students with disabilities. The general education teacher may be the most important member of the school in determining the success of the students with disabilities.

Unfortunately, general education teachers have expressed negative attitudes from the beginning of the implementation of inclusion, especially when dealing with feelings of inadequacy. Some of the concerns of general education teachers about inclusion involve the severity of the disability and the amount of teacher responsibility (Kavale & Forness, 2000).

Even though the mandate for a LRE has existed for 30 years, local school districts have experienced difficulties with implementation (Roach & Salisbury, 2006). A separate education system evolved for students with disabilities, characterized by failure to master IEP goals, high dropout rates, low graduation rates, high unemployment rates, and lack of integration into the community (Lipsky, 2005). Recurring negative teacher perceptions include lack of time, lack of training, lack of awareness of specific disabilities, and lack of interest, among others (M.K. Smith & K.E. Smith, 2000).

Because teachers are characteristically overloaded, they tend to view change with skepticism (Carter & Hughes, 2006). Teachers need to understand that inclusive programs will benefit the students. One of the major concerns that teachers have is that they will not be able to implement the program successfully (Van Reusen, Shoho, & Barker, 2001). According to Daam et al., (2000), teachers support the concept of inclusion, but remain uncertain about the reality, wanting to retain some version of the special education classroom. By understanding the attitudinal barriers to inclusion,

general education teachers will be able to shift to a better understanding of the benefits of inclusion, creating acceptance for all students (Anderson, 2006). Freytag (2008) noted that truly loving teachers cannot help but think first of the needs of their students.

The barriers to inclusion are increased in areas that are identified as rural. The challenges for the rural teacher include lack of knowledge about students with disabilities, lack of training on collaboration, and lack of training on how to plan effective instruction. Because these teachers often lack access to traditional campus classroom delivery approaches to skills training, the training must occur in other modes (Short & Martin, 2005).

The longer that teachers are exposed to inclusion and practice inclusion, the more their acceptance and tolerance of students with disabilities in their classrooms improves (Idol, 2006). They generally become more skilled in accommodating students are different ability levels. Conversely, less positive attitudes represent a challenge to inclusion efforts (Mastropieri & Scruggs, 2001). In order to facilitate the practice of inclusion, a frank discussion must occur on the perceptions of general education teachers on the inclusion of students with disabilities in general education settings.

### **Purpose Statement**

The purpose of this study was to explore the differences between the perceptions of general education teachers who teach in inclusive middle school settings and general education teachers who teach in traditional settings toward the inclusion of students with disabilities.

## **Significance of the Study**

Because it is generally accepted that teacher perceptions are vitally important for the systematic change of educational practices, it is important to measure teacher perceptions (Antonak & Larrivee, 1995). Since the inception of the Education for All Handicapped Students Act in 1975, the attitudes of everyone involved in inclusion, integration, or mainstreaming have been analyzed. Studies have been conducted on the perceptions regarding inclusion of students with disabilities, students without disabilities, special education teachers, general education teachers, paraprofessionals, preservice teachers, administrators, and parents (Scruggs & Mastropieri, 1996).

This quantitative analysis of teacher perceptions of inclusion has made a contribution to knowledge about increased positive experiences involving students with disabilities. This study has differentiated between the perceptions of general education teachers who teach in inclusive middle school settings and general education teachers who have only taught in traditional middle school settings. By examining the perceptions of middle school teachers in a rural setting, the researcher has contributed to the body of knowledge regarding inclusion of students with disabilities in general education classrooms.

## **Research Questions**

The general question addressed in this study was: To what extent is there a difference when comparing perceptions of inclusion held by general education teachers who teach in inclusive middle school settings (GI) to perceptions of inclusion held by general education teachers who have only taught in traditional middle school settings

(GT)? The areas considered by the survey to be subsets of the general question are as follows:

1) Do general education teachers in inclusive middle school settings perceive the benefits of inclusion differently than general education teachers in traditional middle school settings?

2) Do general education teachers in inclusive middle school settings perceive the benefits of inclusion to classroom management differently than general education teachers in traditional middle school settings?

3) Do general education teachers in inclusive middle school settings perceive their ability to teach students with disabilities differently than general education teachers in traditional middle school settings?

4) Do general education teachers in inclusive middle school settings have a different understanding of special education than general education teachers in traditional middle school settings?

### **Hypotheses**

H<sub>1</sub>: General education teachers who teach in inclusive middle school settings will exhibit more different perceptions toward inclusion than general educators who teach in traditional middle school settings.

H<sub>0</sub>: There will be no difference between the perceptions of inclusion held by general education teachers who teach in inclusive middle school settings and the perceptions of inclusion held by general education teachers who teach in traditional middle school settings.

H<sub>2</sub>: General education teachers in inclusive middle school settings perceive the benefits of inclusion differently than general education teachers in traditional middle school settings.

H<sub>0</sub>: General education teachers in inclusive middle school settings perceive the benefits of inclusion no differently than general education teachers in traditional middle school settings.

H<sub>3</sub>: General education teachers in inclusive middle school settings perceive the benefits of inclusion to classroom management differently than general education teachers in traditional middle school settings.

H<sub>0</sub>: General education teachers in inclusive middle school settings do not perceive the benefits of inclusion to classroom management differently than general education teachers in traditional middle school settings.

H<sub>4</sub>: General education teachers in inclusive middle school settings perceive their ability to teach students with disabilities differently than general education teachers in traditional middle school settings.

H<sub>0</sub>: General education teachers in inclusive middle school settings do not perceive their ability to teach students with disabilities differently than general education teachers in traditional middle school settings.

H<sub>5</sub>: General education teachers in inclusive middle school settings have a different understanding of special education than general education teachers in traditional middle school settings.

H<sub>0</sub>: General education teachers in inclusive middle school settings do not have a different understanding of special education than general education teachers in traditional middle school settings.

### **Identification of Variables**

The two variables of interest used in this study were the responses to the survey that measured the perceptions of inclusion of general education teachers who have taught in inclusive middle school classrooms and the response to the survey that measured the perceptions of inclusion of general education teachers who have only taught in traditional middle school classrooms.

In the first group, the general education teacher taught in an inclusive general education setting (GI), meaning that students with disabilities are included in the general education classroom alongside students without disabilities. In the second group, the general education teacher taught in a traditional general education setting (GT), meaning that only students without disabilities are in the general education classroom.

### **Middle School Experience**

The purpose of middle grades education is to provide adolescent students with appropriate curriculum in a safe environment. Students at this developmental stage are rapidly changing both physically and emotionally. Considering the challenges of early adolescence, what teacher would consider a career as a middle school educator? Quite simply, it is a time of great discovery. Students begin to discover their identities and passions while gaining skills that allow them to think complexly. At this stage, students gain a willingness to learn and start to understand how they learn (Repetto, Webb, Neubert, & Curran, 2006).

Characteristics of effective middle school educators differ from elementary and secondary educators. First of all, middle school educators require a knowledge base in young adolescents' social, physical, and emotional needs. Along with the knowledge base, the educator needs to understand how to meet these needs. Secondly, the educators must utilize this knowledge to build positive learning climates specific to young adolescents. Educators must also build creativity into learning and engage students in the learning process. In the development of middle schools, there are three vital components: knowledge about the uniqueness, requirements, and interests of young adolescents; knowledge about responsive curriculum and instruction; and specialized middle school personnel preparation (Repetto et al., 2006).

Many middle schools employ interdisciplinary teaming as their organizational structure. Simply put interdisciplinary teaming means that the core teachers (language arts, math, social studies, and science) share the same students and have collaborative planning. This structure allows teachers to make personal decisions about curriculum content, integrate student interests, and focus on the unique strengths and needs of individual students (Repetto et al., 2006).

### **Overview of Methodology**

The purpose of this study was to compare the perceptions of inclusion held by general education teachers who have taught in inclusive middle school settings with the perceptions of inclusion held by general education teachers who have only taught in traditional middle school settings in rural Northeast Georgia. This quantitative study analyzed perceptions of inclusion held by general education teachers in the 14 middle schools within the 11 rural school districts in the Northeast Georgia Pioneer RESA.

These 14 schools were chosen because they are all members of Pioneer RESA with similar rural demographics, including the populations and the makeup of their faculties.

Ex post facto, or causal-comparative, research was chosen as the method for this study due to the need to acquire teachers' perceptions in the most efficient and economical way. According to Ary, Jacobs, Razavieh, and Sorenson (2006), the researcher in ex post facto research compares groups differing on the independent variable to determine the effect on the dependent variable. There are two basic modes of ex post facto research. In the first mode, the researcher begins with subjects who differ in some way and try to determine the effect of these differences. In the second mode, the researcher begins with subjects who differ in effect and try to determine the cause of this difference. This study utilized the second mode of ex post facto research.

A survey instrument was administered to general education teachers in 14 middle schools within 11 school districts in the RESA. The results of the survey instrument were used to compare teacher perceptions of inclusion. Teacher perceptions were measured using the Opinions Relative to Integration of Students with Disabilities (ORI) scale (Antonak & Larrivee, 1995), a survey routinely used by researchers to examine teachers' attitudes, perceptions, and beliefs toward the practice of inclusion (Dedrick, Marfo, & Harris, 2007; Dupoux, Wolman, & Estrada, 2005; Jobe, Rust, & Brissie, 1996; Jung, 2007; Leyser & Tappendorf, 1999). The factors addressed in this survey included:

- Benefits of Inclusion
- Inclusive Classroom Management
- Perceived Ability to Teach Students with Disabilities
- Special Education Versus Inclusive General Education

Responses from the survey were compared between the two groups, and a *t*-test was performed to determine the statistical significance of the differences. The results of the *t*-test gave insight into the distinguishing factors among the two groups.

### **Assumptions and Limitations**

This study was delimited to 14 middle schools in rural, Northeast Georgia. Using only 14 middle schools from Northeast Georgia allowed for more precise information on a group of educators from a rural area. The study was based on teacher perceptions as given within a survey that has been used worldwide to measure teacher perceptions of inclusion. While it may not be appropriate to generalize the findings to all educators in all schools, the results can be used to address findings that are important to all schools.

Teachers may have felt that a survey given by the RESA was not entirely confidential, which may skew the results. Though anonymity was assured for all participants, it is impossible to know if all participants were entirely honest with their responses.

Also, teachers who are less familiar with inclusion and special education topics may not have had the knowledge base necessary to effectively answer the questions on the survey.

Researchers must be careful interpreting the results of ex post facto investigations because the researcher lacks control over many of the variables. The procedure of ex post facto research does not provide the safeguards that are necessary for making inferences about causal relationships. The researcher may mistakenly attribute causation based on a relationship between two variables. This is known as post hoc fallacy (Ary et al., 2006).

## **Definition of Terms**

The following definitions are provided to ensure uniformity and understanding throughout this study.

*Access to the general curriculum:* Access to the general curriculum means students with disabilities have the opportunity to learn the same academic content as typical peers in the same grade level. Access to the general curriculum is different from inclusion because students can learn the same academic content in a variety of settings outside the general education classroom (Browder & Spooner, 2006).

*Accommodation plan:* An accommodation plan is a written set of instructions that detail specific strategies and practices that will be used to communicate to teachers what practices and strategies will be utilized to ensure the student's needs are met, detail special equipment needed, list additional services, explain grading changes, and detail the student's responsibilities regarding the plan (Downing, 2002).

*Americans with Disabilities Act (ADA):* In general, the ADA requires that all programs and activities receiving federal financial assistance or benefits must not discriminate against *qualified* people with disabilities on the basis of their disabilities.

*Consultation:* The special education teacher provides the general education teacher with ideas and strategies, but no direct classroom support (Damore & Murray, 2009).

*Continuum of alternative placements:* This is a spectrum of placements for IEP implementation, ranging from less restrictive to more restrictive, and all points in between (New Mexico State Department of Education, 2003).

*Coteaching*: This is a common method of special education service delivery that requires collaboration between general and special education teachers for all of the teaching responsibilities of all students in a classroom (Gately & Gately, 2001).

*Criterion-Referenced Competency Tests (CRCT)*: CRCT is an assessment designed to measure how well students acquire the skills and knowledge described in the Georgia Performance Standards (GPS). The assessments provide information on academic achievement (Georgia Department of Education, 2009).

*Differentiated Instruction*: Differentiated instruction is the practice of modifying and adapting instruction, materials, content, student projects and products, and assessment to meet the learning needs of individual students (Browder & Spooner, 2006)

*Disability*: A disability is a physical or mental impairment that substantially limits one or more major life activity (Ryndak & Alper, 2003).

*Due Process*: Due process is a requirement under the United States Constitution and the Individuals with Disabilities Education Act (IDEA) that sets forth the regulatory basis for a formal set of policies and procedures to be implemented by school districts (U. S. Department of Education, 2002).

*Exceptionality categories*: The categories of IDEA for which a student may receive special education services. These include autism, deaf-blindness, emotional disturbance, hearing impairment (including deafness), mental retardation, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury, and visual impairment (including blindness) (U. S. Department of Education, 2002).

*Free and Appropriate Public Education (FAPE):* Under IDEA, schools are required to provide this to students with learning disabilities and educational disabilities (U. S. Department of Education, 2002).

*General Education Curriculum:* The general education curriculum is what typical students are taught in public schools at each grade level (Browder & Spooner, 2006).

*General education teacher in inclusive setting:* A general education teacher in an inclusive setting teaches general education students and students with disabilities, using an inclusive model (Correa, Jones, Thomas, & Morsink, 2005).

*General education teacher in traditional setting:* A general education teacher in a traditional setting teaches general education students only. Special education students are served in special pull-out programs, resource rooms, or self-contained rooms (Correa, Jones, Thomas, & Morsink, 2005).

*Georgia Performance Standards (GPS):* GPS refers to the standardized curriculum required by the state of Georgia to drive instruction and assessment (Georgia Department of Education, 2009).

*Highly Qualified Teacher:* In No Child Left Behind (NCLB), teachers are required to be highly qualified. Highly qualified teachers are certified in the core subjects for which they are primary teachers (Therrien & Wasburn-Moses, 2009).

*Inclusion:* Inclusion refers to the practice of educating students with disabilities in the general education classroom (Janney & Snell, 2003).

*Individualized Education Plan (IEP):* An IEP is a legally binding document that spells out exactly what special education services the student will receive. It includes the student's classification, placement, services such as a one-on-one aide and therapies, academic and

behavioral goals, a behavior plan if needed, percentage of time in regular education, and progress reports from teachers and therapists. The IEP is planned at an IEP meeting (U. S. Department of Education, 2002).

*Individuals with Disabilities Education Act (IDEA):* IDEA is the federal law that requires schools to conduct activities to locate, identify, and diagnose students with specific learning disabilities (SLDs) and other types of disabilities, ages 3-21, and to provide a complete educational evaluation to determine their eligibility for special education services (U.S. Department of Education, 2002).

*Integration:* Integration is the process of including students with disabilities in both the social and curricular aspects of attendance in general education schools (Janney, Snell, Beers, & Raynes, 1995).

*Least Restrictive Environment:* School districts are required to educate students with disabilities in regular classrooms with their nondisabled peers, in the school they would attend if not disabled, as much as is possible. The LRE is the educational setting that maximizes a child's ability to receive maximum educational benefits while participating in a regular educational environment as much as possible (U. S. Department of Education, 2002).

*Mainstreaming:* Mainstreaming is the process of integrating students with disabilities into general education classes in order to comply with the “least restrictive environment” mandate in the Individuals with Disabilities Education Act (Scruggs & Mastropieri, 1996).

*Middle School:* For the purpose of this study, middle school is a public school consisting of grades six, seven, and eight (Repetto et al., 2006).

*No Child Left Behind (NCLB)*: NCLB is federal legislation that holds states responsible for the education of all students within their charge. (U.S. Department of Education, 2001).

*Regional Educational Services Agency (RESA)*: The state of Georgia is comprised of sixteen districts known as Regional Educational Service Agencies (RESA). RESAs support member systems as they strive to improve the performance levels of their schools, their staffs, and their students (Georgia Department of Education, 2010).

*Related services*: Related services are the support services that schools are required to provide under IDEA to students who need them to learn. These services may include physical therapy, occupational therapy, or speech therapy (U. S. Department of Education, 2002).

*Specifically designed instruction (SDI)*: SDI refers to the teaching strategies and methods used by teachers to instruct students with learning disabilities and other types of learning disorders (U. S. Department of Education, 2002).

*Specific learning disability*: A specific learning disability (SLD) is a disorder in one of the following areas: expressive language, receptive language, written expression, reading decoding, reading comprehension, math calculation skills, or applied math calculation skills (U. S. Department of Education, 2002).

*Student with a significant cognitive disability*: A student with a significant cognitive disability is one who requires substantial modifications, adaptations, or supports in order to access the grade-level content, who requires intensive individualized instruction, and who is working toward alternate achievement standards (Browder & Spooner, 2006).

*Supported Instruction:* In supported instruction, a paraprofessional assists the general education teacher with the instruction of students with disabilities (Idol, 2006).

## **CHAPTER TWO: REVIEW OF THE LITERATURE**

This chapter is a review of the recently published literature pertaining to inclusion of special education students in general education classrooms. Because this author is researching general education teachers' perceptions, the majority of the review will focus on literature relevant to general education. Since the publication of the Education for All Handicapped Students Act in 1975, many studies have been completed on educators and inclusion. This review will focus specifically on the perception of inclusion of special education teachers', administrators', and general education teachers. Research has shown education and training, administrative support, experience, gender, age, severity of the student's disability, amount of teacher responsibility, and class size all factor into educator perceptions of inclusion. This review highlights only competent research publications from the last ten years that exhibit, reviews of literature, meta-analyses, research syntheses, and journal articles that focus on inclusion and specific factors that influence teacher perceptions of inclusion. This review is not exhaustive, due to the large body of research in the field of special education and inclusion; however, it highlights the most relevant literature related to the study.

Because of the legislation concerning students with disabilities and their education, general education teachers have had increasing interaction with these students. The Education of all Handicapped Students Act in 1975, the Individuals with Disabilities Act in 1990, its subsequent reauthorizations in 1997 and 2004, and No Child Left Behind (NCLB) in 2001 have all changed the way that general education teachers interact with

students with disabilities. Because many general education teachers are now responsible for teaching students with disabilities, their perceptions of inclusion may be altered.

### **Theoretical Framework**

The research on inclusion for students with disabilities has a consistent theme running through the studies: inclusion is beneficial for students with disabilities. Not only do students with disabilities benefit academically, they benefit socially. If one is to accept and embrace Vygotsky's Sociocultural Theory, then one must accept and embrace inclusion for students with disabilities. Valenzuela (n.d.) states Vygotsky's theory as such: higher order functions develop from social interaction. Valenzuela also states that learning is embedded in social interaction, which further supports inclusion for students with disabilities. Self-contained settings limit the amount of social interactions for students with disabilities. According to Kearsley (2009), the range of skill that can be developed with adult guidance or peer collaboration exceeds what that child can master on his or her own. Dahms et al., (2007) stated that when a student with disabilities copies a typically-developing peer, the student with disabilities will have higher performance.

Vygotskian theory explores learning, human action, and socio-cultural influences. According to Udvari-Soiner (1996), Vygotsky believed that education is intended to develop one's personality, that personality is linked to potential, that inner values are developed through teaching, that the teacher guides and directs, and that learning must correspond to individual characteristics. Vygotskian ideals help educators to see the differences in learning styles and promote differentiated curriculum. Vygotskian theories offer the fundamental basis for inclusion by showing the importance of interactions that facilitate learning. Any discussion of teacher attitudes toward inclusion should include

the teachers' attitudes toward Sociocultural Theory.

### **History of Special Education**

Special education first came into the public consciousness in the United States as a result of the enactment of Section 504 of the Rehabilitation Act of 1973. This act prevented discrimination on the basis of membership in a protected class in programs that receive federal financial assistance. This meant that students could not be denied access to public education programs solely on the basis of a disability. Section 504 was followed closely by Public Law (PL) 94-142. PL 94-142, the Education of All Handicapped Children Act of 1975, provided for the right to a free and appropriate public education for all students. This law also mandated that students with disabilities be placed in the least restrictive environment (LRE). Students could only be removed from the general education setting if it could be shown that they would not benefit from instruction in the general education setting with appropriate supports and resources (Alper, 2003).

The Education for All Handicapped Children Act of 1975 (PL 94-142) made schooling for students with disabilities mandatory. However, this education was almost always separate from children without disabilities. During the 1970s, the major focus for educators of students with disabilities was to teach functional and meaningful skills with respect to the student's chronological age. It took years for these new procedures to become part of school programs across the United States. During the mid-1980s and early 1990s, integration and inclusion were highlighted. Students were to attend their neighborhood schools and have membership status in general education classrooms.

These advances were legislated by IDEA and its reauthorizations (Browder & Spooner, 2006).

More recent legislation has built upon the Education for All Handicapped Children Act. NCLB (2001) and the IDEA (2004) make schools accountable for the learning and achievement of all students. Students with disabilities now have IEPs that align with the general curriculum. According to IDEA 1997, twenty years of research and experience demonstrated that the education of students with disabilities is more effective if access to the general education curriculum is ensured. Prior to 1997, students with disabilities were often excluded from the general education curriculum, were almost always exposed to an alternate curriculum, and were not included in statewide assessments (MacQuarrie, 2009). Their education occurred in resource rooms or self-contained rooms. Without the access to the general education curriculum, students with disabilities missed the opportunities to reach their full academic potential and were unable to achieve postsecondary goals. These same students were not held to a high level of accountability because they were not always included in statewide assessments.

Recent efforts encouraging inclusion have resulted in more and more students receiving special education services in the general education classroom (Vostal, Hughes, Ruhl, Benedek-Wood, & Dexter, 2008). Current education principles, policies, and practices reinforce the idea that all students are general education students, that there is but one general education curriculum, and that with supports, all students can make progress in the general education curriculum. All students should be considered general education students with access to, and support in, the general education curriculum.

## **Inclusion**

The history of education for students with disabilities began with an emphasis on free and appropriate public education, which opened the doors to educate all students. It later progressed to a greater focus on LRE, which assumes that the ability baseline is the same as the typically developing peer, and has arrived at access to the general curriculum (inclusion), in which all students have the opportunity to meet the same set of academic and social standards (Halle & Dymond, 2010).

The importance of inclusion has been debated and researched. If it is important for all students to have access to the general education curriculum for both academic and social reasons, then inclusion must occur. In a recent study by Wehmeyer, Lattin, Lapp-Rincker, and Agran (2003), students with disabilities who had access to the general education classroom were observed working on tasks linked to a standard during 90% of intervals, and students who did not have access to the general education classroom and were served primarily in self-contained settings engaged in tasks related to a standard during only 50% of intervals.

While inclusion includes physical integration, social integration, and access to normal activities that occur in school, inclusion does not necessarily imply that all students will spend the entirety of every day all in a general education classroom. Nor does inclusion mean that all students with disabilities will learn exactly the same things at the same level of mastery as students without disabilities (Alper, 2003). Inclusion does, however, support the belief that all children can learn, all children can thrive in an atmosphere of high expectations about what they will learn, and all children can

experience success if they are expected to learn and they have had opportunities to reach high expectations (Thompson, Quenemoen, Thurlow, & Ysseldyke, 2001).

There are those who are skeptical of the concept of inclusion. Special education teachers, general education teachers, administrators, and the public at large often argue that inclusion is too costly, that inclusion is impractical, that inclusion will lower the bar for general education students, and that inclusion is not effective. Some special education teachers have wondered if an inclusive setting is actually more restrictive than a self-contained setting (Shealey, McHatton, & Farmer, 2009). Some general education teachers are not as positive about collaboration in teaching students with disabilities. While most general education teachers support inclusion, they are against having all or no students taught in the general education classroom (Taylor, Smiley, Ramasamy, 2001). If advocates of inclusion are going to be successful in providing inclusion to students with disabilities, they must identify these arguments, expose them, and rebut them (Halle & Dymond, 2010).

According to IDEA, students with disabilities are to be educated as frequently as possible with students who do not have disabilities. Students with disabilities are to be removed from the regular education environment only when the extent of disability is so great that the student cannot be educated in regular classes with the use of supplementary aids and services. Under IDEA, the presumption is that students with disabilities will be educated alongside students without disabilities (Turnbull, 2005).

Increasingly, federal laws are mandating the inclusion of students with disabilities in the general education classroom. IDEA and NCLB both have roots in civil rights for the disabled community by ensuring equal opportunity, full participation, independent

living, and economic self-sufficiency. Several sections of IDEA 2004 restate the LRE principle. These sections ensure that the student may participate and have the opportunity to make progress in the general curriculum (Turnbull, 2005).

Unfortunately for students with disabilities, many schools never seriously consider general education classes for these students. These schools rely on the provision of IDEA that allows for removal of students with disabilities if the nature of the disability is such that education in general education classes cannot be achieved satisfactorily. Teams responsible for making this placement decision must be consistent with the law. This means discarding many of the commonly-cited reasons students are denied access to general curriculum classes, such as certain labels, functional levels, desired outcomes, administrative inconvenience, required supports, or unfamiliarity of adults with the characteristics of the students. Instead of asking which students can be excluded, schools should ask how the existing practices can be changed so that more students with disabilities can be successfully included and educated in the general education classroom (Giangreco, 2004). The principles of empowerment, emancipation, and equity embedded in the context of inclusion should be in the forefront while teachers and researchers confront dilemmas and difficulties (Argyropoulos & Nicolaraizi, 2009). This change of perspective can only happen if teacher perceptions of inclusion are overwhelmingly positive and hopeful.

### **No Child Left Behind and the Highly Qualified Teacher**

Empowerment, emancipation, and equity are not the only issues driving inclusion in today's schools. NCLB not only promotes inclusion of an increasing number of students with disabilities, it further requires all teachers to be highly qualified. To be

highly qualified, teachers must demonstrate subject matter competence in all subject areas that they teach. These legal requirements lead to increased collaborative planning and teaching among school personnel in an attempt to effectively educate students while complying with federal law (Thousand, Villa, & Nevin, 2005). The highly qualified teacher requirement is designed to ensure that all general education and special education teachers are fully qualified in both content and pedagogy (Kossar, Mitchem, and Ludlow, 2005).

NCLB is typically viewed as having four pillars. These four pillars are heightened accountability, greater flexibility, enhanced parental choice, and research-based instructional methods. Under the pillar of heightened accountability comes the principal of highly qualified teachers (Vannest, Mahadevan, Mason, & Temple-Harvey, 2009). The universal standard requires that teachers have at least a bachelor's degree, state certification or licensure, and competence in the core subject areas that they teach (Brownell, Bishop, & Sindelar, 2005).

Traditionally, there has been a difference in the way that general education teachers and special education teachers have been trained. Special education teachers have traditionally been trained around the disability-deficit model. General education teachers have traditionally been trained to teach content to groups of students. Now that there is an emphasis on access to the general curriculum, special education teachers and general education teachers must both be accountable for improved student performance. Special education teachers should be called on to apply the specialized knowledge and skills to a broader group of at-risk students, while general education teachers need to learn to teach students whose needs exceed those of the traditionally defined typical

student (Rosenberg, Sindelar, & Hardman, 2004).

Teacher shortages in special education have continually been a source of concern in regards to the education of students with disabilities, especially in rural areas. Because of their geographic location, culture, and a lack of resources, the problem of special education shortages has plagued rural areas. NCLB and the definition of the highly qualified teacher presents even more challenges for rural school districts, including difficulty in recruiting teachers and retaining teachers, and the problem of teachers being required to teach more than one subject (Kossar, Mitchem, & Ludlow, 2005). While NCLB acknowledges the important role teacher quality plays in the education of all students, the design is problematic because the availability of specialized content and special education teachers is shrinking (Brownell, Bishop, & Sindelar, 2005).

Special education teachers who do not instruct students with disabilities in core academic subjects do not have to demonstrate subject matter competency. This includes special education teachers who provide consultative services and special education teachers who provide instructional assistance within a core academic subject classroom. Thus, special education teachers who coteach are not required to demonstrate core academic subject competence in order to be highly qualified. This is the basis for the coteaching model (Wakeman, Browder, Meier, & McColl, 2007). Evidence from a study by Nichols, Dowdy, & Nichols (2006) suggests that co-teaching models are being initiated to meet the mandates of NCLB. Since NCLB was enacted, there has been an increase in inclusive, collaboratively taught classrooms. The increase in inclusion efforts related to NCLB has led to an increase in the time special education teachers have been spending in general education settings, facilitating learning and assisting in the delivery

of instruction (Shealey, McHatton, & Farmer, 2009).

### **Middle School Model**

Between 1991 and 2003, over 3,000 studies related to middle schools were published. Out of these studies, the middle school concept emerged. High-quality middle schools improve academic achievement, understand adolescence, provide a challenging and integrated curriculum, and ensure teacher preparation specifically for middle grades (Beane & Lipka, 2006). Beane and Lipka (2006) also state that effective middle schools create small teaching teams to fulfill the early adolescent's need for belonging, to improve family relationships through a support system, to create an integrative curriculum for learning through meaningful contexts, and to improve teacher preparation.

The middle school concept is based on an organization style called *interdisciplinary teaming*. The students and teachers are divided into teams with the school size being the factor that determines the size of the teams. A typical example of the team structure would include a language arts teacher, a social studies teacher, a math teacher, and a science teacher (Cornelius, 1993). These teams share the same students, the same part of the building, the same schedule, common planning time, and the same responsibility for the major portion of the curriculum. While teaming is the norm among middle schools, the structure and composition varies. Individual schools differ in their use of looping teams, multiage grouping, personalized educational plans, increased use of technology, alternate assessments, and teacher support (Rottier, 2000). Inclusion teams are also common (George, 2001). In inclusion teams, special education students and teachers are placed with the general education teachers and students.

## **Inclusion Models**

On the middle school level, there are several models that can be implemented to accommodate students with disabilities in the general education classroom. These include natural peer support, individualized support, co-teaching, supported instruction, and consultation. Each of these options is very different in the way that the general education teacher interacts with the students with disabilities.

**Natural peer support.** Same-age peers can assume responsibility for natural supports for a student with disabilities. This could include assistance getting from class to class, assistance remembering materials, or assistance completing assignments. Peers can take notes, facilitate communication, or serve as a role model. Additionally, peers can expand a student's social network by including the student in free time activities, clubs, or other social events (Thousand, Villa, & Nevin, 2005).

**Individualized support.** Individualized support involves one or more adults providing support for one student for most or all of the day. This support is often given by paraprofessionals. The role of the individual providing support is to prompt peer support, support other students, facilitate small group learning, and differentiate support. The goal is to eventually fade out the need for individualized support (Thousand et al., 2005).

**Consultation and stop-in support.** The consulting teacher model is a form of indirect special education service in which the special education teacher consults with the general education teacher, but the students with disabilities are actually taught by the general education teacher. These students have no contact with the special education teacher. Often, special education teachers offer consultation services in addition to their

full time assignment as a direct instruction teacher (Idol, 2006). The consultative teacher meets regularly with the classroom teachers to keep track of a student's progress, to adapt or supplement materials, and to problem solve (Thousand et al., 2005).

**Supported instruction.** In supported instruction, an instructional assistant, or paraprofessional, accompanies students with disabilities to general education classes. This is one of the first options that school teams choose for providing assistance to general education teachers. In some cases, these paraprofessionals provide assistance to a single student and remain with the student throughout the school day (Idol, 2006).

**Coteaching.** In the co-teaching model, special education teachers work together with general education teachers in a variety of arrangements, but in the same classroom, to provide education for all students (Idol, 2006). Special education teachers have long advocated for students with disabilities to be educated alongside their non-disabled peers. Coteaching is the most likely vehicle to accomplish the goals of increasing instructional options, enhancing the participation of students with disabilities in general education classrooms, and enhancing the performance of students with disabilities (Nichols, Dowdy, & Nichols, 2006)., Coteaching also improves the experience of inclusion for everyone in the classroom (Gately & Gately, 2001). Coteaching draws on the strengths of both the general education teacher, who is the content specialist, and the special education teacher, who understands the unique learning needs of the individual student. Not only are the students with disabilities taught the general education curriculum by a general education teacher, they have the help and support of the special education teacher, resulting in greater access to that curriculum (Kloo & Zigmond, 2008)

Kloo and Zigmond (2008) have identified five theoretical models of coteaching.

- *One teaching and one assisting* requires the general education teacher to retain the instructional lead while the special education teacher provides assistance and support.
- *Station teaching* involves dividing the content and the physical space of the classroom into zones, with each teacher responsible for a zone.
- *Parallel teaching* involves two teachers simultaneously delivering instruction to half of the students. Some of the variations of parallel teaching are split class, rotation, cooperative group monitoring, experiment monitoring, learning style focus, and supplementary instruction (Thousand et al., 2005).
- *Alternative teaching* divides the students into one large group and one small group. The general education teacher provides instruction to the larger group while the special education teacher works with the smaller group of students in a more intensive setting.
- *Team teaching* involves parity between the teachers in both planning and instruction. The teachers alternate the roles within the individual lesson.

Coteaching is a challenging model that requires flexibility, respect, willingness to change, shared responsibilities, reliance, and strong interpersonal skills (Argyropoulos & Nikolarazi, 2009). Co-teaching topics that are commonly dealt with include instruction, time for planning and logistics, behavior management, communication, and evaluation of success (Thousand et al., 2005). A study by Damore and Murray (2009) found that special education teachers and general education teachers both expressed a need for professional development opportunities, increased time for

planning and communicating, and clear expectations for performance. These factors reveal other shortcomings in the co-teaching process. Sometimes, special education teachers in coteaching environments have been tasked with performing paraprofessional-level tasks and with providing parallel instruction and instruction only to the students with disabilities in the classroom. Administrators, general education teachers, special education teachers, and preservice training professionals must critically examine the manner of teaching collaboration to ensure that the partnership fully utilizes the skills of each teacher (McKenzie, 2009). In a study by Shealey, McHatton, and Farmer (2009), special education teachers expressed that the role of coteaching was distressing because the general education teachers did not understand the value that a special education teacher could bring to the classroom.

There are a number of benefits associated with coteaching, including decreased referrals to special education, increased student achievement, fewer behavior problems, decreased paperwork, an increased number of students in gifted and talented programs, and decreased behavior referrals. In addition to benefits for the students, teachers reported feeling happier and less isolated (Thousand et al., 2005).

In order for collaboration to be successful, institutions and individuals must take responsibility on three levels. Thousand et al., (2005) have outlined a triangle of responsibility for collaborative planning. First of all, teacher preparation programs must take on the challenge of teaching effective collaborative planning. Secondly, school districts must provide ongoing professional development on collaborative planning. Lastly, individual teachers must take the initiative to keep abreast of emerging knowledge on coteaching, and to promote collaborative planning and practice. Likewise,

Mastropieri et al., (2005) found that the specific variables of academic content knowledge, high-stakes testing, and coteacher compatibility interact strongly with coteaching success. Other practices that affect the perception of successful coteaching include creating positive learning climates, providing active learning during instructional time, setting and maintaining high expectations, allocating time for planning, and finding creative ways to evaluate student progress (Dieker, 2001).

### **Teacher Perceptions**

The most important factor for successful inclusion is the change in the perceptions of general education teachers toward students with disabilities (Antonak & Larrivee, 1995). Researchers have found that a correlation exists between positive attitudes of teachers regarding inclusion and the amount of support that they get from administration. These same general education teachers are also able to acquire more resources, have smaller class sizes, and gain more time for preparation because of inclusion (Talmor, Reiter, and Feigin, 2005). General education teachers seem to be generally positive about the philosophy of inclusion, but negative about the implementation (Taylor, Smiley, & Ramasamy, 2001).

A key element in a successful inclusion program is the positive attitudes of teachers (Clampit, Holifield, and Nichols, 2004). Special education teachers have been found to be more supportive of inclusion than general education teachers. However, since general education teachers themselves are the ones who implement inclusion, it is important to examine teachers' understandings and feelings regarding inclusion (Taylor, Smiley, & Ramasamy, 2001). General education teachers' positive or negative attitudes toward students with disabilities are the most important factor for success or failure of any

attempt at inclusion (Smith & Leonard, 2005).

A landmark study by Larrivee and Cook (1979) identified three factors underlying teacher attitudes toward inclusion. First, the general education teacher has academic concerns, including the possible negative educational consequences. Secondly, the general education teacher has administrative concerns over issues of support. Lastly, the general education teacher has pedagogical concerns about the training and experience necessary to educate students with disabilities. Previous research has found several variables which influence individuals' attitudes towards inclusion (Jones, Ouellette-Kuntz, Vilela, & Brown, 2008).

### **Special Education Training and Special Education College Courses**

By far, the most oft-mentioned factor that influences general education teachers' perceptions of inclusion is whether or not the general education teacher has had special education training or special education coursework. Instructional strategies for students with disabilities must be taught to teachers. This training often comes in the form of courses that special education teachers have taken but are rarely offered to general education teachers. In many cases, general educators do not feel that they have had the necessary training to teach students with disabilities (Hines, 2001).

Special education coursework focuses on the academic instruction of students with disabilities, management of students with behavior problems, use of technology, and knowledge of special education law. These are all skills that are necessary for a teacher to have if they are going to teach students with disabilities (Crockett, 2002). However, in a study by M.K. Smith and K.E. Smith (2000) general education teachers related emphatically that their undergraduate coursework had done nothing to prepare them for

teaching students with disabilities in an inclusive setting. Being taught the knowledge and skill set to work with students with disabilities has been shown to lead to more positive teacher attitudes toward inclusion. Teachers need systematic and intensive training, either as part of certification programs or as ongoing, intensive in-services (Scruggs & Mastropieri, 1996). This was echoed through teachers' experiences by Leatherman (2007), who noted that the teachers interviewed felt they needed more education and training to make their inclusive classrooms more successful. Avramidis, Bayless, and Burden (2000a) found the number of professional development courses was significantly related to the teachers' perceptions of inclusion (Ernst and Rogers, 2009). General education teachers seem to develop more positive feelings about including students of all abilities in the mainstream classroom when they have taken more special education courses, have had more in-service training revolving around special education issues, and have had some experience teaching in an inclusive environment.

A multitude of studies on teacher attitudes toward inclusion have shown that positive teacher attitudes appear related to the amount of special education training (Bruns & Mogharreban, 2007; Conderman & Johnston-Rodriguez, 2009; Rose, Kaikkonen, & Koiv, 2007; Subban & Sharma, 2006; Van Reusen et al., 2001). A study by Shade and Stewart (2001) supported the idea that even a single course can significantly change preservice teacher attitudes toward inclusion. Heiman (2001) also supports the idea that at least one special education course is a factor in teachers' positive perceptions of inclusion. In fact, research conducted on elementary school teachers in three Southwestern United States school districts found overwhelmingly negative attitudes toward inclusion, which were the result of insufficient training (Hammond &

Ingalls, 2003).

General education teachers have emphasized to researchers the importance of training in reducing fears and apprehensions, correcting inaccurate assumptions, and garnering support for the program (Janney et al., 1995). Not only do teachers need training in inclusive practices in order to meet the needs of the students, but they also must have their own needs met (Downing & Hardin, 2007). Agbeyega (2007) found that teachers perceived their professional knowledge and skills were inadequate to effectively teach students with disabilities. Because of this lack of knowledge and expertise, the teachers believed that they were contributing to a reduction in the academic success of their schools. Conversely, Mock and Kauffman (2002) state that the level of knowledge and expertise is irrelevant because there is no amount of training that will prepare teachers to meet the needs of all students effectively and competently. The researchers liken this expectation to the expectation that a general practitioner would be able to meet all of a patient's medical needs.

Several studies have been undertaken involving preservice teacher attitudes toward inclusion (Avramidis, Bayliss, & Burden, 2000b; Boling, 2007; Campbell, Gilmore, & Cuskelly, 2003; Hastings & Oakford, 2003; Henning & Mitchell, 2002; Mdikana, Ntshangase, & Mayekiso, 2007; Romi & Leyser, 2006; Shade & Stewart, 2001; Sharma, Forlin, Loreman, & Earle, 2006; Spandagou, Evans, & Little, 2008; Sze, 2006). Henning and Mitchell (2002) discovered that bringing together preservice general education teachers and preservice special education teachers for a module on disabilities and inclusion improves the attitudes of the preservice teachers. Koay, Lim, Sim, and Elkins (2006) also found that preservice teachers who attended a course in special education

were significantly more positive about inclusion than those who did not attend a course. Stenton and Elkins (2004) established that preservice teachers moved towards a more positive attitude regarding the benefits of inclusion following participation in a course on the topic of inclusive special education.

One program, Project Inclusion, at Southeastern Louisiana University, provided financial support for general educators willing to participate in a college class to acquire information and strategies for teaching students with disabilities. The general education teachers reported increased knowledge in special education issues, and the research data indicated an increase in positive attitudes toward inclusion (Coombs-Richardson, & Mead, 2001). Another initiative documented by Golder, Norwich, and Bayliss (2005) was designed to enhance the knowledge of British trainee teachers and to equip them to meet the needs of all students, including those with special educational needs. In this program, the trainees worked intensively one-on-one with a student with disabilities in a way that offered them a chance to utilize systematic strategies for individualized teaching.

One idea that stands out from the study by Sharma, Formin, and Loreman (2008) is that the content and the pedagogy of a teacher preparation program are by far the most significant predictors of preservice teachers' attitudes, sentiments, and concerns about inclusion. These researchers found that preservice teachers who have contact with persons with disabilities, who are taught local policies and legislation supporting inclusion, and who complete assignments dealing directly with their concerns are more likely to feel positively about inclusion of students with disabilities compared with their counterparts who lack such an education.

However, an introductory course in disabilities would be inadequate in changing the perceptions of some teachers toward inclusion (Dupoux et al., 2005). Garriott, Miller, and Snyder (2003) found that preservice teachers believe that students with mild disabilities are best served in a special education classroom. These preservice teachers believe that students with disabilities need more individualized attention and also that they might distract typical students from learning. They also voiced the concern that these students would demand increased teacher attention and detract from the teacher's time for typical students. Cook (2002) also found that preservice teachers reported that their teacher preparation experiences were inadequate. Likewise, Van Reusen et al., (2001) and M.K. Smith and K.E. Smith (2000) caution administrators against providing one shot workshops. Teachers need ongoing staff training that focuses on development of specific procedures, along with the expectations and components of inclusive classrooms. One study conducted by B.G. Cook, Tankersley, L. Cook, and Landrum (2000) found that teacher attitudes toward students with disabilities who were included in general education settings were not changed by the amount of special education coursework.

For inclusion to work, all parties involved must be more aggressive in how they approach preparation of general education teachers. Course requirements should be adjusted for both undergraduate and graduate degrees, resulting in a greater number of teachers prepared to teach in inclusive classrooms. Administrators should provide continuing in-service training to ensure that general education teachers are able to support students with disabilities in the general education classroom (Snyder, 1999). Weiner (2003) suggests that professional development should include continuous learning, reflection, theorizing on how to best meet the needs of the students, and ongoing

collaboration. A study by Voltz (2001) suggests that special education teachers in professional development schools are underutilized in preparing preservice teachers. The contributions of special education teachers should be utilized in a very deliberate way to train these preservice general education teachers.

Ford, Pugach, and Otis-Wilborn (2001) suggest five expectations of general education preservice teachers regarding special education. These expected outcomes are: a commitment to teaching the full range of learners with disabilities, having an understanding of disabilities, being prepared to anticipate high-priority needs, being prepared to work within an inclusive classroom, and demonstrating political, social, and historical awareness of special education. Rarely do preservice teachers indicate that these outcomes are being met in teacher preparation programs.

One recent innovation to support inclusion among general education teachers is the proposal of unification of general education and special education teacher preparation programs. Hsien (2007) advocates the unification of preservice teacher preparation programs in order to better support teachers in the demanding inclusive classroom environment. In this format, unification would bridge existing gaps and concerns while demystifying the subjects of disabilities and inclusive practices. For example, Project ACCEPT (Achieving Creative & Collaborative Educational Preservice Teams) represents an initiative at Northern Illinois University that joins special and general education preservice teachers and features enhanced curriculum and field experiences. The participants receive training in assistive technologies, functional behavioral assessments, and instructional accommodations (Van Laarhoven, Munk, Lynch, Bosma, & Rouse, 2007).

Agran and Alper (2000) found that general education teachers need increased coursework emphasizing individualized instruction and classroom accommodations for students with disabilities. General education teachers must know the curriculum content, but they are also responsible for accommodations and modifications. It is not enough for a general education teacher to have one special education course. Most research on inclusion suggests that general education teachers need more special education coursework to effectively manage an inclusive classroom. Nichols, Dowdy, and Nichols (2010) surveyed 24 school districts concerning the amount of preparation that their teachers received prior to implementing coteaching. Their results indicated that coteaching models are generally initiated without proper staff development for general education teachers, special education teachers, or school administrators. Not surprisingly, the researchers concluded that coteaching was being used primarily to satisfy NCLB, not for quality instruction of students. One simply cannot expect to put a student with disabilities in a general education classroom and receive the same level of instruction. According to Palley (2006), classes must be smaller and general education teachers must receive additional training.

**Instructional strategies.** Because students with disabilities are continuing to be served in the general education classroom, it is important for all educators to learn to accommodate diverse populations of students through the use of effective instructional strategies. The infrequent use of instructional strategies can lead to a problematic cycle with fewer quality learning opportunities producing lower achievement, resulting in the reinforcement of negative teacher attitudes (Van Reusen et al., 2001). Instructional strategies are also often paired with social support strategies such as grouping students,

group problem solving, and academic assistance (Pavri & Monda-Amaya, 2001). Lee et al., (2006) studied a number of these instructional and learning strategies such as graphic organizers, shadowing, verbatim notes, semantic maps, mnemonics, chunking, questioning, and visualizing strategies. They found positive outcomes for students with intellectual and developmental disabilities, which suggests the use of these strategies results in increased access to the general education curriculum. These positive outcomes are less likely to occur when the strategies are not being taught. The findings of one study (Wehmeyer et al., 2003) showed that there were very few instances in either inclusive or noninclusive settings in which students with mental retardation were being taught strategies to enable them to learn more effectively in the context of the general curriculum. Teachers must be taught these instructional and learning strategies in order to effectively implement them in the inclusive classroom.

Teachers are responsible for a number of steps to ensure that students with disabilities who are being taught in the general education classroom are supported to the maximum extent to help them progress in the general curriculum. Wehmeyer et al., (2003) recommend the school-wide implementation of quality instructional strategies that incorporate principles of universal design. Such universal design features include adaptations to curricular materials that modify content presentation and response. These curriculum adaptations include using materials that present information in graphic form, using digitized text that allows for increasing font size or color, and using audio and video. Utilization of learning strategies, such as advance organizers and presenting information about main ideas in the curriculum, are additional ways to provide curriculum adaptations. Modifications to students' responses include allowing students

to report their knowledge using a wide array of products, from traditional written formats to video products. Once again, these strategies must be taught to the teacher in order for the teacher to effectively use them with the students.

General education teachers who have taken special education courses use instructional strategies more often, and their use of strategies continues to increase as the number of courses increases (deBettancourt, 2005). This training in instructional strategies is important as general education teachers are often unaware of the distinction between students with disabilities and low-performing students. Lee, Wehmeyer, Soukoup, and Palmer (2010) found that curriculum modifications were used primarily in general education classrooms by the special education teacher. The researchers found that it would be necessary to disconnect the presence of the special education teacher and the use of curriculum modifications if students with disabilities are to succeed in the general education classroom. In order for the use of curriculum modifications to spread to the general education teachers, intensive training is needed.

In their 2002 study, McLesky and Waldron discovered two main implications of curriculum modifications for teacher education. First of all, it is not feasible to teach highly specialized special education strategies to general education teachers and expect them to incorporate the strategies into the general education classroom routine. The skills taught must be highly adaptable in order to be used effectively. Secondly, teachers should be explicitly taught to collaborate in order to develop, implement, and maintain inclusion. Vaughn, Elbaum, and Boardman (2001) also suggest that teachers of students with disabilities learn instructional strategies that support the students' use of clear directions, structured activities, and frequent monitoring.

Mastropieri and Scruggs (2001) discuss which teaching variables are positively associated with successful inclusion. According to the researchers, the teachers must exhibit skills targeted to the needs of individual students, and they should look to special education teachers for the most effective instructional strategies for students with disabilities. Patterson (2005) identifies instructional strategies that will improve student outcomes. These instructional strategies include assessing each student's present levels of performance, defining the new skills to be learned, designing instructional materials that provide guided and independent practice, using mediated scaffolding, providing systematic consequences, incorporating fluency-building activities, incorporating generalization and maintenance strategies, and conducting direct and frequent measurements of student performance. Agran and Alper (2000) also found that general education teachers who were skilled in instructional strategies used them to advance curriculum and instruction. These positive instructional strategies include grouping options, self-selection of peer tutors, and the opportunity to practice the skills that have been learned. In order for inclusion to be successful and positively influence teacher attitudes, the special education teacher and the general education teacher must be able to employ effective instructional strategies (Voltz, Brazil, & Ford, 2001). Although most general education teachers do not realize instinctively recognize the host of challenges that must be addressed with students with learning disabilities, training in instructional and learning strategies will help to bridge this gap (DeSimone & Parmar, 2006).

**Disability awareness.** According to DeSimone and Parmar (2006), teachers surveyed felt that their preservice teacher preparation courses did little to prepare them for inclusive settings. The required special education courses were simply survey type

courses that gave a general overview of special education and included broad descriptions of disabilities. The authors suggest that preservice teacher preparation programs be restructured to increase the amount of information on disability awareness. Similarly, the authors suggest that workshops be revamped to address more than the few high-profile categories such as Attention Deficit Hyperactivity Disorder (ADHD). The teachers surveyed by Avramidis et al., (2000a) also asked for preservice courses on how best to deal with specific learning difficulties and how best to manage behavior by students with emotional and behavioral needs.

Tam, Seevers, Gardner, and Heng (2006) interviewed general education primary school teachers in Singapore. One of the main concerns was the lack of disability awareness. Teachers were unaware of effective practices to use with students with disabilities, unsure of what to expect from these students, and unsure how to help the student integrate into the classroom. These teachers requested support on disability awareness.

### **Administrative Support**

According to Mastropieri and Scruggs (2001), teacher attitude surveys show that administrative support is important to the success of the program in virtually every area of educational practice. Inclusion is no different. Administrative support is important for all successful inclusion efforts. The administrators' positive attitudes toward the inclusion effort are imperative for success. DeSimone and Parmar (2006) established that teachers in schools with higher levels of administrative support were significantly more supportive of inclusion; furthermore, a lack of administrative support contributed to emotional exhaustion and reduced the teacher's sense of accomplishment. Teachers have identified

a number of concerns linked to administrative support that result in a more negative attitude toward inclusion. Those concerns are insufficient planning time, a lack of personnel and material resources, and a paucity of policy guidance (Scruggs, Mastropieri, & McDuffie, 2007). While administrators need to acquire their own set of special education skills, teachers need to be provided with administrative leadership and the accompanying resources (such as material, personnel, and time for planning and collaboration) as well as clear policy guidance (Van Reusen et al., 2001). The teachers interviewed by Leatherman (2007) confirmed this need of administrative support. All of the researchers' participants noted that administrative support was a contributing factor to the success of inclusion. Idol (2006) noted that teachers in a school that employed a *proinclusion* administrator showed more positive perceptions of inclusion than the same teachers a year before when the proinclusion administrator was not present. Unfortunately, administrators are not always trained in specific special education topics, which can result in negative perceptions toward inclusion (Praisner, 2003).

Burstein, Sears, Wilcoxon, Cabello, and Spagna (2004) documented a model of administrative change in attitudes for inclusion. In the Model for Change, administrators build a commitment to change, plan for change, prepare for change, and support change. This is done through a series of steps involving observing inclusive models, developing a vision of inclusive practices, developing a strategic plan, participating in professional development, allocating resources, and sustaining administrative support by repeatedly evaluating the steps and the program.

Abbot (2006) interviewed 28 head teachers in Northern Ireland about their perceptions of inclusion. Inclusion to these head teachers meant valuing staff, developing

a spirit of collaborative working, encouraging children to be accepting of disability, involving parents and community, and anticipating the long-term needs of students. The head teachers agreed on the main approaches to developing inclusion in the classroom- individual targets must be set for student learning and appropriate resources must be identified. The head teachers also believed that for inclusion to be successful, the teachers needed support with assessment, curriculum adaptation, planning, reading support, and review.

School administrators are faced with the combined tasks of promoting forms of teaching and learning that enable diverse students to succeed, and also molding school cultures that embrace diversity. Administrators' efforts should include making and promoting inclusive cultures and practices in schools while building positive relationships outside those schools (Riehl, 2000). The Council for Exceptional Children (CEC) has developed a list of competencies that administrators must have in order to fully support special education. These competencies include knowledge of the philosophical, historical, and legal foundations of special educations, understanding characteristics of learners, assessment, diagnosis and evaluation, instructional content and practice, planning and managing the teaching and learning environment, managing student behavior and social interaction skills, communication and collaborative partnerships, and professionalism and ethical practices (Crockett, 2002). Principals or administrators are expected to lead, manage, and implement programs for all students under their purview (Burke & Sutherland, 2004), communicate the mission, manage the curriculum, supervise teachers, monitor student progress, and promote a positive and accepting instructional climate (Cruzeiro & Morgan, 2006). Administrators who exhibit

these competencies can influence the perceptions of inclusion in their schools. For inclusion to be successful, general education teachers and special education teachers must have sustained professional interactions. This can only be done when administrators are the facilitators of a collaborative vision. These administrators should empower teachers to collaborate and make decisions pertinent to successful inclusion (Smith & Leonard, 2005).

**Material resources.** Teacher perceptions of inclusion are influenced by the availability of material resources in the school. Ernst and Rogers (2009) found that teachers' access to support materials and resource staff influenced the affective and behavioral components of their attitudes positively. This finding suggests that teachers perceive that they feel and behave more positively when instructional resources are available (Ernst & Rogers, 2009). In a study by McLesky, Waldron, So, Swanson, and Loveland (2001), two times as many noninclusion teachers as inclusion teachers felt that their school lacked the necessary resources to practice successful inclusion. This perceived lack of support leads to negative perceptions of inclusion among general education teachers. Damore and Murray (2009) found that teachers in urban elementary schools placed a high value on resources. While this sounds obvious, teachers need adequate curriculum materials and equipment appropriate to their students' needs (Avramidis et al., 2000b; Carter & Hughes, 2006; Scruggs & Mastropieri, 1996). Agbenyega (2007) found that teachers' negative views on inclusion stemmed, in part, from a lack of material resources, including inaccessible classrooms, overcrowded classrooms, and lack of instructional materials. A study by Abbot (2006) found the lack of material resources to have an impact on attitudes toward inclusion. Specialized items

such as wheelchairs were lacking, and facilities such as conference rooms were not available. This was distressing to the teachers, administrators, and parents. Without access to the necessary specialized items needed for successful inclusion, teacher perceptions are negatively affected.

**Personnel resources.** The effective involvement of additional people may ease the pressure of the increased load of students with disabilities in the classroom. Conversely, lack of appropriate personnel can be partially responsible for negative teacher perceptions of inclusion (Carter & Hughes, 2006; M.K. Smith & K.E. Smith, 2000). Results from a study by DeSimone and Parmar (2006) showed overwhelmingly that the single most valuable resource for general education mathematics teachers in an inclusive classroom was other people, specifically the special education teachers, paraprofessionals, and guidance counselors. In a study done by Burke and Sutherland (2004), teachers believed that they had more adequate material support than adequate personnel support. Mastropieri and Scruggs (1996) discovered the same material-support discrepancy. Teachers need additional paraprofessional or special education personnel in order to carry out effective inclusion programs. However, merely adding personnel to the classroom is not enough. Another aspect of appropriate use of inclusion personnel is that the personnel need to be constant and well trained (Avramidis et al., 2002b).

In the discussion by Jull and Minnes (2007), it is noted that the presence or absence of additional staff support has not been addressed in previous research. Their research shows that there is a significant relationship between perceived quality of support and positive attitudes toward inclusion. According to the researchers, any measure of teacher attitudes toward inclusion should include the level of support within, or outside of, the

regular classroom. One study by McNally, Cole, and Waugh (2001), showed that teachers see additional support as an important factor for the success of inclusion in the classroom. These researchers were surprised, however, to find that the teachers surveyed perceived no difference in the amount of support that students with mild disabilities should receive and the amount of support that students with severe disabilities should receive.

Jull and Minnes (2007) studied the perceptions of inclusion as related to the level of support provided to students with special needs. They found that teachers who perceived the student to be well supported were more likely to favor continuing inclusion for those specific students. Personnel support allows teachers to work individually with students with disabilities, plan for appropriate curriculum modification, and develop suitable resources. These supports provided by the schools help the teachers to better integrate students with disabilities into the general classroom setting (Tam et al., 2006).

**Collaboration.** Professional literature regarding inclusion consistently addresses the importance of collaboration. Collaboration is defined as problem solving by a group of colleagues who contribute their own knowledge and skills and participate in shared decision making to accomplish one or more common goals (Thomas, Correa, & Morsink, 2001). Collaboration requires that the general education teacher and the special education teacher work together to plan instruction. This model draws on the curriculum and content expertise of the general education teacher and the disability knowledge and learning strategies skills of the special education teacher (M.K. Smith & K.E. Smith, 2000). It is a shift, however, that requires a sharing of the learning environment, a concept foreign to the traditionally trained teacher (Hines, 2001).

McLesky and Waldron (2003) found that effective collaboration is the cornerstone of successful inclusion. However, deBettancourt (1999) found that general educators involved in inclusion were able to spend less than one hour a week with the special educators. DeBettancourt's results suggested that an increase in collaboration would lead to an increase in general educators' use of instructional strategies, thus benefiting the students with disabilities. Austin (2001) and Salend and Dulhaney (1999) suggested that administrators offer training in collaboration to teach educators the skills necessary for working together as a cooperative team. Overwhelmingly negative perceptions of inclusion were found in a study of elementary school teachers in three Southwestern school districts (Hammond & Ingalls, 2003). The study found that one of the issues facing the teachers was inadequate levels of collaboration.

Carter and Hughes (2006) found that "limited time to collaborate" was the most significant barrier to successful inclusion by general education teachers, indicating that it is vital that administrators prioritize collaboration (page number for the direct quote). Collaboration time should reflect an administrative commitment to inclusion rather than just reflecting teacher creativity in juggling time demands (M.K. Smith & K.E. Smith, 2000). Wolpert (2001) found that the most common request of general education teachers working with students with Down Syndrome was for more collaboration time among education professionals, including the special education teacher. These general education teachers felt that they needed more planning time to be built into the scheduling. Lusk, Thompson, and Daane (2007) showed that favorable perceptions of inclusion occurred when there were collaborative efforts between the special education

teachers and the general education teachers. Both sets of teachers bring something unique to the collaborative pair.

Fink (2004) shared his experiences with successful inclusion. He suggested that each teacher leaves his or her egos in the hall and allow each other to share the spotlight of teaching. Each teacher should maintain a high energy level 100% of the time. There should be neither distinction between special education students and general education students, nor the workload for the teachers. Finally, Fink suggests that the teachers talk continuously among themselves about improvements and modifications that will benefit the students.

The problems with collaboration reported by teachers have included the inability to find the time to collaborate, and the lack of skills to collaborate effectively (Carter, Prater, Jackson, & Marchant, 2009). Administrators are important in helping teachers prepare for inclusive services and providing resources to support professional collaboration by the effective handling of teacher's time, schedules, and personnel resources (M.K. Smith & K.E. Smith, 2000). Valeo (2008) concluded that teachers felt that administrators should be responsible for facilitating collaboration and communication between the general education teacher and the special education teacher. King and Youngs (2003) found that some general educators viewed the special education teachers as unprepared and unqualified. These are issues that must be addressed for collaboration to be meaningful and successful.

Collaborative problem solving should be actively taught to special education teachers and general education teachers. Voltz et al., (2001) recommend the 5-step CLASP model of collaborative problem solving:

1. The teachers first clarify the problem by developing a problem statement that is specific enough for common understanding.
2. The teachers then look at the influencing factors and identify as many underlying causes as possible and identify as many aspects of the problem as they can.
3. Then the teachers actively explore intervention options by brainstorming strategies that may positively impact the problem.
4. The teachers select the best option.
5. The teachers implement the plan.

Other collaborative strategies that positively affect inclusion are MAPS (Making Action Plans), Circle of Friends, and Palminder (Killoran, 2002). These are person-centered planning collaborations that focus on the student and the team of individuals responsible for the student. All of these collaborative strategies are founded on the belief that a positive attitude about the ability of the student and the teacher is necessary for successful inclusion. Most importantly, educators must realize that collaborative skills cannot be assumed to exist. These valuable skills, such as communication and group interaction, must be nurtured and developed (Friend, 2000). According to Florian (2008), teachers need to learn new collaboration strategies. Preservice teachers need opportunities to engage in collaborative teaching. The point of educating teachers to teach inclusively is to ensure that teachers have a greater awareness of the educational and social issues that can affect learning, and that teachers have developed strategies to support and deal with such issues.

**Policy.** Both district-level and building-level administrators implement policies that have been shown to be factors in the attitudes of teachers toward inclusion. Knowing

the origin, implementation, and relevance of the special education laws is the responsibility of all classroom teachers (Patterson, 2005). Roach and Salisbury (2006) noted that teachers, principals, and other educators need to understand the connection between their work and the federal, state, and local policies affecting inclusion. All parties are then in a better position to offer feedback concerning the implementation of policies. By developing inclusive philosophies, policies, structures, and practices, school districts can provide the foundation for both expectations and practices (Ruef, 2003).

Crawford and Tindal (2006) surveyed teachers and administrators concerning their knowledge and beliefs about the inclusion of students with disabilities in statewide assessments. These researchers found that though the teachers were familiar with the policies, they were not interested in following the policies, showing that familiarity with policy does not always ensure positive or beneficial beliefs or attitudes. Subban and Sharma (2006) found that teachers with knowledge of the federal policy on inclusion held more positive attitudes toward inclusive education. This finding indicates that there is a difference between teachers complying with the letter of the law and teachers following the spirit of the law.

School districts should help ensure the success of inclusion by involving all stakeholders in developing a mission statement that articulates the district's position and vision relating to inclusion of students with disabilities in general education classrooms (Salend & Dulhaney, 1999). These researchers challenged school administrators to support the use of proven practices and to show leadership that will improve teacher attitudes and contribute toward positive student attitudes (Boscardin, 2007). District administrators can promote positive attitudes through providing support and leadership

(Janney et al., 1995). A *no choice* policy, in which inclusion is forced, has shown an increase in positive student attitudes. There is a necessity to adopt a gradual approach to the implementation of inclusion, requiring careful planning, monitoring, and review (Avramidis & Norwich, 2002). An understanding of policy helps teachers avoid lawsuits, enhances the educational experience, and moves the system toward the development of the school and community (Kluth, Villa, & Thousand, 2002).

The Hamilton-Wentworth Catholic District School Board near Toronto, Canada is an award-winning model of true inclusion for all students in general education classes. The district set policy on how to achieve true inclusion and promoted the concept. This policy had philosophical underpinnings that included the belief that all children should be considered exceptional. The district then employed staff that supported this philosophy. By focusing on two primary strategies, the district has been able to achieve its goals. The primary strategy of the district is to have every student attend regular classes in community schools. The second fundamental strategy consists of identifying every student's strengths. Consequently, teachers in this district have positive perceptions about the success of implementing inclusive practices (Killoran, 2002).

Throughout the world, people with disabilities, their families, their teachers, and their advocates are working towards redesigning legislation to promote inclusion, not only in schools, but in the community as well. Constructive engagement of policy makers, administrators, teachers, parents, and students can produce public policy that promotes inclusive communities and improves the quality of life for persons with disabilities (Gardner & Mathis, 2009).

## **Other Factors Affecting Perceptions of Inclusion**

Teacher experience (whether special education or general education) in the classroom, grade level taught, and level of education are all factors that affect the perceptions of teachers toward inclusion.

**Time in teaching profession.** There is a disparity of information in the studies conducted that relate time in the teaching profession to perceptions of inclusion. Dupoux et al., (2005) found that teaching experience is less important in predicting teacher attitudes than other factors. Other researchers have found no significant relationship between teacher perceptions of inclusion and years of teaching experience (Heiman, 2001; Koay et al., 2006; Van Reusen et al., 2001). Jobe et al., (1996) surveyed general education teachers and found no significant difference in the attitudes of teachers with less than six years' experience when compared with the attitudes of more experienced teachers. Brady and Woolfson (2008), however, found that teachers with more than fifteen years of experience had more negative attitudes toward students with disabilities than teachers with less than fifteen years' experience. Kalyva, Gojkovic, and Tsakiris (2007) also found that teachers with more teaching experience were more likely to have negative perceptions of inclusion.

Despite experienced teachers' negative attitudes toward students with disabilities, DeSimone and Parmar (2006) determined that experienced teachers were more comfortable adapting instruction in inclusive settings than teachers with fewer years of experience. Avramidis and Norwich (2002) reached the same conclusion when conducting their literature review. Leatherman and Niemeyer (2005) found that teachers with positive attitudes toward inclusion had previous positive experiences in inclusive

classrooms. The positive perceptions of these teachers were transferred to the preservice teachers who were a part of the inclusive classroom. Avramidis et al., (2000a) also found that teachers that had active experience with inclusion held more positive attitudes toward inclusion than teachers from randomly-selected schools. Thus, teaching experience may or may not have an effect on a teacher's attitude toward inclusion.

**Grade level taught.** Studies have found that there is a relationship between the grade level taught and the teacher's perception of inclusion. Elementary schools tend to focus on student development and are more positive toward inclusion. It is generally believed that an emphasis on content is less compatible with inclusion than a focus on student development (Avramidis & Norwich, 2002). Because secondary teachers lack training and skills for inclusion, they tend to exhibit more negative attitudes (Scruggs et al., 2007). Kaoy et al. (2006) found that primary school teachers were significantly more positive in comparison with their secondary counterparts.

**Level of education.** Dupoux et al. (2005) found that teachers with advanced degrees indicated more favorable perceptions of inclusion. Preservice teachers in India were surveyed concerning their attitudes toward inclusion. Participants with postgraduate qualifications were more positive about implementing inclusive practices in their classrooms compared to those participants with an undergraduate or diploma level qualification (Sharma, Moore, & Sonawane 2009).

Forlin, Loreman, Sharma, and Earle (2009) surveyed preservice teachers in Singapore, Hong Kong, Australia, and Canada and found conflicting results. Preservice teachers who possessed a matriculation from school or a diploma exhibited no significant differences in their attitudes toward inclusion. Those who had an undergraduate degree

had a significantly more positive attitude, but those with a postgraduate degree indicated significantly less positive attitudes. Additionally, DeSimone and Parmar (2006) authored a study of middle school mathematics teachers' beliefs about inclusion, which asserted that education level had a minimal effect, or no effect at all. Koay et al. (2006) and Heiman (2001) also found that there was no significant difference in relation to a teacher's level of education and their perceptions of inclusion.

### **Demographics**

Gender and age have both been researched as factors in teacher perceptions of inclusion. These studies have been inconsistent in their findings. Some studies have found no significant relationship between teacher perceptions and gender (Alghazo, Dodeen, & Algaryouti, 2003; Koay et al., 2006; Treder, Morse, & Ferron, 2000; Van Reusen et al., 2001 ;). However, Jobe et al. (1996) found that males were significantly more confident in their ability to teach students with disabilities. A study by Ernst and Rogers (2009) reported that male teachers also attested to having more positive feelings about inclusion than did their female counterparts. While this finding is similar to Jobe et al.'s (1996) it is not clear why male and female teachers differ in their attitudes. On the other hand, Avramidis et al. (2000b) found female prospective teachers to be more accommodating for students with disabilities than male prospective teachers.

Forlin et al. (2009) analyzed attitudes toward inclusion and their relationship to age and gender. These researchers found that when considering the age of the preservice teachers, there were no significant differences in attitudes or levels of concern at either pre- or post-training. They also found no significant gender differences. Avramidis and Norwich (2002) found inconsistent evidence in their literature review of research on

teacher attitudes with respect to gender. Leyser and Tappendorf (1999) concluded that attitudes with respect to gender and age were inconsistent and needed more examination.

### **Severity or Category of Disability**

The severity of the disability and the category of the disability have been shown to be a factor in teacher perceptions of inclusion. Dupoux et al. (2005) found that teachers varied in their acceptance of students with different types of disabilities. There seemed to be a hierarchy of acceptance, with the learning disability category as most positively viewed and the emotional and behavior category as most negatively viewed. It has been determined that teachers are much more eager to accommodate students with physical disabilities than students with cognitive, emotional, or behavioral problems (Idol, 2006; Sharma et al., 2006; Jobe et al., 1995; Yuen & Westwood, 2001). Idol (2006) found that educators generally held a favorable impression of the impact that students with disabilities have on other students in the class. The striking exception was when the student's disability involved serious behavior problems. Support for inclusion, it has been determined, covaries with the severity of the disability category. Teachers have been more willing to include students with mild disabilities, apparently because of the teachers' perceived lack of ability to provide quality instruction to students with more severe disabilities (Scruggs & Mastropieri, 1996). Likewise, Avramidis and Norwich (2002) found in their review of the literature that teachers exhibited more positive attitudes toward the inclusion of children with physical disabilities than students with emotional and behavioral disabilities.

Inclusion magnifies the range of individual needs in a classroom, requiring that the type and intensity of child need be factored in during placement (M.K. Smith & K.E.

Smith, 2000). The question remains of whether or not educators truly believe that all children, regardless of disability, are capable of learning. Agran, Alper, and Wehmeyer (2002) surveyed teachers of students with severe disabilities in one state regarding the access to the general education curriculum of those students. The researchers found that the majority of teachers surveyed indicated that the students were participating in the general curriculum, but that the teachers did not believe that the general curriculum was appropriate.

According to Cook (2001), teachers may feel inadequate about meeting the needs of students with obvious disabilities. Also, these teachers may not realize the significance of tailoring instruction to students with hidden or mild disabilities. Cook believes that schools would be wise to emphasize the unique characteristics of students with hidden disabilities when training general education teachers. Cook (2004) replicated and extended this study and found that teachers' attitudes toward students with disabilities depend on the nature and severity of the disability. The teacher's perception of how the student will behave can be a major obstacle to including students with emotional and behavioral disabilities in the general education classroom. The results of a study by Sharma et al. (2009) on the attitudes toward inclusion of preservice teachers in India likewise reflected this point. These preservice teachers would rather have students who require academic and physical accommodations instead of students who display disruptive behaviors. Teachers have reported concerns that the students' behaviors will have a negative effect on their programs, and the teachers would be unable to provide proper instruction for them (Cawley, Hayden, Cade, & Baker-Kroczyński, 2002).

### **Amount of Teacher Responsibility**

Teacher perceptions of inclusion can be influenced by the extra amount of responsibility placed on them when a student with a disability is brought into the general education classroom. In Scruggs and Mastropieri's research synthesis (1996), it was determined that teachers perceived mainstreaming as requiring significant changes that many were not willing to make. Many teachers believed that mainstreaming or inclusion would result in additional time, work, and attention. Teachers were more willing to include students with disabilities if their disabilities did not burden the teacher with additional responsibilities (Kavale & Forness, 2000). Stanovich and Jordan (2002) stated that advocates for inclusion should realize that teachers are being asked to commit to a model of service delivery that they believe will increase their workload. In addition, general education primary school teachers in Singapore expressed concern about meeting the demands of the school syllabus and competitive academic standards while dealing with discipline issues and providing intensive attention to students with special learning needs (Tam et al., 2006). For teachers to have positive perceptions toward inclusion they must believe that they can easily manage the extra responsibility.

### **Class Size**

Class size and student-to-teacher ratio are factors in teacher perceptions of inclusion. One group of teachers expressed the belief that collaborative teaching strategies are effective for all students, citing reduced student-to-teacher ratio as the principal benefit (Austin, 2001). Generally, teachers agree that inclusive classes should be less than twenty students (Scruggs & Mastropieri, 1996). Teachers interviewed by M.K. Smith and K.E. Smith (2000) who had reported successful inclusion experiences

taught smaller classes and fewer students than the teachers who reported unsuccessful inclusion experiences.

One study on teacher perceptions done in Hong Kong reported that general education teachers highlighted large class size as a major cause for concern. They found the teachers often find it a challenge to work with a large class comprised of students with and without disabilities (Tam et al., 2006). Short and Martin (2005) also found that class size was an important factor in teacher perceptions of the success of inclusion. Their recommendations include decreasing class size and accessing community volunteers to enhance the learning environment. Rose et al. (2007) stated that respondents to their study were in agreement that class size was a factor in successful inclusion. Although one study by Avramidis et al. (2000b) found that class size was not a factor in preservice teacher attitudes toward inclusion, the overwhelming evidence supports the view that class size is a factor in teacher perceptions of inclusion.

### **Summary**

Because of federal legislation such as the Education for All Handicapped Children Act in 1975, the Individuals with Disabilities Act in 1990, its reauthorizations in 1997 and 2004, and the No Child Left Behind Act of 2001, inclusion in the general education classroom continues to be one of the most studied aspects of special education. Increasing numbers of general education teachers have been called upon to teach students with disabilities. Some of these general education teachers have had special education coteachers, some have been assigned paraprofessionals, and some have had no additional support.

Factors such as special education training, administrative support, experience, level of education, severity of disability, and gender have been studied to determine the causes of positive or negative perceptions of inclusion. As the above review indicates, the studies show generally inconclusive results about how these factors influence teacher perceptions of the inclusion of students with disabilities in the general education classroom.

Although the attitudes of the parents, students, special education teachers, and administrators are important, it has long been recognized that the success or failure of inclusion rests on the attitudes of the general education teacher. Relevant research has shown that general education teachers' positive perceptions of inclusion are accompanied by their concerns about the integration of students with disabilities into the mainstream classroom setting. This study examined the difference in perceptions between middle school general education teachers who have taught in inclusive middle school classroom settings and general education teachers who have only taught in traditional classrooms settings.

Although the topic of teachers' perceptions towards inclusion is widely researched and includes many factors, evidence from rural, middle school general education teachers has not been undertaken. NCLB (2001) and IDEA (2004) have changed the way that all schools utilize special education. Rural schools are affected differently than urban and suburban schools, while middle school teachers are affected differently than elementary or high school teachers. Within the context of NCLB (2001) and IDEA (2004), the aim of this study is to explore rural middle school general education teachers' perceptions of inclusion.

### **CHAPTER THREE: METHODOLOGY**

After reviewing the special education literature, this researcher noticed an obvious gap in the area of general education teacher perceptions of inclusion. This study intends to fill that gap. General education middle school teachers in rural areas have either taught students with disabilities or have not taught these students. It was this researcher's opinion that having taught students with disabilities would create a significantly different perception of inclusion for the general education teacher.

This chapter explains why ex post facto research was used, why a survey was used to gather data, the method of the proposed survey, the validity and reliability of the proposed instrument, the demographics of the schools, and the participants that were involved in the study. The researcher's theoretical framework and the statistical methods procedures are also discussed.

The purpose of this study was to analyze the perceptions of inclusion of two distinct groups of general education middle school teachers. The study was based primarily on the perceptions of two groups: one group of general education teachers who teach in inclusive middle school settings and one group of general education teachers who teach in traditional middle school settings toward the inclusion of students with disabilities. A survey was used as the method of data collection for this study due to the need to gather information from a smaller group that can be used to make inferences about a greater population (Ary et al., 2006). The survey instrument was administered to the general education teachers at 14 rural middle schools in the Northeast Georgia Pioneer RESA. The results of the survey were used to compare the perceptions of

inclusion of general education teachers in inclusive middle school settings to general education teachers in traditional middle school settings.

In the Pioneer RESA, there is no regional policy on inclusion. Each of the schools practices a different level of inclusion, which is generally dependent on the student. Some middle schools include students with mild disabilities, such as specific learning disabilities, in all general education classes. These students are served in either a co-teaching environment with a general education teacher and a special education teacher or a supported instruction environment with a general education teacher and a paraprofessional. In other schools, students with specific learning disabilities are taught in resource classes away from the general education classes. Some students with mild, moderate, severe, or profound intellectual disabilities are taught in co-teaching or supportive classes for science and social studies, but in self-contained classes for language arts and math. In some cases, students with moderate, severe, or profound disabilities are taught in self-contained resource classrooms for all subjects. There are a variety of settings in which students with disabilities are being served in rural Northeast Georgia. This study, however, was only concerned with general education settings.

### **General Perspective**

This quantitative study analyzed the perceptions of inclusion among general education teachers in the 14 middle schools within 11 rural school districts in the Northeast Georgia Pioneer RESA. The general question addressed in this study was: To what extent is there a difference when comparing perceptions of inclusion by middle school general education teachers who teach in inclusive settings and middle school

general education teachers who teach in traditional settings. The factors considered by the survey to be subsets of the general question were as follows:

1) Do general education teachers in inclusive middle school settings perceive the benefits of inclusion differently than general education teachers in traditional middle school settings?

2) Do general education teachers in inclusive middle school settings perceive the benefits of classroom management in inclusive settings differently than general education teachers in traditional middle school settings?

3) Do general education teachers in inclusive middle school settings perceive the ability to teach students with disabilities differently than general education teachers in traditional middle school settings?

4) Do general education teachers in inclusive middle school settings have a different understanding of special education than general education teachers in traditional middle school settings?

The hypothesis of the general question states that the general education teachers who teach in inclusive middle school settings will exhibit more positive perceptions toward inclusion than general educators who teach in traditional middle school settings. The null hypothesis is that there will be no difference in the perceptions of inclusion held by general education teachers in inclusive middle school settings and the perceptions of inclusion held by general education teachers in traditional middle school settings.

The hypothesis for the first factor states that general education teachers in inclusive middle school settings perceive the benefits of inclusion differently than general education teachers in traditional middle school settings. The null hypothesis for this

question is that general education teachers in inclusive middle school settings perceive the benefits of inclusion no differently than general education teachers in traditional middle school settings.

The hypothesis for the second factor states that general education teachers in inclusive middle school settings perceive the benefits of classroom management in inclusive settings differently than general education teachers in traditional middle school settings. The null hypothesis for this factor is that general education teachers in inclusive middle school settings do not perceive the benefits of classroom management in inclusive settings differently than general education teachers in traditional middle school settings.

The hypothesis for the third factor states that general education teachers in inclusive middle school settings perceive their ability to teach students with disabilities differently than general education teachers in traditional middle school settings. The null hypothesis is that general education teachers in inclusive middle school settings do not perceive their ability to teach students with disabilities differently than general education teachers in traditional middle school settings.

The hypothesis for the fourth factor states that general education teachers in inclusive middle school settings have a different understanding of special education than general education teachers in traditional middle school settings. The corresponding null hypothesis is that general education teachers in inclusive middle school settings do not have a different understanding of special education than general education teachers in traditional middle school settings.

## **The Research Context**

Special education began in the United States in 1975 with the introduction of the Education for All Handicapped Children Act, otherwise known as PL-94-142. This law was reauthorized in 1990, 1997, and 2004 as the Individuals with Disabilities Education Act (IDEA). This legislation provided school-aged children and youth (aged 3 through 21), special education and related services to be provided through the school system. These services can be very important in helping children and youth with disabilities develop, learn, and succeed in school and other settings. This legislation sets forth several basic tenets including, but not limited to, the rights of students with disabilities to have access to a free and appropriate public education (FAPE) and the right to be served in the least restrictive environment (LRE). Inclusion is not defined by the Department of Education, nor is it mentioned in IDEA or NCLB. However, the concept of LRE is one of the important fundamentals of IDEA. The intent of LRE is that students with disabilities be educated alongside their same-age peers (Alper, 2003). Since 1975, starting with the Education for All Handicapped Children Act, federal policy initiatives sought to educate students with disabilities in general education classes, utilizing general education curriculum (Boscardin, 2007).

Antonak and Larrivee (1995) noted that full inclusion of students with disabilities will occur only if there are long term changes in the perceptions of educators. Positive perceptions encourage the establishment of policies and the allocation of resources, while negative perceptions create low expectations and support inappropriate behaviors. Because teacher perceptions are important for the successful implementation of inclusion, it is vital to know the perceptions that teachers have in relation to inclusion.

## **The Research Participants**

The survey was given to all the general education teachers in 14 middle schools within 11 rural school districts in the Northeast Georgia Pioneer RESA. These middle schools have similar demographics, as shown by Table 1. The teachers have similar characteristics as well, as shown by Table 2. Each teacher self-identified on the demographic portion on the survey whether he or she teaches in a traditional setting or an inclusive setting. Based on this self-report, the two groups were defined.

Of the 198 respondents, 152 were female and 46 were male. The highest level of education attained varied among the respondents with 35 having a bachelor's degree, 83 having a master's degree, 62 having a specialist's degree, and zero having a doctoral degree. The respondents also had varied amounts of teaching experience. Five respondents had less than two years' experience. Of the remaining 193 respondents, 68 had between three and eight years of experience, 58 had between nine and 14 years' experience, and 65 had more than 15 years' experience. Because the electronic survey required an answer to each question, all 198 collected surveys were used in the data analysis. Respondents represented all 14 of the middle schools who received the survey link.

## **Setting**

There are 16 RESAs to meet the educational needs in the state of Georgia. The RESA is an agency established to provide shared services to improve the effectiveness of educational programs and services of local school systems and to provide direct instructional programs to selected public school students (Georgia Department of Education, 2010). Pioneer RESA serves a total of 14 school systems, 102 schools, and

68,000 students. The RESA is governed by a 19 member Board of Control, which functions much like a local board of education. The Board of Control is comprised of the superintendents of each school system in the RESA, the president of the colleges and universities in the RESA, the president of the technical colleges and one representative from the public libraries. Funding is provided by the Georgia legislature, by grant funds, and through local membership fees. The support given to school systems include facilitative, consultative, technical, and staff development services that promotes continuous school improvement planning, building system capacity to sustain change and to connect school improvement plans to systemic improvement efforts. In addition to the focus on school improvement, Northeast Georgia Pioneer RESA also provides business and operations, provides evaluation and assessment, Georgia Learning Resources System (GLRS), provides professional learning and instruction, provides special/shared services, provides technology services, runs the Northeast Georgia Youth Science and Technology Center (NEGYSTC), GNETS/Alpine Program, and runs the Cooperative Purchasing Agency (Pioneer RESA, 2010).

Table 1

*Student Demographics*

	M1	M2	M3	M4/5	M6/7	M8	M9	M10	M11	M12	M13
Student enrollment	658	445	843	763	768	824	333	951	274	610	638
Percentage economically disadvantaged	57	40	51	43	59	55	64	58	44	54	46
Percentage special needs	14	9	11	17	19	9	12	16	11	19	14
Percentage English Language Learners	2	0	2	1	8	1	4	0	0	1	0
Student to teacher ratio	15:1	16:1	15:1	12:1	11:1	15:1	12:1	15:1	12:1	15:1	14:1

*Note.* Adapted from the Georgia Department of Education, 2009

*Note.* M4/5 and M6/7 denote two middle schools with separate sixth grade academies. The state of Georgia aggregates the data for the sixth grade academy and the middle school.

Table 2

*Teacher Demographics*

	M1	M2	M3	M4/5	M6/7	M8	M9	M10	M11	M12	M13
Full-Time	41	24	55	61	66	52	26	63	20	40	47
Part-Time	4	6	2	3	2	7	5	5	5	2	0
Male	15	8	15	17	16	14	10	18	11	11	17
Female	30	22	42	47	52	45	21	50	14	31	30
4 Yr Bachelor's	19	13	18	17	24	19	8	20	10	15	12
5 Yr Master's	17	15	18	29	25	27	13	31	7	17	24
6 Yr Specialist's	9	2	20	18	19	13	9	16	8	10	11
7 Yr Doctoral	0	0	1	0	0	0	1	1	0	0	0
Black	0	0	3	0	0	2	0	4	0	0	1
White	45	30	51	64	67	57	30	64	25	42	46
Hispanic	0	0	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	1	0	1	0	0	0	0
Native American	0	0	0	0	0	0	0	0	0	0	0
Multiracial	0	0	3	0	0	0	0	0	0	0	0
< 1	2	3	3	2	1	0	1	4	2	1	2
1-10	21	15	20	21	36	24	11	22	8	19	20
11-20	18	8	25	20	16	19	8	22	9	12	17
21-30	4	4	8	15	11	9	8	15	4	10	8
> 30	0	0	1	6	4	7	3	5	2	0	0
Average	10.4	10.8	12.6	15.8	12.2	15.3	15.9	15.8	14.9	12.9	11.9

*Note.* Adapted from the Georgia Department of Education, 2009

*Note.* M4/5 and M6/7 denote two middle schools with separate sixth grade academies. The state of Georgia aggregates the data for the sixth grade academy and the middle school.

## Instrumentation

The ORI is a revision of the Opinions Relative to Mainstreaming (ORM) scale developed in 1979 by Larrivee and Cook. This instrument measures teachers' perceptions of inclusion by presenting statements such as "Integration of special needs students will require significant changes in regular classroom procedures," or "The integration of special needs students can be beneficial for regular students." The scale includes twenty-five Likert-style statements that were scored for four categories on the

survey. These four categories include: benefits of inclusion, inclusive classroom management, perceived ability to teach students with disabilities, and special education versus inclusive settings.

Rensis Likert (1932) developed the Likert scale, which is one of the most common techniques to use in the measurement of attitudes and perceptions. The Likert scale questions are ranked based on the participant's attitudes. The possible responses are: *I disagree very much, I disagree pretty much, I disagree a little, I agree a little, I agree pretty much, or I agree very much*. Twelve of the 25 statements are worded negatively and 13 are worded positively. Responses were scored by reversing the sign of the negatively worded items and then finding the sum of the 25 items. A constant score of 75 was added to each score to eliminate negative scores. Scores range from 0-150, with a higher score representing more favorable attitudes toward inclusion.

The ORI scale is used by researchers to evaluate the attitudes of teachers toward the integration of students with disabilities into general education classes. This revision of the ORM scale streamlined the survey from 30 questions to 25 and updated the language of the survey. The ORI has been given credibility by researchers through their use of the instrument and is considered reliable and valid. After an item analysis was done on the survey by Antonak and Larrivee (1995), the results were considered satisfactory. The Spearman-Brown corrected split-half reliability estimate is 0.82. The Scale of Attitudes toward Disabled Persons (SADP), a measure of global attitudes toward persons with disabilities as a group, was given in conjunction with the ORI. The validity of the scale was then measured by hierarchical multiple-regression analyses. Cronbach's coefficient

alpha homogeneity coefficient was 0.83 (Antonak & Larrivee, 1995). Written permission to use the scale was obtained from Richard Antonak and is included in Appendix A.

In addition to completing the ORI, participants were asked to complete a short demographic survey designed by the researcher. The teacher was asked to self-report whether he or she has ever taught in an inclusive setting. This information was used to divide the participants into two groups: general education teachers who have taught in inclusive settings and general education teachers who have only taught in traditional settings. The participants were asked to provide information on gender, current school, educational level, and years of experience. This information was used to describe the participants of the survey.

## **Procedures**

**Phase 1.** All general education teachers at each of the 14 middle schools were asked to complete the ORI. (See Appendix A and Appendix B for a copy of the survey and the demographic questions). The researcher, in conjunction with the Web Services Director of the RESA, sent the principal or contact person a survey link via email. The principal or contact person forwarded the email with the survey link to all the general education teachers at each school. The email informed teachers about the study and the availability of the online instrument. The email requested that the teachers complete the voluntary, anonymous web-based survey within a two-week period. Only general education teachers, as opposed to administrators and special education teachers, were asked to complete this survey. The participants were told that the data collected was to be used in a research project to meet a requirement toward the completion of a doctoral degree at Liberty University. An anonymous survey encourages the participants to be

more honest and forthcoming in their responses. Electronic surveys have become increasingly popular for this reason, as well as allowing for flexibility in time and location. The researcher is not present while the participant completes the survey instrument, which allows for anonymity (Ary et al., 2006).

The survey, ORI, includes 25 items considered to be conditions. The teachers were asked to respond to each statement by selecting one of the following choices: *I disagree very much, I disagree pretty much, I disagree a little, I agree a little, I agree pretty much, or I agree very much.* They were asked to select the response that best reflects his or her opinion.

SurveyMonkey was the platform for delivering the survey. This program is already in use by the Web Services Director of the RESA to deliver perception data surveys. SurveyMonkey is an open source survey application that is free and user-friendly. This researcher loaded the ORI and the demographic questions onto the SurveyMonkey platform. The researcher, in conjunction with the Web Services Director of Pioneer RESA, sent the link to the principal or contact person at each of the 14 participating middle schools in the RESA.

Surveys are routinely sent to staff, faculty, administrators and other groups among the RESA to gather data for analysis. The Pioneer RESA survey service is used to gather information from school staff, student, parents, and the community about experiences and perceptions of various topics. The data gleaned from these perception-based surveys allow the administrators to form a comprehensive picture of what is happening in a school or system and to use those opinions and attitudes as another piece of information in the decision-making process, which helps identify areas in need of improvement.

Surveys are commonly used to meet state accreditation requirements, assess the effectiveness of district program and services, to learn about the satisfaction of staff, student, and community toward school goals, programs, and activities, to assess classroom learning environments and to gather information for grant proposals (Pioneer RESA, 2010).

This researcher sought the backing of the RESA Director and the RESA Board of Control (BOC) by writing a letter requesting permission to contact the middle school principals asking for their permission to survey their teachers. The BOC consists of all the school district superintendents in the RESA. Permission from the BOC was submitted to Liberty University's Institutional Review Board (IRB). Once the researcher received IRB permission, each principal was contacted by phone and email. When the permission of each principal had been secured, through a letter of permission on school letterhead with original signatures, the researcher then sent an email to each principal or contact person with the survey link and the dates of availability. This allowed for anonymity of the survey. From the date that the survey link was first sent, the survey was available for two weeks. Approximately three days from the end of the two week window, the researcher sent another email to the principal or contact person that asked them to remind the teachers to complete the survey. The researcher documented the number of people who were sent the survey so that a response rate could be calculated.

**Phase 2.** Because of the low number of respondents for Group 2, the researcher collected more respondents for this group. In order to accomplish this, a targeted email was sent to the principals of the participating middle schools. The email specified two conditions that had to be met for teachers to take the survey: respondents who had not

previously taken the survey and respondents who had never taught in inclusive settings. Follow-up emails and phone calls were made to ensure participation. A satisfactory number of responses were gathered.

### **Design of the Study**

This basic research study utilized the causal-comparative design. Sometimes called ex post facto research, this design usually considers the causes after they have had an effect on another variable (Glatthorn & Joyner, 2005). In causal-comparative research, the researcher does not manipulate the variable of interest. Instead, the researcher compares groups by examining the preexisting differences in the variable to determine its effect on another variable (Ary et al., 2006). Because this research attempted to compare the perceptions of general education teachers in inclusive middle school settings to the perceptions of general education teachers in traditional middle school settings, the study began with subjects who differed on one of the variables of interest and then tried to determine if the difference was significant. In an attempt to establish a cause and effect relationship, this researcher used the between-group subtype of the causal-comparative design.

This researcher conducted the survey research using the ORI. The ORI has been analyzed and deemed reliable and valid (Antonak & Larrivee, 1995). According to Glatthorn and Joyner (2005), surveys are used to assess opinions, perceptions, and attitudes. A short demographic survey designed by the researcher was attached to the ORI in order to collect demographic information for the purpose of describing the participants.

**Data Analysis** The data was analyzed using Statistics Package for the Social Sciences (SPSS), statistical software that allows data management, analyses, and presentation options. Responses from the survey were compared among the two groups of educators (general education teachers in inclusive settings and general education teachers in traditional settings) and a *t*-test was done in order to determine the statistical differences between the items in the survey. This *t*-test was used to determine if the difference between the mean scores of two groups was likely to have occurred by chance, or if it represents a statistically significant difference in the scores of the populations (Glatthorn & Joyner, 2005). The results of the *t*-test gave insight to the distinguishing characteristics among the faculty perceptions between the two groups. Each response of the Likert-scale survey was given a point value from negative three to three. The 12 negative items were positively scored by reversing the sign. The 25 items were summed and a constant of 75 was added to the total to ensure a positive number. The range is 0-150. The scores were calculated for each group. The total score for each participant was calculated in each group. These scores were entered into a spreadsheet by group. A *t*-test was used to determine if the difference in means between the two groups was likely to have occurred by chance or if it represented a true difference.

Survey questions were grouped, according to the factors found by the survey authors (Antonak & Larrivee, 1995). Then a total score for each group was calculated for each of the following factors: benefits of inclusion, inclusive classroom management, ability to teach students with disabilities, and special education versus inclusive general education. Once a total score was calculated from each category for each group representing the general education teachers who teach in inclusive middle school settings

and general education teachers who teach in traditional middle school settings, a *t*-test was used to determine if the difference in scores was statistically significant.

The *t*-test was used for this study because it allowed the researcher to compare the means of two groups in order to determine the likelihood that the difference between the two means occurred by chance. Because the subjects of the two groups were not the same people, the independent *t*-test was used because it compares the means of two samples that are selected independently of each other. An equal variance *t*-test was used because the variance in the two groups was similar. Therefore, the researcher utilized an equal (or pooled) variance independent samples *t*-test (Ary et al., 2006). The limitation of the *t*-test is that results are typically accepted with a significance on each *t*-test of 95%. For multiple tests, these accumulate and reduce the validity of the results. The *t*-test is the most widely used and widely known statistical test of all time (Ary et al., 2005). It is simple, straightforward, easy to use, and adaptable to many situations.

***T*-test analysis.** In order to test the relationships between the study's two populations (general education teachers who had taught in inclusive settings and general education teachers who had only taught in traditional settings), the researcher used the *t*-test. This test is used to assess distributions of interval spaced variables (Ary et al., 2006); thus was the most appropriate choice. In order for the assumptions for a *t*-test to be met, all observations must be independent of each other. This was accomplished by having each participant take the survey unaided. Secondly, the dependent variable must be measured on an interval scale. This was accomplished by using a Likert-scale. There are two other assumptions that must be met for a *t*-test to be valid. These include the

normality assumption and the homogeneity of variance assumption (Tabachnick & Fidell, 2001). These remaining assumptions are addressed in Chapter 4.

### **Conclusion**

Quantitative research, specifically ex post facto or causal-comparative research, was used for this study. This research was conducted after variation in the variable of interest had been determined. The purpose of causal-comparative research is to investigate cause-and-effect relationships between two variables of interest (Ary et al., 2006). The results of the analysis are presented in the following chapter.

## **CHAPTER FOUR: RESULTS OF THE STUDY**

The primary purpose of this study was to determine if there is a statistically significant difference in the perceptions of the inclusion of students with disabilities in general education classes between middle school general education teachers who have taught in inclusive settings and those who have only taught in traditional settings. This chapter includes the organization of the data, an explanation of the descriptive statistics utilized for the sample, and a summary of findings in relation to the general research question and the four factors that comprise the remaining four research questions.

The ORI survey, developed by Antonak and Larrivee (1995), was completed by 55% of the general education teachers from the 14 schools that were studied. The five questions in the study addressed the perceptions of those teachers regarding inclusion of special education students in the mainstream classroom, as well as the following four factors: benefits of inclusion, inclusive classroom management, perceived ability to teach students with disabilities, and special education versus inclusive general education. The teacher perceptions data from the ORI were compiled into two groups. The first group (Group 1) consisted of general education teachers who had taught in inclusive settings with a coteacher or assigned paraprofessional, and the second group (Group 2) consisted of teachers who had only taught in traditional settings.

### **Organization of Data**

Upon closing the window on the survey timeframe, the Web Services Director emailed a link to the collected data to the researcher. The raw data was downloaded onto an Excel spreadsheet. The data was then divided into two groups, depending upon the

respondent's answer to this demographic question: "Have you ever taught students with disabilities in an inclusive setting (either supported instruction with a paraprofessional or coteaching with a special education teacher)?" After the data was divided into the two groups, the researcher used Excel to obtain a total score for each factor. This data was imported into SPSS for analysis. The researcher used SPSS to run the following summary statistics on the mean variance, standard deviation, median, range, minimum, and maximum. Then a *t*-test was run for each of the five research questions. For the general research question, the total score for each participant on all 25 questions were used for statistical analysis. For Factors 1-4, the total scores of the participants for each question relating to each factor were used for statistical analysis. Each respondent was given a total score. Then the mean, median, range, minimum, maximum, and standard deviation were calculated for each group's scores, including the total score and the scores relating to each factor.

### **Research Question 1**

To what extent is there a difference when comparing perceptions of inclusion held by general education teachers who have taught in inclusive middle school settings (GI) to perceptions of inclusion held by general education teachers who have only taught in traditional middle school settings (GT)?

### **Null Hypothesis 1**

There is no difference in the perceptions of inclusion held by general education teachers who have taught in inclusive middle school settings and the perceptions of

inclusion held by general education teachers who have only taught in traditional middle school settings.

Table 3 sets forth the summary statistics for the data. Group 1 represents the general education teachers who had taught in inclusive settings and Group 2 represents the general education teachers who had only taught in traditional settings. A constant of three was added to each score to ensure that a positive number was available for any future statistical manipulation of these scores.

Table 3

*Summary Statistics-General Question*

Group	<i>n</i>	$\bar{X}$	Variance	$\sigma$	Median	Range	Minimum	Maximum
1	25	3.46	0.34	0.58	3.53	2.19	2.48	4.67
2	25	2.99	0.20	0.45	3.02	1.83	2.28	4.11

The dependent variable must be normally distributed in the population for each group being compared. In SPSS, this is done by reviewing the skewness and kurtosis, which are presented in Table 4. The values for skewness and kurtosis both fall in the acceptable range of +/- 2, meaning that the dependent variable is normally distributed.

Table 4

*Skewness and Kurtosis-General Question*

	Skewness	SE	Kurtosis	SE
General Question	-0.19	0.17	-0.15	0.34

The data must also meet the assumption of homogeneity of variance, meaning that the distribution of the dependent variable for one of the groups being compared must have the same variance as the distribution for the other group being compared. SPSS verifies equality of variance with Levene's test. Table 5 shows the significance of

Levene's to be .17, which exceeds the p-value of .05, meaning equal variances can be assumed.

Table 5

*Levene's Test for Equality of Variances-General Question*

	F	Sig.
Equal Variances Assumed	3.78	0.06
Equal Variances Not Assumed		

The *t*-test was calculated for the data on the general research question. The general research question involved the sum of the score from the ORI. The following table displays the measure, mean difference, standard error, degrees of freedom, *t*-stat, and *p*-value for the general research question.

Table 6

*Independent Samples Test-General Question*

	Mean Differences	SE	Df	<i>t</i>	Sig.
Equal variances assumed	11.9	3.95	196	3.01	0.003
Equal variances not assumed	11.9	3.68	110.55	3.23	0.002

An independent *t*-test was conducted to evaluate whether a statistically significant difference exists between the perceptions of inclusion of general education teachers who have taught in inclusive settings and general education teachers who have only taught in traditional settings. At the probability of .05, *df* = 196, the *t*-stat value of 3.01 is larger than the table value of 2.01. The results of the independent *t*-test were significant,  $t(196) = 3.01$ ,  $p = .003$ , indicating that there is a significant difference between the scores of general education teachers who have taught in inclusive settings ( $M = 86.57$ ,  $SD = 25.72$ ,

n = 144) and general education teachers who have only taught in traditional settings (M = 74.67, SD = 21.99, n = 54). ETA squared was used to calculate the effect size. Effect size was .04, indicating a very small magnitude of difference in the means. The 95% confidence interval, shown in the table below, for the difference between the scores, was 4.11 to 19.70. The researcher rejected the null hypothesis. This general research question utilized the total of all 25 survey questions.

Table 7

*CI for General Question*

Measure	95% CI	
	LL	UL
Equal Variances assumed	4.11	19.70
Equal variances not assumed	4.61	19.20

*Note:* CI is confidence interval. LL is lower limit. UL is upper limit.

Table 8 exhibits the summary statistics that were gathered from the total scores of each respondent. Because a constant of 75 was added to each score, the actual possible range of scores for the total survey was 0-150.

Table 8

*Summary Statistics-General Question Total Scores*

Group	<i>N</i>	$\bar{X}$	$\sigma$	<i>Median</i>	<i>Range</i>	<i>Minimum</i>	<i>Maximum</i>
1	144	86.57	25.72	89.00	128.00	8.00	136.00
2	54	74.67	21.99	76.00	94.00	29.00	123.00

**Research Question 2**

Do general education teachers who have taught in inclusive middle school settings perceive the benefits of inclusion differently than general education teachers who have only taught in traditional middle school settings?

## Null Hypothesis 2

General education teachers who have taught in inclusive middle school settings perceive the benefits of inclusion no differently than general education teachers who have only taught in traditional middle school settings.

Table 9 sets forth the summary statistics for the data. Group 1 represents the general education teachers who had taught in inclusive settings, and Group 2 represents the general education teachers who had only taught in traditional settings. The number of questions on the survey involving Factor 1 is indicated by  $n$ . Both groups exhibit an above average mean for Factor 1. This factor had the highest mean of all the research questions for both groups.

Table 9

### *Summary Statistics-Factor 1*

Group	$n$	$\bar{X}$	Variance	$\sigma$	Median	Range	Minimum	Maximum
1	8	3.95	0.13	0.37	3.87	1.14	3.53	4.67
2	8	3.45	0.13	0.36	3.39	1.02	3.09	4.11

The dependent variable must be normally distributed in the population for each group being compared. In SPSS, this is done by reviewing the skewness and kurtosis, which are presented in Table 10. The values for skewness and kurtosis both fall in the acceptable range of +/- 2, meaning that the dependent variable is normally distributed.

Table 10

### *Skewness and Kurtosis-Factor 1*

	Skewness	SE	Kurtosis	SE
Factor 1	-0.34	.17	-0.5	0.34

The data must also meet the assumption of homogeneity of variance, meaning that the distribution of the dependent variable for one of the groups being compared must have the same variance as the distribution for the other group being compared. SPSS verifies equality of variance with Levene's test. Table 11 shows the significance of Levene's to be .01, which does not exceed the p-value of .05, meaning equal variances cannot be assumed.

Table 11

*Levene's Test for Equality of Variances-Factor 1*

	F	Sig.
Equal Variances Assumed	7.57	0.01
Equal Variances Not Assumed		

The *t*-test was calculated on the data for the second research question or Factor 1. Factor 1 involved the sum of the scores from ORI questions 3, 7, 11, 14, 17, 20, 21, and 24. The following table displays the measure, mean difference, standard error, degrees of freedom, *t*-stat, and significance for Factor 1.

Table 12

*Independent Samples Test-Factor 1*

	<i>Mean Difference</i>	<i>SE</i>	<i>Df</i>	<i>t</i>	<i>Sig.</i>
Equal variances assumed	4.44	1.42	196	3.13	0.002
Equal variances not assumed	4.44	1.2	137.9	3.69	0

An independent *t*-test was conducted to evaluate whether a statistically significant difference exists between the perceptions of inclusion (benefits of inclusion) of general education teachers who have taught in inclusive settings and general education teachers

who have only taught in traditional settings. At the probability of .05,  $df = 137.9$ , the  $t$ -stat value of 3.69 is larger than the table value of 2.15. The results of the independent  $t$ -test were significant,  $t(137.9) = 3.69$ ,  $p = 0$ , indicating that there is a significant difference between the scores of general education teachers who have taught in inclusive settings ( $M = 31.99$ ,  $SD = 9.59$ ,  $n = 144$ ) and general education teachers who have only taught in traditional settings ( $M = 27.56$ ,  $SD = 6.61$ ,  $n = 54$ ). ETA squared was used to calculate effect size. Effect size was .08, indicating a moderate magnitude of difference in the means. The 95% confidence interval, as shown in the table below, for the difference between the means, was 2.06 to 7.23. The researcher rejected the null hypothesis.

Table 13

*CI for Factor 1*

Measure	95% CI	
	LL	UL
Equal Variances assumed	1.64	7.23
Equal variances not assumed	2.06	6.82

Note: CI is Confidence Interval. LL is lower limit. UL is upper limit.

Table 14 exhibits the summary statistics that were gathered from the scores of each respondent for Factor 1. Because a constant of 24 was added to each score, the actual possible range of scores for the questions relating to Factor 1 was 0-48.

Table 14

*Summary Statistics-Factor 1 Scores*

Group	$N$	$\bar{X}$	$\sigma$	Median	Range	Minimum	Maximum
1	144	31.99	9.59	33.00	46.00	2.00	48.00
2	54	27.56	6.61	28.00	29.00	14.00	43.00

### Research Question 3

Do general education teachers who have taught in inclusive middle school settings perceive the benefits of classroom management in inclusive settings differently than general education teachers who have only taught in traditional middle school settings?

### Null Hypothesis 3

General education teachers who have taught in inclusive middle school settings do not perceive the benefits of classroom management in inclusive settings differently than general education teachers who have only taught in traditional middle school settings.

Table 15 sets forth the summary statistics for the data. Group 1 represents the general education teachers who had taught in inclusive settings and Group 2 represents the general education teachers who had only taught in traditional settings. The number of questions on the survey involving Factor 2 is indicated by *n*. Group 1 exhibited an above average mean for Factor 2.

Table 15

*Summary Statistics-Factor 2*

Group	<i>n</i>	$\bar{X}$	Variance	$\sigma$	Median	Range	Minimum	Maximum
1	10	3.41	0.23	0.48	3.30	1.29	2.48	4.12
2	10	2.78	0.09	0.30	2.77	0.92	2.83	3.20

The dependent variable must be normally distributed in the population for each group being compared. In SPSS, this is done by reviewing the skewness and kurtosis, which are presented in Table 16. The values for skewness and kurtosis both fall in the acceptable range of +/- 2, meaning that the dependent variable is normally distributed.

Table 16

*Skewness and Kurtosis-Factor 2*

	Skewness	SE	Kurtosis	SE
Factor 2	-0.15	0.17	-0.41	0.34

The data must also meet the assumption of homogeneity of variance, meaning that the distribution of the dependent variable for one of the groups being compared must have the same variance as the distribution for the other group being compared. In SPSS this is checked by Levene's test, which is shown in Table 17. Since the significance of Levene's test is .05, which is equal to the probability score of .05, equal variances are assumed.

Table 17

*Levene's Test for Equality of Variances-Factor 2*

	F	Sig.
Equal Variances Assumed	0.46	0.50
Equal Variances Not Assumed		

The *t*-test was calculated on the data for the third research question or Factor 2. Factor 2 involved the sum of the scores from ORI questions 1, 4, 6, 9, 12, 15, 16, 18, 22, and 25. The following table displays the measure, mean differences, standard error, degrees of freedom, *t*-stat, and *p*-value for Factor 2.

Table 18

*Independent Samples Test-Factor 2*

	<i>Mean Differences</i>	<i>SE</i>	<i>Df</i>	<i>t</i>	<i>Sig.</i>
Equal variances assumed	6.32	1.79	196	3.53	0.001
Equal variances not assumed	6.32	1.75	100.09	3.62	0

An independent *t*-test was conducted to evaluate whether a statistically significant difference exists between the perceptions of inclusion (inclusive classroom management) of general education teachers who have taught in inclusive settings and general education teachers who have only taught in traditional settings. At the probability of .05,  $df = 196$ , the *t*-stat value of 3.53 is larger than the table value of 2.10. The results of the independent *t*-test were significant,  $t(196) = 3.53$ ,  $p = .001$ , indicating that there is a significant difference between the scores of general education teachers who have taught in inclusive settings ( $M = 34.11$ ,  $SD = 11.37$ ,  $n = 144$ ) and general education teachers who have only taught in traditional settings ( $M = 27.80$ ,  $SD = 10.77$ ,  $n = 54$ ). ETA squared was used to calculate effect size. Effect size was .06, indicating a moderate magnitude of difference in the means. The 95% confidence interval, as shown in the table below, for the difference between the scores was 2.79 to 9.84. The researcher rejected the null hypothesis.

Table 19

*CI for Factor 2*

Measure	95% CI	
	LL	UL
Equal Variances assumed	2.79	9.84
Equal variances not assumed	2.85	9.78

*Note.* CI is Confidence Interval. LL is lower limit. UL is upper limit.

Table 20 exhibits the summary statistics that were gathered from the scores of each respondent for Factor 2. Because a constant of 30 was added to each score, the actual possible range of scores for the questions relating to Factor 2 was 0-60.

Table 20

*Summary Statistics-Factor 2 Scores*

Group	<i>n</i>	$\bar{X}$	$\sigma$	Median	Range	Minimum	Maximum
1	144	34.11	11.37	34.00	53.00	6.00	59.00
2	54	27.80	10.77	27.00	51.00	2.00	53.00

**Research Question 4**

Do general education teachers who have taught in inclusive middle school settings perceive their ability to teach students with disabilities differently than general education teachers who have only taught in traditional middle school settings?

**Null Hypothesis 4**

General education teachers who have taught in inclusive middle school settings do not perceive their ability to teach students with disabilities differently than general education teachers who have only taught in traditional middle school settings.

Table 21 sets forth the summary statistics for the data. Group 1 represents the general education teachers who had taught in inclusive settings, and Group 2 represents

the general education teachers who had only taught in traditional settings. The number of questions on the survey involving Factor 3 is indicated by *n*. Group 1 exhibited an above average mean for Factor 3, while Group 2 showed a slightly below average mean.

Table 21

*Summary Statistics-Factor 3*

Group	<i>n</i>	$\bar{X}$	Variance	$\sigma$	Median	Range	Minimum	Maximum
1	3	3.10	0.16	0.40	2.91	0.73	2.83	3.56
2	3	2.76	0.14	0.37	2.80	0.74	2.37	3.11

The dependent variable must be normally distributed in the population for each group being compared. In SPSS, this is done by reviewing the skewness and kurtosis, which are presented in Table 22. The values for skewness and kurtosis both fall in the acceptable range of +/- 2, meaning that the dependent variable is normally distributed.

Table 22

*Skewness and Kurtosis-Factor 3*

	Skewness	SE	Kurtosis	SE
Factor 3	-0.29	0.17	-0.43	0.34

The data must also meet the assumption of homogeneity of variance, meaning that the distribution of the dependent variable for one of the groups being compared must have the same variance as the distribution for the other group being compared. In SPSS this is checked by Levene's test, which is shown in Table 17. Since the significance of Levene's test is .21, which is above the probability score of .05, equal variances are assumed.

Table 23

*Levene's Test for Equality of Variances-Factor 3*

	F	Sig.
Equal Variances Assumed	1.60	0.21
Equal Variances Not Assumed		

The *t*-test was calculated on the data for the fourth research question or Factor 3. Factor 3 involved the sum of the score from ORI questions 2, 10, and 19. The following table displays the mean difference, sample mean, standard error, degrees of freedom, *t*-stat, and *p*-value Factor 3.

Table 24

*Independent Samples Test-Factor 3*

	Mean Difference	SE	Df	<i>t</i>	Sig.
Equal variances assumed	1.03	0.64	196	1.61	0.11
Equal variances not assumed	1.03	0.6	107.4	1.7	0.1

An independent *t*-test was conducted to evaluate whether a statistically significant difference exists between the perceptions of inclusion (perceived ability to teach students with disabilities) of general education teachers who have taught in inclusive settings and general education teachers who have only taught in traditional settings. At the probability of .05, *df* = 196, the *t*-stat value of 1.61 is smaller than the table value of 2.78. The results of the independent *t*-test were not significant,  $t(196) = 1.61$ ,  $p = .11$ , indicating that there is not a significant difference between the scores of general education teachers who have taught in inclusive settings ( $M = 9.31$ ,  $SD = 4.14$ ,  $n = 144$ ) and general education teachers who have only taught in traditional settings ( $M = 8.28$ ,  $SD$

= 3.64, n = 54). ETA squared was used to calculate effect size. Effect size was .01, indicating a very small magnitude of difference in the means. The 95% confidence interval, as shown in the table below, for the difference between the means was -0.23 to 2.29. The researcher was unable to reject the null hypothesis.

Table 25

*CI for Factor 3*

Measure	95% CI	
	LL	UL
Equal Variances assumed	-0.24	2.29
Equal variances not assumed	-0.17	2.22

*Note.* CI is Confidence Interval. LL is lower limit. UL is upper limit.

Table 26 exhibits the summary statistics that were gathered from the scores of each respondent for Factor 3. Because a constant of nine was added to each score, the actual possible range of scores for the questions relating to Factor 3 was 0-18.

Table 26

*Summary Statistics-Factor 3 Scores*

Group	<i>N</i>	$\bar{X}$	$\sigma$	<i>Median</i>	<i>Range</i>	<i>Minimum</i>	<i>Maximum</i>
1	144	9.31	4.14	10.00	18.00	0.00	18.00
2	54	8.28	3.64	9.00	15.00	0.00	15.00

**Research Question 5**

Do general education teachers in who have taught in inclusive middle school settings have a different understanding of special education than general education teachers who have only taught in traditional middle school settings?

## Null Hypothesis 5

General education teachers who have taught in inclusive middle school settings do not have a different understanding of special education than general education teachers who have only in traditional middle school settings.

Table 27 sets forth the summary statistics for the data. Group 1 represents the general education teachers who had taught in inclusive settings, and Group 2 represents the general education teachers who had only taught in traditional settings. The number of questions on the survey involving Factor 4 is indicated by *n*. Both groups exhibited below average means for Factor 4. These were the lowest means of the five research questions.

Table 27

### *Summary Statistics-Factor 4*

Group	<i>n</i>	$\bar{X}$	Variance	$\sigma$	Median	Range	Minimum	Maximum
1	4	2.79	0.05	0.21	2.86	0.49	2.48	2.97
2	4	2.76	0.12	0.34	2.74	0.70	2.43	3.13

The dependent variable must be normally distributed in the population for each group being compared. In SPSS, this is done by reviewing the skewness and kurtosis, which are presented in Table 28. The values for skewness and kurtosis both fall in the acceptable range of +/- 2, meaning that the dependent variable is normally distributed.

Table 28

### *Skewness and Kurtosis-Factor 4*

	Skewness	SE	Kurtosis	SE
Factor 4	-0.04	0.17	-0.56	0.34

The data must also meet the assumption of homogeneity of variance, meaning that the distribution of the dependent variable for one of the groups being compared must have the same variance as the distribution for the other group being compared. SPSS verifies equality of variance with Levene's test. Table 29 shows the significance of Levene's to be 0.14, which exceeds the p-value of .05, meaning equal variances can be assumed.

Table 29

*Levene's Test for Equality of Variance-Factor 4*

	F	Sig.
Equal Variances Assumed	2.25	0.14
Equal Variances Not Assumed		

The *t*-test was calculated on the data for the fourth research question or Factor 4. Factor 4 involved the sum of the score from ORI questions 5, 8, 13, and 23. The following table displays the mean difference, sample mean, standard error, degrees of freedom, *t*-stat, and *p*-value for Factor 4.

Table 30

*Independent Samples Test-Factor 4*

Measure	Mean difference	SE	Df	<i>t</i>	Sig.
Equal variances assumed	0.11	0.82	196	0.13	0.89
Equal variances not assumed	0.11	0.77	109.53	0.14	0.89

An independent *t*-test was conducted to evaluate whether a statistically significant difference exists between the perceptions of inclusion (special education versus inclusive general education) of general education teachers who have taught in inclusive settings

and general education teachers who have only taught in traditional settings. At the probability of .05,  $df = 196$ , the  $t$ -stat value of 0.13 is smaller than the table value of 2.44. The results of the independent  $t$ -test were not significant,  $t(196) = 0.13$ ,  $p = .89$ , indicating that there is a not significant difference between the scores of general education teachers who have taught in inclusive settings ( $M = 11.16$ ,  $SD = 5.33$ ,  $n = 144$ ) and general education teachers who have only taught in traditional settings ( $M = 11.04$ ,  $SD = 4.63$ ,  $n = 54$ ). ETA squared was used to calculate effect size. Effect size was 0, indicating no difference in the means. The 95% confidence interval, as shown in the table below, for the difference between the means was -0.47 to 0.53. The researcher was unable to reject the null hypothesis.

Table 31

*CI for Factor 4*

Measure	95% CI	
	LL	UL
Equal Variances assumed	-1.52	1.74
Equal variances not assumed	-1.42	1.64

Table 32 exhibits the summary statistics that were gathered from the scores of each respondent for Factor 4. Because a constant of 12 was added to each score, the actual possible range of scores for the questions relating to Factor 4 was 0-24.

Table 32

*Summary Statistics-Factor 4 Scores*

Group	$N$	$\bar{X}$	$\sigma$	Median	Range	Minimum	Maximum
1	144	11.16	5.33	12.00	24.00	0.00	24.00
2	54	11.04	4.63	11.00	20.00	1.00	21.00

## Summary

The summary table below provides a quick reference of results for each of the five research questions. Listed are the means of each group, the degrees of freedom, the  $t$ -stat, the table value of the  $t$ -stat, and the statistical significance. The table includes the general research question and the four factors that comprise the remaining four research questions that are addressed in the study.

Table 33

### *Summary of Research Questions*

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	$\bar{X}$ Group 1	$\bar{X}$ Group 2	$Df$	$t$	Table Value	Significant
1	86.57	74.67	196	3.01	2.021	Yes
2	31.99	27.56	137.87	3.69	2.145	Yes
3	34.11	27.80	196	3.53	2.101	Yes
4	9.31	8.23	196	1.61	2.776	No
5	11.15	11.04	196	0.13	2.447	No

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For the general research question, the researcher was able to reject the null hypothesis that there is no statistically significant difference between the perceptions of the two groups of general education teachers, as determined by the ORI. Data analysis of Factors 2 and 3 also allowed for rejection of the null hypothesis that there is no statistically significant difference between the perceptions of the two groups of general education teachers in the areas of benefits of inclusion and inclusive classroom management. Factors 3 and 4 found no statistically significant difference between the two groups and resulted in the inability to reject the null hypothesis for those two questions.

Scores on the ORI were calculated according to directions from the scoring key.

Total scores from 0-150 were possible. The range of actual scores for Group 1 was 8-136 (M = 86.57, SD = 25.72). The range of actual scores for Group 2 was 29-123 M = 74.67, SD = 21.99). Scores for Factor 1 (benefits of inclusion) potentially fell from 0 to 48. Actual scores for Group 1 were 2-48 (M = 31.99, SD = 9.59). Actual scores for Group 2 were 14-43 (M = 27.56, SD = 6.61). Factor 2 scores (inclusive classroom management) could have been between 0 and 60. Actual Group 1 scores ranged from 6-59 (M = 34.11, SD = 11.37). Actual Group 2 scores ranged from 2-53 (M = 27.80, SD = 10.77). Factor 3 (perceived ability to teach students with disabilities) scores had a possible range of 0-18. Group 1 scored along the entire range from 0-18 (M = 9.31, SD = 4.14). Group 2 scores ranged from 0-15 (M = 8.28, SD = 3.64). Scores for Factor 4 (special education versus inclusive general education) potentially could have ranged from 0 to 24. Group 1 scores ranged from 0-24 (M = 11.16, SD = 5.33) while Group 2 scores ranged from 1-21 (M = 11.04, SD = 4.63).

Chapter Five has a summary of the research project, the researcher's interpretation of these findings, and their relevance in light of the review of literature. The chapter will also discuss the implications for further research, education policy, and education pedagogy.

## **CHAPTER FIVE: CONCLUSION**

The previous chapter presented data analyses utilizing the independent *t*-test to examine the differences between the perceptions of two groups of general education teachers in rural Northeast Georgia middle schools. Descriptive statistics and summaries were also presented. This chapter is organized into a statement of the problem, a summary of the findings, and a discussion of the findings of the study. Study limitations and recommendations for future research are also included.

### **Statement of the Problem**

The study addresses the following problem: Do general education teachers who have taught in inclusive settings and general education teachers who have only taught in traditional settings have similar perceptions toward inclusion of students with disabilities? The two groups of general education teachers who were surveyed showed differing perceptions on the general question and two of the factors.

### **Significance of the Study**

Researchers have surveyed the perceptions of inclusion held by students with disabilities, their typically-developing peers, their parents, their general education teachers, their special education teachers, their administrators, their service providers, and other stakeholders in the educational success of students with disabilities. Researchers have also surveyed the involved parties about their perceptions of inclusion, and then compared the perceptions between the groups. By comparing two different groups of general education teachers, this study attempted to show whether or not there was a difference in the perceptions of the two groups. Therefore, this study has added to

the body of knowledge about perceptions of inclusion.

The focus of this study was general education teachers in rural Northeast Georgia. Because of the highly qualified mandate of NCLB, rural schools are using different models to attract and retain highly qualified teachers. These models differ in urban and suburban districts, which affect the perceptions of the teachers in these areas. This study has implications for further research, educational policy, and educational pedagogy.

### **Review of Null Hypotheses**

The null hypotheses were as follows:

H1<sub>0</sub>: There will be no statistically significant difference between the perceptions of inclusion held by general education teachers who teach in inclusive middle school settings and the perceptions of inclusion held by general education teachers who teach in traditional middle school settings.

H2<sub>0</sub>: General education teachers in inclusive middle school settings perceive the benefits of inclusion no differently than general education teachers in traditional middle school settings.

H3<sub>0</sub>: General education teachers in inclusive middle school settings do not perceive the benefits of classroom management in inclusive settings differently than general education teachers in traditional middle school settings.

H4<sub>0</sub>: General education teachers in inclusive middle school settings do not perceive their ability to teach students with disabilities differently than general education teachers in traditional middle school settings.

H5<sub>0</sub>: General education teachers in inclusive middle school settings do not have a different understanding of special education than general education teachers in traditional middle school settings.

The researcher tested these null hypotheses using the *t*-test and gathered descriptive statistics using SPSS and Microsoft Excel. The findings were summarized in the 31 tables in Chapter 4.

### **Summary of the Findings**

The research questions consisted of one general research question and four research questions derived from the factors embedded in the survey. The data for the general research question and the first two factor research questions showed a statistically significant difference in the perceptions of inclusion held by general education teachers who have taught in inclusive environments and general education teachers who have only taught in traditional settings. The result of the *t*-tests performed on the data for the third and fourth factor research question, however, showed no statistically significant difference between teacher perceptions within the two groups being analyzed.

### **Discussion of the Findings and Implications of Relevant Literature**

Educators have long realized that one of the most important influences on a child's educational progress is the classroom teacher (Antonak & Larrivee, 1995). Measuring teacher perceptions gives insight into the factors that support positive teacher involvement. As stated in Chapter 1, the purpose of this study was to compare teacher perceptions of inclusion. Ex-post facto research was chosen as the method of research due to the need to survey teachers' perceptions "after the fact." The survey instrument was completed by 198 teachers within 14 Northeast Georgia middle schools with similar

student demographics. One group of general education teachers had taught students with disabilities in inclusive settings, and one group of general education teachers had only taught in traditional settings. The results of the survey instrument were used to compare the perceptions of the teachers and to determine if having taught in inclusive settings caused differences of opinion about inclusion, and if so, if teaching in an inclusive setting was a factor in those differences of opinion.

**Research question one.** The statistical analysis done on the results of the total survey scores revealed that in this study there was a statistically significant difference in the total score of respondents who had taught in inclusive settings and the total score of respondents who had only taught in traditional settings. These questions addressed the total of the four different factors relating to inclusion. Because the combined total score of all participants was very close to neutral, this seems to indicate that the general education teachers are not highly supportive of inclusion, nor do they highly disapprove of inclusion. Since the attitudes that teachers hold are critical for the success of inclusion, these findings are enlightening. Clearly, if inclusion is to succeed, something needs to be done to improve the perceptions of inclusion among Northeast Georgia general education teachers. The study also found that in a survey of 198 general education teachers, the mean score for the total survey was neutral for the group as a whole; these teachers exhibited neither positive nor negative perceptions of inclusion. Researchers should ask why, after years of promoting inclusion for students with disabilities, general education teachers are not showing more positive perceptions of the process.

**Research question two.** The statistical analysis also showed a statistically significant difference in the responses given on the questions comprising Factor 1:

benefits of inclusion. These questions mainly addressed the benefits of inclusion for students with disabilities and also the benefits of inclusion for their peers without disabilities. These results suggest that while both groups of general education teachers can recognize the benefits of inclusion for all students, general education teachers who have taught in inclusive settings show more positive perceptions of the benefits of inclusion. It is likely that having been exposed to students with disabilities has shown the teachers that the benefits are tangible. Also, the teachers have gotten over their fear of the unknown. As more and more general education teachers teach students with disabilities, this factor should improve even more.

**Research question three.** The statistical analysis showed a statistically significant difference in the responses given on the questions comprising Factor 2: inclusive classroom management. These questions focused on both behavior management and on the extra amount of work that would be realized by including students with disabilities. Teacher concerns included classroom management procedures and extra administrative work. This factor can be influenced by the category of the disability. Teachers are generally more positive about including students with physical disabilities than students with emotional and behavioral disabilities (Dupoux et al., 2005). These results demonstrate that general education teachers are divided on how the inclusion of students with disabilities affects classroom management. General education teachers who have not taught in inclusive settings are more likely to have concerns about inclusive classroom management. Once general education teachers experience teaching students with disabilities, they realize that classroom management is not the hurdle they once thought. Perhaps more teacher training on classroom management would help alleviate

these fears.

**Research question four.** The statistical analysis showed no statistically significant difference in the responses given on the questions comprising Factor 3: perceived ability to teach students with disabilities. The questions that made up Factor 3 are mostly concerned with ability and training. Both groups of general education teachers held similar perceptions about the ability of the general education teacher to effectively teach students with disabilities. It is not surprising that general education teachers believe in their ability to teach. After all, these teachers are well-versed in their content and they know their subject.

**Research question five.** The statistical analysis revealed no statistically significant difference on Factor 4: special education versus inclusive education. On questions that reflected perceptions of special education versus inclusive education, general education teachers who had only taught in traditional settings did not reflect more positive perceptions about inclusion than general education teachers who had taught in inclusive settings. General education teachers from both groups held similar perceptions about the appropriate placement for students with disabilities. These questions focused on whether the respondent believed that general education was the best placement for students with disabilities. As the trend has moved from self-contained special education class settings for all students with disabilities to placement in the general education classroom, general education teachers have been asked to accept this idea. Some general education teachers in the system today have likely never experienced self-contained settings for students with learning disabilities or other mild disabilities.

Surprisingly, the results from all five research questions reflected almost precisely

neutral teacher perceptions of inclusion. The typical response fell between the extremes of strong agreement and strong disagreement. The review of the literature, informal conversations with teachers, and personal experience had led the researcher to speculate that perceptions of inclusion would be negative. However, the researcher felt that general education teachers who had taught in inclusive settings would have overwhelmingly more positive perceptions of inclusion than general education teachers who had only taught in traditional settings. As Taylor, Smiley, and Ramasamy (2001) found, general education teachers are generally positive about the philosophy of inclusion, but negative about the implementation. One survey of special education teachers found beliefs that an inclusive setting may be more restrictive than a self-contained setting (Shealey, McHatton, & Farmer, 2009). Once again, for inclusion to be successful, the attitudes of the teachers involved (both general education and special education) must be positive. In order to increase positive perceptions of inclusion, the arguments against inclusion must be identified and rebutted with logical, reasoned arguments (Halle & Dymond, 2010).

Because special education training is one of the most oft-mentioned factors influencing general education teachers' perceptions of inclusion, this factor must be addressed. M.K. Smith and K.E. Smith (2000) found that general education teachers related emphatically that their undergraduate coursework had done nothing to prepare them for teaching students with disabilities in inclusive settings, while Hines (2001) found that general education teachers do not feel they have had the necessary training to teach students with disabilities. These studies measured the perceptions of teachers who are clearly representative of the teachers who are charged with teaching students with disabilities. As numerous general education teachers in Northeast Georgia are teaching

students with disabilities, a unified special education and general education teacher preparation program as proposed by Hsien (2007) may be the answer.

The demographic portion of the survey specifically asked general education teachers if they had taught in an inclusive setting, either in a coteaching classroom or in a supported instruction classroom with a paraprofessional. Most of the general education teachers answered that they had taught in this setting. Thanks to the highly qualified mandate of the NCLB, coteaching and supported instruction are gaining traction in today's classrooms. Coteaching and supported instruction helps districts to overcome the challenges created by the necessity of recruiting and retaining highly qualified teachers (Kossar, Mitchem, & Ludlow, 2005). Special education teachers are not required to show core academic competence in order to be highly qualified when instructing in a coteaching setting (Wakeman, Browder, Meier, & McColl, 2007). For this reason, the enactment of NCLB, and its highly qualified mandate, have increased the number of inclusive, collaboratively taught classrooms.

### **Study Limitations and Recommendations for Further Research**

The study was based on the perceptions of general education teachers as measured by the ORI. The ORI was administered to general education teachers in 14 middle schools within 11 rural school districts in Northeast Georgia. While it may not be appropriate to generalize the results to all populations and schools, the data gives information that may be important to specific populations. The limitations section will discuss some of the weaknesses of the study, such as design, analysis, instrumentation, sample, and threats to external and internal validity. The recommendations section will

discuss recommendations, research implications, practitioner implications, policy implications, and areas for future research.

### **Limitations**

The limitations of this study are as follows:

1. The survey was administered to a homogeneous group of teachers.  
Perceptions can be very different in rural areas, where a high number of teachers may not have access to professional development.
2. Any survey that is limited to one instrument may not realize its full potential.
3. There may be unobservable personal variations that cannot be captured by administering a survey of perceptions. Survey research relies on the participant to provide honest answers through self-reporting or personal perceptions.
4. General education teachers were the target population of this study. No other licensure area was targeted.
5. Quantitative information was the focus of this study. Designing a mixed design study and thus implementing the rigor of qualitative methods could lead to an increased amount of data being gathered in order to draw more in-depth conclusions.
6. Although the ORI met validity and reliability measures, the subscales should be used with caution. There are not an equal number of questions in each subscale. For instance Factor 1 consists of eight questions, while Factor 3 is comprised of four questions.

## **Recommendations**

This study was done primarily to compare two groups of general education teachers' perceptions of inclusion. The findings have implications for researchers, practitioners, and policy makers. The most important finding of the study is that the vast majority of general education teachers in rural Northeast Georgia who responded to this survey are teaching students with disabilities in the classroom. Researchers should not only want to know these teachers' perceptions of teaching students with disabilities, but their level of training and how successful they have been at teaching these students. Practitioners should know that they will most likely be teaching students with disabilities in their general education classroom.

The implication for teacher preparation programs is that more teachers need to take courses relating to students with disabilities. While introductory courses on special education are an important starting point, teacher preparation programs need to be more thorough and systematic in how they approach educating those who will instruct students with disabilities. Policy makers need to review IDEA and NCLB. Because students with disabilities are now being educated in general education classrooms, the whole concept of special education has changed. Unfortunately, the laws are ambiguous on the concept of inclusion and how to implement it. This expectation needs to be clarified.

Practitioners of both special education and general education should investigate the actions that can be taken, whether in the schools or in the teacher preparation programs, that would promote a more positive perception of inclusion. Policymakers, as well, should look at education law. If students with disabilities are being taught by general education teachers who do not have a positive attitude about inclusion, these

students may be left behind.

Based on the findings of this study, the following recommendations for further research are made:

1. Research should be conducted that investigates the amount and quality of training that general education teachers are receiving in rural areas in order to teach students with disabilities. Teacher perceptions of inclusion can improve significantly when they are trained to make adaptations to the general education curriculum for students with disabilities (Leyser & Tappendorf, 2001).
2. Research should be conducted on district administrators to determine the extent that NCLB and the highly qualified mandate are driving the number of general education teachers who are teaching students with disabilities.
3. Research is needed to analyze the points of view of students with disabilities to determine whether or not they perceive a difference in the teaching styles of the general education teacher and the special education teacher.
4. More research is needed to continue to examine the demographic factors that affect teacher attitudes toward inclusion. Findings reported in the literature regarding the relationship between teacher demographic characteristics and teacher perceptions are often inconsistent.
5. Research is needed to test whether teacher perceptions of inclusion differ with larger samples or with samples that represent urban, suburban, or rural communities. This research should be ongoing as perceptions change over time.

6. Replication of this study using a more precise survey instrument could prove beneficial in determining the reason for differences between teachers' perceptions of inclusion. Teachers' perceptions are critical to the education of children.
7. Research is needed to identify the perception of inclusion of students with differing categories of disabilities in the general education classroom because studies have shown that the category of the disability impacts general education teachers' perceptions of inclusion.
8. More research needs to be done on the relationship between the level of education attained and the teacher's perceptions of inclusion.
9. More research should be done which utilizes the perceptions of all inclusion stakeholders such as students, teachers, administrators, parents, and others.

## **Conclusion**

Overall, the findings from the study demonstrate that when the perceptions of general education teachers who have taught students with disabilities are compared with the perceptions of general education teachers who have never taught students with disabilities, general education teachers who have taught students with disabilities have a more positive attitude toward inclusion. The study also found that general education teachers who have taught in inclusive settings had more positive perceptions of the benefits of inclusion than general education teachers who had not taught in inclusive settings. Likewise, general education teachers who had taught in inclusive settings were more positive about classroom management than general education teachers who had not taught in inclusive settings. On the other hand, there was no statistically significant

difference in the perceptions of the two groups of teachers relating to their perceived ability to teach students with disabilities. There was also no difference in the teachers' perceptions of special education placement versus general education placement.

Research Questions examined in this study included:

1. To what extent is there a difference when comparing perceptions of inclusion by middle school general education teachers who teach in inclusive settings and middle school general education teachers who teach in traditional settings?
2. Do general education teachers in inclusive middle school settings perceive the benefits of inclusion differently than general education teachers in traditional middle school settings?
3. Do general education teachers in inclusive middle school settings perceive the benefits of classroom management in inclusive settings differently than general education teachers in traditional middle school settings?
4. Do general education teachers in inclusive middle school settings perceive their ability to teach students with disabilities differently than general education teachers in traditional middle school settings?
5. Do general education teachers in inclusive middle school settings have a different understanding of special education than general education teachers in traditional middle school settings?

This study suggests that the variable of having taught students with disabilities has an effect on enhancing positive perceptions toward inclusion. General education teachers who have taught students with disabilities have more positive perceptions of inclusion in three of the five areas. This is rewarding and reassuring

because it indicates that that general education teachers who have taught students with disabilities are not disenchanted by the task. As more general education teachers are introduced to teaching in an inclusive environment, positive perceptions of inclusion should increase proportionally. Students with disabilities have a civil right to be educated with their peers. Once again, separate but equal is not equal. Complete inclusion and acceptance of students with disabilities will only occur if there are long-term changes in the perceptions of teachers.

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## APPENDICES

### Appendix A Opinions Relative to the Integration of Students with Disabilities Survey



UNIVERSITY of  
MASSACHUSETTS BOSTON  
100 Morrissey Blvd.  
Boston, MA 02125-3393

Office of the  
Vice Provost for Research  
617.287.5600  
Fax: 617.287.5616

October 18, 2011

Dear Inquirer:

Thank you for your inquiry about the scale entitled *Opinions Relative to Mainstreaming Special-Needs Children*. This scale was completely revised recently. It is now entitled *Opinions Relative to the Integration of Students with Disabilities*. I have enclosed with this letter a copy of the most recent version of the *ORI* scale and a scoring key for your use.

You may reproduce the *ORI* scale in any form that suits your research needs. The only requirement that we have for the use of the instrument is that you ascribe authorship to Dr. Larrivee and me somewhere on the instrument and acknowledge us as the authors of the instrument, using the citation below, in any publication that may arise from your use of it.

Good luck with your research. Please call or write if I can assist you further.

Very truly yours,

s/Richard F. Antonak

Richard F. Antonak, Ed.D.  
Vice Provost for Research

*Appropriate citation:*

Antonak, R. F., & Larrivee, B. (1995). Psychometric analysis and revision of the Opinions Relative to Mainstreaming Scale. *Exceptional Children*, 62, 139-

## 149. Opinions Relative To The Integration Of Students With Disabilities

**General Directions:** Educators have long realized that one of the most important influences on a child's educational progress is the classroom teacher. The purpose of this questionnaire is to obtain information that will aid school systems in increasing the classroom teacher's effectiveness with students with disabilities placed in his or her classroom. Please circle the number to the left of each item that best describes your agreement or disagreement with the statement. There are no correct answers: the best answers are those that honestly reflect your feelings. There is no time limit, but you should work as quickly as you can.

*Please respond to every statement.*

**KEY**

<p>-3: I disagree very much          -2: I disagree pretty much          -1: I disagree a little</p>	<p>+1: I agree a little          +2: I agree pretty much          +3: I agree very much</p>
--	---

**-3-2 -1 +1 +2 +3** 1. Most students with disabilities will make an adequate attempt to complete their assignments.

**-3-2 -1 +1 +2 +3** 2. Integration of students with disabilities will necessitate extensive retraining of general-classroom teachers.

**-3-2 -1 +1 +2 +3** 3. Integration offers mixed group interaction that will foster understanding and acceptance of differences among students.

**-3-2 -1 +1 +2 +3** 4. It is likely that the student with a disability will exhibit behavior problems in a general classroom.

**-3-2 -1 +1 +2 +3** 5. Students with disabilities can best be served in general classrooms.

**-3-2 -1 +1 +2 +3** 6. The extra attention students with disabilities require will be to the detriment of the other students.

**-3-2 -1 +1 +2 +3** 7. The challenge of being in a general classroom will promote the academic growth of the student with a disability.

**-3-2 -1 +1 +2 +3** 8. Integration of students with disabilities will require significant changes in general classroom procedures.

**-3-2 -1 +1 +2 +3** 9. Increased freedom in the general classroom creates too much confusion for the student with a disability.

**-3-2 -1 +1 +2 +3** 10. General-classroom teachers have the ability necessary to work with students with disabilities.

**-3-2 -1 +1 +2 +3** 11.The presence of students with disabilities will not promote acceptance of differences on the part of students without disabilities.

Please respond to every statement.

**KEY**

-3: I disagree very much  
-2: I disagree pretty much  
-1: I disagree a little

+1: I agree a little  
+2: I agree pretty much  
+3: I agree very much

- 3-2 -1 +1 +2 +3** 12.The behavior of students with disabilities will set a bad example for students without disabilities.
- 3-2 -1 +1 +2 +3** 13.The student with a disability will probably develop academic skills more rapidly in a general classroom than in a special classroom.
- 3-2 -1 +1 +2 +3** 14.Integration of the student with a disability will not promote his or her social independence.
- 3-2 -1 +1 +2 +3** 15.It is not more difficult to maintain order in a general classroom that contains a student with a disability than in one that does not contain a student with a disability.
- 3-2 -1 +1 +2 +3** 16.Students with disabilities will not monopolize the general-classroom teacher's time.
- 3-2 -1 +1 +2 +3** 17.The integration of students with disabilities can be beneficial for students without disabilities.
- 3-2 -1 +1 +2 +3** 18.Students with disabilities are likely to create confusion in the general classroom.
- 3-2 -1 +1 +2 +3** 19.General-classroom teachers have sufficient training to teach students with disabilities.
- 3-2 -1 +1 +2 +3** 20.Integration will likely have a negative effect on the emotional development of the student with a disability.
- 3-2 -1 +1 +2 +3** 21.Students with disabilities should be given every opportunity to function in the general classroom where possible.
- 3-2 -1 +1 +2 +3** 22.The classroom behavior of the student with a disability generally does not require more patience from the teacher than does the classroom behavior of the student without a disability.
- 3-2 -1 +1 +2 +3** 23.Teaching students with disabilities is better done by special- than by general-classroom teachers.
- 3-2 -1 +1 +2 +3** 24.Isolation in a special classroom has a beneficial effect on the social and emotional development of the student with a disability.
- 3-2 -1 +1 +2 +3** 25.The student with a disability will not be socially isolated in the general classroom.

thank you for your assistance in responding to this questionnaire **Barbara Larrivee**  
**Richard F. Antonak**

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## Opinions Relative To The Integration Of Students With Disabilities

### ORI Scoring Key

Item #	+/-	Factor
1	+	II
2	-	III
3	+	I
4	-	II
5	+	IV
6	-	II
7	+	I
8	-	IV
9	-	II
10	+	III
11	-	I
12	-	II
13	+	IV

Item #	+/-	Factor
14	-	I
15	+	II
16	+	II
17	+	I
18	-	II
19	+	III
20	-	I
21	+	I
22	+	II
23	-	IV
24	-	I
25	+	II

**To score the ORI:**

1. Positively score the 12 items that are worded negatively by reversing the sign of the response (i.e., from + to – , or from – to +).
2. Sum the 25 item responses.
3. Add a constant of 75 to the total to eliminate negative scores.
4. Scores range from 0 to 150 with a higher score representing a more favorable attitude toward the integration of students with disabilities into general education classrooms.
5. It is suggested that protocols with omitted responses to 4 or more items should not be scored. Protocols with omitted responses are scored as described above, with the omitted responses assigned a value of zero.

Preliminary research data suggest there may be four orthogonal factors that account for the variation in the ORI item responses. Scores for these four factors are determined by summing the positively-scored item responses as indicated in the table below. The use of factor scores as subscale scores for differential prediction of attitudes has not been investigated. The computation of ORI subscale scores cannot be defended until these factors can be shown to be homogeneous, reliable, and specific, and until they consistently predict valid indicators of favorable attitudes of education professionals.

<b>Factor</b>	<b># Items</b>	<b># + / #–</b>	<b>Range</b>	<b>Factor Title</b>
I	8	4+ / 4–	0 to 48	Benefits of Integration
II	10	5+ / 5–	0 to 60	Integrated Classroom Management
III	3	2+ / 1–	0 to 18	Perceived Ability to Teach Students with Disabilities
IV	4	2+ / 2–	0 to 24	Special versus Integrated General Education

**Reference citation:**

Antonak, R. F., & Larrivee, B. (1995). Psychometric analysis and revision of the Opinions Relative to Mainstreaming Scale. *Exceptional Children*, 62, 139-149.

**For more information:**

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## **Appendix B**

### **Demographic Section for Inclusion Survey**

- 1) Please select your current school:
- 2) Please select your gender:
- 3) Have you ever taught students with disabilities in an inclusive setting (either supported instruction with a paraprofessional or co-teaching with a special education teacher)?
- 4) Please select educational level:
- 5) Please select years of experience:

**Appendix C**  
**Letter to Pioneer RESA Board of Control**

Dear Dr. Addis and Board of Control:

I am currently a doctoral candidate in Educational Leadership – Teaching and Learning at Liberty University in Lynchburg, Virginia. The purpose and overall goal of my dissertation is to examine the differences in teacher perceptions of inclusion among general education teachers at rural middle schools in Northeast Georgia. I am also a special education teacher at Banks County Middle School in Homer, Georgia.

I propose to survey the teachers from as many different middle schools as possible within the Pioneer RESA district. I respectfully request your permission to use the system data and contact the principal in each of the middle schools to receive their permission to anonymously survey their teachers. This will be done through an anonymous online survey.

Upon receiving the permission of the RESA Board of Control, my dissertation committee, and the Liberty University IRB, I will contact the principals to determine the approximate number of teachers who will be included in this study. I would greatly appreciate your permission and support. At your request, the results of this study will be shared with the Board of Control, the RESA, and the school personnel.

Thank you for your consideration. If you have any questions, please feel free to contact me at (706) 498-1328; or by email at [krhoades@banks.k12.ga.us](mailto:krhoades@banks.k12.ga.us).

Sincerely,

Kelly Whitaker Rhoades

## Appendix D

### Permission Letter from RESA Board of Control



P.O. Box 1789  
1342 Highway 254  
Cleveland, GA 30528-0033  
Phone: (706) 865-2141  
Toll-Free: (866) 812-RESA  
Fax: (706) 865-6748

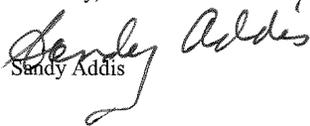
Sandy Addis  
Director

May 3, 2011

To Whom It May Concern:

This letter is to verify that the Pioneer Regional Educational Service Agency (RESA) Board of Control has granted permission for Ms. Kelly Whitaker to contact principals of certain schools within the Pioneer RESA service area for the purpose of requesting their permission to survey teachers relative to her dissertation research.

Sincerely,

  
Sandy Addis

---

Working Collaboratively with  
Banks · Dawson · Franklin · Gainesville City · Habersham · Hall · Hart · Lumpkin · Rabun · Stephens · Towns · Union · White  
Gainesville State College · North Georgia College and State University · Lanier Technical College · North Georgia Technical College  
Northeast Georgia Regional Library System  
[www.pioneerresa.org](http://www.pioneerresa.org)

**Appendix E**

**Liberty Institutional Review Board Approval Letter**

March 24, 2011

Kelly Whitaker  
IRB Approval 1053.032311: General Education Teachers' Perceptions of Inclusion in  
Rural Northeast Georgia

Dear Kelly,

We are pleased to inform you that your above study has been approved by the Liberty IRB. This approval is extended to you for one year. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB and we wish you well with your research project.

Sincerely,



**Fernando Garzon, Psy.D.**  
*IRB Chair, Associate Professor*  
**Center for Counseling & Family Studies**

(434) 592-5054