The Relation Between High School Teacher Sense of Teaching Efficacy and Self-Reported Attitudes Toward the Inclusive Classroom Settings

By

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Liberty University

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

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Abstract

The purpose of this study was to investigate if collective sense of teaching efficacy, general sense of teaching efficacy, or personal sense of teacher efficacy influenced teacher attitude toward inclusive classroom settings. Additionally, the study sought to determine if teacher attitude toward inclusive classroom settings differed when taking into account primary student disability type. Prior research indicates that there is a direct link between teacher sense of efficacy and student disability type when determining teacher attitude toward inclusive classroom settings. The sample population for the survey consisted of a convenience sample that represented only a select number of teachers, thus limiting the generalizability of the findings. Multiple regression and analysis of variance (ANOVA) were utilized to test the hypotheses that teacher sense of efficacy and student disability type had no impact on teacher attitude toward inclusive classroom settings. Consistent with predictions based on Social Cognitive Theory, this study indicated that teacher sense of efficacy and primary student disability type had a direct impact on teacher attitude toward inclusive classroom settings.

Keywords: high school teacher attitude, inclusion, teaching efficacy, interventions, disabilities.
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CHAPTER ONE - INTRODUCTION

Research supports the notion that teacher efficacy and attitude correlate with meaningful public school outcomes and student success (Smith, 2008). The quality of the experience for both student and teacher is based on their relationship and how they interact within that relationship. The teacher/student affiliation is contingent upon several variables. The variables that may influence the student/teacher bond can include individual personalities, the surrounding environment, student disabilities, and the assumptions and beliefs that both teacher and student bring to the relationship (Schaefer, 2010). Additionally, teacher attitude and sense of self-efficacy may influence student participation, classroom management skills, instruction, and overall climate (Acikgoz, 2005).

Over the last two decades, teacher efficacy has been identified as a crucial component in improving educational reform, teacher education, effective teaching practices, and teacher attitude toward inclusive settings (Barco, 2007). Teacher efficacy beliefs, along with teacher attitudes, have been associated with the educational success of students’ with disabilities receiving instruction in inclusive classrooms and participating in the general education curriculum. Teacher attitude toward students with special needs, their sense of teaching-efficacy, and the severity of student disabilities present in the classroom have a direct impact on their attitude toward the inclusive classroom, which directly influences student performance and academic success (Alahbabi, 2009).
The National Center for Educational Statistics (NCES) (2004-2005) reported 13.8% of students enrolled in public schools were students with disabilities and 52.1% of these students (ages 6-21 years old) spent 80% or more of their instructional time in the general education classroom. Because classroom diversity has broadened considerably during the last couple of decades, with more exceptional students’ being educated in general education classroom settings, a critical need exists for all teachers to be prepared to address their educational needs (Smith, 2008). Educational needs include student social and emotional development, language and cognitive differences, and disabilities. Teachers’ confidence in their knowledge and skills is essential to promoting the academic progress for all students (Barco, 2007). Continued examination of teacher efficacy, the obscure construct that has been acknowledged as influencing multiple variables, seems to be a research focus that may provide helpful data for teachers in inclusive classrooms.

Research focusing on the impact of high school teacher attitude and efficacy in the inclusive classroom is lacking compared to studies focusing on elementary level teacher attitude and sense of teaching efficacy. In the past, little consideration had been given to teacher preparation intended toward educating dissimilar learners, including those who are ethnically, socio-economically, and linguistically diverse, as well as those with disabilities (Barco, 2007).

**Background**

Much psychological and educational literature has been devoted to interpreting the concept of teacher attitude and teacher efficacy as it relates to student success (Sherman, Rasmussen, & Baydala, 2008). Empirical research supports teacher efficacy having a direct impact on teacher attitude in the classroom, which ultimately can affect
student achievement and student motivation (Beard, Hoy, & Woolfolk-Hoy, 2010; Schaefer, 2010).

The ratification of The Education for All Handicapped Children Act (Public Law 94-142) in 1975 created legal mandates that altered the educational process for students with disabilities in public schools (U.S. Department of Justice, 2006). Public Law 94-142, through a number of revisions, eventually resulted in the Individuals with Disabilities Education Act (IDEA) of 2004. To ensure that all students with disabilities were given free appropriate public education, in addition to complying with federal mandates, schools began emphasizing inclusive classroom designs.

Due to the scarcity of empirical data regarding inclusion at the high school level, it is difficult to draw firm conclusions to address the impact of teacher attitude toward inclusive classrooms, the impression of teaching-efficacy, or the influence of various student disabilities present in the classroom.

**Statement of Problem**

The significant issue concerning the overall sense of efficacy beliefs and attitudes toward inclusive classrooms and students with disabilities, with regard to educationalists in co-taught classrooms was the impetus of this study. This study sought to investigate teacher attitudes toward inclusive feasibility and identify new methods of research key to understanding teacher attitude and efficacy and its relationship to inclusion and co-teaching.

**Purpose of the Study**
This study sought to examine potential correlations between teacher attitude toward inclusive classroom settings, collective sense of teacher efficacy, general teaching efficacy, personal teaching efficacy, and student disability type in high school settings. This study focused on the relationships between teacher efficacy and student disability types in seven urban, public, high schools in the Southeastern United States. This study sought to provide additional empirical research on inclusive classrooms at the high school level since most of the studies have been conducted at the elementary level (Barco, 2007).

**Research Questions**

1. Is there a relationship between teacher sense of collective teaching efficacy, general teaching efficacy, or personal teaching efficacy and their attitude toward inclusive classroom settings.

2. Is there a difference in teacher attitude toward inclusive classroom settings when working with various student disabilities groups (i.e. learning disabled (LD), emotional/behavioral disorders (EBD), other health impairments (OHI), or none listed).

**Statement of Hypothesis**

**Hypothesis 1**

$H_{01}$: There is no significant correlation between high school teachers’ collective sense of teaching efficacy (as shown by cumulative TES scores) and their attitude toward inclusive classroom settings (as shown by collective STATIC scores).
\( \text{H}_01_2 \): There is no significant correlation between high school teachers’ general sense of teaching efficacy (as shown by cumulative TES scores) and their attitude toward inclusive classroom settings (as shown by collective STATIC scores).

\( \text{H}_01_3 \): There is no significant correlation between high school teachers’ personal sense of teaching efficacy (as shown by cumulative TES scores) and their attitude toward inclusive classroom settings (as shown by collective STATIC scores).

**Hypothesis 2**

\( \text{H}_02_1 \)  There is no difference in teacher attitude toward inclusive classroom settings while working with learning disabled students (LD) when taking into account cumulative STATIC scores.

\( \text{H}_02_2 \)  There is no difference in teacher attitude toward inclusive classroom settings when working with emotional/behavioral disorders (EBD) when taking into account cumulative STATIC scores.

\( \text{H}_02_3 \)  There is no difference in teacher attitude toward inclusive classroom settings when working with other health impairments (OHI) when taking into account cumulative STATIC scores.

\( \text{H}_02_4 \)  There is no difference in teacher attitude toward inclusive classroom settings when working with students with none of the behavioral disorders listed, but still qualified as special needs students (i.e. traumatic brain injury, autistic, etc.) when taking into account cumulative STATIC scores.
Significance of the Study

Data relevant to the relationship between high school teacher sense of collective teaching efficacy, general teaching efficacy, personal teaching efficacy, and attitude toward inclusion classrooms as well as primary student disability type and attitude toward inclusive classroom settings was gathered for this study. The significance of data accumulation was to inform teachers about the importance of their attitude toward students with disabilities and the potential impact it can have on students’ overall performance. The researcher sought to provide data to guide high schools in producing and implementing staff development programs for inclusive educators that will help them accommodate all students in an accepting, beneficial, manner and feel more confident in their ability to successfully educate students in an inclusive classroom environment (Barco, 2007). Current research has focused on teacher efficacy and attitude toward inclusive classroom settings at the elementary level (Dover, 2007). Due to the scarcity of empirical research on inclusion at the high school level, it is difficult to draw conclusions from the few studies addressing the inclusion construct (Barco, 2007). Reviews of studies by Manset and Sammel (1997) failed to produce relevant research at the high school level that addresses teacher self-efficacy and teacher attitudes toward inclusive classroom settings. The data accumulated within this study stresses the importance of teacher attitude in relation to inclusive classroom settings at the high school level.

Definition of Terms

Because extensive alterations exist in defining special education disabilities across states, the survey utilized the following terms for consistency:
• **Accommodation**: A change in testing or academic procedures that affords students’ with disabilities an equal opportunity to participate in academic situations and demonstrate their understanding and aptitude (Mississippi Department of Education, 2007).

• **Emotional Behavioral Disorder (EBD)**: Emotional disturbance means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance: (a) an inability to learn that cannot be explained by intellectual, sensory, or health factors, (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers, (c) inappropriate types of behavior or feelings under normal circumstances, (d) a general pervasive mood of unhappiness or depression, or (e) a tendency to develop physical symptoms or fears associated with personal or school problems. (IDEA, 2004).

• **Full Inclusion**: All handicapped children, regardless of the severity and nature of their disability, are placed in a general education classroom or program full time (Ramirez, 2006).

• **General Teaching Efficacy**: Teachers’ beliefs about the power external factors have over the student’s motivation and performance in education compared to the influence of teachers and schools. External factors include conflict, violence, or substance abuse in the home or community; the value placed on education at home; the social and economic realities concerning
class, race, and gender; and the physiological, emotional and cognitive needs of a particular child (Tschannen-Moran, M., Woolfolk Hoy, A. & Hoy, W. K., 1998)

- **Inclusion**: A never-ending process of integrating students with disabilities, into the general education classroom, for the greater part of the day or to the maximum extent suitable for individual student needs. In inclusive settings, the primary venue is the general education classroom and support services are brought to the student with a disability to minimize their barriers to learning regardless of disability (Gordon, 2006; Ramirez, 2006; Pather, 2007).

- **Learning Disabled (LD)**: General, specific, learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using written or spoken language. Learning Disabilities may manifest themselves in an inability to listen, think, speak, read, write, spell, or to do mathematical calculations. These learning disabilities may include conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, or developmental aphasia. Specific learning disability does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage (IDEA, 2004).

- **Mainstreaming**: The integration of students with disabilities alongside their non-disabled peers for part of the day. This placement usually occurs during academic or non-academic periods depending on the severity of the student’s
disability. The purpose of mainstreaming is academic and social interaction. During academic periods, students with disabilities receive appropriate instructional support under a mainstream situation (Gordon, 2006).

- **Other Health Impairment (OHI):** Other health impairment can result in having limited strength, vitality, or alertness, including a heightened awareness of environmental stimuli that result in limited attentiveness in the educational environment. The limited attentiveness is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and Tourette syndrome, and adversely affects a child's educational performance (IDEA, 2004).

- **Personal Teaching Efficacy:** An individual’s confidence level in their personal ability, as a teacher, to overcome factors that make learning difficult for a student. It is a statement about their personal teaching ability reflecting confidence that they have adequate training or the experience to develop strategies for overcoming obstacles to student learning. These teachers may have experienced past success in boosting students’ achievement (Tschannen-Moran, et. all, 1998).

- **Students with Disabilities:** Included in the Individuals with Disabilities Education Improvement Act of 2004 (IDEA) are students who have been assessed, found to have a disability, and are in need of special education
services. The relevant services are in concurrence with state regulations and regulations under IDEA. To be provided services under special education students must (a) have up to date eligibility documentation for a specific disability under IDEA, (b) have a current Individualized Education Program (I.E.P.), and (c) receive special education services (Mississippi Dept. of Education, 2007).

- **Teacher Efficacy**: A teacher’s collective perception of his/her competence to promote learning in all students, including those with disabilities, regardless of their social or cognitive challenges (Woolfolk & Hoy, 2003-2004)
CHAPTER TWO – LITERATURE REVIEW

Due to legislation and federal mandates, an increasingly important issue for U.S. school districts has become the education of students with disabilities in the general education classroom (Barco, 2007). This chapter is a review of literature that discusses research related to this study. Fifteen areas were examined: (a) inclusion; (b) legal mandates behind inclusion; (c) obstacles to inclusion; (d) inclusive reform; (e) theoretical constructs behind teacher efficacy; (f) Social Cognitive Theory; (g) self-efficacy; (h) teacher attitude toward inclusion; (i) inclusive teachers at the high school level; (j) teachers and accommodations; (k) high school educator expectations; (l) teacher efficacy; (m) social cognitive theory; (n) teacher educational level and classroom experience; and (o) inclusive practices and differentiated instruction. Literature for this study was obtained through extensive library based inquiries and computer database searches including: Liberty Library Research Portal, Educational Resources Information Center (ERIC), Georgia Library Learning Online (GALILEO), Academic Premier Research, Psych INFO, Professional Development Collection, Academic Search Complete (EBCOhost), and LexisNexis Academic.

Inclusion

Inclusion as a singular definition has been hard to characterize. In some areas of the country, inclusion is thought of as serving students with disabilities in the general education setting; in other areas it is a reform supporting diversity amongst all students (Ainscow, 2006). Regardless of the definition, the ultimate goal of inclusion is to
eliminate social exclusions or diversity with regard to race, social class, gender, religion, ethnicity, or ability (Ainscow, 2006). Inclusive classroom designs are similar to the historical educational principles involved in integration, deinstitutionalization, the regular education initiative, normalization, and mainstreaming of students with disabilities; these settings are similar to the inclusive construct, but lack in meeting the academic needs of students with disabilities (Barco, 2007). More and more students with special needs are receiving their education within the general education classroom through the inclusive delivery model (Dover, 2005).

According to the National Research Council, in 2001 approximately 1.1 million students with disabilities were eligible for special education services in the United States (as cited in United States Government Accountability Office [GAO], 2005). Over the past 12 years students with disabilities receiving support services in the general education classroom has increased dramatically (Skiba, Poloni-Staudinger, Gallini, Feggins-Azziz, & Simmons, 2006). In 2006, the United States Department of Education published its 27th Annual Report to Congress on the implementation of IDEA noting 47.4% of students’ with disabilities were being provided supportive services in the general education setting, otherwise known as inclusive classrooms. The U.S. Department of Education figures reflected that in 2000 approximately 25% more students were diagnosed as having disabilities and being served in the general education classrooms than in the 1980’s (as cited in Barco, 2007). The increasing number of students with disabilities served in general education settings is reflective of multiple state efforts to ensure IDEA compliance with regard to the Least Restrictive Environment for students with disabilities (U.S. Department of Education, 2006). By 2012, the National Research
Council projects 1.3 million students will be eligible for special education services (as cited in Koenig & Bachman, 2004).

Prior to legislation and schools moving toward inclusive classrooms students with disabilities were often removed from the general education classroom and educated in an alternate setting, such as the remedial classroom, alternative schools, or the home (Watson, n.d.). A concern noted by parents, students, and schools, was instruction in remedial settings might not be consistent or continuous with regard to basic curriculum needs (Semmel, Butera, & Lesar, 1991). IDEA (1997) defined the least restrictive environment and encouraged the utilization of the general education classroom setting. As a result, more opportunities that are inclusive exist and fewer special needs students are educated in separate settings from their non-disabled peers (Barco, 2007).

Consensus on the precise definition of inclusion remains obscure and some have cited that the vague definition of inclusion is utilized to encompass broad student needs (Blamires, 1999; Pather, 2007; Reindal, 2010). Many have argued that it is a social justice issue involving equity, access, and opportunities for students with disabilities, while others look to it as the politics of recognition (Rice, 2006). The universal objective of inclusion is to afford all students the opportunity to spend more time together and grow together academically and socially (Rice, 2006). Proponents of the inclusion initiative cite moral and ethical reasons as a basis for including students with disabilities in general education classrooms (Fontana, Scruggs, & Mastropieri, 2007). Another reason inclusion has been touted as a popular special education service option is the fact that it is cost effective (Dorries & Holler, 2001; Lovette, 1996). In inclusive classrooms,
resources and services are combined to meet the educational needs of the students (Fontana et al., 2007). Socialization is a beneficial and an integral part of individual development; inclusive classrooms enable camaraderie more readily (Cooper, Griffith, & Filer, 1999). Inclusive classrooms may encourage students without disabilities to be more accepting of others’ difficulties and competencies (Cooper, et al., 1999).

The notion of the “least restrictive environment” ensures that students with disabilities are educated to the fullest extent possible with their nondisabled peers (H.R. Res. 108-446, 2004). The reauthorization of IDEA includes Congressional changes for students with disabilities, at-risk populations, and the homeless student population (U.S. Department of Justice, 2006). The inclusive classroom enables general education instructors to converge various aspects of special needs students’ educational career, including, academic, cultural, and social facets (Cook, 2002). Many educators question their ability to effectively educate and meet the demands of special needs students due to their personal beliefs toward inclusive classrooms and students with disabilities (Barco, 2007).

**Legal Mandates and Inclusion**

The ratification of The Education for All Handicapped Children Act (Public Law 94-142) in 1975 created legal mandates that altered the educational process for students with disabilities in public schools (U.S. Department of Justice, 2006). Public Law 94-142, through a number of revisions, eventually resulted in the Individuals with Disabilities Education Act (IDEA) of 2004. Prior to the passage of 94-142, not all students with disabilities were afforded the same educational opportunities as their non-
disabled peers (Barco, 2007; Olson, 2003). Under IDEA, all eligible students with
disabilities have to be given equal learning opportunities commensurate with their non-
disabled contemporaries (U.S. Department of Justice, 2006). The necessity of equal
learning opportunities that accompanied PL 94-142 strengthened the need for student
placement in the least restrictive environment (Barco, 2007).

The amendment of Individuals with Disabilities Act, otherwise known as IDEA
1997, mandated that all students be included in state and district-wide assessments. The
mandate echoed the push for equal access and high standards for all students; it also
forces schools and districts to face the consequences of such testing (Wasburn-Moses,
2003).

**Obstacles to Inclusion**

Inclusion has become widely accepted in elementary schools, but issues such as
collaboration, skill level gaps, standardized testing issues, and scheduling challenges
have plagued effective inclusion at the high school level (Black, Cooney, Gradel, Kozick,
& Vinciguerra, 2009). Time to plan, inadequate preparation, large caseload concerns,
and ineffective professional development are some of the barriers educators cite when
discussing inclusion (Coleman, 2000; Kozick et al., 2009).

Based on a research study conducted by Rice (2006), communication between the
special education and content area educators during the planning process is a central issue
that high school teachers try to overcome. Participant groups in Rice’s (2006) study,
which included teachers and administrators, tended to talk past one another and engage in
dialog that was difficult for the opposite party to understand due to their perceptions’ of
one another’s role. Data suggests each party in the study tended to have a skewed view of the others’ priorities and role expectations. Major areas of concern found through Rice’s (2006) research included: interpretation of how individuals engage in the process of change, compared to opposing it; the notion of inclusive ideology, compared to inclusive practices; and understanding the inclusive pedagogy as a means of content delivery, verses viewing it as a complex task that requires reorganization of current instructional practices. Sufficient levels of trust must be present between all invested parties for inclusive classrooms to be effective.

Mastropieri and Scruggs (2001) acknowledged the convolution of the high school setting as a serious hindrance to inclusion. Student skill gaps at the high school level are much more pronounced, thereby teacher centered strategies must be employed for effective education to occur (Kozick et al., 2009). Foley and Mundschenk (1997) identified collaboration as a critical skill necessary for high school educators to make inclusion successful. Their research suggested that many teachers lacked the skills necessary to adapt instruction and integrate multi-sensory teaching strategies that were necessary for successful inclusion.

Inclusive Reform

One problem faced with inclusive reform and implementation is that it requires input from all stakeholders in the educational process, but rarely is the opinion of the teacher sought during the process of change (Barco, 2007). Per Sarason (1990), educational reform will only be successful when reformers come to the realization that
schools exist for not only the students, but also the educators who guide their young minds. Much of the educational reform has occurred via scholars and researchers who are affiliated or active with special education departments at the college or university level, not at the level where application of procedures actually occurs with the students (Davis, 1989). Educators, who actually interact with students in the classroom, have had limited input in the reform process (Semmel, et al., 1991). For inclusion to be truly effective both general and special education teachers have to be convinced that change is necessary and feel they are a viable part of the process of change (Semmel, et al., 1991).

Studies regarding inclusion reform in the classroom have identified three primary factors in relation to inclusive sustainability including district and state policy, leadership, and teaching/classroom factors (Sindelar, Shearer, Yendell-Hoppey, & Liebert, 2006). Schools that have principals devoted to effective inclusive implementation are more likely to have teachers who are committed to successful inclusive classrooms (Sindelar, et al., 2006). Districts where principals are retained in lieu of being procedurally rotated are more likely to have effective inclusive classrooms (Klinger, Arguelles, Hughes, & Vaughn, 2001).

**Theoretical Framework**

**Teacher Efficacy**

Teacher efficacy is the conviction that an individual educator can shape student outcome in a positive manner (Barco, 2007; Brownell & Pajares, 1999). Teacher efficacy is a two-dimensional conviction about reaching students that comprises general
teaching efficacy, or a belief about the general power of teaching to reach students, and personal teaching efficacy, which is a belief, that one is personally capable of reaching students (Solomon, 2007). Teacher efficacy and teacher’s level of confidence in their ability to promote student learning (Hoy, 2000) was first discussed as a concept more than 30 years ago when these two items were included in studies conducted by researchers’ at the Rand Corporation (as cited in Protheroe, 2008). Bandura’s Social Cognitive Theory (1977) is the foundation of teacher efficacy and the theoretical foundation on which teacher efficacy is constructed. Some researchers’ have suggested that the more precise term “teacher sense of efficacy” can be used as what a teacher’s personal sense of confidence, not an objective measure of actual competence (Protheroe, 2008). Shaughnessey (2004) conveys that teacher’s sense of teaching efficacy have been linked to more diligent teachers who set higher goals and persist when teachers with a lesser sense of teaching efficacy would refer them on within the school system (i.e. special education, specialty programs, etc.). According to Shaughnessey (2004), teachers who set high goals, who persist, and who try another strategy when one approach is found wanting are more likely to act on their higher sense of ability and thereby they are more likely to have students who learn. Protheroe (2008) suggests teachers’ level of self-belief about capacity to advance learning can depend on previous experiences or on the culture of the school itself. Principals and school staff can help develop a sense of efficacy for individual teachers as well as the entire school with proper training and support.

**General Teaching Efficacy**
General efficacy reflects the degree that teachers believe other educators can control and manipulate the learning environment despite outside influences such as family background and I.Q. (Burris, McLaughlin, McCulloch, Brashears, & Fraze, 2008). Studies show that general teaching efficacy has been linked to teacher enthusiasm in the classroom and teacher clarity (Tschanne-Moran, et. all, 1998). General teaching efficacy normally increase while completing college coursework but later decline during student teaching (Hoy & Woolfolk, 1990; Spector, 1990) suggesting that teacher optimism may lessen when faced with the realities and complexities of the teaching task. General teaching efficacy seems to reveal a general conviction about the power of teaching and its ability to get to difficult children and seems to have more in common with teachers' conservative/liberal stance towards education (Woolfolk-Hoy, 2000).

**Personal Teaching Efficacy**

Personal teaching efficacy has been defined as a teacher’s evaluation of their own ability to bring about student learning (Burris, et. all, 2008). Studies indicate personal teaching efficacy is linked to teacher level of organization, planning, instructional experimentation, including willingness to try a variety of materials and approaches, the desire to improve the way they teach, and implementation of progressive and innovative methods. Educators with a higher sense of personal teaching efficacy have been shown to find inclusive classroom settings more appropriate for students with disabilities (Tschanne-Moran, et. all, 1998). Research has shown increases in personal efficacy during student teaching experience (Hoy & Woolfolk, 1990), at the same time, general
sense of teaching efficacy tends to decrease. Personal efficacy beliefs have a significant impact on teacher behaviors in the classroom. Teachers with a sense of higher personal teaching efficacy tend to be rated more positively on teaching lessons, presenting behavior, classroom management techniques, and questioning behavior by their supervisors (Saklofske, Michaluk, & Randhawa, 1988).

**Social Cognitive Theory**

Bandura’s Social Cognitive Theory, grounded in educational psychology, addresses the impact of teaching and learning in the classroom setting (as cited in Schaefer, 2010). Empirical evidence shows that the confidence level high school teachers possess in their personal ability to work effectively with students with disabilities, has a direct impact on student performance (Sodak, Podell, & Lehman, 1998). Social cognitive theory becomes more evident in an inclusive setting where the needs of the students are more diverse and the demands placed on the teacher are more extensive (Schaefer, 2010).

Bandura’s Social Cognitive Theory (SCT) envisions individual actions as a triadic, self-motivated, and reciprocal exchange of personal reasons, actions, and the atmosphere (Bandura, 1997; Schaefer, 2010). The behavior and actions of a person is determined by the interactions of these factors. SCT suggests that prior consequences and experiences are predictors of both future behavior and the regulation of behavior. Beliefs are continually altered by individual experiences within the environment and it is those experiences that mold what an individual thinks they are capable of or their
perception of their own capabilities (Bandura, 1989). According to SCT, individuals develop notions about their own capacity and characteristics that establish their conduct. This is based on what a person attempts to accomplish and the exertion they put forth into accomplishing their aspiration (Bandura, 1989). According to SCT, teachers’ sense of self-efficacy is replicated in their attitude and efficacy in teaching in an inclusive setting (Schaefer, 2010).

The social cognitive theory states self-efficacy and attitude evolve from achievements, successes, failures, the influence of others, and the individual’s psychological state (Bandura, 1977). According to Bandura (1986), motivation is determined by individual judgments of their capability to execute particular courses of action known as efficacy expectations and their beliefs about the likely consequences of those actions, or outcome expectations. Teachers, with high self-efficacy perceptions, have the ability to contribute to the creation of a more efficient education and teaching career, compared to those with a low sense of self-efficacy (Vhmez, 2009). Self-efficacy denotes an individual’s acuity of the performance they can display in diverse circumstances, not the skills of the individual (Bandura, 1997). Individuals, who believe that teaching can be a potentially powerful factor in student learning, may believe that they are effective or lacking in the ability to make a difference with their students (Hoy & Woolfolk, 1993).

Kurbanoglu (2004) explains a person’s belief in their skills and abilities influence their motivation and consequently their success. Social cognitive theory has a distinct performance in courses where problems are experienced in achieving student motivation
Teacher’s pedagogical self-efficacy perception can manipulate students’ motivation and attitude toward the various courses in school (Kurbanoglu, 1994). The theory emphasizes interaction between an individual and his or her social environment (Alghazo et al., 2003). In inclusive environments, people learn by imitating; when the teacher openly accepts a student then others will follow and the transition will be easier (Barco, 2007). Teachers, with a high perception of self-efficacy, are inclined to believe their actions produce a powerful educational experience by using an assortment of approaches and techniques in the classroom (Alderman, 1990).

Teacher’s sense of self-efficacy is a major determining factor in classroom management (Vhmaz, 2009). The social cognitive theory provides an account of knowledge acquisition that motivates relevant aspects of personality and social interactions, such as educators openly accepting students with disabilities, and easing their transition into the general education classroom (Kihlstrom & Harackiewics, 1990). Educators with a high sense of self-efficacy perception spend their classroom time on academic studies and productive classroom activities to promote student development and have high levels of future goals (Bandura, 1997). Teachers with a low sense of self-efficacy utilize their instructional time solving discipline problems and discussing mistakes made by students and their goals tend to be rather modest and easier to attain (Bandura, 1997). Modeling is a central theme in the social cognitive theory. Modeling has been shown to impact motivation, thought patterns, self-regulation, and decision-making (Bandura, 1977, 1989). Ross states, “it is impossible to establish an efficient learning environment without elimination of any possible question marks that may occur
in the minds of students with respect to …what is and why it should be learned (as cited in Vhmaz, 2009, p. 510). Teaching efficacy is a key component in establishing a clear learning environment (Barco, 2007).

Research on how teacher efficacy is measured has been the subject of debate (Henson, Kogan, & Vacha-Haase, 2001). The crucial concern in measuring teacher efficacy is the need to maintain equilibrium and generalize characteristics in a single scale. The construct validity of scales and their scores needs to be thoroughly examined (Coladarci & Breton, 1991; Henson et al., 2001).

**Self-Efficacy**

Over 30 years ago Rand Corporation (as cited in Protheroe, 2008) began the initial studies into teaching efficacy with two questions.

1. A teacher really cannot do much because most of a student’s motivation and performance depends on his or her home environment.

2. If I try hard, I can get through to even the most difficult or unmotivated students.

Self-efficacy is a major principle of Bandura’s Social Cognitive Theory (as cited in Schaefer, 2010). Bandura (1997) has defined self-efficacy as a self-reflective thought that affects an individual’s behavior. In part, self-efficacy is formed through various experiences in life. Self-efficacy is based on whether or not a person thinks he/she can accomplish a task. Self-Efficacy can influence a person’s thought patterns and emotions (Bandura, 1977, 1982, 1993, 1997). Bandura notes four sources of self-efficacy expectations: mastery experiences, physiological and emotional states, vicarious

Self-efficacy is based on the notion that an individual believes he or she can perform a certain task. This notion or sense of self efficacy has the ability to influence individual’s thoughts, patterns, and emotions, which in turn influences behavior (Bandura, 1977, 1982, 1993, 1997). Self-efficacy is solely based upon whether or not an individual believes they are capable of performing a specific task (Schaefer, 2010).

The construct of self-efficacy translates into teaching and has been extended to explore how beliefs influence teacher performance (Barco, 2009). Theoretically, if educators think they are successful at teaching, their expectations for continued and future success will grow. However, if educators do not feel they are reaching their students successfully, their expectations are less likely to grow (Barco, 2009).

A study conducted by Ashton and Webb (1986) proposed that teacher efficacy beliefs are linked both to instructional practices and ultimately to student outcomes. Due to the fact that self-efficacy is task specific, it is a useful tool for examining the beliefs of teachers with regard to their ability to effectively support students with disabilities.

It is generally thought that two types of teaching efficacy, personal efficacy and general efficacy comprise the construct of efficacy (Protheroe, 2008). Personal efficacy relates to a teacher’s personal feelings of confidence about his/her teaching abilities and general teaching efficacy appears to reflect a general belief about the power of teaching to reach difficult children (Hoy, 2000). Researchers have found that these two constructs are independent of one another (Woolfolk & Hoy, 1993). Accordingly, a teacher may
have faith in the ability of teachers to reach difficult children, but they may lack confidence in his/her own personal ability to reach the population (Protheroe, 2008).

**Dimensions of Teacher Efficacy**

The two dimensions of teaching efficacy, personal and general, form the basis of a teacher’s belief in his/her ability to create positive change in the classroom. General teaching efficacy tends to reflect a general belief about the power of teaching and an educator’s ability to reach difficult children (Bandura 1997). Hoy and Woolfolk (1993) found general teaching efficacy correlated with teachers’ conservative or liberal attitudes toward education. In contrast, personal teaching efficacy is an individual’s sense of his/her own effectiveness as a teacher (Hoy & Woolfolk, 1993). A teacher may be sure of his/her personal teaching efficacy, but may doubt the personal ability to teach in a way that enables the students’ to learn (Schaefer, 2010).

A study conducted by Ashton and Webb (1986) explored the perceptions of self-efficacy of experienced teachers. Their study indicated that teacher efficacy was related to student achievement. The teacher’s sense of efficacy was formed through the interaction of a variety of factors. Ashton (1984) identified eight dimensions that culminate to form a teacher’s sense of efficacy. These dimensions include:

1. A sense of personal accomplishment has to be present. The teacher has to think of their work as meaningful and important.
2. The teacher must have positive expectations for students with regard to both behavior and academic achievement. The teacher must expect the students to make progress.

3. There is a sense of personal responsibility for student learning. The teacher accepts accountability and shows a willingness to examine performance.

4. The individual plans strategies to achieve objectives. The teacher plans for student learning, sets goals and determines how they will achieve those goals.

5. There is a positive attitude toward their life. The teacher feels good about teaching, about themselves, and about their students.

6. They hold a sense of control or believe they can influence student learning.

7. There is a common sense of teacher and student goals where both parties develop a joint venture to accomplish the classroom goals.

8. The classroom upholds democratic decision making whereby the teacher involves the students in making decisions with regard to goals and strategies.

Teachers who scored high on Ashton’s (1984) eight dimensions tend to view all students as reachable and teachable. Such teachers tend to believe that it merely takes creativity and increased effort to reach all students, including those with disabilities (Ashton, 1984; Schaefer, 2010). Teachers with a higher sense of self-efficacy tend to be better organizers, plan their curriculum, and exhibit more enthusiasm in the classroom (Ashton & Webb, 1986). Additionally, they are more confident in the classroom, more open to experimenting with new ideas to improve their teaching methodologies, and more willing to assist their students in the learning process (Allinder, 1994). Teachers with a
low sense of teaching efficacy tend to correlate learning difficulties with their students’ low ability (Frase, 2006).

Teacher sense of efficacy is influenced by personal and contextual needs that are beyond simple skill development (Barco, 2007). Empirical research conducted by Brownell and Pajares (1999) recorded that teacher actions, thoughts, and feelings have a direct and significant impact in enhancing student performance and overall academic outcomes. Jordan, Lindsay, and Stanovich found teacher expectations, attitudes, and their perception of students have a dramatic impact on student response in the classroom (as cited in Barco, 2007).

Brownell and Pajares (1999) found teachers were minimally secure in their capability to educate students with disabilities, due to lack of experience and education. The analysis established that teachers with a higher sense of teaching efficacy and extensive training in handling students with disabilities are more willing to include those students in the general education classroom. Educators felt more effectual subsequent to training in appropriate instruction methods for students with disabilities (Brownell & Pajares, 1999). The study determined the most vital training pertained to the needs of students with disabilities, instructional modifications and accommodations, and behavioral management techniques (Barco, 2007; Brownell & Pajares, 1999). Multiple studies have ascertained a correlation between training, teaching efficacy, and positive teacher attitude toward inclusive students (Mastropieri & Scruggs, 1997).

Hammill and Deaver (1998) found teachers often have mixed feelings about their ability to accommodate classroom lessons in inclusive settings. Study findings show
many teachers felt confident regarding content, but less confident when it came to making accommodations and modifications to the material (Hammill & Deaver, 1998). Study responses indicated teachers’ lack of efficacy directly correlated to overbearing situations in inclusive settings (Hammill & Deaver, 1998). The overall study indicated that teachers were confident in their ability to teach students with disabilities, but the confidence lagged in inclusive settings, due to external variables, such as home life, administrative support, instructional material, and collegiality (Hammill & Deaver, 1998).

Sodak et al., (1998) determined teacher’s use of differentiated instructional techniques correlated with the number of years of teaching experience and training. The ability to teach students with disabilities in the general education classroom is a learned skill (Barco, 2007). The ability to educate students with disabilities is impacted by the frequency of interaction with students’ with disabilities that occurs over time (Alghazo, Dodeen, & Algarouti, 2003).

Woolfolk and Hoy (1993) found several school climate variables associated with teacher attitudes of efficacy including professional and collegial relations, strong administrative leadership, and high academic expectations. Teachers who perceived that the school protects them from unreasonable community demands and assists them in maintaining integrity in their instructional programs, as well as educators who perceive a sense of trust and support among their colleagues (morale), are more likely to believe teaching can overcome the negative forces of the students’ home environment. Interpersonally warm and supportive environments made teachers feel more satisfied
with their jobs and in some cases less stressed, but it had little effect on teacher
confidence with regard to reaching difficult students (Hoy & Woolfolk, 1993). Prior to
studies conducted by Woolfolk and Hoy, it was thought, teacher efficacy could be
determined by assessing organizational factors that helped teachers manage and assist
students (Barco, 2007). Woolfolk and Hoy (1993) found that only the personal variable,
teacher educational level, uniquely predicted personal teaching efficacy. Teachers who
went to graduate school to further their education had a greater sense of teacher efficacy
than those who did not. In later research, Woolfolk-Hoy (2003) concluded teaching
efficacy could be predicted by institutional integrity and teacher morale. Institutional
integrity is the ability of the school to protect the faculty from outside demands
(Woolfolk-Hoy, 2003). The healthiest school climates included a principal who was
influential with his/her superiors and willingly used that influence to assist his/her staff
(Woolfolk-Hoy, 2003).

Efficacious teachers tend to be persistent when educating struggling students
(Gibson & Dembo, 1984). Teacher efficacy studies indicate that educators, who display
a greater sense of teaching efficacy, criticize less following incorrect answers and are
more likely to believe that students with special needs should be placed in the general
education classroom setting (Henson, 2001). Effectual educationalists tend to
experiment with instructional methodologies and materials to determine what works best
(Henson, 2001). Evans and Tribble (1986) found similar results in their study involving
pre-service teachers.

**Teacher Attitude Toward Inclusion**
Attitude has been defined as a tendency toward particular behaviors (Merriam-Webster, 2010). A person’s attitude is believed to influence their individual efficacy, actions, and behaviors (VanReusen, Shoho, & Barker, 2000). Teacher and administrative attitudes toward inclusion have been shown to influence the learning environment and educational opportunities for students with disabilities (Gartner & Lipskey, 1987). Negative teacher attitudes toward students with disabilities and the inclusive environment have the capability to limit the students, both academically and socially (Cochran, 1997). More positive inclusive attitudes are generally found in teachers who teach lower grades, have students with only mild disabilities, or who have associated with disabled persons in the school and community (Sharma, Forlin & Loreman, 2008). Generally, teachers have been found less willing to include students with emotional and behavioral disorders (Hastings & Oakford, 2003).

Research imparts, for inclusion to be effective school personnel must be receptive to the principles and demands of inclusion (Schmelkin & Garvar, 1989). Collaborative skills and a positive attitude amongst school personnel have been identified as a necessity for quality inclusion to occur (Kozick et al., 2009).

Teacher efficacy has been defined as “the extent to which the teacher believes he or she has the capacity to affect student performance” (Barco, 2007, p. 3). Historically, educators have dealt with various issues such as multicultural education, school reforms, education of student character, closing achievement gaps, collaborative networking, and preparing students for state mandated testing to make sure annual yearly progress is met (Perks, 2006). Over the past decade, teachers have been confronted with expectations of
change, policy instructions, and policy demands, most of them justified by a concern for educational improvement (Ballet & Kelchtermans, 2008). Liability demands and practices created by policy-makers have directly impacted the daily working conditions of teachers and school leaders and thereby their attitude toward both the teaching profession and the students (Ballet & Kelchtermans, 2008). Teachers are responsible for a broad variety of duties such as student academic performance, socialization skills, meeting student emotional needs, duty stations (i.e. lunch duty, recess, etc.), parent contact, record management, data team meetings, faculty meetings, Response to Intervention, 504 plan implementation, school security, steering committees (i.e. curriculum committees), and classroom management (Barco, 2007). The additional task of ensuring an individualized education plan, or I.E.P., is properly constructed to meet individual needs, implementation of that plan, and its maintenance for each disabled child in the classroom has added to the workload and frustration levels of high school educators (Schaefer, 2010). Many high school teachers have over 100 different students pass through their classrooms on a daily basis (Olson, 2003). The increased workload and responsibilities of including students with disabilities in the general education classroom is capable of creating feelings of frustration and resentment toward teaching students in inclusive classrooms (Olson, 2003).

It is evident that teachers’ attitudes and beliefs affect student behavior and academic performance (Clark & Peterson, 1986; Kagan, 1992). Helton and Oakland’s study (1977) found that teacher attitude is directly influenced by the student behavior present in the classroom. Undesirable behaviors evoke unfavorable impressions of the
student and tend to result in negative teacher attitude toward that student, not their specific behaviors (Helton et al., 1977). Stuart (1994) conducted a study of secondary teachers’ perceptions and attitudes toward various student behaviors. She found there were four areas of teacher concern over student behavior:

1. Lack of respect, manners, self-discipline, and aggressiveness.
2. Apathy, lack of interest or motivation toward school in addition to failing to see the relevance of school.
3. Lack of basic skills, difficulty comprehending, and inability to learn.
4. Lack of empathy toward others and overall negative attitudes.

Research conducted by Stuart (1994) found that teachers were aware of overt and aggressive behavior, but were much less concerned with behaviors indicative of social or emotional difficulties not directly related to the school setting. Teachers tended to prefer passive behavior in lieu of aggressive behavior. Educators tended to view aggressive behavior as more serious. Aggressive behavior was noted to cause teachers frustration and in turn, they would counterattack the nature of the child’s conduct. When teachers witnessed withdrawing behaviors in the classroom it tended to invoke feelings of sympathy and protectiveness toward the student (Stuart, 1994).

Dupoux, Wolman, and Estrada (2005) found that teachers’ attitudes were a prerequisite of successful student integration, but noted that general education teachers find it difficult to integrate students who are at risk of failing due to their disability. Their findings indicate large class size and lack of training made it difficult to teach socially maladjusted and emotionally disturbed children in the inclusive setting.
Irrespective of experience, the severity of the disability showed an inverse relationship with positive attitudes; as the perception of the disability severity rose, the teachers’ positive attitude decreased (Forlin, Douglas, & Hattie, 1996). Clough and Lindsay (1991) found teachers were more willing to accept students with mild disabilities then students with emotional behavioral disabilities.

Ferris (1996) conducted a study to measure high school teacher attitude toward inclusive practices and strategies. The study observed the feasibility, frequency of use, and effectiveness of 22 strategies for inclusive classes. The study found special educators were more positive about including students with disabilities in the general education classroom than their content area counterparts. Per study findings, most general education teachers thought students with disabilities included in the general education classroom should not require accommodations or special assistance, if they did, the assistance should be provided in a special education setting. When teaching in an inclusive environment, teachers preferred to have smaller class size or professional consultation over a co-teacher or paraprofessional during instructional periods. Inclusive teachers preferred instructional strategies that would be beneficial to everyone in the classroom. Strategies that required different standards or expectations for students with disabilities were viewed as less feasible by both general and special education high school educators (Barco 2007; Ferris, 1996).

VanReusen, Shoho, and Barker (2000) conducted an investigation to determine the impact of high school teacher attitudes toward inclusion with regard to teacher
preparation, academic climate, social adjustment, and academic content as it relates to teacher effectiveness. The analysis revealed that teachers with adequate to high levels of training perceived their teaching ability toward students with disabilities in a more positive manner than educators with limited instructional training (Barco, 2007).

Thirty years after various forms of inclusive practice implementation, research has shown that teacher attitude has changed very little regarding its application (Barco, 2007). Various test findings show only half of the teachers surveyed thought inclusion is beneficial to students (Mastropieri & Scruggs, 1997).

**Inclusion Teachers at High School Level**

Teachers have come to realize that when students with disabilities are placed in their classroom, they are responsible for adapting and modifying the curriculum to ensure that all students, including students with special needs master the curriculum. When educators feel they are unable to make appropriate accommodations and modifications to ensure student success, they resist the inclusive model (Schumm & Vaughn, 1991). Schumm and Vaughn (1991) found that when highly effective educators thought that modifications were unreasonable, they would resist making those modifications; whereas when those educators thought they were reasonable modifications, they would utilize them readily.

High school general education teachers often have to realign their classrooms, including their instructional methodologies and practices, to adequately present content and create a positive classroom environment conducive to students with disabilities. The
additional workload that comes with educating students with disabilities can negatively affect educators’ attitude toward special education students (Mastropieri & Scruggs, 1997).

Empirical research on inclusion disseminates less confident high school educators often question their ability to teach students’ with disabilities (Barco, 2007; Brady & Woolfson, 2008). Many teachers do not comprehend the need to modify lessons or the importance of accommodations as it relates to students with disabilities (Barton, 1992; McDonnel, Mathot-Buckner, & Thorson, 2001; Rieck & Wadsworth, 2005; Schaefer, 2010). Teacher point of view is vital to successful inclusive education, but also the individual success of students’ with disabilities (Cochran, 1997). Specific to the high school educator, students with disabilities have been able to influence all facets of the high school atmosphere, including high stakes achievement testing and varying graduation diploma requirements (Schaefer, 2010). The general education teacher bears primary responsibility for the educational outcomes of students with disabilities served in the inclusive classroom setting (Barco, 2007). Through utilization of inclusive practices in the classroom, many high school teachers have been afforded the opportunity to teach all levels of students including students with learning disabilities, physical disabilities, and behavioral/emotional disabilities (Cook, 2002). Inclusion at the high school level varies significantly from inclusion at the elementary level and the educators face different tribulations (VanReusen, Shoho, & Barker, 2000). High school educators often work
with more than 125 students on a daily basis, in didactic settings designed to accommodate large numbers of students, with limited individual instructional time (VanReusen et al., 2000; Zigmond, 1990). Most high school educators are content specialists and their classroom program is designed to prepare the student for complex demands of society, and post graduation in a specific content area (VanReusen et al., 2000). Because of the variances in the educational environment, “secondary-level teachers display a less positive attitude toward educational inclusion than do elementary teachers” (Mastropieri & Scruggs, 2001, p. 267). Reasonability of high school educators to provide accommodations are influenced by various factors such as class size, pressure for content coverage, and lack of planning time to appropriately prepare for students with disabilities in the general education classroom (Avramidis & Kalyva, 2007; Sze, 2009; Vaughn, Schumm, & Kouzekamani, 1993).

Olson, Chalmers, and Hoover (1997) conducted a series of interviews with principals and special education teachers and documented necessary competencies for high school general education teachers. The necessary attributes included tolerance, reflection, responsibility, acceptance, and warmth.

**Teachers and Accommodations**

Educators are more likely to employ accommodations that are familiar to them, perceived by the individual to be effective, and easy to utilize (Johnson, 1990). When teachers are knowledgeable and confident in their ability to adapt the curriculum in inclusive classrooms and utilize appropriate materials, they can stimulate student engagement, increase assignment completion, and improve appropriate student attending
behavior (Chalmers, 1990; Preston 1996). Accommodations can alleviate some of the difficulties students with disabilities face in completing daily assignments and level the educational field with their non-disabled peers (Chalmers, 1990).

Instructional accommodations and differentiated instruction are central to the academic success of students with disabilities and research notes several influential factors affecting a teachers’ ability to adapt instructional material, including teacher perception of accommodation reasonability (Johnson & Pugach, 1990; Preston, 1996). A teacher’s sense of ability to appropriately accommodate and present educational material has been shown to directly influence their ability to do so (Semmel et al., 1991). Research indicates, teacher attitudes toward inclusion tends to be positive, but their views of feasibility fluctuate, based on the extent of accommodations the various disabilities in their classroom require (Avramidis & Kalyva, 2007).

Appropriate accommodations must be identified on a student-by-student basis in high stakes testing to attain valid, not optimal, test scores. Students must be taught test approach skills (i.e. proper sleep, eating), test taking skills, and test preparedness, in addition to content (Wasburn-Moses, 2003).

Olson, Chalmers, and Hoover (1997) determined high school educators differ in mind-set toward inclusive classrooms and implementing necessary adaptations, when compared with their elementary counterparts. Some educators openly accepted responsibility for all students in their classrooms, while others view the necessary accommodations as barriers in the learning process (Olson, Chalmers, & Hoover, 1997). Olson et al., (1997) recorded that academic success of students with disabilities in
inclusive settings was dependent on the extent to which teachers were willing to accommodate both lessons and assignments. Teachers’ instructional decisions should be made based on quality assessment data (Ferris, 1996). Research suggests many educators base instructional planning and decisions on curricular material and subjective impressions (Olson, 2003). Teachers who center instructional decision making on assessment data were more willing to modify instruction based on student need in inclusive classrooms (Preston, 1996). As educational systems move toward data driven classrooms and Response to Intervention (RTI) strategies, classroom teachers will be forced to utilize quality assessment data more and more in their daily instructional practices (Fuchs & Fuchs, 2006).

**High School Educator Expectations**

Research substantiates that many educators view their special needs pupils as belonging to socially subordinated groups (Nieto, 1996). When educators lack conviction in their students’ ability to educationally succeed, they are more likely to produce an environment of low expectations for their students. Additionally, teachers who lack faith in student academic ability are more likely to stifle their learning (Nieto, 1996). In contrast, teachers who view students from divergent cultures as an asset and truly respect cultural differences are more likely to convey confidence toward the student body and provide them with intellectually rigorous curriculum that teaches them strategies to monitor their own learning (Villegas & Lucas, 2007). Research conducted by Zigmond, Levin, and Laurie (1985) supports other studies signifying educators at the
high school level identify students with disabilities as underachievers and think their instruction will be an additional burden to their duties. Educationalists in Zigmond’s et al., (1985) study documented special needs students were not much of a burden when they failed to provide accommodations for instructional practices in their classrooms; instead, these individuals lowered their standards for passing grades on tests and assignments to reward interest or effort on the part of the students with disabilities.

**Teacher Educational Level and Classroom Experience**

Over time, teaching experiences mold the educator and his/her attitudes toward his/her students (Brooks, 2008). Initially, many teachers do not think they are appropriately educated to accommodate instruction when teaching students with disabilities (Avramidis & Kalyva, 2007; Preston, 1996; Semmel, Butera, & Lesar, 1991; Sze, 2009). Over time, educator confidence levels increase due to training, exposure to students with disabilities, and knowledge of utilizing specific interventions. Teacher training has a direct influence on his/her sense of efficacy and his/her ability to educate students with special needs (Jung, 2007).

Examination of literature on teacher attitudes toward inclusion within his/her own educational settings reflected specific trends such as a positive correlation between the experience and training of the teacher, specifically with regard to special education and acceptance of inclusion (Ernst, 2006; Schaefer, 2010).

The way in which teachers perceive inclusion is important because their attitude toward inclusion can affect how they respond to students with special needs. Teachers are more likely to be supportive of students with special needs in the inclusive setting if
they are supportive of inclusion in general (Valletutti, 1969). Adequate instructional support for inclusive teachers is critical to developing positive teacher attitudes (Ernst, 2006).

**Inclusive Practices and Differentiated Instruction**

Not all students are alike; different students acquire content in different manners (Hall, Stangman, & Meyer, 2009). According to Tomlinson (2001), inclusion and differentiated instruction apply an approach to teaching and learning that gives students multiple options when taking in information and making sense of ideas (Hall et al., 2009). The implementation of inclusive procedures, including differentiated instruction, in the classroom has a direct impact on student performance, ability, and academic gain. Student success in an inclusive classroom is determined by the attitudes of teachers, parent beliefs, and educational support (McGhee-Richmond, Jordan, & Schwartz, 2009).

Research links high school student success to three factors: classroom interventions that are student-focused and teacher-focused, integrated and comprehensive service delivery systems for content reading, and teacher professional development programs that are data driven and well designed (Deshler et al., 2009). Effective professional development that emphasizes differentiated instruction and inclusive practices have been shown to increase teacher cognition of learning styles during the instructional planning process and reducing educational gaps in the student body (Hawkins, 2007).

At the high school level there are seven leading techniques educators employ to augment responsiveness to the needs of all students (Villa, Thousand, Nevin, & Liston,
2005). The seven methods are: (1) differentiated instruction, (2) interdisciplinary curriculum, (3) technology utilization, (4) peer-mediated instruction and collaboration, (5) accommodations and supports, (6) education of self-determination, peacemaking, and responsibility, and (7) authentic student performance assessments. Professional development emphasizing differentiated instruction, inclusive practices, and literacy across content areas have been shown to reduce educational gaps between disabled and non-disabled student populations (Hawkins, 2007). Differentiated instruction is a teaching theory based on the premise that instructional approaches should vary and be adapted in relation to individual and diverse students in classrooms (Hall et al., 2009).

Successful high schools, capable of educating a diverse student population, have reorganized their day with block scheduling, allowed flexible student groupings via de-tracking, utilized collaborative planning, and have strong administrative backing and support (Villa et al., 2005). Inclusive high schools, that are flourishing, often employ teaching stations, parallel teaching, and alternative teaching methodologies (Hawkins, 2007). Teaching stations allow instructors to break up the class and teach mini-classes (Hawkins, 2007). Parallel teaching utilizes both general education and support personnel in the teaching process to maximize the educational experience. Finally, alternative teaching involves groups of students being pre-taught or re-taught a lesson (Hawkins, 2007).

 Conclusion

Due to legislation and federal mandates, an increasingly important issue for U.S. school districts is the education of students with disabilities in the general education
classroom (Barco, 2007). Research has linked teacher efficacy, knowledge, and experience in inclusive classrooms with teacher performance and student outcomes (Bandura, 1997; Hoy & Woolfolk, 1993; Tschannen-Moran, 2001).

Multiple studies have addressed teacher efficacy as it correlates to the construct of inclusive practices (Barco, 2007). Teacher efficacy and attitude directly impinge on teacher performance and effectiveness in inclusive classrooms (Hammill & Deaver, 1998). Teacher attitude directly correlates with teacher efficacy and his/her ability to implement inclusive practices in the general education classroom (Barco, 2007).

Empirical research has determined that educators with a high sense of self-efficacy and specific special education training have tended to be more receptive and effective when working with students with disabilities in an inclusive setting.

The successful inclusive classrooms are based on how the teachers working in the classroom embrace and systemize the practice. Research indicates that educators who are confident in their abilities in an inclusive setting demonstrate more favorable attitudes toward inclusion and ultimately find more success in the inclusive classroom (Ashton & Webb, 1986; Bradshaw & Mundia, 2006, Deemer, 2004; Schaefer, 2010; Subban & Sharma, 2006). Research therefore has suggested that special education teaching experience provides more confidence that leads to a more positive attitude toward inclusion and greater success (Subban & Sharma, 2006).
CHAPTER THREE - METHODOLOGY

Research supports the notion that teacher sense of efficacy is related to meaningful outcomes in public schools and thereby influences student success (Brownell & Pajares, 1999). Educator attitude and sense of teaching ability can increase student performance with regard to student engagement, classroom management, and instructional strategies (Tschannen-Moran, 2001).

The rationale of this chapter is to explicate the research design, the methodology, the data collection, and the data modus operandi that was utilized in the inquiry. The chapter is separated into ten sections: (a) introduction; (b) purpose; (c) research design; (d) instrumentation; (e) subject selection and description; (f) data collection; (g) research questions; (h) null hypotheses; (i) data analysis; (j) summary. The end of the chapter discusses the limitations relevant to the study methodology applied.

Research Questions and Null Hypotheses

Research Questions

1. Is there a relationship between teacher sense of collective teaching efficacy, general teaching efficacy, or personal teaching efficacy and their attitude toward inclusive classroom settings.

2. Is there a difference in teacher attitude toward inclusive classroom settings when working with various student disabilities groups (i.e. learning disabled (LD), emotional/behavioral disorders (EBD), other health impairments (OHI), or none listed).

Statement of Hypothesis
Hypothesis 1

H₀₁: There is no significant correlation between high school teachers’ collective sense of teaching efficacy (as shown by cumulative TES scores) and their attitude toward inclusive classroom settings (as shown by collective STATIC scores).

H₀₁₂: There is no significant correlation between high school teachers’ general sense of teaching efficacy (as shown by cumulative TES scores) and their attitude toward inclusive classroom settings (as shown by collective STATIC scores).

H₀₁₃: There is no significant correlation between high school teachers’ personal sense of teaching efficacy (as shown by cumulative TES scores) and their attitude toward inclusive classroom settings (as shown by collective STATIC scores).

Hypothesis 2

H₀₂₁: There is no significance in teacher attitude toward inclusive classroom settings while working with learning disabled students (LD) when taking into account cumulative STATIC scores.

H₀₂₂: There is no difference in teacher attitude toward inclusive classroom settings when working with emotional/behavioral disorders (EBD) when taking into account cumulative STATIC scores.
There is no difference in teacher attitude toward inclusive classroom settings when working with other health impairments (OHI) when taking into account cumulative STATIC scores.

There is no difference in teacher attitude toward inclusive classroom settings when working with students with none of the behavioral disorders listed, but still qualified as special needs students (i.e. traumatic brain injury, autistic, etc.) when taking into account cumulative STATIC scores.

**Research Design**

This study employed a non-experimental correlational design for research question one and a correlational and causal comparative research design for research question two. Two established survey instruments were utilized examining the relation of teacher efficacy toward teacher attitude in inclusive classroom settings at the high school level.

Multiple regression analysis was used to test the relationship between the variables of interest (collective teaching efficacy, personal teaching efficacy, and general teaching efficacy) and teacher attitude toward inclusive classroom settings. A one-way analysis of variance (ANOVA) was used to determine if there was a statistical difference in teacher attitude toward inclusive classroom settings when taking into account the predominant student disability type based on faction variances and sample sizes.

High school level educators in a single school district in the southeastern United States were asked to complete one multiple-choice online survey. The multiple-choice survey combined two previously established instruments: the Teacher Attitude Toward
Inclusive Classrooms, (STATIC) (Cochran, 1997) and the Teacher Efficacy Scale, (TES) (Hoy & Woolfolk, 1993). Contact was made with Dr. Cochran (Appendix D) and Dr. Woolfolk-Hoy (Appendix E) and permission provided allowing utilization of their instruments in the study to determine the relationship between high school teacher sense of teaching efficacy and his/her personal attitude toward the inclusive classroom construct. The surveys were distributed to respondents in an online format via Survey Monkey. The survey questions sought to determine teacher perception of individual teaching efficacy, their attitude toward inclusive classrooms, and the primary student disability type present in their classroom. Eligible respondents had at least one year of previous teaching experience in an inclusive classroom environment. High school administrators provided the names of all qualified personnel. From approximately 510 eligible high school teaching candidates within the district, 250 respondents were randomly selected via Research Randomizer Software and asked to participate. Data from the questionnaire addressed the null hypotheses for the research questions. The surveys were administered in unison in a single online survey, but were scored independent of one another to maintain previously established reliability and validity.

**Participants**

The sample for this study sought to comprise a census of 250 randomly selected general education and special education teachers, instructing in inclusive classrooms at the high school level in seven county public high schools. The district superintendent and local school principals granted permission prior to data collection and following approval from the Internal Review Committee of Liberty University (Appendix F).
The district superintendent and site principals granted permission via telephone calls with follow up emails. The letter of request sought permission to conduct an anonymous online survey of high school education teachers who taught in inclusive settings with at least one-year prior inclusive teaching experience. Principals were asked to provide names of educators within their high schools who have met both tenure and inclusion criteria.

Upon obtaining superintendent and principal approval (Appendix C), all potential participants were assigned numerical identification numbers in chronological order based on principal submission. The sample consortium consisted of approximately 500 high school inclusion teachers (including both content area and special education teachers). The researcher randomly selected approximately 50% (n=250) of the pool using Research Randomizer Software. The sample population (n=250) was selected by way of electronic lottery. The lottery system of random selection permitted each high school inclusion teacher an equal opportunity for selection without replacement. Each potential participant had an equal opportunity to be selected.

**Setting**

The populace and setting for this study was a sample of geographic convenience since it was located in close proximity to the researcher’s place of residence. Of the nine high schools within the selected county, seven of the county high schools were asked to participate. Since two high schools within the county were undergoing administrative reconstruction, the additional paperwork and responsibility of completing the online survey would only add to an already difficult situation and would potentially be counter-
productive for the school environments and the research itself. Neither the county, nor the individual schools are identified by name in the research, per county mandate. Therefore, none of the participating schools or the district are acknowledged by name within the research due to the guarantee of anonymity by the researcher.

**Instrumentation**

**Survey Design**

Surveys, generally, are unable to supply all the necessary data on a topic because there would be several more questions than the majority of respondents would want to answer (Barco, 2007). Though a longer survey renders more data, it also creates the potential for greater risk within the study (Borg, Gall, & Gall, 2007). To discourage respondents from answering questions without reading them, the researcher carefully selected survey instruments (STATIC and TES) which were short and succinct. The short forms of both the STATIC and TES were chosen purposefully to promote a higher degree of response due to fewer questions, circumvent measurement error caused by respondent’s hastening to complete a prolonged task, and thwart negative attribution or refusal to partake in an additional futile investigation.

Requested demographic information, TES questions, and STATIC items were compiled into a single survey and placed online via Survey Monkey for administration. Survey questions were presented through online presentation. Questions from the TES and STATIC were loaded into the survey site and combined for administration ease. The survey addressed teacher attitude toward inclusion classroom settings first and then teacher efficacy. Survey results were calculated separately based on scoring guidelines.
Each respondent \((n=250)\) answered 41 questions. Demographic information was addressed in the first ten questions. The author of the STATIC, Dr. Cochran, requested specific demographic queries be asked, though they did not pertain to this particular study (i.e. race, gender, etc.). Questions 11-21 were TES questions with a Likert scale format; the values ranged from one to six (strongly agree to strongly disagree) for TES questions. STATIC questions, 22-41 on the survey, had a Likert scale format with values ranging from one to six (strongly agree to strongly disagree).

Woolfolk and Hoy’s TES (short form), consisted of ten questions (Appendix A) addressing teacher opinion of the various classroom difficulties they confront and their sense of teaching efficacy. Questions from the STATIC (Appendix A) encompassed 20 perception statements that were used to measure differences in teachers’ attitudes toward students with special needs and identify the relationship between teachers’ attitudes toward inclusion and their attitudes toward students’ with disabilities in general (Cochran, 1997).

The researcher did not provide respondents the option of a non-answer while completing the survey. Particular care was taken to avoid ambiguous phrasing, unfamiliar wording, and multifarious word choices. The researcher ensured total anonymity of survey respondents to the fullest extent possible, to promote candid responses. Survey results were completed confidentially with limited demographic information posed.

**Instrument Selection**
The short forms of the TES and STATIC were chosen purposefully, to promote a higher degree of response due to fewer questions, circumvent measurement error caused by respondent’s hastening to complete a prolonged task, and thwart negative attribution or refusal to partake in an additional futile investigation.

TES

Teachers’ Efficacy Scale, or TES, examined the relationships between two specified dimensions of teacher efficacy: general and personal teaching efficacy (Hoy & Woolfolk, 1993). On the Teacher Efficacy Scale, the primary unit of analysis is teacher perception. The Teacher Efficacy Scale was adapted by Woolfolk and Hoy (1988, 1990) from Gibson and Dembo’s Teachers Efficacy Scale (1984). Factor analysis of the instrument produced two independent dimensions of general and personal teaching efficacy (Hoy & Woolfolk, 1993). The first dimension, general teaching efficacy, reflected the belief that a teacher’s ability to bring about desired outcomes is limited by factors external to the teacher such as home environment and family background. The second dimension, personal teaching efficacy, reflects a teacher’s belief in his/her ability to bring about positive student and learning outcomes (Cerit, 2010). Higher scores on the TES are indicative of a greater sense of efficacy in both general and personal teaching efficacy (Barco, 2007).

The TES’s reliability has been determined to be high based on Kuder and Richardson’s KR-21 (Barco, 2007). The TES (short form) has a reliability of .90 (Tschannen-Moran, 2001). The reliability is determined high because it is an adaptation of the original Gibson and Dembo’s (1984) Teacher Efficacy Scale.
rater reliability was interpreted by calculating perfect agreement percentage between raters of all potential ratings. The computation included 15 coded variables and ranging from 76.09% to 100% with a mean of 91.35% and a standard deviation of 6.92%. Based on the average score for the entire scale, the alpha co-efficient of reliability was in the 95th percentile (Henson, Kogan, & Vacha-Haase, 2001, p. 410). The interpretations of test scores and inferences taken from the TES results were previously proven to be appropriate and adequate (Barco, 2007). The construct validity of the Teacher’s Efficacy Scale was .95 (Tschannen-Moran & Woolfolk-Hoy, 2001). Validity for the Teachers’ Efficacy Scale is high due to the scale measuring its intended measurement of efficacy.

Regarding validity, Tschannen-Moran and Hoy noted “the three dimensions of efficacy for instructional strategies, student engagement, and classroom management represent the richness of teachers’ work lives and the requirements of good teaching” (as cited in Heneman, Kimball, & Milanowski, 2006, p. 4). During previous studies utilizing The Teachers’ Efficacy Scale, three moderately correlated factors have surfaced; efficacy in student engagement, efficacy in instructional practices, and efficacy in classroom management (Barco, 2007; Tschannen-Moran & Hoy, 2001).

**STATIC**

The Scale of Teachers’ Attitudes Toward Inclusive Classrooms (STATIC) was designed to determine the impact of teacher perception of inclusive practices in the general education classroom (Cochran, 1997). Cochran’s (1997) study revealed there
were significant differences in teacher attitude toward inclusive classrooms and students with disabilities. The STATIC provides 20 questions addressing general attitudes and opinions toward mainstreaming and inclusion through the utilization of a 6-point Likert scale ranging from “strongly agree” to “strongly disagree”. Six items (3, 4, 7, 9, 13, and 15) have been inversely scored to compensate for negative wording. After negatively worded items are reverse coded, the sum score of all twenty items can be 120 once totaled, indicating an attitudinal index ranging from zero to 100. As with the TES, higher scores will denote a more positive attitudes and lower scores will imply attitudes that are more negative.

Previous STATIC test administration indicated a consistent Cronbach alpha reliability coefficient of 0.89%, which held constant for the total group as well as for individual groups of regular and special education teachers, and elementary and secondary teachers (Cochran, 1997). Item to total correlations ranged from 0.26 to 0.70 with a mean of 0.51, standard deviation of 0.11, and a standard error of measurement of ± 0.04 (Cochran, 1997). A confirmatory principal component factor examination was executed with a varimax rotation. The Kaiser rule was employed which was not to consider factors with eigenvalues less than 1.00 (Cochran, 1997). Eigenvalues were discovered to decline below 1.00 at factor five. Simple structure was found at a four-factor solution that accounted for 55.65 percent of the variance (Cochran, 1997). Cronbach alpha reliability coefficients were calculated for each factor. Reliability for factor one was found to be at .87, factor two at .83, factor three at .57, and factor four at .62 (Cochran, 1997). A one-parameter Rasch model rating scale analysis was completed
on the total sample and for special and regular educationalists separately. Disparities amid the positioning of items and persons for all teachers, for special education teachers alone, and for regular education teachers alone were negligible (Cochran, 1997). Four factors can be identified from the STATIC: (a) advantages and disadvantages of inclusive education (7, 11, 12, 13, 14, 15, 20); (b) professional issues regarding inclusive education (1, 2, 3, 4, 9); (c) philosophical issues regarding inclusive education (5, 6, 10, 16); (d) logistical concerns of inclusive education (8, 17, 18, 19). The four factors accounted for 55.65 percent of the total variance for the theoretical construct of “attitude toward inclusion” (Cochran, 1997).

**Procedures**

Only certified general and special education teaching staff with at least one year of prior inclusive teaching experience were invited to participate. Informed consent for participation and a written guarantee of anonymity in the perception survey were the first undertaking (Appendix B). The survey began with a collection of demographic information from each participant (Appendix A). Perception statements regarding self-efficacy and attitude toward inclusive classroom settings were addressed in the final portion of the survey.

For this study, a Likert style research survey inquiry was used to gather information. The certified teachers were asked to complete the Likert scale questionnaire and submit their responses via Survey Monkey. Once a final alphabetical list of the randomly selected participants was generated, an informational email was sent to each participant requesting their assistance in completing the survey. The email outlined the
purpose of the study, the potential impact of the research on inclusive classrooms, and its prospective importance to future research (Appendix B). The website address was written and formatted to link the respondent directly to the survey on Survey Monkey. Specific instructions on how to complete the survey was outlined within the email and reiterated at the beginning of the online survey.

Survey completion was conducted voluntarily on the basis of total anonymity. Honesty and accuracy were requested of all participants to minimize bias. The researcher requested for surveys to be completed within 14 days from the date of information dissemination. Respondents were requested to answer questions in the order of presentation to ensure scoring accuracy (Preston, 1996). Upon entering the website survey, the participant was prompted to begin answering questions regarding teacher attitude and how it relates to inclusion. Questions from the TES and the STATIC were entered into a single survey for respondent convenience. The respondents were directed to select the responses to the best of their ability and submit the survey subsequent to completion. After the last question, survey participants were directed to exit the survey window. All survey information remained anonymous during data collection. No personally identifiable information (i.e. name, address, telephone number, social security number, date of birth) was recorded in the survey.

To increase respondent participation, the initial email was resent as a reminder to all survey participants 14 days after the initial email (Appendix B). The purpose of the contact was to remind respondents of the importance of their input and encourage teacher survey completion. Two weeks following the second reminder, a third reminder was
sent, again via email. One week following the third reminder, the survey closed and data analysis began.

All surveys were completed via electronic format and all information relevant to the study was stored within Survey Monkey’s online database. Two hundred fifty emails were sent out requesting survey participation. Survey Monkey automatically logged completion time for each respondent.

**Data Analysis**

Upon completion of the survey timeline, 35 total days, the data was downloaded onto a computer and all data analyzed. SPSS Statistics 18 Software ran descriptive statistics to identify frequencies, percentages, central tendency, and measures of variation in addition to multiple regression and ANOVAs. Multiple regression analysis was used to test the relationship between the variables of interest (collective teaching efficacy, personal teaching efficacy, and general teaching efficacy) and teacher attitude toward inclusive classroom settings. Multiple regression analysis was used to test the relationship between the variables of interest (collective teaching efficacy, personal teaching efficacy, and general teaching efficacy) and teacher attitude toward inclusive classroom settings.

Research question two was analyzed using one-way analysis of variance. The one-way analysis of variance examined if there are any differences in teacher attitude toward inclusive classroom settings when taking into account primary student disability type.
The predictor variables in this study were collective sense of teaching efficacy, general sense of teaching efficacy, personal sense of teaching efficacy, and primary student disability type. Teachers participating in this study were considered self-volunteers. Biases may be present because of participant volunteer status and were unknown to the researcher. The findings of this study should be interpreted with caution due to unknown bias.

**Subject Selection and Description**

The survey district educates roughly 11,000 students at the high school level; county data estimates purport 1,100 students receive special education services per academic year (T. Fagin, personal communication, January 28, 2010). All seven high schools selected for the study were located in areas considered to be urban-metropolitan or suburban, but with student populations that have become increasingly diverse as students transfer in from surrounding rural settings due to multiple financial opportunities located within the city (Georgia Department of Education [GADOE], 2009). The majority of the students attending the selected high schools come from households classified as economically disadvantaged according to socio-economic makeup (T. Fagin, personal communication, January 28, 2010). Student populations within the seven high schools are proportionate in demographic makeup. The teachers within the selected county are diverse with regard to age, years of experience, and level of education attained (T. Fagin, personal communication, January 28, 2010). County mandates create uniformity in inclusive high school classrooms; each classroom contains one special education teacher and one general education teacher in a collaborative, co-
teaching design. Inclusive classroom placement for high school special education teachers within the county is determined by student need and disability area based on IEP committee decisions (D. Keeney, personal communication, February 5, 2010)
CHAPTER FOUR - FINDINGS

This study sought to determine if teachers’ sense of collective teaching efficacy, general teaching efficacy, or personal teaching efficacy predict their attitude toward inclusive classroom settings and if there a difference in teacher attitude toward inclusive classroom settings when working with various student disabilities groups (i.e. learning disabled (LD), emotional/behavioral disorders (EBD), other health impairments (OHI), or none listed). Chapter four is organized in terms of the two research questions guiding this study. It examines the relationship between collective sense of teaching efficacy, general sense of teaching efficacy, personal sense of teaching efficacy, and teacher attitude toward inclusion as well as exploring any differences in teacher attitude toward inclusive classroom settings when taking into account primary student disability type.

Purpose

The purpose of this study was to investigate if collective sense of teaching efficacy, general sense of teaching efficacy, or personal sense of teacher efficacy influenced teacher attitude toward inclusive classroom settings. Additionally, the study sought to determine if teacher attitude toward inclusive classroom settings differed when taking into account primary student disability type.

Demographic Profile of the Population

The sample of teachers in this survey study represented high school level teachers throughout the United States. Both general and special education high school teachers
were invited to participate in this study. The following sections analyze breakdowns of the demographic information of the 250 respondents.

**Years of Teaching Experience**

The sample of schools had an even breakdown of teachers with varying years of experience. Figure 1 provides a breakdown of the respondents by years of teaching experience. A concern with the small sample size is that it can limit the generalizability, validity, and reliability of the results. The percentage differences in the variable of years of teaching experience are minimal between 1-5 years (n=64) and the 6-10 years of experience (n=70). There is a larger discrepancy between the 11-15 years of practice (n=34) and the veteran faction with 16 or more years of teaching experience (n=82).

![Figure 1. Respondents by years of teaching experience](image)

**Education**

Most of the teachers within the sample have completed graduate work to earn advanced education degrees, the sample was dominated by the faction who earned their Master of Education (M.Ed.) degree. As displayed in Figure 2, fifty percent of the respondents have achieved their M.Ed graduate degree (n=124). Thirty-six percent of
the teachers retain their Bachelor of Science (B.S.) undergraduate degree (n=89). Twelve percent of the respondents attained their six year Education Specialist (Ed.S) graduate degree (n=29). Less than four percent of the respondents within the sample population attained their doctorate (Ed.D) graduate degree (n=8).

Figure 2. Respondents level of education

Area of Certification

While the number of general educators is clearly disproportionately higher in any high school around the country when compared to special educators, the number of respondents with special education certification was abnormally high within this sample (Barco, 2007). Figure 3 displays that within this sample of high school teachers, 70% of the respondents were general educators (n=174) and 30% were special education teachers (n=76). Figure 3 breaks down general education teachers by subject area, education teachers who taught mathematics (n=22), English (n=38), history (n=32), science (n=28),
and technical subjects ($n=54$). Educators classified in the technical category instructed business, technology, art, home economics, and drama at the time of survey administration.

![Figure 3](image.png)

**Figure 3.** Respondents by area of certification

**Gender**

Figure 4 provides a visual depiction of the gender specifics for the 250 participant sample that responded to the surveys. The sample population consisted of 178 female respondents (72%) and 70 male respondents (28%).
Figure 4. Respondents by gender

Ethnicity

Figure five displays a large number of Caucasian respondents in this study ($n=156$) though the student population served within the high schools surveyed were primarily African American ($m=79\%$). African American respondents ($n=56$) comprised 22 percent of the educators polled, while Hispanic educators ($n=10$) comprised only four percent of the respondents. Six percent of the respondents were of Asian ($n=16$) descent with five percent classified as “other” ($n=12$).
Research Questions and Hypothesis Testing

The data analysis is presented in two distinct sections: (a) multiple regression analysis was used to test the relationship between the variables of interest (collective teaching efficacy, personal teaching efficacy, and general teaching efficacy) and teacher attitude toward inclusive classroom settings and (b) one-way analysis of variance (ANOVA) to determine if there is a statistical difference between the group means (research question two) based on faction variances and sample sizes. Tables in each section detail the results of the analyses as well as noteworthy findings for items when analyzed with the diverse variables.
Research Question One and Hypotheses

Is there a relationship between teacher sense of collective teaching efficacy, general teaching efficacy, or personal teaching efficacy and their attitude toward inclusive classroom settings?

H₀₁₁: There is no significant correlation between high school teachers’ collective sense of teaching efficacy (as shown by cumulative TES scores) and their attitude toward inclusive classroom settings (as shown by collective STATIC scores).

H₀₁₂: There is no significant correlation between high school teachers’ general sense of teaching efficacy (as shown by cumulative TES scores) and their attitude toward inclusive classroom settings (as shown by collective STATIC scores).

H₀₁₃: There is no significant correlation between high school teachers’ personal sense of teaching efficacy (as shown by cumulative TES scores) and their attitude toward inclusive classroom settings (as shown by collective STATIC scores).

Research Question One and Multiple Regression

A multiple regression analysis was utilized to test the null hypotheses for RQ1. Before performing the regression analysis, a collective Teacher Efficacy Scale score was derived from the single items on the TES to form a solitary criterion variable for H₀₁₁. Questions one, two, four, five, and ten from the TES were added together to determine a cumulative score for General Teaching Efficacy (H₀₁₂) while questions three, six, seven,
eight, and nine were tallied to comprise the collective Personal Teaching Efficacy score (H$_{6,13}$). Responses for all questions were summed and averaged to create a single composite score. Composite scores are often used to generate an average response score from a survey for each participant (McDonald, 1999). A reliability analysis for the full scale produced a Cronbach’s alpha = .778. Since the attained alpha exceeded the test value of .70 as proposed by previous research (Kaplan & Saccuzzo, 2009), the results imply that scores for items of the Teacher Efficacy Scale could be summated to construct a more consistent total score.

**Parametric Assumptions for Regression Analysis**

Before RQ1 was analyzed the basic parametric assumptions for regression analysis were measured. That is, for the criterion variable, (Teacher Attitude Toward Inclusive Classroom Settings) and predictor variables (Cumulative Teacher Efficacy, General Teaching Efficacy, and Personal Teaching Efficacy), assumptions of normality, linearity, homoscedascity, and multicollinearity were assessed. Based test results, no multivariate outliers existed based on the Mahalanobis score.

**Normality of the Criterion Variable**

The researcher then addressed the assumption of normality for the criterion variable. A frequency histogram was produced for the composite scores of the Cumulative Teacher Efficacy scores, General Teacher Efficacy scores, and Personal Teaching Efficacy scores to determine if the score patterns were normally distributed. In the research the actual distribution appears similar to the expected normal distribution.
This would suggest that the distribution of self-efficacy scores were normally distributed (Tabachnick & Fidel, 2007.)

The expected normal probability plot was produced to further validate normality for the Teaching Efficacy Composite variable. In the figure below the expected values are represented by the diagonal running from lower left to upper right. The observed value is represented by the points that snake along this line. In Figure 6 observed values appear relatively close to expected values, which is evidenced by the diagonal line.

Figure 6 Cumulative Teacher Efficacy Scores (Normal Q-Q Plot of Z score)

![Normal Q-Q Plot of Zscore](image)

Figure 6. Normal Q-Q plot of Zscore

Given the preponderance of evidence that suggests normality of the criterion variable, normality was confirmed. That is, after examining the Frequency Histograms and Normal Probability Plot, the researcher determined that the criterion distribution meets parametric assumptions. Accordingly, no outliers were detected in H₀₁₁.
The expected normal probability plot was also produced to further validate normality for the Cumulative Teaching Efficacy Composite variable. In the figure below the expected values are represented by the diagonal running from lower left to upper right. The observed value is represented by the points that *snake* along this line. When the observed values remain relatively close to the expected values, normality is assumed. In Figure 6 observed values appear relatively close to expected values, which is evidenced by the diagonal line. The results suggest that the cumulative teacher efficacy distribution is normally distributed (Tabachnick & Fidel, 2007.)

![Normal Q-Q Plot of Zscore(GenAVG)](image)

*Figure 7.* Cumulative teaching efficacy composite (scatter plot of results)

Given the preponderance of evidence that suggests normality of the criterion variable, normality was confirmed. That is, after examining the Frequency Histograms and Normal Probability Plot, the researcher determined that the criterion distribution meets parametric assumptions. Accordingly, no outliers were detected in $H_0.1_2$. 67
The expected normal probability plot was also produced to further validate normality for the General Teaching Efficacy Composite variable. The intent of the normal probability plot (Normal QQ Plot) is to compare the expected normal value with the actual normal value. In the figure below the expected values are represented by the diagonal running from lower left to upper right. The observed value is represented by the points that snake along this line. When the observed values remain relatively close to the expected values, normality is assumed. The results suggest that the general teacher efficacy distribution is normally distributed (Tabachnick & Fidel, 2007.)

![Normal QQ Plot of Zscores(PerAVG)](image)

*Figure 8.* General teaching efficacy composite (scatter plot summary of results)

Given the preponderance of evidence that suggests normality of the criterion variable, normality was confirmed. That is, after examining the Frequency Histograms and Normal Probability Plot, the researcher determined that the criterion distribution meets parametric assumptions. Accordingly, no outliers were detected in $H_{0.13}$.

The expected normal probability plot was also produced to further validate normality for the Teaching Efficacy Composite variable. The intent of the normal
probability plot (Normal QQ Plot) is to compare the expected normal value with the actual normal value. In Figure 8 the expected values are represented by the diagonal running from lower left to upper right. The observed value is represented by the points that snake along this line. When the observed values remain relatively close to the expected values, normality is assumed. The results suggest that the cumulative teacher efficacy distribution is normally distributed (Tabachnick & Fidel, 2007.)

The presence of multicollinearity was examined by reviewing the Tolerance and Variance Inflation Index in the Collinearity Diagnostic table produced by SPSS. Tolerance is the percentage of the variance in a given predictor that cannot be explained by other predictors while VIF means the amount of inflation attributed to the standard error of the regression coefficient (SPSS, 2008). A VIF greater than two is usually indicative of a problem with multicollinearity (SPSS, 2008). Results indicated that the tolerance was one (Tolerance = 1.00) and VIF is less than two (VIF = 1.00). Garson (2009) suggests that Tolerance values close to zero and VIF values greater than two imply high multicollinearity. This suggests there is not a serious problem with multicollinearity.

**Research Question One Data Analysis**

**Research Question One and Hypothesis**

Is there a relationship between teacher sense of collective teaching efficacy, general teaching efficacy, or personal teaching efficacy and their attitude toward inclusive classroom settings?

**Hypothesis \( H_1 \)**
H₀₁₁ stated there is no significant correlation between high school teachers’ collective sense of teaching efficacy (as shown by cumulative TES scores) and their attitude toward inclusive classroom settings (as shown by collective STATIC scores). Multiple Regression analysis was utilized to test H₀₁₁. Beta coefficients suggest that for every one unit increase in predictor variable (cumulative teacher efficacy), the criterion variable (total scores on the STATIC) increases by .735 points. Based on findings in Figure 6 the distribution of cumulative self-efficacy scores were normally distributed and appeared similar to the expected normal distribution. Data suggests that, as teacher sense of efficacy increase, teacher attitude toward inclusive classroom settings become more positive in nature. Given these results and a p-value less than .05, null hypothesis H₀₁₁ was rejected.

Hypothesis H₀₁₂

H₀₁₂ stated there is no significant correlation between high school teachers’ general sense of teaching efficacy (as shown by cumulative TES scores) and their attitude toward inclusive classroom settings (as shown by collective STATIC scores).

Multiple Regression analysis was utilized to test H₀₁₂. General teaching efficacy scores were derived from combining questions one, two, four, five, and ten from the TES. Based on findings in Figure 7 the distribution of general teaching efficacy scores were normally distributed and appeared similar to the expected normal distribution. Data determined that general teaching efficacy scores were indicative of their attitude toward inclusive classroom settings. H₀₁₂ was rejected.
Hypothesis $H_{o13}$

$H_{o13}$ stated there is no significant correlation between high school teachers’ personal sense of teaching efficacy (as shown by cumulative TES scores) and their attitude toward inclusive classroom settings (as shown by collective STATIC scores).

Personal Teaching Efficacy is a teacher’s own feeling of confidence in regard to their teaching abilities and the impact they can personally have on student achievement (Hoy, 2000). The level of organization, planning, and fairness a teacher displayed, as well as clarity and enthusiasm in teaching has been linked to personal teaching efficacy (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998) all of which are vital components to a successful inclusive classroom environment.

Multiple Regression analysis was utilized to test $H_{o13}$ by combining the questions regarding personal teaching efficacy. Questions three, six, seven, eight, and nine comprised the personal efficacy portion of the TES. Based on findings in Figure 8 the distribution of personal teaching efficacy scores were normally distributed and appeared similar to the expected normal distribution. Personal teaching efficacy scores seemed to have the greatest impact on STATIC scores indicating that teachers who believed they were personally capable to teach even hard to reach students held the most positive attitude toward inclusive classroom settings. $H_{o13}$ was rejected.

Summary of Research Question One

Results from the data analysis using Pearson’s coefficient, the coefficient of determination, correlational analysis, and multiple regression, revealed a significant relationship between collective sense of teacher efficacy, general teaching efficacy,
personal teaching efficacy, and teacher attitude toward inclusion. Pearson’s coefficient and the coefficient of determination ($r^2$) indicated that collective teacher efficacy, general teaching efficacy, and personal teaching efficacy significantly correlated with positive STATIC scores, indicative of a more positive attitude toward inclusive classroom settings.

Data indicated that scores on the TES were the best predictor of teacher attitude toward inclusive classroom settings as determined by the STATIC. Teachers who were more confident in their ability to effectively teach students with disabilities in inclusive classroom settings tended to hold a more positive attitude toward inclusive classroom settings. The strongest predictor of total scores on the STATIC was personal teaching efficacy. The regression model found that both general teaching efficacy and personal teaching efficacy were significant predictors of teacher attitude toward inclusive classroom settings, though personal teaching efficacy was a greater contributor ($p=.66$).

Pearson’s $r$ and Unstandardized SWA indicate a positive relationship between overall teaching efficacy, general teaching efficacy, personal teaching efficacy, and teacher attitude toward inclusive classroom settings. R-square, also referred to as the coefficient of determination, suggests a sufficient degree of shared variance between the two variables. Information implies the reason STATIC scores varied was due to overall sense of teaching efficacy, general teaching efficacy, and personal teaching efficacy.

Using SPSS 19.0 ANALYZE/REGRESSION/LINEAR, the data produced a statistically significant regression equation $[R(1, 11) = .564, R^2 = .318, f$-change $= 3.4, R^2 (.318)]$. The statistically significant value of $R^2$ suggests a sufficient degree of shared
variance between the two. That is, 32% variance in teacher efficacy scores can be attributed to scores on the TES and STATIC. The power of the multiple regression procedure was calculated using an online statistical calculator (Soper, 2010). The obtained alpha for the regression was .32, which by convention is low. The low power for the test indicates that the researcher cannot draw accurate conclusion regarding the results. Due to the small sample size it is possible that the results could have been due to chance.

**Research Question Two and Hypotheses**

Is there a difference in teacher attitude toward inclusive classroom settings when working with various student disabilities groups (i.e. learning disabled (LD), emotional/behavioral disorders (EBD), other health impairments (OHI), or none listed)?

- **H₀₂₁** There is no significance in teacher attitude toward inclusive classroom settings while working with learning disabled students (LD) when taking into account cumulative STATIC scores.

- **H₀₂₂** There is no difference in teacher attitude toward inclusive classroom settings when working with emotional/behavioral disorders (EBD) when taking into account cumulative STATIC scores.

- **H₀₂₃** There is no difference in teacher attitude toward inclusive classroom settings when working with other health impairments (OHI) when taking into account cumulative STATIC scores.

- **H₀₂₄** There is no difference in teacher attitude toward inclusive classroom settings when working with students with none of the behavioral disorders

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listed, but still qualified as special needs students (i.e. traumatic brain injury, autistic, etc.) when taking into account cumulative STATIC scores.

**Comparison of Disability Types and Static Scores**

In the demographic portion of the questionnaire, the respondents had answered questions notating the primary student disability type present in their classroom. For research purposes, disabilities were documented based on four possible answers: learning disabled (LD), emotional/behavioral disorders (EBD), Other Health Impaired (OHI), or None (none of the eligibilities listed). The disability options were taken from federal FTE (full time equivalent) disability codes. By respondents notating the primary student disability type present in their classroom, the researcher was able to break down cumulative STATIC scores by disability type and examine if respondent STATIC scores varied when taking into account student disability type.

Statistical Package for the Social Sciences or SPSS software was used to calculate the data. Each respondents cumulative STATIC scores was totaled and separated based on the primary student disability type present in their classroom. The respondents answers could range from 6 to 1 for each question; higher scores (closer to 6) indicated a more positive attitude and lower scores (closer to 1) indicated a more negative attitude. All surveys were complete and were considered in the analysis (n=250). The maximum score an individual could obtain on the survey was 120 and the minimum was 20. The investigator examined the mean STATIC scores for each disability type.
Table 1

Results of Descriptive Statistics Based on Severity of Disability

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<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
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<td>Statistic</td>
<td>Std. Error</td>
<td>Statistic</td>
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<td>10</td>
<td>84.4000</td>
<td>7.74482</td>
<td>24.49127</td>
</tr>
</tbody>
</table>

Table 1 examines the results of the descriptive statistics of each of the attitudes of the participants broken down by the four disability types recorded in the demographics section. Learning disabilities were the primary student population present in the inclusive settings surveyed (n=181). EBD was the second primary student population (n=41), followed by OHI (n=18), and then none of the disabilities listed (n=10).

Examining the mean of each of the disabilities, responses based on emotional behavioral disorders (EBD) showed the lowest overall mean scores. Other Health Impairments (OHI) have means in 90s, showing a higher score and therefore representing a more positive attitude toward inclusion classroom settings.

Research Question Two and an ANOVA

To answer research question two a one-way analysis of variance, ANOVA, was conducted to evaluate each relationship between the differences in teacher attitude toward inclusive classroom settings when taking into account the various student disability types (LD, EBD, OHI, None). The independent variable was student disability type and the
dependent variable was the cumulative STATIC score that is indicative of teacher attitude toward inclusive classroom settings.

The Levene test was used to test for homogeneity of variance. The Levene Statistic for STATIC scores, when taking into account all student disability types, was 3.310 with a significance of .021. Since the homogeneity of variance did not exceed .05 the researcher utilized the Welch test to review robust tests of equality of means. The Welch score was significant $F(3, 28)=3.405, p=.031$.

Because the overall F test was significant, post hoc multiple comparisons were conducted to evaluate pair wise differences among the means of the disability groups. A Tukey procedure was selected for the multiple comparisons because equal variances were assumed. There was a difference in teacher attitude toward inclusive classroom settings when comparing the STATIC means of a classroom with a primary LD and EBD population ($p=.032$) and between a primary OHI and EBD population ($p=.053$). Classrooms with a primary student population classified as None varied little when compared with the other three categories.

There was a difference in STATIC scores when taking into account classrooms with a primary student population of LD, EBD, and OHI. Data was not significant when comparing cumulative STATIC scores of teachers with a primary student population listed as None against those with a primary student population of LD ($p=.759$), EBD ($p=.971$), and OHI ($p=.447$).

Follow up post hoc tests were conducted to evaluate the four pair wise differences among the means for student disability type. Results are displayed in Table 2. Mean
differences were significant at the .05 level for educators with a primary student population of EBD.

Table 2

Post Hoc Multiple Comparisons

<table>
<thead>
<tr>
<th>STATIC</th>
<th>(I) Disability</th>
<th>(J) Disability</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LD</td>
<td>EBD</td>
<td>7.9110*</td>
<td>2.82066</td>
<td>.005</td>
<td>2.3541 - 13.4679</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>5.3158</td>
<td>5.30148</td>
<td>.317</td>
<td>-5.1284 - 15.7601</td>
<td></td>
</tr>
<tr>
<td>EBD</td>
<td></td>
<td>-7.9110*</td>
<td>2.82066</td>
<td>.005</td>
<td>-13.4679 - 3.7251</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OHI</td>
<td>-12.5701*</td>
<td>4.81205</td>
<td>.010</td>
<td>-22.0502 - 3.0901</td>
<td></td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>-2.5951</td>
<td>5.75755</td>
<td>.653</td>
<td>-13.9379 - 8.7476</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EBD</td>
<td>12.5701*</td>
<td>4.81205</td>
<td>.010</td>
<td>3.0901 - 22.0502</td>
<td></td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>9.9750</td>
<td>6.58068</td>
<td>.131</td>
<td>-2.9894 - 22.9394</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LD</td>
<td>-5.3158</td>
<td>5.30148</td>
<td>.317</td>
<td>-15.7601 - 5.1284</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>EBD</td>
<td>2.5951</td>
<td>5.75755</td>
<td>.653</td>
<td>-8.7476 - 13.9379</td>
<td></td>
</tr>
</tbody>
</table>

Based on observed means.
The error term is Mean Square(Error) = 266.495.

* The mean difference is significant at the .05 level.

A summary of estimated marginal means of the STATIC score are provided in Figure 9. The table clearly depicts high STATIC scores, indicative of a more positive attitude toward inclusive classroom settings, for educators who teach students with a primary disability of OHI. Educators with a primary EBD student population have consistently low STATIC scores, indicative of a less positive attitude toward inclusive classroom settings.
A review of the data revealed that one-way ANOVA were significant, $F(3, 246)=3.407, p=.018$ questioning the validity of $H_{01}$, $H_{02}$, $H_{03}$, or $H_{04}$. Based on this information, the researcher realized that not all of the hypothesis were supported by the data and further investigation was warranted. Preliminary results indicated that teacher attitude toward inclusive classroom settings does vary when taking into account primary student disability type. The Welch score was significant $F(3, 28)=3.405, p=.031$ when comparing robust tests of equality of means. Post hoc multiple comparisons were conducted to evaluate pair wise differences among the means of the disability groups using a Tukey procedure. Differences in teacher attitude toward inclusive classroom settings were found between teachers with a primary student population of LD

**Figure 9.** Static scores

A review of the data revealed that one-way ANOVA were significant, $F(3, 246)=3.407, p=.018$ questioning the validity of $H_{01}$, $H_{02}$, $H_{03}$, or $H_{04}$. Based on this information, the researcher realized that not all of the hypothesis were supported by the data and further investigation was warranted. Preliminary results indicated that teacher attitude toward inclusive classroom settings does vary when taking into account primary student disability type. The Welch score was significant $F(3, 28)=3.405, p=.031$ when comparing robust tests of equality of means. Post hoc multiple comparisons were conducted to evaluate pair wise differences among the means of the disability groups using a Tukey procedure. Differences in teacher attitude toward inclusive classroom settings were found between teachers with a primary student population of LD
and EBD, and between a primary population of OHI and EBD. The data suggests that inclusive teachers with a primary student population of LD, EBD, or OHI students did vary in their attitude toward inclusive classroom settings.

**Research Question Two – Data Analysis**

Is there a difference in teacher attitude toward inclusive classroom settings when working with various student disabilities groups (i.e. learning disabled (LD), emotional/behavioral disorders (EBD), other health impairments (OHI), or none listed).

**Hypothesis H₀₂₁**

H₀₂₁ states there is no significance in teacher attitude toward inclusive classroom settings while working with learning disabled students (LD). In this study, 184 respondents reported that LD students were their primary disability type present in their classroom. The maximum score a respondent could obtain on the STATIC was 120 points and respondents with a primary student population classified as LD had a mean score of 89.78 indicative of a more positive attitude toward inclusive classroom settings. A one-way ANOVA was conducted and found to be significant thereby rejecting H₀₂₁. Teacher attitude does vary when taking into account a primary student population that is classified as learning disabled.

**Hypothesis H₀₂₂**

H₀₂₂ states there is no difference in teacher attitude toward inclusive classroom settings when working with emotional/behavioral disorders (EBD). Forty-two of the respondents taught a primary student population classified as having an emotional/behavioral disorder. The mean score of these respondents were 82.046, which
were the lowest mean scores for the four disability areas. Data indicates that teachers with a primary student population classified as EBD tend to have a less positive attitude toward inclusive classroom settings than those who taught LD, OHI, or none listed. Data fails to support $H_{o2}$ and it is rejected.

**Hypothesis $H_{o23}$**

$H_{o23}$ states there is no difference in teacher attitude toward inclusive classroom settings when working with other health impairments (OHI). Sixteen respondents had a primary student population classified as OHI and they held the highest mean scores (94.37) of all disability areas indicating a more positive attitude toward inclusive classroom settings. Based on ANOVA results which indicated a significance data indicates that teachers who had a primary student population classified as OHI held a more positive attitude toward inclusive classroom settings and hypothesis $H_{o23}$ was rejected.

**Hypothesis $H_{o24}$**

$H_{o24}$ states there is no difference in teacher attitude toward inclusive classroom settings when working with students with none of the behavioral disorders listed, but still qualified as special needs students (i.e. traumatic brain injury, autistic, etc.). Ten respondents had a primary student population classified as none listed. These respondents scored an average mean score of 84.4 indicating a less positive attitude toward inclusive classroom settings. $H_{o24}$ was rejected.

Research question two sought to determine if teacher attitude toward inclusive classroom settings differed when taking into account various student disability types (e.g.
learning disabled (LD), emotional/behavioral disorders (EBD), other health impairments (OHI), or none listed). Null hypothesis two stated that high school teacher attitudes toward inclusive classroom settings would not differ when taking into account student disability types, including learning disabled students (LD), emotional behavioral students (EBD), other health impairments (OHI), or none of those previously listed, but still qualified as special needs students. A one-way Analysis of Variance (ANOVA) was used to analyze null hypothesis two in order to determine if the differences between condition means or cumulative STATIC scores were significant when factoring in the dependent variable.

The one-way analysis of variance (ANOVA) revealed a main effect of Disability, F (3, 246) =3.407, p=.018. The significance or p score is less than .05, meaning that the condition mean or disability types listed had an effect on teacher attitude toward inclusive classroom settings as signified in respondent STATIC scores. When the effects are found to be significant, or less than .05, using the above procedure, it implies that the means differ more than would be expected by chance alone.

Data reveals that educators with a primary student population diagnosed as OHI held the highest mean scores (M=94.3750) while educators who taught a primary student population diagnosed as EBD (M=81.8049) held the lowest mean scores indicative of a less favorable attitude toward inclusive classroom settings.

**Summary of Research Question Two**

The STATIC had four subareas or factors of teacher attitude toward inclusive classroom settings that it addressed, advantages and disadvantages, professional issues,
philosophical issues, and logistical concerns; a one-way analysis of variance was conducted for each subarea. Factor one, advantages and disadvantages of inclusive classroom settings was significant based on one-way ANOVA calculations, F (3, 246) = 7.906, p = .000. A significance level of .000 means that only .01% of the time, the results will be due to chance. Based on ANOVA results there is a direct correlation between teacher attitude toward advantages and disadvantages toward inclusive classroom settings when taking into account student disabilities. Inclusive teacher attitude regarding professional issues F (3, 246) = 2.946, p = .034, appears to be impacted by the various student disabilities as does philosophical issues F (3, 246) = 2.791, p = .041. Data does not reflect logistical concerns being impacted by student disability types, F (3, 246) = 1.045, p = .373.

Tukey post hoc analysis was used to determine where the significance exists between disability types and their impact on STATIC scores. A post hoc test revealed differences between students with EBD and LD (p = .32) and EBD students when compared to students diagnosed as OHI (p = .053). Data revealed no significance between students diagnosed as LD and those diagnosed as OHI or None Listed. EBD students showed the most significance when compared to LD students and OHI students, but not when compared to the students classified as None Listed, p = .971. This negative perception toward students classified as EBD may be due in part to the unique classroom management and/or discipline issues this population creates, such as understanding and following rules, controlling behavior, and interacting with others in the classroom (Briggs, Johnson, Shepherd & Sedbrook, 2002). Examining the various factors within
the STATIC factor one, advantages and disadvantages LD and EBD were significant $p=.000$, as were OHI and EBD $p=.012$. Professional issues revealed only one significant correlation, between OHI students and those classified as None listed $p=.027$. Factor three, philosophical issues were significant between LD and EBD, $p=.022$ only. Logistical concerns showed no significant data between the various disabilities listed.

Levene test was conducted to assess variance homogeneity. Comparing student disability types to cumulative STATIC scores reveals a significance of .021. Since the significance is less than .05, a Welch ANOVA was used as a robust test of equality of means. STATIC scores when taking into account primary student disability type reveals statistical significance, $F=3.405, p=.031$ and fails to support null hypothesis two. When taking into account factors within the STATIC, advantages and disadvantages were found to be statistically significant, $F=9.90, p=.000$. Professional issues were found to be significant, $F=4.735, p=.008$. Philosophical issues were not found to be statistically significant, $F=2.933, p=.051$, nor were logistical concerns statistically significant $F=1.203, p=.327$.

A one-way ANOVA was conducted to assess whether there were differences in STATIC scores based on student disability type. Since the $p$ value of all four disability types (LD, EBD, OHI, and None Listed) are significant below .05, data fails to support Null Hypothesis $H_{01}, H_{02},$ and $H_{03}$. There is sufficient evidence to conclude that teacher attitude toward inclusive classroom settings, as indicated by cumulative STATIC scores, do vary when taking into account various student disability types.
Summary of Results

Research question one asks if teachers’ sense of collective teaching efficacy, general teaching efficacy, or personal teaching efficacy predict their attitude toward inclusive classroom settings. A multiple regression analysis was conducted to assess the relationships between the constructs contained in the TES and the STATIC. Data failed to support $H_{o1}, H_{o2},$ or $H_{o3}$ and were rejected. Results from the multiple regression analysis revealed several statistically significant correlations which will be expounded upon in the following chapter.

Research question two asked if there a difference in teacher attitude toward inclusive classroom settings when working with various student disabilities groups (i.e. learning disabled (LD), emotional/behavioral disorders (EBD), other health impairments (OHI), or none listed)? Given these results and a $p$ value less than .05, data failed to support $H_{o4}$ and were therefore rejected. The research did however support $H_{o4}$, finding that teacher attitude did not differ when taking into account students with a primary disability type of none and the hypothesis was accepted. The data indicates that primary student disability type directly impact scores on the STATIC when taking into account classrooms with a primary student disability of LD, EBD, or OHI. Teachers who taught a primary student disability type of none did not tend to differ in their attitude toward inclusive classroom settings.
CHAPTER FIVE - DISCUSSION

Summary of Findings

Over the past two decades, an accumulation of data has substantiated the relationship between teacher efficacy and teacher attitudes toward inclusive classrooms (Alahbabi, 2009). Inclusion holds great potential for students with disabilities. A review of the literature showed that there is a predictable relationship between teacher sense of efficacy, attitude, and performance (Ashton & Web, 1986; Brown et al., 2008; Deemer, 2004; Sadler, 2005). Inclusive classrooms can hold promise for students with disabilities in teaching them both content and social skills (Schaefer, 2010). Inclusion can only be fully realized when educators embrace classroom challenges with confidence and the competency to overcome obstacles. Empirical information established that efficacy beliefs directly influenced the effort teachers put into teaching, their determination during difficult circumstances, their willingness to employ new strategies to meet student needs, the extent of their persistence in working with struggling students, their passion and dedication to the teaching profession, and their willingness to collaborate with peers (Smith, 2008). Due to the mounting significance of teacher efficacy regarding instructional practices, classroom management, student outcomes, and inclusion, inspection of this construct ought to be sought after.

Literature suggests that teacher efficacy is context specific and grounded in experience (Tschannen-Moran et al., 1998) and teachers who demonstrate high teacher
efficacy in an inclusive setting also demonstrate a more positive attitude toward inclusion and ultimately find more success in the inclusion setting (Ashton & Webb; Ernst, 2006).

This study sought to investigate if collective sense of teaching efficacy, general sense of teaching efficacy, or personal sense of teacher efficacy influenced teacher attitude toward inclusive classroom settings. Additionally, the study sought to determine if teacher attitude toward inclusive classroom settings differed when taking into account primary student disability type. This chapter provides discussion of the conclusions drawn from the study and considers its implications both for practice and for future research.

**Discussion and Implication of Findings**

As explained in chapter three, only certified and special education teaching staff with at least one year of prior inclusive teaching experience were invited to participate in this case study on a voluntary basis with total anonymity promised to all parties. Two hundred fifty five qualified respondents were randomly selected and two hundred fifty chose to participate in the study. At the request of Dr. Cochran, multiple factors were examined within the population including years of teaching experience, area of certification, gender, and ethnicity.

The majority of teachers surveyed were veteran teachers with over 16 years of experience (n=82), followed by educators who had between six and ten years of experience (n=70). Several studies have investigated correlations between a teacher age, years of experience, and teacher attitude toward the inclusive classroom setting (Avramidis et al., 2000; Cornoldi et al., 1998; Harvey, 1985; Heiman, 2001; Stoler, 1992; Whiting & Young, 1995). Study findings note older teachers appear to present a less
positive attitude than younger teachers toward inclusive classroom settings (Cornoldi et al., 1998; Lampropoulou & Padelliadu, 1997). Study findings report the most experienced educators tend to have the lowest level of acceptance toward inclusive classroom settings (Forlin, Douglas, & Hattie, 1996; Knight, 1999). Whiting and Young (1995) published that older, more experienced teachers are uncomfortable with inclusive practices, due to the intrusion into their rooms by support personnel. The presence of other adults in the room can create an environment fraught with tension and discomfort, especially if the general education teacher perceived the support personnel as an observer and not as additional support, which often occurs (Whiting & Young, 1995). In line with previous studies, this study found that teachers with more experience, tended to have a lower scores on the STATIC, indicative of a more negative attitude toward inclusive classroom settings, while educators who were new to the profession (1-5 years) obtained higher scores on the STATIC, indicative a more positive attitude toward inclusive classroom settings.

Most of the teachers surveyed held a master of education degree (n=124) followed by educators with only an undergraduate degree (n=89). Previous studies have found that a teacher's level of education does not significantly influence a teacher's attitude toward the inclusion of students with disabilities into regular classes (Heiman, 2001; Kugter, 2000). A study by Stoler (1992) found that teachers with higher levels of education tended to have a less positive attitude toward inclusion, than those who did not achieve master's degree status, which this study supported.
This study consisted of 178 female respondents and 70 male respondents. Several studies state that there is no correlation between a teacher's gender and their attitude toward inclusive classroom settings (Cornoldi, Terreni, Scruggs, & Mastropieri, 1998; Kuester, 2000; Van Reusen et al., 2001). Harvey (1985) also concluded that gender failed to significantly impact teacher's attitudes toward inclusive education. However, several studies that examined teacher attitude toward inclusive classroom settings found that female teachers tend to have more positive attitudes toward inclusive classroom settings than their male counterparts, but male educators are more confident in their ability to educate students with disabilities (Leyser & Tappendorf, 2001; Pearman, Huang, Barnhart, & Mellblom, 1992). One fact to note is that findings which link gender as a variable in inclusive education studies, are often imbied with cultural factors (Lampropoulou and Padelliadu, 1997).

Hₙ₁ stated high school teachers’ sense of collective teaching efficacy does not influence their attitude toward inclusive classroom settings. To examine research question one, the study employed a non-experimental correlational design since we were seeking to interpret the degree to which STATIC scores, interpreting teacher attitude toward inclusive classroom settings co-occurred when taking into account individual sense of cumulative, general, and personal teaching efficacy as determined by the TES. Multiple regression analysis tested the relationship between collective teaching efficacy, personal teaching efficacy, and general teaching efficacy. Data found the distribution of cumulative teacher efficacy scores were normally distributed and appeared similar to the expected normal distribution. Figures support other research findings that, as teacher
sense of efficacy increase, teacher attitude toward inclusive classroom settings become more positive in nature. Given the results listed in chapter four and a $p$ value less than .05, null hypothesis one was rejected.

$H_{o12}$ stated high school teachers’ sense of general teaching efficacy does not influence their attitude toward inclusive classroom settings. Multiple Regression analysis was utilized to test $H_{o12}$. General teaching efficacy scores were derived from combining questions one, two, four, five, and ten from the TES. Data found that general teaching efficacy scores were indicative of teacher attitude toward teaching in inclusive classroom settings. Based on the failure of data to uphold $H_{o12}$, was rejected.

$H_{o13}$ stated high school teachers’ sense of personal teaching efficacy does not influence their attitude toward inclusive classroom settings. Personal Teaching Efficacy is a teacher’s own feeling of confidence in regard to their teaching abilities and the impact they can personally have on student achievement (Hoy, 2000). The level of organization, planning, and fairness a teacher displayed, as well as clarity and enthusiasm in teaching has been linked to personal teaching efficacy (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998) all of which are vital components to a successful inclusive classroom environment.

This study found teachers’ who were more confident in their ability to effectively teach students with disabilities in inclusive classroom settings tended to have a more positive attitude toward inclusive classroom settings. The study found that both general teaching efficacy and personal teaching efficacy were significant predictors of teacher attitude toward inclusive classroom settings, though personal teaching efficacy was a
greater contributor. This means that, based on personal teaching efficacy, an educator believes he/she has the skills and abilities required to affect learning in a positive manner. In general teaching efficacy, the educator believes that education and the interventions provided in the school environment can overcome other environmental factors that influence children, in order to affect positive change (Dembo & Gibson, 1985; Liljequist & Renk, 2007). It should be noted that previous research has demonstrated that general teaching efficacy scores tend to decrease with teaching experience (Dembo & Gibson, 1985), though data in this study indicated that general teaching efficacy ($r^2=.373$) had a slightly more significant impact on attitude toward inclusive classroom settings than personal teaching efficacy ($r^2=.371$). According to Burke and Sutherland (2004) educators can have experience, but it is the knowledge they feel they lack, along with the updated current strategies needed, to make inclusive classroom settings successful. It is believed that additional training would provide educators with further strategies to increase inclusive classroom learning for students (Parker, 2006). Training and experience in special education practices provide educators with the foundation they need to have a greater sense of teaching efficacy which imparts a more positive attitude toward the inclusive classroom setting (Bradshaw & Mundia, 2006; Subban & Sharma, 2006).

According to Burke and Sutherland (2004), teachers can have experience, but it is the current knowledge they feel they lack along with updated current strategies needed to make inclusion successful. For teachers to increase student learning and have a more positive attitude toward inclusive classroom settings, it is believed that additional training is needed to provide teachers with additional strategies to increase student learning.
Teachers who have had training or additional experience in special education and inclusion demonstrate more positive attitudes and a greater sense of efficacy toward inclusive settings (Bradshaw & Mundia, 2006; Schaefer, 2009; Subban & Sharma, 2006). Similar data was found in studies conducted by Jordan and Stanovich (2001), and Van Reusen, Shoho, and Barker (2000) which found that teachers with high classroom management skills were more likely to have high confidence levels and a greater sense of efficacy. Teacher’s with low confidence levels were less likely to feel they have the ability to teach disabled students in inclusive classroom settings. As with this study, Barco (2007) found that teacher attitude and sense of teaching efficacy share a relationship with teachers’ ability to teach in the inclusive classroom settings. The results of this study were in line with previously conducted research. Ashton & Webb (1986) asserted that teacher efficacy has the ability to influence teacher attitude, their level of persistence, and their resilience with regard to classroom instructional activities.

Personal teaching efficacy has been linked to teacher level of organization, planning, fairness, clarity, and enthusiasm in teaching (Ashton & Webb; Deemer, 2004; Schaefer, 2009). Allinder and Woolfolk-Hoy (1994) and Burke-Spero (2005) determined that external factors, such as support and resources offered to teachers, can significantly impact their sense of self-efficacy. Additional teacher resources, such as parental support, positive feedback, supportive administration, and positive colleague relationships, can serve as social persuasion, which when taking into account Social Cognitive Theory, can increase teacher sense of efficacy (Bandura, 1997). Moreover, earlier studies indicate that teacher sense of efficacy has a direct impact on attitude
toward inclusive classroom settings (Barco, 2009; Bradshaw & Mundia, 2006; Deemer; Ernst, 2006; Subban & Sharma, 2006). Liljequist and Renk (2007) found that educators with a higher sense of efficacy were either less distressed by students’ emotional and behavioral difficulties or felt more responsible for their problems and felt they could make a difference. Morals, attitudes, and efficacy beliefs of educationalists, are essential to the didactic and social achievements of students with disabilities in inclusive classrooms. These attributes may also shape the successful integration of students’ with disabilities into other school environments and activities, potentially society at large (Hayes, 2005). Pajares (1996) stated that teacher efficacy has proven to be related to many meaningful outcomes. It has been determined that attitudes toward inclusion of students’ with disabilities in the general education classroom fluctuate due to quite a few variables (Scruggs & Mastropieri, 1996) such as teacher efficacy beliefs. Thus, continued appraisal of efficacy beliefs and thoughts toward inclusion for educators is warranted at both the in-service and pre-service level. This means that, based on personal teaching efficacy, an educator believes he/she has the skills and abilities required to affect learning in a positive manner. In general teaching efficacy, the educator believes that education and the interventions provided in the school environment can overcome other environmental factors that influence children, in order to affect positive change (Dembo & Gibson, 1985; Liljequist & Renk, 2007). It should be noted that previous research has demonstrated that general teaching efficacy scores tend to decrease with teaching experience (Dembo & Gibson, 1985), though data in this study indicated that general teaching efficacy (r^2=.373) had a slightly more significant impact on attitude toward
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According to Burke and Sutherland (2004), teachers can have experience, but it is the current knowledge they feel they lack along with updated current strategies needed to make inclusion successful. For teachers to increase student learning and have a more positive attitude toward inclusive classroom settings, it is believed that additional training is needed to provide teachers with additional strategies to increase student learning (Parker, 2006). Teachers who have had training or additional experience in special education and inclusion demonstrate more positive attitudes and a greater sense of efficacy toward inclusive settings (Bradshaw & Mundia, 2006; Schaefer, 2009; Subban & Sharma, 2006).

Research question two stated teacher attitude toward inclusive classroom settings will not differ while working with various student disabilities (e.g. learning disabled (LD), emotional/behavioral (EBD), other health impairments (OHI) or none listed. Research question two utilized a causal comparative research design to examine how
teachers felt toward inclusive classroom settings when taking into account multiple primary student disability types. The demographic portion of the questionnaire assisted in notating the primary student disability type present in each respondent’s classroom. Based on the demographic information provided the researcher was able to break down cumulative STATIC scores by disability type and examine if respondent STATIC scores varied when taking into account the notated disability.

$H_0^{2_1}$ stated there is no significance in teacher attitude toward inclusive classroom settings while working with students with learning disabilities (LD). Most respondents had a primary student population that consisted of students who were diagnosed with a learning disability ($n=184$). The mean STATIC score for respondents with a primary student population of students with a learning disability was 89.78 indicative of a more positive attitude toward inclusive classroom settings.

$H_0^{2_2}$ stated there is no significance in teacher attitude toward inclusive classroom settings while working with students with emotional/behavioral disorders. Forty two respondents had a primary student population diagnosed as having an emotional and/or behavioral disorder. These respondents scored the lowest of all four disability categories with a mean STATIC score of 82.047 indicative of a less positive attitude toward inclusive classroom settings.

$H_0^{2_3}$ stated there is no significance in teacher attitude toward inclusive classroom settings while working with students with other impairments (OHI). Only sixteen respondents had a primary student population diagnosed with other health impairment,
but they held a significantly higher mean STATIC score of 94.3750 indicative of a positive attitude toward inclusive classroom settings.

H₀₂₄ stated there is no significance in teacher attitude toward inclusive classroom settings while working with students with none of the behavioral disorders listed, but still qualifying as a student with disabilities (i.e. traumatic brain injury, autism, etc.). Only 10 respondents fell within this category and they had a mean STATIC score of 84.40.

A one-way analysis of variance, ANOVA was used to evaluate each relationship between the differences in teacher attitude toward inclusive classroom settings when taking into account the various student disability types. There were differences in teacher attitudes toward inclusive classroom settings when comparing respondents with a primary student population of LD and EBD and OHI and EBD. Classrooms with a primary student population listed as none varied little when compared to the other three categories.

In direct correlation with research findings of this study previous research notes teacher attitudes toward inclusion classroom settings appear to be shaped by the type and the degree of the disability of the student concerned. Inclusion teachers are primarily concerned with the severity of the disabilities within their classroom (Barnatt & Kabzems, 1992; Croll & Moses, 2000; Heiman, 2001). Teachers view the move to include students with multiple disabilities and unstable emotional and behavioral disabilities into the inclusive classroom, as unrealistic (Sigafoos & Elkins, 1994). Research published by Avramidis, Bayliss, and Burden (2002) and Kuster (2000) found that students with emotional and behavioral disorders promote a less positive attitude
from teachers within inclusive classroom settings, which is in direct correlation with our research findings. Seventy percent of teachers surveyed by Dixon (2005) felt that students with emotional or behavioral disabilities did not belong in the general education classroom. Dixon goes on to write “when the attention is focused on students’ disabilities rather than who they are as people, the focus is usually on their deficits, not on their strengths” (Dixon, 2005, p. 37).

**Limitations of the Study**

A variety of limitations naturally constrain the conclusions drawn from this research. The potential limitations discussed in Chapter One were affirmed during the study.

This study focused on the attitudes of high school teachers toward inclusion classroom settings when taking into account their sense of teaching efficacy and primary student disability type. The study was based on a convenience sample that represented only a select number of high schools in a discrete geographic area, limiting the study to these locals only. Due to the limited number of site locations utilized during this study, the information obtained may not be representative of how all high school educators perceive inclusion or the extent of implementation of inclusive practices. In addition, the convenience sample does not protect against under coverage bias (when some members of the population are not adequately represented in the sample) and results may be less generalizable as a results (Heckman, 1979; Lohr, 1999; Schaefer, 2009). Thusly, what is accurate for this particular group of respondents may or may not generalize to other
school districts and caution must be utilized with regard to the conclusions made by this research.

The high school locations surveyed utilized a fully inclusive model of education, as mandated by the county. The subjective degrees of respondent inclusive experience and training may have affected response discrepancies in survey questions. Diverse internal factors within the selected sites may have yielded anecdotal results without the surveyor’s knowledge.

Response limitations from high school educators may have included: participant selection process; contributor geographical location; and the assumption that students with disabilities taught in the inclusive setting have been appropriately identified and placed, therefore are receiving appropriate instruction.

This study also used only the Teacher Efficacy Scale (Tschannen-Moran & Woolfolk & Hoy, 2001). This limits the focus of this study to the definition of teacher efficacy as employed by Tschannen-Moran and Woolfolk Hoy. Similarly, only the Scale of Teacher Attitude Toward Inclusive Classrooms (STATIC) (Cochran, 1998) was used to determine teacher attitude toward inclusive classroom settings and Cochran’s operational definitions also naturally constrain the focus. By limiting the data to these two instruments and the subsequent definitions of teacher efficacy and teacher attitude toward inclusive classrooms, the study is limited in that it would not be generalizable to other circumstances in which the definitions are not the same.

The aforementioned factors may have influenced respondent answers in this study. Various life and teaching experiences could have affected participant survey
responses, thereby making generalizations difficult. Research has shown that gender can influence teacher attitude toward inclusive classroom settings. Ernst (2006) found male teachers to hold more positive view of inclusive classroom settings than female teachers.

The number of respondents choosing to participate in this study was small, making it more difficult to represent a majority of the high school level educators who teach in inclusive classrooms. It should also be noted that the participants were self-volunteers which may unknowingly contribute to bias. The teachers that responded to the survey may not have answered honestly. The teachers may not have wanted to answer honestly in the events of possibly being viewed as incompetent or not qualified to teach in an inclusive classroom, though anonymity was guaranteed and provided. Caution should be taken when interpreting the results of this study. Another limitation was that the researcher collected data over a period of multiple days with various school settings coming into play and therefore subjected respondents to potential differences in environment and circumstances that may have influenced their responses. Additionally, there was a possibility that teacher attitudes toward inclusion may have been shaped by personal experiences rather than professional experiences. For example, a respondent who has a child with a disability may have their personal views influenced by way of their parenting experiences rather than their teaching experiences. Data obtained from such participants would affect the results in that the experiences of the participant are not limited to educational or professional experiences, adding the possibility of personal bias on the part of the respondents.
The surveys used in this study pertained to the disabled student population served in inclusive classroom settings. Results may be biased due to the fact that high school teachers may feel more receptive to having students’ with disabilities in their regular classrooms. The generalizations form this particular population sample may not be replicated through research for other more diverse school districts and populations. In order to improve on the generalize ability of this study; an increase will have to be made with the number or participants to make it a nationwide study.

One area of researcher concern was the lack of definitive identifiers for the predictor variables (number of clock hours of professional development, previous work experience, and percent of students’ with disabilities in inclusive setting). Professional development opportunities come in many forms including, in-service training, field observations, peer mentoring, and collaborative planning.

Future research should specifically target professional development hours and presentation types as well as specific data on students with disabilities present in the general education classroom. Educational level can be enhanced through professional development. In previous studies professional development had significant correlations toward overall sense of teaching efficacy and attitudes toward inclusive classroom settings. Study findings produced by Deglau and O’Sullivan (2006) showed that planned workshop participation contributed to teachers’ shifting their beliefs and attitudes. The study also indicated teachers felt a heightened sense of efficacy toward teaching methodologies following workshops. Teaching efficacy plays a central responsibility in
shaping how individuals tackle new challenges, the initial motivation to learn and master new skills, as well as how individuals persevere when difficult situations occur (Schaefer, 2010). Teachers have to be aware of their efficacy beliefs in the classroom because they have the ability to determine student success in inclusive classrooms by promoting positive educational outcomes for the entire classroom (Woolfolk – Hoy, 2004).

Some educational research studies have examined the relationship of teacher efficacy with teacher certificate or degree (Hoy & Woolfolk, 1993), grade taught (Soodak & Podell, 1996), classroom atmosphere and student conduct (Emmer & Hickman, 1991), and work with students with disabilities (Stanovich & Jordan, 1998). Further research should be considered for additional variables that could be significant in the growth or enhancement of teachers’ efficacy beliefs and attitudes toward inclusive classrooms. Woolfolk and Hoy (1990) have suggested that teacher efficacy is content and situation explicit, associations between teacher efficacy and other variables ought to be specified or results may miss important associations or findings vital to this construct.

Discussion and Implications

The findings of this study can benefit all professionals in related fields as well as educators. For individuals who work with students with special needs, it can help them become more conscious of how they both perceive them and treat them in comparison to their peers. Individual educators can utilize this data to reflect on his/her attitude toward inclusive classroom settings and the students’ within to determine if they need to improve at a personal or professional level in that area. The research can also be used to determine how their individual attitudes truly impact their students in both development
and growth. The research has been designed to educate teachers and professionals on how they improve on services they provide by ensuring they have adequate training in teaching students with special needs, and factors that can ensure a diverse classroom is successful. Administrative support in educating teachers and professionals regarding diverse populations of students would greatly help all stakeholders gain the education needed.

The findings can assist in improving education by providing backing to the notion that teachers’ attitudes affect students academically, socially and emotionally. Students need the support of not only their peers but also their teachers to learn and grow successfully. When an educator focuses only on a student’s deficits rather than concentrating on each student’s strengths potential gains are lost within the student and the learning experience as a whole.

The findings of this study suggest that teacher educational level had a slight impact on teacher attitude toward inclusive classrooms, but modest influence on teacher sense of efficacy. Years of teaching experience appeared to have little impact on teachers’ efficacy and teacher attitude toward inclusive classrooms, despite the perceptions of the participants and some recent study findings. Regardless, educators must be exposed to training and professional development that enhances their self-assurance, attitudes, and preparedness to organize and execute a course of action that upholds academic and social progress for all students.

Teacher attitude toward inclusive classrooms and their sense of self-efficacy has a direct impact on the teaching methodologies they employ during instruction. Teacher
efficacy has been identified as an essential, but overlooked construct in teacher educational programs of study and professional learning activities (Smith, 2008). Future training that closes the gap between teachers’ sense of efficacy beliefs and attitudes toward inclusion, with the reality of knowing how to teach a diverse student population in inclusive classroom settings is needed, especially with regard to the high school level. More and more students with special needs are being educated in general education environment (an increase from 33% to 52% over the past 10 years). Preparing educators with the knowledge and pedagogy needed to meet the needs of the diverse student population needs to be a priority of the education reform initiatives.

Insurmountable amounts of resources are spent on in-service training and professional development opportunities, in an effort to provide the necessary knowledge, skills, and aptitude that educators need to be successful in inclusive classrooms. These resources could be further maximized were they to provide opportunities for educators to acquire the essential knowledge and experiences needed to emerge from their teaching preparation programs possessing the confidence in their individual capabilities to organize and execute a course of teaching action that promoted learning for all students, even the most challenging ones.

While limited, the findings in this research show a correlation between sense of efficacy beliefs and overall attitude toward inclusive classroom settings. The variables impacting efficacy levels and attitudes are more professional and philosophical, such as professional development and years of teaching experience. Data shows primary student disability type in inclusive classrooms appear to effect teachers overall attitudes toward
inclusive classrooms, while teacher educational level and years of teaching experience did not impact teacher attitude toward inclusive classroom environments. Many believe that inclusion works best for high functioning students with disabilities (Smith, 2008).

The study found that there is a relationship between secondary teachers’ sense of teaching efficacy, the primary student disability type, and teacher attitudes as they relate to teaching students’ with disabilities in the inclusive setting. The relationship did not appear to be influenced by factors such as teacher educational level and years of teaching experience.

In previous studies, the teacher’s level of experience teaching special education students has a direct impact on their attitude toward inclusion (Burke & Sutherland, 2004); the data accumulated in this study did not show a difference in attitude toward inclusive classroom settings when taking into account years of teaching experience. The discrepancy in research findings may be linked to lack of teaching experience in inclusive classroom environments. This study only required one year of previous teaching experience in an inclusive environment, so educators with greater than 16 years of teaching experience may have only spent one year in an inclusive environment. Further research needs to be done to investigate relationships between inclusive teaching experience and teacher attitude toward inclusive classroom settings.

Much of the early research on teacher efficacy has suggested that the teachers’ perception of their ability to positively impact student learning are a critical factor in the actual success or failure of the inclusive classroom environment as well as the achievement of students with disabilities (Ashton & Webb, 1986; Barco, 2008; Bradshaw
& Mundia, 2006; Deemer, 2004; Jull & Minnes, 2007; Sadler, 2005; Schaefer, 2009; Subban & Sharma, 2006). Educators who are more confident in their ability to meet the educational needs of the student population in an inclusive environment demonstrate a more positive attitude and ultimately demonstrate greater success with the students (Ashton & Webb; Barco; Bradshaw & Mundia; Deemer; Schaefer; Subban & Sharma). This coincides with Bandura’s (1977) Social Cognitive Theory, which stresses self-reflective thought that affects an individual’s behavior.

The premise of Social Cognitive Theory (SCT) contends that an individual’s thought process, their emotions, and beliefs impact the individual’s behavior (Bandura, 1986). Bandura (1993) proposed self-efficacy as the primary predictor of behavior, more so than expectations, knowledge, or skills. Self-efficacy plays a critical role in how individuals approach challenges, their motivational level in learning and mastering new skills, and their level of persistence in adverse situations (O’Shea, 2006). Teacher efficacy can be a determinant in how he/she will perform in an inclusive classroom setting and in teacher willingness to work with students who are struggling academically, behaviorally, or socially (Solomon, 2007).

On a personal level, educators need to be conscious of how their personal beliefs in the classroom and how those beliefs impact their teaching ability since student success is so dependent upon teacher attitude and sense of teaching efficacy (Woolfolk-Hoy, 2004). Educators also need to be skilled in the various disability types present in their classroom and statistically sound management techniques that help make students successful.
Recommendations for Further Research

Several recommendations for future research in this area can be suggested. These recommendations can be considered as an extension to this study with the potential to further advance discovery in this area. These include the following:

1. In order to answer additional questions of concern, a nationwide longitudinal study could be done to track students enrolled in the inclusive construct from the elementary level throughout high school. This study could track the opinions and attitudes of teachers as they progress over time. Inclusive student interviews could also render vital information regarding the benefits and drawbacks of the inclusive construct.

2. Add a question to the demographic study asking for professional development and training experiences with inclusion and working with students with disabilities. This is a potential factor of influence due to previous literature demonstrating a connection between professional preparation, efficacy, and attitude (Barco, 2009; Bradshaw & Mundia, 2006; Schaefer, 2009; Subban & Sharma, 2006).

3. Include additional student disabilities types beyond those presented in this study. Severe and profound students, autistic and Aspergers students, and many other various disabilities, not individualized in this study are served through the inclusive model and teacher attitude needs to be determined based on the severity of the disability present in their classroom.
4. Studies that account for preschool educators and their attitudes toward inclusive classroom settings, or including teacher attitudes about the preparation of special needs students before they enter the formal education setting could be studied. This information could expound on literature in terms of comprehending the potential for improvement in student outcomes through inclusive classroom settings at an earlier stage of student development.

5. Since this study was done in urban high school settings, future research could be done to include private school settings and the practices they employ in meeting the requisites of special needs students. This information could potentially add to the body of research by providing a comparison of practice, since private schools are not restricted by the same laws as public schools, and effectiveness of practice in the inclusion setting.

6. Additional studies could be employed to include variations in the attitudes of male and female teachers toward inclusive classroom environments. Ernst’s 2006 study found male teachers to express more positive perceptions of inclusion than their female counterparts. Research of this type could reveal reasons for such gender variations and suggest strategies for improvement of female teacher attitudes toward inclusion by analyzing the male perceptions.

**Recommendations for Practice**
Just as the study provides additional considerations for future research, it also encourages consideration in educational practice. Teachers, educators, administration, and college level professors could utilize the results of this research in reflecting on their personal approaches to inclusion. Consideration should also be given to the impact their approach toward inclusive classroom settings will have on the student population they serve.

There is a relationship between teacher sense of efficacy, student disability types present in their classroom, and their attitude toward inclusive classroom settings. Based on study findings and previous studies conducted, the future recommendations are suggested:

1. Teacher attitude toward inclusion is affected by personal and general sense of teaching efficacy. Schools should offer and allow for additional training/professional development to the teaching staff so they are better prepared to teach and service the needs of students with disabilities in an inclusive classroom setting. In previous studies, educators with additional training had a greater sense of teaching efficacy and a more positive attitude toward inclusive classroom settings (Barco, 2008; Bradshaw & Mundia, 2006; Ernst, 2006; Schaefer, 2009; Subban & Sharma, 2006).

2. Future studies, as recommended above, should be done in various geographic locations and settings. This study was only a sample of seven high schools in single public school district in an undisclosed location in the United States,
limiting the generalizability of the study results. Studies incorporating various geographic settings and regions could provide greater generalizability.

3. Additional questions should be sought to determine how much time a teacher spends in making the accommodation’s for the disabled student in the classroom. Data from this type of question could provide greater insight into understanding the attitudes presented by teachers toward inclusion and as educator comfort level with inclusive classroom structure, instructional strategies, and teacher efficacy reflection.

4. Additional comparisons should be done between general education teachers and special education teachers’ efficacy and their attitudes toward inclusive classroom settings.

Summary

Respective approaches to inclusive practices need to be considered on case-by-case basis, taking into account district, administrative, and educator needs with regard to the inclusive setting. Teachers need to consider, on a personal level, how their approach to teaching in an inclusive classroom, affects the success of students’ with disabilities. To fully engage students in inclusive classroom environments teachers must be able to accept the responsibility for modifying the curricula for various learners based on their learning and social-emotional needs. The classroom setting also requires a different type of pedagogy which is student centered and allows for achieving different outcomes.

This study presented findings that suggest the importance of the teacher sense of efficacy and attitude toward the inclusive classroom environment and the impact teachers
have in determining inclusive student success. Teacher sense of efficacy toward inclusive classrooms was found to be impacted by primary student disability type and years of teaching experience.

Teacher sense of efficacy has been closely linked to Bandura’s Social Cognitive Theory. Bandura’s Social Cognitive Theory suggests that teacher efficacy impacts the amount of effort and the degree of persistence a teacher will exert in various teaching situations and how well they will perform in an inclusive setting (Bandura, 1986). Social Cognitive Theory can be utilized as a predictor to determine how well a teacher will perform in an inclusion setting (Schaefer, 2009).

This information can be used by administration, teacher educations, and teachers to understand and manage the inclusive classroom climate and aid in strategies for teacher efficacy improvement in terms of inclusion. Professional development that emphasizes inclusive practices and meeting the needs of students’ with special needs may be beneficial for all educational stakeholders as it could potentially improve teaching efficacy, and attitude toward inclusive classroom settings. Professional development can educate teachers and administrators on cultivating productive inclusive environments and may aid in the improvement of teacher efficacy. The ultimate goal is effective learning for all students, including those with disabilities.
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APPENDICES
Appendix A

Teacher Survey on Inclusive Practices

| High School Teacher Attitude Toward Inclusion and Self Reported Usage of Survey |
| A number of statements about organizations, people, and teaching are presented below. The purpose is to gather information regarding actual attitudes of educators concerning these statements. There are no correct or incorrect answers. We are interested only in your frank opinions. Your response will remain confidential. |

INSTRUCTIONS: Please indicate your personal opinion about each statement by clicking the appropriate response below each statement.

1. Age (in years):

2. Gender:
   - Female
   - Male

3. Area(s) of Certification (please check only that area in which you have been legally certified by the state of Georgia):
   - Special Education
   - Regular Education - Social Studies
   - Regular Education - Science
   - Regular Education - Mathematics
   - Regular Education - English Language Arts
   - Regular Education - Other

4. Grade(s) Instructed (Check all grades you are currently instructing on a regular basis):
   - 9
   - 10
   - 11
   - 12

5. Greatest number of students with an active IEP that are in your classroom at the same time:

<table>
<thead>
<tr>
<th>High School Teacher Attitude Toward Inclusion and Self Reported Usage of</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Level of education attained (highest degree you attained as of the current year):</td>
</tr>
<tr>
<td>○ Associate's Degree</td>
</tr>
<tr>
<td>○ Bachelor's Degree</td>
</tr>
<tr>
<td>○ Master's Degree</td>
</tr>
<tr>
<td>○ Education Specialist's Degree</td>
</tr>
<tr>
<td>○ Doctoral Degree</td>
</tr>
<tr>
<td>7. Total Years of Teaching Experience (The number of years you have been employed under contract as a teacher, up to and including the current year. Use whole numbers only.):</td>
</tr>
<tr>
<td>8. Fill in the circle corresponding to the statement that best describes you.</td>
</tr>
<tr>
<td>○ I DO NOT have a child with special needs living in my home.</td>
</tr>
<tr>
<td>○ I Do have a child with special needs living in my home.</td>
</tr>
<tr>
<td>9. Fill in the bubble that BEST describes the location of your school.</td>
</tr>
<tr>
<td>○ Urban</td>
</tr>
<tr>
<td>○ Suburban</td>
</tr>
<tr>
<td>○ Community</td>
</tr>
<tr>
<td>○ Rural</td>
</tr>
<tr>
<td>10. Fill in the corresponding bubble that BEST identifies your racial/ethnic background.</td>
</tr>
<tr>
<td>○ Asian</td>
</tr>
<tr>
<td>○ Black</td>
</tr>
<tr>
<td>○ Hispanic</td>
</tr>
<tr>
<td>○ White</td>
</tr>
<tr>
<td>○ Other</td>
</tr>
<tr>
<td>11. Fill in the bubble that best describes the special need(s) most closely associated with children included in your classroom.</td>
</tr>
<tr>
<td>○ Learning differences</td>
</tr>
<tr>
<td>○ Behavioral differences</td>
</tr>
<tr>
<td>○ Health or physical differences</td>
</tr>
<tr>
<td>○ None of these</td>
</tr>
</tbody>
</table>
High School Teacher Attitude Toward Inclusion and Self Reported Usage of

12. The amount a student can learn is primarily related to family background.
   - Strongly Agree
   - Moderately Agree
   - Agree slightly more than disagree
   - Disagree slightly more than agree
   - Moderately Disagree
   - Strongly Disagree

13. If students aren't disciplined at home, they aren't likely to accept any discipline.
   - Strongly Agree
   - Moderately Agree
   - Agree slightly more than disagree
   - Disagree slightly more than agree
   - Moderately Disagree
   - Strongly Disagree

14. When I really try, I can get through to most difficult students.
   - Strongly Agree
   - Moderately Agree
   - Agree slightly more than disagree
   - Disagree slightly more than agree
   - Moderately Disagree
   - Strongly Disagree

15. A teacher is very limited in what he/she can achieve because a student's home environment is a large influence on his/her achievement.
   - Strongly Agree
   - Moderately Agree
   - Agree slightly more than disagree
   - Disagree slightly more than agree
   - Moderately Disagree
   - Strongly Disagree
High School Teacher Attitude Toward Inclusion and Self Reported Usage of

16. If parents would do more for their children, I could do more.
   ○ Strongly Agree
   ○ Moderately Agree
   ○ Agree slightly more than disagree
   ○ Disagree slightly more than agree
   ○ Moderately Disagree
   ○ Strongly Disagree

17. If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.
   ○ Strongly Agree
   ○ Moderately Agree
   ○ Agree slightly more than disagree
   ○ Disagree slightly more than agree
   ○ Moderately Disagree
   ○ Strongly Disagree

18. If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly.
   ○ Strongly Agree
   ○ Moderately Agree
   ○ Agree slightly more than disagree
   ○ Disagree slightly more than agree
   ○ Moderately Disagree
   ○ Strongly Disagree
19. If one of my students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.

- Strongly Agree
- Moderately Agree
- Agree slightly more than disagree
- Disagree slightly more than agree
- Moderately Disagree
- Strongly Disagree

20. If I really try hard, I can get through to even the most difficult or unmotivated students.

- Strongly Agree
- Moderately Agree
- Agree slightly more than disagree
- Disagree slightly more than agree
- Moderately Disagree
- Strongly Disagree

21. When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment.

- Strongly Agree
- Moderately Agree
- Agree slightly more than disagree
- Disagree slightly more than agree
- Moderately Disagree
- Strongly Disagree
<table>
<thead>
<tr>
<th>High School Teacher Attitude Toward Inclusion and Self Reported Usage of</th>
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<tbody>
<tr>
<td>22. I am confident in my ability to teach children with special needs.</td>
</tr>
<tr>
<td>- Strongly Agree</td>
</tr>
<tr>
<td>- Moderately Agree</td>
</tr>
<tr>
<td>- Agree Slightly More than Disagree</td>
</tr>
<tr>
<td>- Disagree Slightly More than Agree</td>
</tr>
<tr>
<td>- Moderately Disagree</td>
</tr>
<tr>
<td>- Strongly Disagree</td>
</tr>
<tr>
<td>23. I have been adequately trained to meet the needs of special needs children.</td>
</tr>
<tr>
<td>- Strongly Agree</td>
</tr>
<tr>
<td>- Moderately Agree</td>
</tr>
<tr>
<td>- Agree Slightly More than Disagree</td>
</tr>
<tr>
<td>- Disagree Slightly More than Agree</td>
</tr>
<tr>
<td>- Moderately Disagree</td>
</tr>
<tr>
<td>- Strongly Disagree</td>
</tr>
<tr>
<td>24. I become easily frustrated when teaching students with special needs.</td>
</tr>
<tr>
<td>- Strongly Agree</td>
</tr>
<tr>
<td>- Moderately Agree</td>
</tr>
<tr>
<td>- Agree Slightly More than Disagree</td>
</tr>
<tr>
<td>- Disagree Slightly More than Agree</td>
</tr>
<tr>
<td>- Moderately Disagree</td>
</tr>
<tr>
<td>- Strongly Disagree</td>
</tr>
<tr>
<td>25. I become anxious when I learn that a student with special needs will be in my class.</td>
</tr>
<tr>
<td>- Strongly Agree</td>
</tr>
<tr>
<td>- Moderately Agree</td>
</tr>
<tr>
<td>- Agree Slightly More than Disagree</td>
</tr>
<tr>
<td>- Disagree Slightly More than Agree</td>
</tr>
<tr>
<td>- Moderately Disagree</td>
</tr>
<tr>
<td>- Strongly Disagree</td>
</tr>
<tr>
<td>Question</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
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</tbody>
</table>
| 26. Although children differ intellectually, physically, and psychologically, I believe that all children can learn in most environments. | ○ Strongly Agree  
○ Moderately Agree  
○ Agree Slightly More than Disagree  
○ Disagree Slightly More than Agree  
○ Moderately Disagree  
○ Strongly Disagree |
| 27. I believe that academic progress is possible in special needs children. | ○ Strongly Agree  
○ Moderately Agree  
○ Agree Slightly More than Disagree  
○ Disagree Slightly More than Agree  
○ Moderately Disagree  
○ Strongly Disagree |
| 28. I believe that children with special needs should be placed in special education classes. | ○ Strongly Agree  
○ Moderately Agree  
○ Agree Slightly More than Disagree  
○ Disagree Slightly More than Agree  
○ Moderately Disagree  
○ Strongly Disagree |
| 29. I am comfortable teaching a child that is moderately physically disabled. | ○ Strongly Agree  
○ Moderately Agree  
○ Agree Slightly More than Disagree  
○ Disagree Slightly More than Agree  
○ Moderately Disagree  
○ Strongly Disagree |
High School Teacher Attitude Toward Inclusion and Self Reported Usage of

30. I have problems teaching a student with cognitive deficits.
   - Strongly Agree
   - Moderately Agree
   - Agree Slightly More than Disagree
   - Disagree Slightly More than Agree
   - Moderately Disagree
   - Strongly Disagree

31. I can adequately handle students with mild to moderate behavioral problems.
   - Strongly Agree
   - Moderately Agree
   - Agree Slightly More than Disagree
   - Disagree Slightly More than Agree
   - Moderately Disagree
   - Strongly Disagree

32. Special needs students learn social skills that are modeled by regular education.
   - Strongly Agree
   - Moderately Agree
   - Agree Slightly More than Disagree
   - Disagree Slightly More than Agree
   - Moderately Disagree
   - Strongly Disagree

33. Students with special needs have higher academic achievements when included in the regular education classroom.
   - Strongly Agree
   - Moderately Agree
   - Agree Slightly More than Disagree
   - Disagree Slightly More than Agree
   - Moderately Disagree
   - Strongly Disagree
High School Teacher Attitude Toward Inclusion and Self Reported Usage of

34. It is difficult for children with special needs to make strides in academic achievement in the regular education classroom.
   - Strongly Agree
   - Moderately Agree
   - Agree Slightly More than Disagree
   - Disagree Slightly More than Agree
   - Moderately Disagree
   - Strongly Disagree

35. Self-esteem of the child with special needs is increased when included in the regular education classroom.
   - Strongly Agree
   - Moderately Agree
   - Agree Slightly More than Disagree
   - Disagree Slightly More than Agree
   - Moderately Disagree
   - Strongly Disagree

36. Students with special needs in the regular education classroom hinder the academic progress of the regular education student.
   - Strongly Agree
   - Moderately Agree
   - Agree Slightly More than Disagree
   - Disagree Slightly More than Agree
   - Moderately Disagree
   - Strongly Disagree
### High School Teacher Attitude Toward Inclusion and Self Reported Usage of

#### 37. Special in service training in teaching special needs students should be required for all regular education teachers.
- [ ] Strongly Agree
- [ ] Moderately Agree
- [ ] Agree Slightly More than Disagree
- [ ] Disagree Slightly More than Agree
- [ ] Moderately Disagree
- [ ] Strongly Disagree

#### 38. I don't mind making special physical arrangements in my room to meet the needs of students with special needs.
- [ ] Strongly Agree
- [ ] Moderately Agree
- [ ] Agree Slightly More than Disagree
- [ ] Disagree Slightly More than Agree
- [ ] Moderately Disagree
- [ ] Strongly Disagree

#### 39. Adaptive materials and equipment are easily acquired for meeting the needs of my students with special needs.
- [ ] Strongly Agree
- [ ] Moderately Agree
- [ ] Agree Slightly More than Disagree
- [ ] Disagree Slightly More than Agree
- [ ] Moderately Disagree
- [ ] Strongly Disagree
### High School Teacher Attitude Toward Inclusion and Self Reported Usage of

**40. My principal is supportive in making needed accommodations for teaching children with special needs.**

- [ ] Strongly Agree
- [ ] Moderately Agree
- [ ] Agree Slightly More than Disagree
- [ ] Disagree Slightly More than Agree
- [ ] Moderately Disagree
- [ ] Strongly Disagree

**41. Students with special needs should be included in regular education classrooms.**

- [ ] Strongly Agree
- [ ] Moderately Agree
- [ ] Agree Slightly More than Disagree
- [ ] Disagree Slightly More than Agree
- [ ] Moderately Disagree
- [ ] Strongly Disagree
Appendix B

RESPONDENT LETTER OF REQUEST

Dear Colleague:

For many schools, the regular classroom setting is a fundamental component of the inclusion construct. For the last 20 years or more inclusion has become a vital part of education reform.

Please take about 5 minutes to complete this online survey so that your perspective on inclusion may be better understood. Permission has been obtained through the school board and at the local level. The survey is completely confidential and the teachers’ personal information will not be identified in the study. The data is collected and correlated directly within the website and its software. The necessary teachers’ participation is voluntary and consent will be given by their contribution.

To access the surveys please go to the following website:

The Relation of High School Teacher Sense of Efficacy Toward Inclusion and Self-reported Usage of Effective Inclusion Strategies in the Classroom.

http://www.surveymonkey.com/s/YVTN6LQ

As part of my research, I am interested in examining whether or not a relationship exists between teacher sense of self-efficacy and teacher attitudes as it relates to teaching students’ with disabilities in the high school inclusionary classroom setting. The research questions for this study are: (1) Does teacher sense of efficacy influence high school teacher attitude toward inclusive classroom settings? (2) Is there difference in high school teacher attitude toward inclusion of students when taking into account student disability type, teacher educational level, or years of teaching experience?

Due to the scarcity of empirical research on inclusion at the secondary level, it is challenging to draw conclusions from the few studies addressing the inclusion construct. Several reviews of studies (Manset and Sammel, 1997) have failed to find relevant research on the secondary level that addresses teacher self-efficacy and teacher attitudes. Empirical studies (Scruggs and Mastropieri, 1996) have investigated the effectiveness of inclusion at the secondary level and from this research, viable teaching methodologies have been implemented and are being used in successful inclusive classrooms.

If you experience any difficulties in accessing the surveys, feel free to e-mail me at heather.wright@sccpss.com.

Thank you in advance for your help in my study on teacher efficacy and teacher attitudes toward inclusion. Your responses are invaluable to the success of this research project. If you would like to see, the results of the study please email me and I will be more than happy to forward them to you upon conclusion of the study. Thank you.

Heather Dillehay-Wright
Appendix C

School System Permission Letter

April 16, 2010

To Whom It May Concern:

Ms. Heather Wright has requested and been granted permission to conduct research within the County Public School System on the following topic:

*The relation of high school teacher attitude toward inclusion and self-reported usage of effective inclusion strategies in the classroom.*

This permission has been granted by the office appointed by the Superintendent of schools to review all requests for research to be conducted within the school system. Ms. Wright has fulfilled all local requirements and provided the documentation necessary to ensure that we understand the scope of her research and the methods which will be used to collect and present her data.

Should you have any questions regarding Ms. Wright’s research approval status, please feel free to contact me at [contact information]

Thank you,

Kristy Collins Rylander
Coordinator of Research and Statistics
Office of Accountability, Research, Evaluation, and Assessment
Appendix D

STATIC Permission Letter

April 1, 2010

From: Dr. H. Keith Cochran, Ph.D
129 Forest Drive
Carl Junction, MO 64834

To: Heather D. Wright
4 Skipjack Lane
Savannah, GA 31411

RE: Scale of Teachers’ Attitudes Toward Inclusive Classrooms (STATIC)

Dear Heather:

You have my permission to use the Scale of Teachers’ Attitudes Toward Inclusive Classrooms (STATIC) in your research. A copy of the instrument as well as scoring instructions are enclosed.

Sincerely,

H. Keith Cochran, Ph.D.
Appendix E

TES Permission Letter

March 31, 2010

Dear Heather

You have my permission to use the Teachers’ Sense of Efficacy Scale in your research. A copy of both the long and short forms of the instrument as well as scoring instructions can be found at:

http://www.coe.ohio-state.edu/shoy/researchinstruments.htm

Best wishes in your work.

Anita Woolfolk Hoy
Anita Woolfolk Hoy, Ph.D.
Professor

Anita Woolfolk Hoy
Appendix F

IRB Approval Letter

February 2, 2012

Heather Wright
IRB Exemption 1255.020212: The Relation of High School Teacher Sense of Teaching Efficacy and Self-Reported Attitudes toward the Inclusive Classroom Settings

Dear Heather,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and that no further IRB oversight is required.

Your study falls under exemption category 46.101 (b)(4), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:

(4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

Please note that this exemption only applies to your current research application, and that any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption, or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

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

(434) 592-5054

Liberty University
40 Years of Training Champions for Christ: 1971-2011