2018

Attitudes and Effectiveness of Teachers in Diverse Inclusive Classrooms

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This is to certify that the doctoral study by

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Abstract

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MA, Strayer University 2009

BS, University of Mississippi, 2003

Project Study Submitted in Partial Fulfillment

Of the Requirements for the Degree of

Doctor of Education

Administration Leadership for Teaching and Learning

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Abstract

Students with disabilities who participate in a fully inclusive educational program have failed to meet district or state goals for adequate yearly progress. This student population is explicitly recognized in state and federal accountability systems. The purpose for this study was to determine how certain factors affected the implementation of inclusive services at one school. This study investigated how teachers' attitudes and perceptions toward inclusion, level of education, exposure to people/students with disabilities, level of support, and knowledge of laws governing the education of students with disabilities affected inclusive classrooms. Gardner's theory of multiple intelligences was used as the theoretical framework to present information about multiple intelligences and differentiated strategies that assisted in the implementation of inclusive services. The sample included 40 teachers who were working in inclusive settings. Teacher Attitudes Toward Inclusion Scale, 1-on-1 interviews, and end-of course scores were used in this sequential explanatory mixed methods study. The quantitative data were analyzed with t tests and ANOVAs, and the qualitative data were analyzed through hand transcription and locating emerging themes. Data showed that teachers had a slightly negative attitude toward inclusion, and student test scores were affected as a result. There were 2 statistically significant differences in attitudes of special education compared to regular education teachers and an average level of knowledge compared to those having very good knowledge of special education laws. The project created based on these results was a series of workshops for school staff. These workshops on inclusive practices could close the achievement gap for this student population and increase teacher effectiveness.

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Dedication

This research is dedicated to those students and teachers who have advocated for students with exceptionalities. The inspiration is a manifestation of observing those students and educators who are hard-working, loving, and determined to succeed against all odds. Thank you for working so diligently even when the odds were not in your favor.

I would like to acknowledge my family members who have pushed me to never give up. Thank you for being an integral part of my academic success. There were many times that I wanted to give up, but because of your faith in me and your continued prayers, I am fulfilling my dreams of furthering my education. I have been blessed beyond measure with a support system that is grounded and worked with me to complete such a daunting task. Again, I say thank you.

Table of Contents

i

List of Tables

Section 1: The Problem

Introduction

The move toward inclusion of students with disabilities in regular education classrooms initially focused on those students who, at one time, had been excluded or separated from their nondisabled peers. This focus is now more strongly on a notion of equity and social inclusion (Sharma, Forlin, & Loreman, 2008). Educational leaders see equity in education as having two dimensions: fairness and inclusion (Organization for Economic Cooperation & Development, 2008). Ross-Hill (2009) stated that education leaders have known for many years that more attention should be given to the nation's education system.

In 2001, President George W. Bush enacted the No Child Left Behind Act (NCLB) in an attempt to close the achievement gap between disadvantaged and minority students and their peers. NCLB (2001) also allowed regular and special education administrators to see the importance behind the inclusion of students with disabilities in the current reform on education. This reformation meant that students with disabilities must be allowed access to regular education curriculum. Likewise, the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA) encouraged the inclusion of diverse and exceptional learners in all classrooms in the United States. Ross-Hill (2009) stated that the success and failure of both laws hinged on the knowledge and attitudes that teachers portray in the inclusive classroom.

The organizing system of educating students with disabilities is one that has greatly evolved and undergone a major transformation. The transformation took place

because of the mandate to include students with disabilities into the regular education classroom with their nondisabled peers. Fletcher (2010) stated that the need for additional research in the area was suggested by data from the U.S. Department of Education (1997) that showed that more than 90% of students with disabilities received instruction in general education classrooms and resource rooms. Specifically, in 2004, the majority (96%) of students with disabilities were being included in regular settings, and just over half (52.1%) of these students spent most (79%) of the day in a general education classroom. This mandate, unlike earlier forms of integration, was not based on the performance of the exceptional learner or the ability of the exceptional learner to keep up with the regular education curriculum. It was a mandate for all exceptional learners regardless of the disability to have the right to be educated in the general education classroom with the necessary support.

Students once referred to as special education students or *sped* students with exceptionalities were not high on the list of priorities for many educational institutions. There was a common misconception that these students were not capable of achieving the same levels of success as their nondisabled peers (Scruggs & Mastropieri, 1996). In the early years of special education, students with exceptionalities were excluded from their nondisabled peers because of the belief that they were not academically and, in many cases, socially equal. As a result, students with exceptionalities were educated in self-contained classrooms. This self-contained setting meant that these students remained together throughout the academic day, and were taught each subject by the special education teacher and the teacher's assistants (Lindsay, 2007). Many special education

teachers were responsible for teaching several subjects, although they were not formally trained in those subject areas. The educators had to teach these subjects to the best of their ability.

Definition of the Problem

The separation and exclusion of exceptional learners were evident not only in the classroom but also in extracurricular and social aspects of academic institutions. For example, students with exceptionalities were excluded from the general education population in that they would eat lunch together as opposed to eating with their nondisabled peers. Many viewed this separation as extreme exclusion, and, as a result, advocates began to speak out about the injustice of these actions (Foote, Kilanowski-Press, & Rinaldo, 2010). McKlensky and Waldron (2011a, 2011b) took an in-depth look into inclusive practices and to what extent full inclusion programs provided the support and resources necessary for students with disabilities to be successful academically. McKlensky and Waldron stated a controversy continued about the education of students with exceptionalities in the regular education classroom. The study centered on high stakes test scores for students with disabilities in the areas of language arts and mathematics. The study revealed that although some students with learning disabilities made progress, many of the students with learning disabilities who were provided a large amount of support and were exposed to valuable resources still showed little progress.

Many schools and school districts have transitioned from self-contained classrooms where the exceptional learner is only educated with disabled peers to mainstreaming. This transition entails the exceptional learner being allowed to

participate in the regular education environment and curriculum and core subject areas if deemed capable of keeping up with nondisabled peers. Causton-Theoharis, Theoharis, Orsati, and Cosier (2011) questioned whether self-contained classrooms were the proper placement for educating students with disabilities. In the 2007 national report to Congress, the U.S. Department of Education stated that nationally, 49% of students with disabilities received instruction in inclusive settings for at least 80% of the school day, and approximately 23% of students with exceptionalities obtained their education in a separate special education setting. Causton-Theoharis et al. stated that research suggested higher achievement occurred in inclusive settings and mandated that support services were available for those who were exposed to the general curriculum through inclusive practices. The researchers advocated for educating students with exceptionalities in settings that were self-contained (Kauffman, Lloyd, Baker & Reidel, 1995). The self-contained setting meant they would be educated alongside peers who also had disabilities, but services or instruction would be provided solely by a special education teacher. The researchers observed several self-contained classroom settings between the years of 2002-2009. They observed not only the practices that took place and the relationship between the teachers and students, but the interactions between the students themselves. Causton-Theoharis et al. (2011) stated the research suggested although students were in a self-contained classroom, many of the practices used could easily be translated into an inclusive classroom setting. They also found that the instruction that took place in self-contained classrooms was not superior to that occurring into the general education classroom.

In an effort to advance the act of integration of students with exceptionalities or disabilities with their nondisabled peers, services provided to educate students with disabilities evolved into inclusion. Inclusion occurred when an exceptional learner was educated alongside nondisabled peers in all courses, with the allowance of the areas of exceptionality or their area of need. This movement finally evolved into full inclusion. Fully inclusive classrooms are classrooms that contain all students, even students who are moderately disabled. Although these students are educated alongside their nondisabled peers, they are still to receive the support services necessary to be academically successful (Fletcher, 2010).

As this transition has taken place and special education services have evolved, many middle and high schools have eliminated inclusion, which incorporated resource classrooms where the special education teacher would teach those students and assess them in their areas of weakness. Although many special education teachers were not formally educated in one particular subject area, they were educated on how to individualize lessons and remediate, so that student could build the basic skills necessary to be successful in those subjects (McKlensky & Waldron, 2011). Laws governing the education of exceptional learners stated that students with disabilities must be granted access to the regular education curriculum (Ross-Hill, 2009). The laws governing special education also stated that students with disabilities must be educated in the least restrictive environment (Bradley et al., 2011).

Many factors contribute to the success or failure of inclusive classroom settings. Teacher attitudes toward inclusive practices are critical to successful inclusion; they

impact classroom practices and ultimately student achievement (Philpott, Furey, & Penney, 2010). Inclusion is a program that not only focuses on the academic and social success of students with disabilities, but it challenges educators to achieve high standards for all students. With many schools and school districts transitioning to fully inclusive special education programs, there is a great debate in the education community about whether full inclusion is the program needed to include students with exceptionalities while still meeting individual needs. The integration of this fully inclusive educational program leads to the important question of whether schools in the United States can go from a society of exclusion to inclusion (Simpson, 2005).

Evidence of the Problem from the Professional Literature

Roberts and Teigland (2008) focused on inclusion as the only successful way to include students with disabilities and adequately prepare them for the high stakes testing measures that are now used to determine yearly growth. Roberts and Teigland stated that the move of students with disabilities into the general education classroom was the first step toward creating an inclusive environment. Although this movement to inclusion was a step in the right direction, the next step was to make those students with disabilities feel as if they actually belonged in an inclusive setting alongside their nondisabled peers. Roberts and Teigland stated that many schools did not make the yearly progress standards set by the state and district because they did not meet the needs of students with disabilities. Teachers cannot simply teach the curriculum as they always have. Additional resources, strategies for differentiation, and collaboration are a few things needed to ensure that inclusion is successful according to Roberts and Teigland.

Although full inclusion is now an option of placement for students with disabilities, the Individuals with Disabilities Education Act of 1991 (IDEA) did not require that students with disabilities be educated in a fully inclusive classroom, but these students were to be educated in their least restrictive environment. Before a student with exceptionalities could be placed in a fully inclusive program, it must be determined by the Individualized Education Plan (IEP) team that this setting was the most appropriate and least restrictive environment, which was determined on an individual basis (Bradley et al., 2011). IDEA also recognized that all students with disabilities could not or should not be educated in the regular education classroom; as a result, a continuum of services must be provided (Zigmond, Kloo, & Volonino, 2009).

The local school in this study had eliminated a service. The service eliminated was a special education program that incorporated resource classrooms. This service allowed students with exceptionalities to be taught in a classroom with their disabled peers by a special education teacher. This exclusion was because the district moved to a fully inclusive program and mandated that each school have full inclusion classrooms for subjects that have an end of course (EOC) assessment.

McCrary and McHatton (2011) stated the concern becomes whether general education teachers have the necessary skills to scaffold support in their classrooms. The concern about the skill level of educators was not the only concern. Another concern was whether the system supported collaboration, with not only special educators but also other service providers and families to improve outcomes for all students. This concern was also a local concern. At the time of data collection, there were not enough special

education teachers to service students in a fully inclusive capacity, provide the support

and one-on-one instruction needed, and have the time necessary to collaborate and plan

with the general education teachers. From a legal perspective, special education is

supposed to provide an avenue through which children with disabilities are guaranteed to

receive specifically designed instruction to assist them in maximizing their highest

potential (Obiakor, 2011). Forlin (2011) stated that for full inclusion to be successful,

professionals and staff must be trained to work at all levels of education, and such

training should incorporate disability awareness and the use of appropriate augmentative

and alternative modes, as well as other forms of communication and educational

resources and materials necessary to support students with disabilities.

Harr-Robins et al. (2012) stated that although students with disabilities were

explicitly excluded from measures of educational performance formerly, since the 1997

amendments to IDEA, states were required to include these students in state and district

assessments and report their participations as well as their performance. The

reauthorization of Elementary and Secondary Education Act (ESEA) in NCLB even

further enforced the requirement in 2001. This act established students with disabilities

as an explicit subgroup to determine if schools make adequate yearly progress (AYP).

Many students with disabilities are able to keep up with the pace and objectives

presented in the regular education classroom; however, there are also students who are

too high functioning for a self-contained classroom but are not yet prepared for, or able to

be successful in, the regular education classroom. As a result of participating in a fully

inclusive program, some students fall through the cracks because there is no service

available other than full inclusion or self-contained programs. I investigated the

relationship between special education inclusive practices and special education

training/professional developments on how to work with students with disabilities,

teacher attitudes, and test scores to determine the success of the inclusion practices at this

local Southern high school.

In this study, I investigated the relationship between factors that could affect the

success of inclusion and inclusive practices. Those factors included, but were not limited

to, special education inclusive practices, level of special education training, teachers'

attitudes and perceptions, and student test scores. The school in question was one that

serviced 1,390 students. This school was a Title 1 school with 893 of the total number of

students on free lunch and another 80 students on reduced lunch. Of these 1,390

students, more than 200 were students with exceptionalities who were being educated in

the general education classroom. Even those students who were moderately disabled,

such as functionally delayed, were educated in the general education classroom and held

to the same standards as their nondisabled peers. I determined the level of effectiveness

of the fully inclusive program by the use of one-on-one interviews, surveys with teachers,

and an analysis of secondary data that consisted of EOC data. The analysis and

presentation of findings from both quantitative and qualitative data represented a mixed

methods approach (Creswell, 2012).

The Local Problem

At a local Southern high school, students with disabilities were integrated into the

general education classroom. Glazzard (2011) stated that despite inclusion dominating

the educational landscape, there was a lack of clarity regarding the translation of inclusion into practice. Despite the implementation of inclusive practices, a lack of academic success continued to occur among exceptional learners in a local Southern high school.

Problem in the Larger Educational Population

Evidence of this problem was observed in below basic test scores based on the EOC, which was used not only on a district level but on a state level as well to determine AYP. Based on the state report card for Tennessee in 2011, of the 98% of students with disabilities who were tested statewide, only 21% were at a level of proficient or advanced on the Algebra I EOC compared to the 98.1% of nondisabled peers who were tested of whom 50.6% performed at a level of proficient or advanced. In the area of English, 98% of students with disabilities were tested, and 22.6% performed at a level of proficient and advanced compared to their nondisabled peers 62.3% of whom performed at a level of proficient and advanced. The percentage of nondisabled students who were tested was 98.1%. In 2012, 98% of the students with disabilities were tested in Algebra I, and 25.2% performed at a level of proficient or advanced. There was a 99% student test rate for nondisabled students, and 59.3% performed at a level of proficient or advanced. For English II, there was a 97% test rate for students with disabilities, and 25% of those students performed at a level of proficient or advanced. There was a 99% test rate for nondisabled students, and 65% of those students performed at a level of proficient or advanced. There was a 29.1% gap size for the area of Algebra I in 2011. In 2012, there was a gap size of 34.1% for students with disabilities versus their nondisabled peers

statewide. In the area of English II, there was a 39.80% gap in 2011 and a 40% gap in 2012.

The scores of exceptional learners on the EOC assessments were not only below that of their nondisabled peers in the state of Tennessee but in other states as well. For example, in the State of Georgia, based on the state report card for the 2010-2011 school year in the area of literature and composition, 55% of students with disabilities scored below basic, 39% scored basic, and only 7% scored at or above proficiency. Their nondisabled peers scores were as follows: 14% scored below basic, 48% scored basic, and 38% scored at or above proficiency. In the area of mathematics in Georgia, students with disabilities scores were 75% below basic, 22% basic, and 2% at or above proficiency. Students without disabilities scores were 35% below basic, 47% basic and 18% at or above proficient. In the area of biology, students with disabilities test scores were 65% below basic, 28% basic, and 7% at or above proficient. Students without disabilities scores for biology were 27% below basic, 44% basic, and 29% at or above proficient. Other states, such as Texas, also used EOC scores to assess AYP. EOC scores were reported for the area of Algebra I on the state report card. The state report card presented the number of students tested and the average scale score. Scores revealed that students with disabilities had an average scale score of 948 compared to their nondisabled peers who had an average scale score of 1137.

The scores for the high school in question were below the percentages set not only by the state but those percentages set by the district. This problem negatively impacted exceptional learners by causing them to be retained in core subject areas needed to

graduate. Changes in legislation now mandate that student performance on EOC

assessments be directly linked to teacher effectiveness on teacher evaluations. Student

test scores represented 35% of teachers' overall evaluation score, which raised the level

of teacher accountability. Possible factors for this problem included teacher attitudes and

perceptions toward inclusive practices, educational preparation, and experience in

teaching students with disabilities. Fletcher (2010) stated that one relatively new and

important federal policy that has received few large-scale empirical inquiries, yet is

responsible for sweeping changes in how and where children are taught, is the movement

to full inclusion.

The local setting extracted data from several subject areas, which required

inclusive services as a result of having an EOC assessment. Seven courses had EOC

assessments that were used to determine AYP. Those courses were Algebra I, Algebra II,

and English I, English II, English III, U.S. History, and Biology. Additional subject area

tests are being added each year. Full Inclusion classrooms are to take place for each of

those subject areas where the special education and regular education teachers worked

collaboratively. There were three Algebra I teachers, four Algebra II teachers, and three

Geometry teachers. The collaborative team for the mathematics department comprised

six mathematics teachers. Two special education teachers were assigned to the math

department to work collaboratively with those six teachers. There were two English I

teachers, two English II teachers, and three English III teachers. The English department

comprised seven language arts teachers and two special education teachers, who were

assigned to the language arts department. There were two U.S. History and two Biology

teachers. One special education teacher was assigned to the science department, and no one was assigned to the history department. With an estimate of more than 200 special education students taking those courses, the student service hours and academic need far outweighed the level of teacher support provided from the special education teachers or regular education teachers in the form of differentiation or accommodation and modifications.

This local high school serviced more than 200 students with disabilities who participated in a fully inclusive program. Those disabilities ranged from specific learning disorders to Asperger syndrome. The only special education services that were offered were in a self-contained or fully inclusive special education program. With only five special education teachers working in the full inclusion program, it was difficult to service students effectively. Although this collaboration of the regular education and special education teachers was a major factor in whether or not students were properly supported and serviced, another important factor was teacher attitude.

Teachers who feel unprepared to meet the diverse needs of students suffer diminishing confidence in their own knowledge and skills (Philpott et al., 2010). Guralnick, Neville, Hammond, and Conner (2008) discussed the importance of continuity in placement for special education students. This continuity of placement was an important aspect of special education because of the social as well as academic demands. Over the past 2 years, students with disabilities at the southern high school have failed to perform at a level of proficient or above and make AYP. This was not only a reflection of student growth and progress but was also used as an indicator for teacher

effectiveness. To ensure that all educators were held accountable for student

achievement, performance on EOC assessments accounted for 35% of the overall teacher

evaluation score.

<center>**Rationale**</center>

Based on the AYP scores over a 3-year period and the state report card, students

with exceptionalities were not as successful as their nondisabled peers on the EOC

assessments. The state report card presented a trend of student success, which decreased

as they advanced to higher grade levels and spent more time participating in fully

inclusive classrooms. Ross-Hill (2009) stated that inclusive education was mandated by

federal law. Few hands-on training and practice models have been implemented in

school districts in the United States. The lack of such models has brought about tension,

stress, and strain for both teachers and students in inclusive settings.

Fletcher (2010) stated that although the language from Congress suggested that

well-founded reasons exist to move toward making regular education classrooms the

default location for children with special needs, the research on the effects of inclusion

was mixed in some areas and nonexistent in other areas. Guralnick et al. (2008) stated

that there must be continuity with student placement for exceptional learners to be

successful academically. This continuity of placement is an integral key to the academic

success of the exceptional learner.

The National Report Card for Tennessee reported proficiency percentages for

grades 3 through 10. A trend emerged from these data. Students in the lower grade

levels (e.g., 3rd, 4th, and 5th grades) who received a continuum of services and had more

one-on-one time with the special education teacher were more successful academically than those exceptional learners in higher grades (e.g., 9th and 10th grades).

Harr-Robbins (2012) stated that students with disabilities were once excluded from testing and accountability measures related to testing. Now, this group is explicitly recognized in state and federal accountability systems. Exceptional learners as a whole had a higher proficiency percentage at the lower grade levels. Additional data from the Tennessee report card also revealed that the amount of time spent in the regular education classroom increased, although the proficiency scores continued to decrease as exceptional learners progressed. Although there is a wealth of knowledge about full inclusion and the implementation, there is a gap in the literature and actual implementation. As a result, student performance was suffering.

Research suggested that the most important factors effectively to include students with disabilities into the regular education classroom are teachers' attitudes and perceptions. Teachers' attitudes toward disabilities and toward inclusion have proved crucial variables in the success of inclusion schemes (Gal, 2010). Forlin (2011) stated that effective inclusionary practices have been found to depend to a noticeable extent on the sentiments of teachers about the nature of the disability and their perceived roles in supporting students with special education needs. Prior experience and knowledge about students with disabilities have been found to be directly linked with more positive attitudes by teachers toward inclusion (Burke & Sutherland, 2004). A better understanding of teachers' attitudes toward inclusion could contribute to the improvement of the learning environment (Ross-Hill, 2009). Although the presence of a

positive attitude may be a strong and important factor for the success of full inclusion, educators' concerns are equally important and should be addressed to ensure that the fully inclusive program is as effective as possible.

Intent

Accountability measures as a result of NCLB have required students with disabilities to participate in standardized testing and report these data to determine levels of achievement. An achievement gap exists in this school district and others in the state. Administrators, school district personnel, and state education leaders have recognized this problem and attempt to increase accountability measures, as well as incorporate strategies that will increase the level of student achievement. In an effort to further ensure that all teachers are working toward closing the achievement gap, special education teachers now have individual Tennessee Value-Added Assessment System (TVASS) scores. The addition of TVAAS scores for special education teachers meant that student achievement was now directly linked, not only to the regular education teacher, but to the special education teacher as well. Therefore, the intent of this study was to investigate the effectiveness of inclusion in a local Southern high school in an effort to provide strategies, resources, and a support system that would assist with the incorporation of inclusive practices that aid in the academic progress of all students.

Definition of Terms

Differentiated instruction: Differentiated instruction is the process of modifying and adapting instruction, materials, content, student projects and products, and assessment to meet the learning needs of individual students (Robb, 2004, para. 1).

Full inclusion: Full inclusion means that all students, regardless of handicapping condition or severity, will be in a regular classroom or program full time. All services must be taken to the child in that setting (Schultz & Higbee, 2007, p. 71).

Inclusion: Inclusion is a term that expresses commitment to educate each child, to the maximum extent appropriate, in the school and classroom he or she would otherwise attend. It involves bringing the support services to the child (rather than moving the child to the services), and requires only that the child will benefit from being in the class (rather than having to keep up with the other students). Proponents of inclusion generally favor newer forms of education service delivery (Schultz & Higbee, 2007, p.71).

Individuals with Disabilities Education Act (IDEA): IDEA was first enacted in 1975 as PL 94-142. The purposes were to (a) assume that all students with disabilities have a right to a free and appropriate public education, (b) protect the rights of the students and their parents in securing such an education, (c) assist state and local education agencies to provide for the education of those students and assess and assure the effectiveness of state and local efforts to educate those students (Schultz & Higbee, 2007, p.72).

Mainstreaming: Generally, mainstreaming has been used to refer to the selective placement of special education students in one or more *regular* education classes. Proponents of mainstreaming generally assume that a student must *earn* his or her opportunity to be placed in regular classes by demonstrating an ability to *keep up* with the work assigned by the regular classroom teacher. This concept is closely linked to traditional forms of special education service delivery (Schultz & Higbee, 2007, p.71).

Significance

Inclusive practices are now a significant topic in the realm of special education

because of the current level of accountability. As a result of below average test scores for

the subgroup of students with exceptionalities, in the local system and statewide, based

on the state report card, a look into the effectiveness of inclusive practices has emerged.

Although students with disabilities were once excluded from accountability measures,

they are now explicitly included. Many of the students taking formative assessments

from which data are derived to determine if adequate growth and progress have occurred

are participating in fully inclusive programs. Data derived from the state report card

revealed that as students with disabilities progressed into higher grade levels, the time

spent in inclusive classroom settings also increased. Although the time spent in an

inclusion setting increased, test scores were decreasing. Some factors that played a major

role in student success were teachers' attitudes and perceptions, special education

training, and exposure to students and others with disabilities (Kuyini & Mangope, 2011).

The investigation of the effectiveness of full inclusion, as it related to integrating

exceptional learners into the general education population as well as supported the

success and academic growth of those students, was not only relevant to my local

community but to those schools implementing fully inclusive programs all over the

world. Ross-Hill (2009) stated that inclusive education was designed to provide a value-

based practice that attempts to bring all students, including students with disabilities, into

full membership in their local school community. An attempt to include everyone,

regardless of disability, was an admirable mission, but do schools still exclude those

exceptional learners who cannot keep up with the general education curriculum? Are a lack of special education training and negative attitudes and perceptions toward inclusion a factor in the effective implementation of inclusion?

This investigation was a call for reflection. This reflection would hold not only special and general educators accountable but administrators and district level personnel as well. Finding the answers to those questions could be useful in the successful implementation of inclusive classrooms. This inclusive environment would ensure that students with disabilities as well as their nondisabled peers were provided with the instruction, support, and resources necessary to show student growth and achievement. Educators must not violate the needs and rights of exceptional learners just to be able to say they were included. The job of an educator is not only to teach but also to act as an advocate for those students being served, exceptional and general alike. It is the legal obligation of academic institutions to ensure that all students are provided the program and services necessary to be successful academically and grow socially.

When the topic of special education services is addressed, generally we think of individualized education. Brown, Fortain, and Von der Embese (2011) stated that students who fall under the umbrella of special education are not only students with learning disabilities but also students with other health impairments, physical disabilities, emotional disorders, and vision impairments, to name a few. Are fully inclusive programs a *one size fits all*? Can this type of program successfully meet the needs of all exceptional learners?

The local high school in this investigation, along with many high schools across the nation, phased out other special education programs and focused on full inclusion. Literature focuses on many types of disabilities and differentiated strategies to use with these disabilities in the regular education classroom, but educators and administrators need to know the basics and foundation of how to implement a full inclusion program that would be beneficial for students across the board, no matter the disability.

This inclusive environment begins with a positive mindset and perception of students with exceptionalities and continued training as well. The classroom demographic that contains a heterogeneous mixture of students could include a wide variety of disabilities. The goal of this investigation was not only to determine how certain factors affected the implementation of full inclusion on the local level, but also to create awareness and change by expanding the knowledge base and interactions of educators and students with disabilities. This awareness and knowledge base would be useful to the educational system because it has the ability to assist in the efforts to decrease the achievement gap between students with disabilities and their nondisabled peers.

Guiding Research Questions

This project study investigated the effectiveness of inclusion. Literature on the subject of inclusion suggests several factors determine the effectiveness of inclusion. Lund (2014) stated that IDEA mandated students with disabilities be educated in the least restrictive environment, and this least restrictive environment ideally transformed what was once exclusion to inclusion. Lund studied the importance of interaction with

students with disabilities and how those interactions affected the attitudes and mindset

that are formed about students who have a disability. The research questions focused on

the attitudes and perceptions of teachers and how these attitudes and perceptions affect

the inclusive practices in a local Southern high school and student achievement. The

research questions that guided this project study follow:

RQ1: What is the difference of teacher perceptions regarding inclusion, based on

level of education, support, exposure to students with disabilities, knowledge of

special education law, and level of achievement of students with disabilities

compared to their nondisabled peers?

$H_0$1: There is no difference in teacher perceptions based on level of

education, support, exposure to students with disabilities, knowledge of

special education law, and the level of achievement based on students with

disabilities compared to their nondisabled peers.

H_a1: There is a difference in teacher perceptions based on level of education,

support, exposure to students with disabilities, knowledge of special education

law, and the level of achievement based on students with disabilities

compared to their nondisabled peers.

RQ2: What is the influence of teacher attitudes and perceptions on the

implementation of inclusive practices in the regular education classroom?

Ross-Hill (2009) stated that the inclusion movement began in the 1980s as a result

of parents and advocates fighting for the rights of students with disabilities. They lobbied

the Congress for a mandate that would provide their children with a less segregated and

isolated education. This transformation was evident, not only in the educational practices applied and laws advocating for the rights of students with exceptionalities, but the increase of more rigorous goals and objectives for exceptional learners as well. As a result, IDEA (2004) was reauthorized, and students with special needs were educated alongside their nondisabled peers. Ultimately, this transformation led to the inclusion of students with a multiplicity of disabilities into the general education classroom with their nondisabled peers.

A school located in the Southern region of the United States failed to meet the district or state AYP target for the past three years for the subcategory of students with disabilities. Legislature called for a higher level of accountability. Students with exceptionalities is a population, which was once excluded from accountability measures and now is explicitly included in state and federal accountability measures. Student test scores are now directly linked to teacher evaluations. All teachers (regular and special education) who service students with disabilities are now held accountable for student performance on EOC assessments.

An investigation of the success of inclusive practices in classrooms at a local Southern high school took place along with how certain factors affected the level of success in those classrooms. A mixed methods approach was used to provide a holistic view of how teacher attitudes, level of teacher education, knowledge of special education laws, exposure to people and students with disabilities, and level of support affected inclusive services and ultimately the success of all students being educated in inclusive

classrooms. Can this type of program successfully meet the needs of exceptional learners?

The services used for educating students with disabilities have undergone a major transformation. Has the level of preparedness for educators as well as teacher preparation programs evolved to ensure that educators are adequately prepared to service, not only the students with disabilities, but foster a classroom environment that students, both disabled and nondisabled, can work in collaboratively? Ernest, Heckaman, Thompson, Hull, and Carter (2011) stated that preparing teachers effectively to teach an increased number of students with challenging and diverse educational needs requires that teacher education programs refine coursework and field experiences. Forlin (2011) stated that following this movement toward an inclusive approach in schools for teacher education also had to undergo a major shift or transformation to be adequately prepared for this change.

The research questions aided in determining the factors that positively influenced educators and fostered a more inclusive academic atmosphere where all students are provided with the resources and support necessary to excel academically. Data collected have the ability to be used to inform educators of the factors that contribute to the creation of a successful inclusive environment. This project study could ultimately guide professional developments and workshops that would lead to better instruction delivery in inclusive environments as well as professional growth for educators.

The next section of this project study focuses on a review of literature on barriers to inclusion, successful inclusive practices, the effects of teacher attitudes and

perceptions on inclusion, and inclusion on an international scale. To find research that

focused on these areas, I used resources from the Walden University library. The

databases that were used are ERIC, Education Research Complete, and Education from

Sage. The key words that I used were *inclusion, mainstreaming, inclusive practices,*

students with disabilities, attitudes toward inclusion, barriers to inclusion, and *NCLB.*

Review of Literature Addressing the Problem

This study investigated how teacher attitudes, special education training, and

experience in teaching students with disabilities affected the implementation of a fully

inclusive program for students with disabilities at a local Southern high school. Recent

research and literature reviews presented many studies that provided a wealth of

qualitative data about the perceptions and attitudes of teachers, parents, and

administrators and how it affected inclusive settings. Literature reviews also suggested a

lack of research exists on how teacher attitudes and perceptions, as well as level of

preparedness, affects students with disabilities and their nondisabled peers regarding

formative testing. Much of the research conducted was specialized and focused on a

particular disability. The research questions in this investigation were designed to

address all students with exceptionalities and provide a holistic view of the effectiveness

of full inclusion, based on the comparison of teacher attitudes/perceptions, special

education training, and experience teaching students with disabilities, and student test

scores.

The literature topics focused on for this investigation were full inclusion (what it

is, the laws governing it, implementation, and barriers), special education (the evolution

of special education, the transition to mainstreaming, inclusion, and full inclusion),

differentiation (Howard Gardner's theory of multiple intelligence, strategies to meet the

different learning styles of students) and, finally, teacher attitudes and perceptions. The

literature presented in this investigation provided a holistic view of the field of special

education and its current practices. Literature that supported full inclusion was featured

along with literature that featured possible complications and barriers that have been

researched in the implementation of full inclusion.

Theoretical Foundation

The theoretical base for this research is Howard Gardner's theory of multiple

intelligence. This theory states that students have different minds, and, as a result, they

learn, perform, and understand in different ways. According to this theory, "We are all

able to know the world through language, logical-mathematical analysis, spatial

representation, musical thinking, and the use of the body to solve problems or to make

things, an understanding of other individuals, and an understanding of ourselves"

(Douglas, 2008, p. 182). McFarlene (2011) stated that the theory of multiple

intelligences was the most sustainable methodology to meet the needs of increasingly

diverse classroom. Where individuals differ is in the strength of these intelligences, the

so-called profile of intelligences, and in the ways in which such intelligences are invoked

and combined to carry out different tasks, solve diverse problems, and progress in various

domains (Jackson, 2009).

McFarlene (2011) discussed how to identify the multiple intelligences of ones'

students. McFarlene stated that by identifying multiple intelligences, an educator has the

information necessary to meet the individual needs of his or her students. Beecher and Sweeny's (2008) study presented data collected over a period of 8 years, which researched the use of differentiation as a way to bridge the gap between achievements. In bridging the gap, educators had to meet students where they were on their academic level. When students with disabilities were placed in the regular education classroom, it was believed they deserved to be exposed to the same curriculum and rigor as their nondisabled peers.

Douglas (2008) stated that NCLB mandated that schools stick to a curriculum that promoted academic growth. One strategy that was used to promote academic growth was to use Gardner's theory of multiple intelligence. Using this theory would allow educators to meet the needs of all students because they would address each area of intelligence through the curriculum. Saeidi (2009) stated that when teachers implement Gardner's theory of multiple intelligences, they must look at each student individually. Saeidi also stated that consciousness of Gardner's multiple intelligences prompted teachers to discover ways successfully to educate all students, students with and students without disabilities, in the regular education classroom. This theory of multiple intelligences directly relates to the effectiveness of inclusion, as teachers working toward closing the achievement gap must be able to tap into the multiple intelligences to meet the variety of needs based on student strengths and weaknesses of those students with disabilities who participate in fully inclusive programs.

Ernest et al. (2011) took an in-depth look into differentiation and how it affected not only teacher efficacy but student success. When students are placed into special

education, they are initially tested to determine their areas of strength and weakness, and a plan is devised to alter or accommodate and modify the curriculum to fit their academic needs. When the idea of intelligence is rethought, educators can begin to meet students where they are and work with them to reach a higher level of achievement. The use of differentiation as an instructional tool to incorporate activities into a fully inclusive classroom can assist in reaching students on different ability levels. For example, there may be a student who is in a 10th grade language arts class, but he or she is functioning on a third-grade reading level. If an educator were to incorporate Gardner's theory of multiple intelligences, and determine the areas of strength and weakness as well as incorporate differentiation techniques, this student may show growth.

As a result of searching articles that focused on full inclusion and differentiation, I found literature that provided readers with resources about bridging the gap in education by using Gardner's theory of multiple intelligence. The term differentiation has been used to describe the practices and strategies that should take place in an inclusive classroom. This differentiation of objectives taught means that all students would be able to participate in lessons and a variety of strategies would be used so that students on all academic levels could comprehend the material being presented. Research shows that, if teachers used Gardner's theory of multiple intelligence, they could accomplish differentiation to achieve academic success.

Casale-Ginnola focused on inclusion and identified some of the things that work as well as those things that need altering was written by Casale-Ginnola (2010). Casale-Giannola conducted an investigation that used a qualitative method to examine inclusion

practices. Casale-Giannola stated that students with exceptionalities who are placed in fully inclusive classrooms often struggled to learn course content only to gain peer acceptance. These students often have poor academic achievement, a passive approach to learning, organizational and study skill deficits, as well as motivational concerns.

Casale-Ginnola's (2010) study was conducted over a 6-month period at two vocational high schools. One of the schools was located in the inner city, and the other school was located in the suburbs. In this study, a total of 30 lessons were reviewed. Casale-Giannola used information from lessons that included web design, horticulture/floriculture, cosmetology, business technology, electronics, carpentry, public safety, performing arts, geographic information systems, and information technology.

Several challenges were identified during this study. The greatest challenge identified was students' basic skills. The cognitive skills needed to succeed in technical careers were not achieved. The licensing exams would require reading comprehension skills and the understanding of complicated terms. Casale-Giannola (2010) stated that students with exceptionalities could not be successful in this area if they did not have a solid foundation of those basic skills. One other important aspect that was identified as a challenge was a lack of knowledge about special education laws and necessary support. The researcher observer that many teachers did not understand or have effective strategies to use as an aid or resource with the integration of exceptional learners into the regular education classroom. Many of these teachers were unaware of the files that were available, which provided the list of necessary accommodations and modifications for the individual students with disabilities that they were to service. The fact that educators

were unaware of student accommodations and modifications showed that there was not only a lack of knowledge but a lack of collaboration between the regular education and special education teacher (Foote et al., 2010).

Although Casale-Giannola's (2010) investigation presented data from one school, schools across the nation face the same issues at the high school level. Students are lacking the necessary foundation and knowledge base to keep up with the regular education curriculum, and there is a lack of communication and collaboration on behalf of the regular education and special education teachers. As a result, the students are the ones who suffer and are academically unsuccessful (Eisenman, McGinley, Pleet, & Wandry, 2011).

Conceptual Framework

The conceptual framework for this project study was grounded in the factors that affect inclusion and inclusive practices. As a result of working toward providing a holistic view of inclusion, this framework included factors that affect inclusion, strategies that aid in creating a conducive inclusive atmosphere, as well as items that take away from inclusive practices. There are literature reviews that will address each of these areas. Sharp, Sadovnik, and Rivera (2011) stated that many schools and programs have a difficult time supporting students with disabilities. The inability to support exceptional learners in the regular education classroom was evident based on the EOC assessment scores and the state report card of the state where this local Southern high school was located.

Sanzo, Sherman, and Clayton (2011) conducted a study that focused on the importance of administrators being instrumental in bridging the divide between the achievement of students with disabilities and their nondisabled peers. These authors also provided strategies that have the ability to assist educators and administrators with the facilitation of inclusive practices in an effort to bring those students with disabilities up to grade level. The conceptual framework focuses on a variety of factors that affect the implementation of inclusive practices. As a result, the literature review focuses on several factors. Those factors will include articles about on the pros and cons of inclusion, barriers to inclusion, inclusion around the world, laws governing the educating of students with disabilities, and perceptions and attitudes toward inclusion.

Review of Broader Problem

As previously noted, the literature reviews to follow focus on the pros and cons to inclusion, barriers to inclusion, laws governing the educating of students with disabilities, and the attitudes and perceptions of inclusion. The search for articles on inclusion took place by accessing articles through the Walden Library. The ERIC database was used to search for these articles. Some of the search terms used were *inclusion, effectiveness of inclusion, inclusion around the world, positive aspects of inclusion, negative aspects of inclusion, attitudes and perceptions towards inclusion,* and *barriers to inclusive practices.* Although some articles focused on the pros and cons of inclusion and the effects inclusion has on students, others focused on how this transition affected teachers.

Harr-Robins et al. (2012) stated that students with disabilities were once excluded from testing and accountability measures related to testing. Now, this student population

is explicitly recognized in state and federal accountability systems. With this student group now being held accountable for testing measures, they are held to the same standards as their nondisabled peers. One important question that was answered with these data stated: "What percentage of schools missed AYP because of the performance of the SWD [students with disabilities subgroup]?" Nine percent of all public schools in 37 states missed AYP in the 2008-09 school years because of students with disabilities (SWD) subgroup performance and other reason(s), and 5% missed it solely because of SWD subgroup performance. Together these schools represented more than a quarter (28%) of tested SWDs in all public schools in these states. Among schools accountable for SWD subgroup performance in these 37 states, 26% missed AYP because of SWD performance and other reasons, and 14% missed AYP solely because of SWD performance in the 2008-09 school year.

The school in this investigation had a special education population that was also held accountable academically. Those students took the EOC assessment and the data derived from the EOC were used to calculate and determine AYP. The EOC assessment accounted for 25% of the students' overall grades. In many instances, if a student failed the EOC, he or she would be in danger of failing the course. Harr-Robins et al. (2012) stated that as a result of the EOC assessment weighing heavily on the overall grade, failure on this assessment would make academic success difficult for many exceptional learners. The state report card for the Southern state in which this school was located had a decreasing rate of proficiency as exceptional learners' progressed to higher grades. By the time students are in the 9th and 10th grades, the proficiency rates were less than 55%,

which was well below the state proficiency target of 83%. The low proficiency rates and

decrease in success may have been caused by several factors. These factors included, but

were not limited to, the type of special education inclusion, special education training,

and teacher attitude/perceptions. This study investigated the difference between the

special education inclusion programs, level of special education training, teacher attitudes

and perceptions, and student test scores.

Many researchers have asked the question, does full inclusion allow educators to

meet the individual needs and different learning styles of students? IDEA mandates that

there is a need for individualized plans and curriculums because of the variety of

disabilities that fall under the umbrella of special education, which causes students with

disabilities to learn in a variety of ways (Bradley et al., 2011). Many times, these

alternative ways of learning do not fit into the cookie-cutter style of teaching that is

presented in high school settings, and, as a result, these students are left behind or simply

fall through the cracks. This form of inclusion, where students are physically present in

the regular education classroom but are not receiving the individualized support and

services necessary to be academically successful, was another form of exclusion.

IDEA was the legal backing that allowed the introduction of inclusion. IDEA

stated students with disabilities must be placed in their least restrictive environment.

Bradley et al. (2011) thoroughly reported on all aspects of IDEA (what it is and how it is

implemented) in the United States by addressing topics that range from the scope of early

intervention in special education, to identification, actual implementation, and the

positive outcomes of that implementation. A wide range of data were collected during

this research. The IDEA National Assessment Implementation Study (IDEA-NAIS) was designed to use in the parameters of this study to provide a nationwide picture of state agency and school district implementation of IDEA across Part C, which is the early intervention, and Part B, which services students ages 3-21. Three state-level mail surveys collected data from (a) state Part C program coordinators who are responsible for early intervention programs serving infants and toddlers, (b) state Part B program coordinators who oversee programs for preschool-age children with disabilities, and (c) state Part B program coordinators who oversee programs providing special education services to children and youth with disabilities. The fourth survey was a web-based survey that collected data from local special education, or Part B program, administrators in a national representative sample of 1,200 school districts. These surveys were fielded in January of 2009 and had a 100% response rate.

Bradley et al. (2011) focused on the 2004 reauthorization of IDEA and began his research by stating what IDEA was. The purposes of IDEA are (a) to ensure that all children receive a free and appropriate public education; (b) to ensure that the rights of children with disabilities and their parents are protected; (c) to assist states, localities, educational service agencies and federal agencies, in providing an education for all children with disabilities; (d) to assist states in the implementation of an interagency system of early intervention services for infants and toddlers with disabilities and their families; (e) to ensure that educators and parents have the necessary tools to improve educational results for children with disabilities and, finally, (f) to assess and ensure the effectiveness of efforts to educate children with disabilities (P.L. 108-446 § 601(d)).

Bradley et al. (2011) used data to define IDEA and provided a vivid picture of, not only what it was, but what it could look like when implemented. The researcher allowed one to travel through the journey of special education from the strategies that were once implemented, to the laws governing special education currently, the breakdown on a number of state programs reporting on students with disabilities, and onto recruitment for educators who have the desire to work with students who have disabilities. As a result, the reader obtained a complete view of special education services, full inclusion, and how inclusion not only affects academics but the budgeting and funding that are necessary to educate students in a fully inclusive classroom setting (Bradley et al., 2011). One has to not only understand the laws governing the educating of students with exceptionalities, but it is imperative to know what you are going to teach, where these objectives are going to be taught, and how the objectives are going to be taught.

Zigmond et al. (2009) stated that there have been many revisions to PL 94-142 since 1975, which required the free and appropriate education of all students. There are several aspects that have continued to concern educators, legislators, and advocates alike. These concerns include, but are not limited to, where, what, and how. Zigmond et al. provided a perspective on just where students with exceptionalities should be educated, what that education should consists of, and how those educational services should be delivered to students with exceptionalities. Zigmond et al. stated that across the United States, special education looks much different than it did decades ago. This difference in implementation was because of the pressures of politics and policy. The avenue that

Zigmond et al. took to provide this perspective was to present four *windows* or examples

of special education service delivery in four different ways. Each of those examples was

based on elementary classrooms in Pennsylvania.

Special education has always provided a separate curriculum, which was based on

the needs of the students. Zigmond et al. (2009) asked if inclusion accomplished the

goals of PL 94-142. The researcher took a look at inclusive practices, and compared

them to the laws that were outlined in 1975 about providing a free and appropriate

education to students with disabilities. The researcher also looked at several court cases

that set the precedent for inclusion. These court cases included *Board of Education v.*

Rowley from 1982 and *Gaskin v. Pennsylvania Department of Education*, 1994.

Zigmond et al. stated that all students with disabilities were then and also now not

entitled to protection under special education laws. "A child is not handicapped for the

purposes of the law unless special education is needed," explained Goldberg (1982, p.

27). Zigmond et al. (2009) explored the laws governing special education and relayed

what it meant in terms of where students with disabilities must be educated, options on

how they could be educated in terms of the material presented to them (i.e., regular

education curriculum or goals and objectives determined by the IEP team), and how they

can be educated in terms of their educational environment (e.g., does it have to be in the

regular education classroom?).

Through the careful review of PL 92-142 and the close observation of a variety of

special education services provided in four elementary classrooms, the researcher

provided examples of positive fully inclusive classrooms settings and negative fully

inclusive classroom settings where the student may have been better served in a resource or self-contained classroom. Zigmond et al. (2009) questioned if full inclusion was the least restrictive environment for all students serviced by special education. If it is not, what factors are contributing to the lack of success with full inclusion? Is it a lack of knowledge and experience on behalf of the educators, a lack of resources, negative attitudes and perceptions, or a combination of all those factors?

Possible Barriers

Full inclusion is not an inclusive practice that begins later in childhood, but can be seen in early childhood programs as well. Guralnick et al.'s (2008) study focused on the continuity and change from full inclusion early childhood programs through elementary school. The 3-year study observed and followed students with developmental delays from preschool to elementary school. A total of 90 students were recruited for this study through contact with more than 11 school districts. Announcements were distributed through participating school districts to parents of those students that outlined an opportunity that would allow students to build peer relations and friendships. Information was automatically sent to all parents of students who had an IEP and were in preschool. This study was a voluntary project; therefore, parents had to inquire and accept to be a part of this research.

A screening and identification process took place (Guralnick et al., 2008). The first requirement was that the student be in a full inclusion program. In addition to this requirement, students also had to meet the following criteria: (a) be between 48 and 78 months of age, (b) have a current IEP, (c) experience difficulties in peer-related social

competence as expressed by parent concerns in a structured phone interview, (d) have a primary female caregiver (minimum of a 6-month relationship, as mothers were our primary informants), and (e) obtain a full scale IQ score between 50 and 90 on the Wechsler Preschool and Primary Scale of Intelligence–Revised (Wechsler, 1989).

Guralnick et al. (2008) discussed the importance of continuity in placement from preschool to elementary. Of the 90 students in the study, only 78 remained in fully inclusive classroom settings. This continuity of placement was particularly important because of the increased academic and social demands that the students faced. The lack of continuity of placement could be one possible barrier to student success when they are not in the appropriate classroom setting; the appropriate setting and resources that are provided while in that placement are imperative to the academic success of the student. When students transition and do not have the proper support or lose support and resources, there can be academic regression. Research suggests that students spend more time in inclusive settings in secondary grades, but it is at this time when decreases in academic progress are seen. This decrease in academic progress suggests that not only is continuity of placement important but continued support is as well.

Although placement is an important factor, other articles focused on the treatment of students and people with exceptionalities, and the effects of this treatment could have on students with exceptionalities and their nondisabled peers later in life. Smith (2008) used his investigation to provide a perspective on the treatment of and inclusion of people with disabilities in the Cook Islands. Smith focused on the treatment of students and adults with disabilities and on the perception that many people have of students and

adults with disabilities. This perception included the thought that students and adults

with disabilities were an equal part of society, and worked to include all students and

adults who have learning disabilities, as well as those students and adults who do not.

Those efforts of including citizens with disabilities generally begins with mainstreaming

practices in schools, then gradually leads to fully inclusive classrooms, followed by

acceptance of those in society that have disabilities. The struggles and challenges that

one must face when labeled learning disabled and the difficulties that often occur when

attempting to build an inclusive society are also discussed in this article.

Smith (2008) stated that, although many viewed the Cook Islands as paradise, it

was not always open and receptive to building an inclusive society with those individuals

who had disabilities. Until recently, there was little to no support for students and adults

with disabilities. In past years, a small disability pension was provided for individuals

who were labeled disabled. A group of organized volunteers banded together to assist in

any way they could. This group was called the Cook Island Disabled Persons Center.

With little to no support, there were many barriers facing individuals with disabilities.

Two of the main challenges discussed were funding and sustainability. Although the

volunteers worked diligently to provide services in the areas of vocation and early

education intervention, many programs did not last because of a lack of funding. With no

source of funding, there was little sustainability.

Smith (2008) discussed the highs and lows of special education services in the

Cook Islands and how one principal decided to implement mainstreaming in his school.

This strategy became a success with this staff of educators, and they worked together

privately to fund the addition of a special education teacher to his or her staff so he or she could have someone to collaborate with as well as assist with differentiation and accommodations. The positive attitudes and perceptions of those educators were a great motivator and ultimately a determining factor in their success to fund the addition of a special education teacher. This leap of faith and work on behalf of a few ignited the creation of a special needs policy that would ensure that all students were provided the necessary resources and have someone to advocate on their behalf. Although positive attitudes can yield great results, negative attitudes have the potential to yield no result or results that are detrimental to the academic success of students.

Smith (2008) focused on positive attitudes and perceptions and how positive attitudes can be a determining factor in success. Fuchs (2010) presented data that were derived from a qualitative study based on general education teachers' beliefs and perceptions of mainstreaming and current mainstreaming practices. Fuchs stated the question, which was the basis for this research, "What are the attitudes and beliefs of regular education teachers on mainstreaming?" (2010, p. 31). The sample population for this study consisted of five general education teachers. The researcher made contact three times with each of the five participants of the study. Each teacher took part in one focus group discussion, one individual interview, and one classroom observation. As the interviewer and observer, the researcher used constant comparison analysis to ensure that the themes in this naturalistic study emerged from the data. Major themes that emerged were two-fold. First, the teachers generally agreed that responsibilities and expectations of regular education teachers were unreasonable. The teachers had little formal education

or training with regard to mainstreaming practices. Second, the teachers felt there was a lack of support from school administrators in the areas of professional developments or work-shops that would focus on education and training, class size, collaboration and planning time, and shared duties with the special education teacher in terms of workload, or who would be the lead instructor (Fuchs, 2010).

These themes were emergent and at the forefront in the minds of many regular education and special education teachers across the world. Fuchs (2010) provided information that is critical to the success of special education because the collaborative efforts attempted play a pivotal role in the level of success that can be achieved by all students. Fuchs stated that although IDEA suggests the full inclusion of exceptional learners, many regular education teachers felt ill-equipped to assist those students with disabilities. If educators were not equipped, or do not feel comfortable working with a particular student population, such as students with disabilities, it is the students who will ultimately be negatively affected. These factors, along with others, need to be taken into consideration when determining the collaborative team of regular and special education teachers. It is important that both educators have the desire to aid and support all students to reach their educational goals. This decision, along with a mandate for continued training measures (e.g., professional development), must be incorporated to ensure an effective inclusive atmosphere.

Brown et al. (2011) focused on the possible barriers and obstacles that could take place when students with exceptionalities are included in the regular education classroom. Brown et al. stated that students with exceptionalities were not limited to

those students with learning disabilities, but students who fall under this umbrella could have other health impairments, emotional disorders, physical disabilities, and vision disabilities, to name a few. Are regular education teachers prepared to handle this array of disabilities and integrate the support and accommodations that come along with them? The researcher focused on one disability and the problem behaviors that could arise when these students are in the regular education classroom.

Legislation, such as IDEA, has strongly suggested the inclusion of students with disabilities in the regular education classroom; however, students with autism spectrum disorders (ASD) display a wide-ranging list of behaviors that could cause obstacles and barriers to academic achievement in inclusive classrooms. Brown et al. (2011) stated that there has been little research to identify effective practices that can be used to reduce problem behavior while promoting inclusion for students with disabilities, especially those students with ASD. The author piloted a methodical literature review of three major psychological and educational electronic research databases to identify empirical research articles of the past 10 years that included (a) students in kindergarten through 12th grade, (b) facilitated inclusion, and (c) reduced problem behavior. Results indicated a lack of evidence-based practices that used inclusion as an independent variable. Brown et al. highlighted four themes demonstrated to be effective: (a) functional behavior assessments, (b) tiered models of service delivery, (c) behavioral approaches, and (d) social skills training. Implications for educators were discussed, such as differentiated strategies and tools that could be implemented in the regular education classroom to

decrease negative behaviors, which are taking place on behalf of those exceptional learners or their nondisabled peers in inclusive classroom settings.

Inclusion focuses on students with exceptionalities and how being with their nondisabled peers affects them in their social and academic success. Focusing on those nondisabled peers, Arampatzi, Barkoukis, Evaggelinou, Koidou, and Mouratidou (2011) framed an obstacle of implementing fully inclusive classrooms into the curriculum. The aim of this study was to examine whether gender and inclusion settings are associated with elementary school pupils' aspects of social development. The aspects that were focused on were aggression, social insecurity, and attitudes toward disability. The sample used for this study consisted of 658 students from 15 primary schools including 306 boys and 352 girls. Of these participants, 353 of them attended schools with inclusive settings, and the remaining 305 attended typical schools.

Data were collected through the use of several checklists, which included, the Checklist of Aggressive Behavior, the Checklist of Social Insecure Behavior, and the Children's Attitudes towards Integrated Physical Education-Revised. Results indicated that girls showed less aggressive behavior related to boys, and students in traditional schools displayed higher attitudes toward disability compared to students in inclusive schools. The data gathered from this study suggested that gender was a significant factor for students displaying aggression but not social insecurity and/or adopting positive attitudes toward disabilities and students with disabilities (Arampatzi et al., 2011).

Fletcher (2010) stated it was important for educators to understand the thoughts and perceptions of students, which included students who were labeled as regular

education students and those students with exceptionalities alike. The perception of their abilities was important to their academic success. We all have areas of strength and weakness and must cultivate an environment where those areas of strength and weakness are respected in others. The negative attitudes and perceptions of others about students with disabilities could lead to disruptive behaviors that occur in the classroom. Those negative attitudes and perceptions could also lead to the mental shutdown of those students with disabilities. As a result of feeling afraid of the reactions of their peers, they may not interact or participate in class at all.

Finding the balance between what is necessary for the success of students with disabilities as well as what is necessary for the success of their nondisabled peers in inclusive classroom settings is another aspect of inclusion that has been studied. It is stated that the goal of any educational institution is to ensure that its students maximize their fullest potential in inclusive environments. The policy of including students with disabilities into the regular education classroom seems to be ideal, but it is still generating a great amount of controversy. King (2003) stated that inclusive education is education that allows all students in a school regardless of their strengths or weaknesses, or disabilities in any area, to become a part of the school community. Inclusion was built on the principle that all students should be valued for their exceptional abilities and included as important members of their school community. Although the concept of inclusion is a popular one and is a trend that is emerging across the globe, there are some practicality and applicability problems with it.

In inclusive classrooms, students can feel that they are connected to their peers and have access to a rigorous and meaningful regular education curriculum. Approximately 70% of students with disabilities are educated in fully inclusive settings with their nondisabled peers. Obiakor (2011) stated that from a legal standpoint, students with exceptionalities were supposed to be provided with an avenue whereby they are assured specifically designed instruction to assist them in maximizing their highest potential. To achieve an equitable and inclusive placement, collaboration and consultation of all stakeholders must take place and be at the vanguard of priorities.

The story of a student named Miguel was presented by Obiakor (2011). Miguel was an eight-year-old, third-grade student with a learning disability. He was bilingual and used Spanish in the home. Miguel enjoyed math and was showing growth and progress in this area, but he had difficulty with reading and was not as enthusiastic about reading. Because of the inability to stay in his seat and the concerns the teacher had about Miguel's reading levels, the regular education teachers recommended Miguel for special education services. He was tested and found to be learning disabled. At that point in time, he began to receive pullout services with the special education teacher for 1 to 2 hours per day.

During the time that Miguel was being pulled out for resource services, his behavior did not improve, and he did not get to grade level for reading. He remained focused and engaged when completing math assignments, even when the math consisted of a large amount of reading. As time progressed, whenever Miguel had to leave the regular education classroom to be pulled out to receive services from the special

education teacher, the behaviors did not stop. These behaviors would manifest themselves when he was working in small groups and at a more intense rate than the behaviors in the general education classroom. This behavior showed that Miguel would have been better served in the regular education classroom.

Obiakor (2011) completed an analysis of the comprehensive support model (CSM) to see if it would help with students such as Miguel to maximize their potential in inclusive programs. The CSM involved the collaboration of several key participants. Those participants included student, family, school, community, and government. It is the combination of those key elements working together to foster a learning environment that provides students with exceptionalities the opportunity to build a strong and proactive foundation of access, equity, and inclusion.

Now that students with exceptionalities are a part of the assessment procedures that determine AYP, one must look at how inclusion affects all students. Fletcher (2010) stated that special education was currently one of the most controversial areas of educational research. One policy that has brought about many changes to the way in which we educate students with disabilities and their nondisabled peers is full inclusion. Fletcher used the Early Childhood Longitudinal Study, Kindergarten Cohort (ECLS-K) data to investigate the effects of inclusion by examining test score gains for children in kindergarten and first grade who shared classrooms with students who had disabilities.

During much of the 20th century, many students with disabilities were taught in separate classrooms from their nondisabled peers, or they received little to no education. By the end of the 20th century, regular education classrooms were the primary placement

for approximately 55% of all students aged 6 to 11 who had a disability, and for 33% of those students who fell in the 12 to 17 age range. It is stated that although Congress may suggest that the regular education classroom was the best location for students with disabilities; however, the research on the effects or effectiveness of full inclusion was mixed in some areas and nonexistent in others. There was not substantial evidence on the effects of inclusion on students with disabilities, and there was even less evidence of the spillover effects of inclusion on the classmates of students with disabilities (Fletcher, 2010).

The data collected from the ECLS-K were a nationally representative sample of kindergartners, their teachers, and schools. Information was collected in the fall and spring from 1998 to 1999 for kindergarten, and 1999-2000 for first grade, the spring of 2002 for third grade, the spring of 2004 for fifth grade, and the spring of 2007 for eighth grade (Fletcher, 2010). Those students came from both public and private schools and attended both fulltime and part time kindergarten programs. Parents, teachers, and administrators also participated in the study.

The relationship between achievement on math and reading tests and the treatment of having a classmate with a serious emotional problem was determined using several approaches. The first step was to estimate a standard OLS regression. The second step was an OLS specification with school-level fixed effects. The results of the OLS regression specifications examining mathematics test scores were presented in the article. The pooled sample as well as baseline results for the kindergarten and first grade class were presented. The results were consistent in the areas of mathematics and

reading. The test scores of students with classmates who had serious emotional problems scored significantly lower than other students, although the results for reading were not statistically significant (Fletcher, 2010).

Many authors present information on inclusive practices in their academic institutions. Blanford (2010) stated the conceptualization and implementation of inclusion on a secondary level was a complex task. Although inclusion has been a topic that has dominated the educational society for many years as a way of reform, there has been a great amount of difficulty with the terminology and actual defining of inclusion. Inclusive practices are a form of social justice, as those exclusionary practices were used for many years to educate students with disabilities to ensure they received an individualized and one-on-one education. Although students with disabilities continue to need this individualized education, advocates demand that they receive this education in an environment that allows them to have access to the same curriculum and highly qualified teachers as their nondisabled peers (Harr-Robins et al., 2012).

Blanford (2010) discussed data that were collected in the context of a 2-year qualitative research study between the years of November 2003 and March 2005. This research explored the interface between theories and policies for inclusion; the interpretation translated into actual practice and the subsequent experience of the learner. The research incorporated interpretive, ethnographic case studies of three schools that were chosen by specific contextual features to examine how culture affected the interpretation of policy. The study placed a high value on how cultures related to teachers' interpretations in terms of discourse, professionalism, and practice.

Data were collected through direct questions during semi-structured interviews on barriers and difficulties identified in the implementation of policies. These data were analyzed in comparison with *thick description*, which stemmed from an observation as well as other discussions that were held with stakeholders who were directly or indirectly involved in the education of particular children, who were chosen at each of the three schools in the study. The case studies illuminated that in three different schools, the same issue was identified. The issue identified at each of the three schools was a resistance to change and limited acceptance and accommodations despite policy initiatives concerning inclusive practices (Blanford, 2010).

The different factors that were acknowledged as barriers to change were discussed extensively. The barriers were grouped into themes: (a) school culture as a barrier or facilitator, (b) differentiation as a barrier, (c) time limitation as a barrier, and (d) teachers' knowledge and conceptualization as a barrier. Barriers and concerns were issues that continued to come to the forefront of the topic of inclusion, which indicated that there was a mismatch between perception of capacity and expectations of policy (Causton-Theoharis et al., 2011). The voices of teachers and other stakeholders should have been heard, so that guidance and support could be provided and the difficulties that had been associated with inclusive practices could be dealt with appropriately.

Effective Inclusive Practices

Professional development schools (PDS) are a component of teacher training and are a critical component of the preparation for the implementation of fully inclusive classrooms into curriculums across the country (Doktor, 2010). Professional

developments and trainings foster collaboration between practitioners and researchers in several areas: (a) scholarship, (b) school improvement, and (c) teacher training. Doktor examined the communal interests between partners in a PDS with an emphasis on promoting inclusive classrooms and allowing special education students to assimilate and receive a continuum of services in the regular education classroom. It focused on how delivery models that obstruct inclusive practices inhibit the growth of PDS partnerships. Therefore, it was in the best interest of all PDS partnerships to expand. The author provided suggestions, which included encouraging special educators and related service personnel's active engagement in PDS activities as well as training teacher candidates on the many practices and strategies that can be implemented in inclusive classrooms.

This research was important to the growth of full inclusion and practices in fully inclusive classrooms (Forlin, 2010). One aspect that was highlighted in this study was a continuum of services. Students with exceptionalities are to be educated in the least restrictive environment. Although it is desired that this placement is the regular education classroom, if not, there must be a continuum of services in place adequately to service this student population. Teacher preparation is also an important component of student success. If the educators are not adequately prepared to service all students, which includes students with exceptionalities; they are going to do a disservice to those students. There are a number of strategies and support services that must be provided outside the realm of regular education. Those services and strategies, if not gained in a teacher preparation program, could be obtained through the use of professional developments.

The appreciative inquiry has been used to gain additional data on ways to promote inclusion in secondary schools (Kozik, 2009). AI is a form of inquiry that allows for future prospects and opportunities to remain open. It is a form of inquiry that attempts to find the best in people. AI involves the exercise of asking questions that strengthen a system's capacity to apprehend, anticipate, and heighten positive potential. It centrally involves the utilization of inquiry through the crafting of the *unconditional positive question*. Kozik (2009) stated that the most successful organizational changes take place through AI when plans are left open, when action plans are informal, and when individuals volunteer their contributions.

These commitments and contributions represent what individuals and their organizations can do and offer in terms of support in the short term to create inclusive adolescent opportunities and prospects as well as to expand the positive outcomes in schools for educating students with exceptionalities. The method of AI used to implement this study of inclusive adolescent teaching and learning with a diverse group of participants would be a viable means of encouraging collaboration in teaching situations on co-teaching teams and in school-wide inclusive reform. It provided an ideal tool for self-reflection and organizational assessment among teacher candidates and in-service educators (Kozik, 2009).

Kozik (2009) used a sample population for this study that included 11 school districts professionals (i.e., six secondary special education teachers, and five content area teachers for math, English, and social studies), one middle school principal, and one district superintendent. There was also a parent of a student with exceptionalities that was

a panelist. The project began with an interactive panel discussion; it was after this discussion that the participants began the AI. Kozik provided information on how to use AI to foster collaboration to the extent that it promotes inclusion.

The question is often asked, can the practices used to educate students with disabilities be effective and inclusive? The author of *Educational Programs for Elementary Students with Learning Disabilities: Can They Be Both Effective and Inclusive?* provided a holistic view of special education and special education services. There was a brief synopsis of the IDEA and how it affected special education services. One focus of the author was the least restrictive environment. The least restrictive environment is determined on an individual basis for each student with exceptionalities (Tobin, 2007). The author attempted to answer the question of what extent students with disabilities should be educated in the regular classroom and how can teachers and administrators promote inclusion.

Kozik (2009) provided information that can be used as a tool for teaching and learning about special education law and how to apply the proper services to individual students, while educating exceptional learners as well as their nondisabled peers. The authors expressed that the debate over whether or not and to what extent students with disabilities should be educated in the regular education classroom has gone on for several decades. With recent mandates about AYP and how it will affect the academic success of exceptional learners, one needs to understand the law and what mandates govern the environments in which an exceptional learner can be placed to receive his or her services.

Not only did Kozik (2009) provide information about the laws governing special education, but he provided a brief review and summarization of research regarding the nature of instruction that has the potential to create enhanced educational outcomes and success. Ultimately, this author provided a solid foundation for full inclusion and how it can be implemented. Full inclusion and strategies to be used in the confines of full inclusion were reviewed, but resource and self-contained classes were discussed, as they were important to provide a continuum of services.

Although it may be difficult to incorporate inclusive practices into the regular education classroom, many articles focused on everyone participating. Teachers should include students with disabilities and their nondisabled peers. Barton, Reichow, Wolery, Chen (2011) focused on strategies that could be useful when incorporating inclusive practices in the classroom uses students who have been diagnosed as autistic. Although Barton et al. focused on students with autism, it showed how many of the same practices could be used for a wide variety of disabilities. One of the barriers that face many students and educators was that they are both unsure of how effectively to transition into the regular education classroom dynamics. Barton et al. focused on circle time and how to adapt the lesson so that students with learning disabilities, particularly autism, can be included into the activities that are taking place in the classroom.

Although Barton et al. (2011) provided one specific example, they also provided a wide spectrum of strategies because special education is one area that we are lacking in. As educators, we need to have an arsenal of strategies to use in the event that we must educate a student with disabilities. Teachers never knows what students they will have in

advance; therefore, teachers cannot speculate and say that they will only work with students that have mild learning disabilities or no disabilities at all (Barton et al., 2011). Teachers must be ready at all times to service all students, regardless of the disability.

Barton et al. (2011) stated that successful inclusion included, but was not limited to, careful planning, collaboration, and consideration of individual needs. The appropriate modifications and accommodations are to be created by the IEP team. It is there that the team determines the placement for the child and brainstorms about possible strategies and resources that are needed to ensure the inclusion and successful immersion of the student into the regular education environment. This placement is determined by and based upon the student's strengths and weaknesses. One important factor that must be recognized is that some strategies that work for students with learning disabilities could be used for all students. These strategies can help to increase the areas of strength for high performing students and work as devices of remediation for low performing students. As a result of the incorporation of differentiated strategies, all students can be properly serviced.

To determine ways to decrease the stress of incorporating inclusive practices into the regular education classroom, Brackenreed (2011) replicated a study conducted by Forlin (2001) that more accurately reflected the language and practice of inclusion in Ontario. In Canada, no federal department of education establishes the educational policies like the United States. The curriculum, delivery, and services, which include special education services, are governed by provincial and territorial legislative assemblies and may differ from each jurisdiction. One commonality across Canada is

that students who are served by special education receive services in the regular education classroom. Stress was a major factor noted by teachers who were responsible for educating students with disabilities. According to the Ontario College of Teachers in 2004, there was an attrition rate of 30% during the first 5 years for all new teachers as a result of stress. Brackenreed (2011) stated the most common reason cited for leaving was lack of support to adjust to the demands of the classroom.

Are our teachers adequately equipped to accommodate and educate students with disabilities (Roberts & Teigland, 2008)? The question of teacher ability in reference to inclusive classroom settings is a question being asked across the country because inclusion is being implemented across the country. In this study, a survey found that 47% of teachers quit before retirement because of stress and frustration. The researcher used the Teacher Stress and Coping Questionnaire to reflect the language and practice of inclusion in Ontario. The population in this study consisted of teachers in Northeastern Ontario who were teaching students with exceptionalities in the regular classroom. Four English public school boards and four English Catholic school boards were included in the study. With a population of approximately 4,175 elementary and secondary school teachers, 269 teachers responded to the mailed, self-administered questionnaire. The data collection included a Likert-type scale technique used with a set of statements where respondents were asked to express agreement or disagreement on a 5-point scale. Descriptive statistics were used to profile the sample of teachers, and open-ended questions on the questionnaire were analyzed according to themes related to the

quantitative findings as described by the teachers through their responses to the questionnaire.

Hall (2009) stated that individuals with disabilities accounted for approximately 15.1% of the population of the United States. This percentage consisted of people who were 5 years of age and older. Although the disability rights movement has made improvements for this population through education, physical accessibility, access to information and services as well as forms of integration, physical integration does not always mean social inclusion.

Hall (2009) focused on social inclusion as a component necessary to the enhancing of a person's quality of life. Although this form of inclusion is said to be essential, it also causes many barriers for people with disabilities, especially students who are being integrated into regular education classrooms to receive full inclusion services. Hall found that individuals with mild intellectual disabilities had similar experiences of social rejection and discrimination. All participants involved in Hall's study mentioned they were concerned about social acceptance. An important aspect of social inclusion for students with a disability was that they were accepted as an individual (Smith, 2008). The social inclusion of students with disabilities included that they be recognized as a person, an individual, instead of being defined by the disability.

Social exclusion can be seen in many forms in the classroom. Some of these forms of exclusion are avoidance, verbal taunts, and even physical abuse. Smith (2008) stated the purpose of his study was to enhance future research and to help researchers understand more about the importance of social inclusion as it pertained to students with

disabilities. The data collection procedures consisted of a qualitative meta-analysis. This meta-analysis consisted of selecting primary research reports and preparing the data for analysis. Purposeful sampling was used to select information rich cases for study so that an in-depth or more comprehensive understanding could be gained of the phenomenon. The primary reports selected were published from January 1990 to February 2008. These reports contained a population of individuals with disabilities and discussed the social inclusion of those individuals in their results.

The data were analyzed by organizing the data, reducing the data into themes through a process of coding, and condensing the codes, then representing the data in a table or through a discussion format. The results of the study included six themes that emerged from the analysis. Those themes were being accepted as individual, relationships, involvement in activities, support, living accommodations, and employment (Smith, 2008). Each theme was discussed and supported through evidence by quotes from the data.

Toblin (2007) discussed a collaborative research project of two inclusion teachers and their principal. This collaborative project entailed ways to enhance the inclusion experience for five inclusion students. Four of the students had mild intellectual disabilities, and the other participant had a learning disability. Toblin stated that making inclusion work took more than a philosophical commitment on the part of the teacher and the administrator (Toblin, 2007). It required a school level integration, classroom strategies, and positioning students as *knowers* in the classrooms. Toblin also stated that inclusion had become a part of a critical reform movement to improve the delivery of

services for students with exceptionalities. For this type of reform to be successful in a school, principals and teachers must first display positive attitudes and a commitment to inclusion.

Causton-Theoharis and Theoharis (2008) stated that to create an inclusive school that would apply to all students; the school would need to eliminate special pull-outs, self-contained classrooms, and students being sent to other schools because of their disabilities. Causton-Theoharis and Theoharis stated that this type of inclusive school was not a new program, but a shift in the mindset and school culture and atmosphere. Causton-Theoharis and Theoharis suggested that this atmosphere had to begin with the attitude that all students should be appreciated for their talents and invited to participate as significant members and an integral part of the learning environment.

According to Goodlad and Lovitt (1993), the decision to develop an inclusive school depended largely upon leaders' values and beliefs. The principal and other administrators were in a position greatly to impact and increase opportunities for students with exceptionalities. Administrators, when adequately prepared and knowledgeable, have the ability to ensure that students with disabilities are truly included in the school environment.

Goodlad and Lovitt (1993) revealed that one teacher could engage in positive interactions in the classroom by positioning the exceptional learners as knowers among their peers, while the second teacher could place an emphasis on enabling social learning and creating an environment where the students had routines that were predictable. The

principal also played a part and had *Good News Visits* with the students one to two times per week.

This study suggested that, although we as educators are to focus on the academic aspect, we must also focus on the social and emotional aspects of education. If we are to be successful with integrating exceptional learners into the regular education classroom, we must teach all of our students about tolerance and acceptance. Using differentiated instruction was one way to increase teacher efficacy for beginning special education teachers (Carter, Ernest, Hull, Heckaman, & Thompson, 2011). Carter et al. provided a description of how a special education teacher who was just starting in the profession working in an inclusive setting used pre-assessment, self-assessment, and ongoing assessments to implement the principles of differentiated instruction to enable her to become more responsive to her students' needs in a systematic way. A case study was the research design for this study.

The preparation of teachers effectively to teach an increased number of students with disabilities who have a wide variety of needs requires teacher education programs to enhance coursework and field experiences. It was stated that research has revealed that teachers who have a perception and belief that they are prepared and have the skills necessary to influence student learning, regardless of the external factors present, were more likely to adapt and differentiate or individualize the instruction. Differentiated instruction is not a new concept. It is one that has been around since the first school, when students of all ages were placed in a room and taught together.

Differentiated instruction is often referred to as a basket of strategies. The definition of differentiated instruction is to make use of a variety of strategies to respond to the individual needs of students. Patterson, Conolly, and Ritter (2009) stated that by using differentiated instruction, teachers were able to provide the support and resources necessary to accommodate the needs of a wide variety of learners by offering several options for learning. This wide variety of options allowed each student to personalize and internalize the objectives being presented, and it also offered a variety of ways to express what meaning they have gained from the lesson.

Models of differentiated instruction include learning activities that are interesting and relevant for each student. Carter et al. (2011) stated that the four areas that teachers selected strategies from were content, process, product, and learning environments. Content refers to the overall learning outcome. The content is the objective, or what one wants the students to learn. Process refers to differentiation. The process is how the content is going to be taught. The product is the artifact that comes as a result of the content and process. The process can be changed and altered to suit the needs of individual students. Finally, the learning environment refers to the physical space in which learning takes place. This environment can be altered by the teacher as well. This space may include individual work space, a choice of available technology, or flexibility of movement.

Carter et al. (2011) was a beginning/provisional special education teacher completing an online initial certification M.A.T. degree program leading to full certification in special education. She had been hired by a school district to work fulltime

in the classroom as a teacher of record, and she worked on her special education

certification using asynchronous web-based technology. The teacher education

candidates (TEC) were responsible for three students in a first grade math class. The

candidate was to address three interrelated areas: data collection, data based planning,

and use of differentiated instruction as a systematic approach to individualization (Carter

et al., 2011).

　　　　During a 5-week period, the teacher used the following process. For the data

collection process, the TEC had to complete a self-assessment of the current practices and

determine the curriculum area of focus. Then, pretest data were collected. Examples of

these data included assignments, tests, and observations. The second phase of this

process was data-based planning. During this phase, the teacher focused on areas of

strength and weakness for individual students and identified at least two differentiated

strategies to use with those students. In the third phase, the TEC had to implement those

strategies of differentiation for at least a week. A reflection then followed. The results of

the case study showed a shift in how the inclusion teacher (TEC) and the general

education teacher collaborated. One of the barriers to differentiation and the

implementation of it was that it is often viewed as another fad.

Perceptions

　　　　Eisenman et al. (2011) provided an inside perspective on the transition to full

inclusion in high school, which is pertinent to the continued support of educators, parents,

and students alike on the changes that can and will occur in many districts across the

nation. In many cases, self-contained and resource classes will be phased out by the time

students reach high school. Because of the AYP requirements, students must be exposed to the regular education curriculum, so they are prepared for the EOC or Gateway exams that are necessary to graduate high school with a regular education diploma. Cosier (2011) conducted a study that examined self-contained special education delivery. According to one special education student who was educated in a self-contained classroom for most of his academic career, the self-contained classroom was a demeaning place.

Because of the recent changes in special education and the laws that govern special education, many special education teachers who were once self-contained teachers or resource teachers found themselves working in a different capacity. They were removed from those positions and moved to the regular education classroom in a collaborative manner. Roberts and Teigland (2008) stated that moving to an inclusive setting was not an easy journey, but there are several steps to make sure inclusion happens successfully. These items included to provide strong leadership, dispel the myths concerning resources early on, ensure training, and recognize that passions run high, gain access to expert advice if you do not already have it (Roberts & Teigland, 2008).

The transition called for them to work in conjunction with a highly qualified regular education teacher to present the objectives and materials necessary to provide academic growth for students with disabilities as well as their nondisabled peers. Eisenman et al. (2011) used the perceptions and attitudes of those special education teachers who were once in their own classrooms working exclusively with students

served by special education who had to make the transition just as the students who are served by special education did. The author discussed how the transition to fully inclusive classrooms was not only difficult for the students but teachers as well. Many special education teachers felt that they were being viewed as assistants to the regular education teachers. This mindset caused a strain on the collaborative efforts necessary to ensure that the inclusion process was effective.

Ben-Yehuda, Last, and Yona (2010) investigated the correlation or relationship between the attitudes, perceptions, and beliefs of educators and the socioeconomic status of special needs students. These researchers employed a qualitative method to determine the characteristics of those educators who were successful in their implementation of inclusive classrooms. The educators in this study were not necessarily using fully inclusive practices but were using mainstreaming as a method of delivery to educate students with exceptionalities. The exploration of teachers' attitudes toward fully inclusive practices was addressed in this article. The attitudes were found to be linked to several factors: (a) the severity and type of disability, (b) teacher training and experience, and (c) gender.

Ben-Yudah et al. (2010) attempted to find a link between teachers' beliefs and socioeconomic status of exceptional learners. This link was an important factor in inclusion because of the perception of students at a lower socioeconomic status as well as their interaction and desire to interact with other students in the classroom. All students want to be accepted and feel they are a part of a group. The level of acceptance or lack

thereof could have a profound effect on a student's adjustment to a fully inclusive classroom setting.

Ben-Yudah et al. (2010) stated that the success of social integration for students with disabilities can be assessed and observed through a variety of approaches. Data can be obtained from (a) peers, by using sociometric measures, observations and rating scales; (b) teachers and school professionals, by obtaining information about social skills and behavior of mainstreamed students, and by observing classroom interactions; and (c) from students themselves, through the use of interviews, focus groups and measures such as rating scales. Ben-Yudah et al. focused on socioeconomic status and how students and educators alike may place a stigma on a person because of that status. As a result, it is imperative that we consider this factor when implementing inclusive practices in our academic curriculum.

Kuyini and Mangope (2011) focused on the perceptions and attitudes of teachers regarding student teachers' attitudes and concerns about inclusive education in Ghana and Botswana. The researchers asked the reader to have a universal look on inclusion and how it is applied in other parts of the world. The investigator in this study presented data that expressed the importance of the attitudes, perspectives, and concerns of student teachers. Data collected during this research were obtained through a three-part survey. A questionnaire that consisted of background variables, attitudes, and concerns of various student teachers was used. This questionnaire was completed by 202 students from four teacher training institutions in both countries (i.e., Ghana and Botswana). One of the

institutions used in this study was a university, and the others were teacher training colleges. Data were analyzed using descriptive statistics, *t tests*, and an ANOVA.

The results that the researchers found were that the attitudes of the student teachers were not a very positive one. They had many concerns about inclusion, and what inclusion meant they would have to deal with in the classroom, as well as questions about the resources and the modifications and accommodations needed to ensure academic success. Kuyini and Mangope (2011) stated that the findings supported earlier studies of attitudes and concerns of practicing teachers and provided a basis for recommending that more needed to be done in teacher training courses in Ghana and Botswana to enhance student teacher attitudes toward students with disabilities in regular classrooms as well as reduce the existing concerns. Recommendations were made in relation to improving student teachers' disposition toward inclusive education. The recommendations included teacher training institutions being used to teach skills that would enhance trainees' capacities to support students with disabilities in inclusive classrooms, more support provided during in-service, and the reduction of concerns through the implementation of day-to-day support services for teachers (Kuyini & Mangope, 2011).

Elliot (2008) stated that the research conducted on teacher variables showed that attitudes and perceptions were related to self-perceptions of aptitude or capability, educational preparation, and experience in teaching students with disabilities. Glazzard (2011) served as a guide to educators who could be in the same situation. Many educators who have not experienced full inclusion are not very open and receptive to

trying it. This lack of exposure is why the attitudes and perspectives of educators are important. Glazzard stated that inclusion would continue to be a difficult transition if teachers are not dedicated to its principles, and if they are not willing to embrace their role and responsibility to educate all students, regardless of their disability. It is important that student teachers' minds and perceptions are molded, so that they understand the importance of appropriate education for all students. Moreover, if education is to take place in the regular education classroom, they must be prepared for it. Every child deserves the same appropriate education, so that they may have a chance to achieve their academic goals.

This view on the attitudes and perceptions of teachers was not the only one found in research. The attitudes of parents are also an integral factor in the academic achievement of students in inclusive settings (Lesser, 2011). Lesser addressed the perspectives and needs of parents of students who had learning disabilities. The parents' voice was a voice that was not often heard. Lesser selected 68 parents to participate. These parents responded to a survey on inclusion. One thing these parents had in common was their children all had Angelman Syndrome, which is a complex learning disability that can be difficult to deal with in the classroom. The parents were from different areas of the United States, but they all attended the Angelman Syndrome Foundation.

Quantitative and qualitative data were collected through this study. Parents not only filled out surveys, but they were able to provide recommendations and suggestions for educators. One surprising attitude that was consistent throughout the parent responses

was that they still had a desire to have their children educated in a self-contained classroom. They felt that the regular education teachers were not as knowledgeable as they should be about different disabilities, and they did not modify and accommodate lessons appropriately (Lesser, 2011).

Many concerns that parents had about their children being educated in the regular education classroom derived from the feeling that their students were being teased in the regular education classroom, and they were resented by the regular education students (Kirk & Leser, 2011). This fear of being resented and teased was an important concern on the part of the parent and the students alike. This perspective should be taken into consideration by educators, administrators, and other professionals who work in an inclusive setting with exceptional learners.

Foote et al. (2010) conducted a study about inclusion practices in the general or regular education classroom. This study was based on 71 regular education classrooms and the perspectives of those special education inclusion teachers across the state of New York. The special education teachers provided their thoughts and perspectives through a survey. The aspects that were explored were co-teaching, one-on-one instruction, small group instruction, and planning support. The teacher perspectives were explored and related to class size, number of students with disability, and the severity of the disability.

Factors that were directly linked to the educators themselves were also examined. Those factors included number of years of work experience, professional developments, and preparatory classes that dealt with implementing inclusive practices into the classroom (Foote et al., 2010). A quantitative study was conducted using a survey. The

author stated that, although co-teaching was one of the most cited practices for full inclusion, it was the least documented and used based on the survey responses.

Foote et al.'s work (2010) can be a useful resource to gain firsthand information about the effectiveness of certain inclusive practices. It is one thing to read about practices, but it is something completely different to implement these practices. To gain insight from inclusion participants who were affected by the outcomes of implementing a variety of practices was one way to determine if those practices were appropriate for the population of students being serviced in their classrooms.

The attitudes and perspectives of regular education students are often overlooked and not taken into account (Wong, 2008). Wong allowed students to have a voice when he researched the thoughts and perceptions of nondisabled students about students with disabilities. The author examined the effects of mainstreaming on regular education students. To gather these data, researchers examined a 47-question survey. This survey was completed by 389 secondary school students at the beginning and end of the school year. The assessment tool used was the Students' Attitudes toward People with a Disability Scale.

This study took place in Hong Kong, where there was a competitive academic atmosphere. Students have a desire to be the best and may feel that participating in a classroom with students with disabilities will slow them down or impede their academic growth (Wong, 2008). This attitude was a barrier to education and the full inclusion of all students. If students with disabilities were ostracized in the regular education classroom or looked down upon by their peers, it could be a major setback for them

socially and academically. Although this study took place in Hong Kong, the negative

attitudes of others about students with disabilities as well as the ostracizing of this student

population are issues seen all over the world.

Fully inclusive classrooms affected more than students served by special

education and teachers. It affected many facets of education and must be looked at

holistically. To view the positive and negative aspects of inclusive settings is the only

way to ensure that inclusive classrooms are the best method for educating and supporting

students with exceptionalities. The regular education teacher and students must also be

taken into account. Inclusion in some cases means that you are taking students from an

environment where they feel safe, that allows them to be educated alongside peers who

are like them, to a placement that causes them to feel as if they are unwanted. This

feeling could be experienced not only by the students with disabilities, but special

education teachers as well. McCrary and McHatton (2011) stated that one major concern

was about whether or not the general educators are equipped with a capacity and skill

level that would allow them to scaffold support in the classroom as well as whether or not

the system in place supports collaboration between the general education teacher and the

special education teacher. This transition can be stressful. School districts,

administrators, and educators must take this fact into account when determining the

educational placement that will be the least restrictive for students with exceptionalities

and the collaborative teams that are formed between the regular education and special

education teachers.

Inclusive education is an important practice that is now known worldwide in terms of students with exceptionalities (Lindsay, 2007). Lindsay provided a review of literature on the effectiveness of full inclusion and/or mainstreaming. This review came from eight journals: (a) *Journal of Special Education*, (b) *Exceptional Children*, (c) *Learning Disabilities Research and Practice*, (d) *Journal of Learning Disabilities*, (e) *Remedial and Special Education*, (f) *British Journal of Special Education*, (g) *European Journal of Special Needs Education*, and (h) *International Journal of Inclusive Education.* The categories researched were comparative studies of outcomes, non-comparative qualitative studies, including non-experimental case studies, teacher practice and development, teacher attitudes, and the use of teacher assistants.

Inclusive education has continued to be promoted for a number of reasons. Those reasons included that inclusion was more effective and students have the right to be educated with their nondisabled peers. A wide variety of information was available about the use of full inclusion. For the purposes of this research, the authors felt there was a lack of substantial evidence about the effectiveness of mainstreaming or inclusion, and the positive evidence that was found was only marginally positive. As a result, they cannot theorize that mainstreaming and inclusion are a positive method for educating students with disabilities. Cosier (2011) suggested that students educated in the regular education classroom generally benefit both socially and academically.

Lindsay (2007) pointed out a great aspect about the quantity of viable research on the topic of educating students with exceptionalities. There was a wealth of information, but much of the research about inclusion and inclusive practices presented the

perceptions and attitudes of others. The mindset and opinions alone were not applicable

data, but this information can be used to assist with the implementation of full inclusion

or inclusive practices.

It was stated that the beliefs and attitudes of teachers are an important element in

the development of inclusive education and its associated practices (Beacham & Rouse,

2012). Teacher education was a crucial component to help develop positive attitudes and

beliefs. These positive attitudes and beliefs were necessary in the reformation of teacher

education to address the issues of inclusion and inclusive practices. Legislation and

policies have been created to bring about education reform, to promote inclusion, and to

decrease the incidence of exclusion and marginalism. Inclusion and inclusive practices

now include a wide range of disabilities. If changes are to occur, there must be teacher

education programs in place that adequately prepare pre-service teachers to not only deal

with inclusive practices, but a wide variety of disabilities. Gorman (2010) stated that

teacher workshops and professional development are essential to the success of inclusion.

Educators are expected to work with and have knowledge about special education and a

variety of disabilities, work with support personnel, and develop appropriate teaching and

management processes; as a result, they must be educated and/or trained to work in this

capacity.

Although many teachers expressed that inclusive practices were necessary for the

creation of an inclusive society, there was still apprehension about the actual execution of

inclusive practices. Much of this apprehension stemmed from teachers feeling they were

ill prepared to execute the implementation of mainstream practices. Beacham and Rouse

(2012) stated evidence suggested that changing experienced teachers' beliefs and attitudes toward inclusive education and practice was fraught with difficulties, particularly when inclusion was imposed on schools, and that younger teachers were more likely to be flexible in their thinking. Beacham and Rouse (2012) attempted to answer the following questions:

- "What are student teachers' views about inclusion, children, and schools at the beginning of the course?" (p. 5)

- "What are their views on these issues at the end of the course?" (p. 5)

- "To what extent do student teachers' views change over the course?" (p. 5)

- "Are there differences in views between male and female student teachers?" (p. 5)

- "To what extent do the views of student teachers differ according to whether they are training to teach in primary or secondary schools?" (p. 5)

- "Are there differences between students who studied the 'Learning without Limits' (LwL) further professional studies course (FPS) and those who did not?" (p. 5)

A questionnaire was used to compare the beliefs and attitudes of all student teachers enrolled in one cohort of the reformed PGDE course in the School of Education at the University of Aberdeen. The pre-course questionnaire consisted of nine sections and included items about respondents' details, previous experiences in schools, expectation of importance of learning experiences, expectation of learning by the end of the course, views about teacher's characteristics, and views about children and schools.

The post-course questionnaire consisted of seven sections and consisted of items that included questions to determine what was learned by the end of the course, views about learning, views about teaching, views on children and schools, and views on their continuing professional development needs. There were sections in both questionnaires about inclusive and exclusionary education and practices that used a 5-point Likert-type scale (Beacham & Rouse, 2012).

At the beginning of the course, the majority of the student teachers' views were in support of inclusion; however, there were a number of items where students neither agreed nor disagreed. Overall, at the start, attitudes and beliefs were positive and supportive of inclusive practices. By the end of the course, attitudes had not changed significantly. Overall, this research suggested that the attitudes of student teachers were generally positive, and with continued support and issues of inclusion incorporated into the teacher education program, it could help to encourage and sustain pro-inclusion attitudes. Overall, student views seem less sure about implementing actual inclusive practices (e.g., grouping students based on ability levels). The findings also suggested that for students who participated in further professional development, LwL were more positive about inclusive practices by the end of the course and more negative about exclusionary practices (Wong, 2008).

The United Nations Educational, Scientific and Cultural Organization (UNESCO, 2003) classified social exclusion as one of the critical issues of our time. Orr (2009) stated that one major issue was the continued exclusion from participation in social, economic, and political life in their respective communities of exceptional learners. One

group that continued to be relegated was those persons with disabilities. This exclusion generally began in the public school setting. It was stated that students with physical and/or sensory impairments were immediately identified and suggested for special programs. This type of labeling led to special programming and a curriculum that was often separate from their nondisabled peers.

The findings reported was derived from an interview-based study that investigated new special education teachers' lived experiences with inclusion. This study used a phenomenological investigation with 15 participants, all graduates of the same Midwestern University. The selection process was based on purposive sampling, and included 14 women and 1 man. A similarity of all the participants was they were all recipients of a prestigious scholarship and considered to be great students with great potential in the field of education (Orr, 2009).

Data collected were interviews with each of the participants. The interviews were recorded and the conversations were later transcribed. Each interview lasted between 45 to 90 minutes. All researchers were asked to describe (a) the inclusionary practices of their schools, (b) the barriers to inclusion they have observed and (c) any *inclusion supportive* practices, pedagogies, or structures present in their teaching settings. Data were analyzed using NVivo software, which was used mostly as an organizational tool as opposed to using the software's automatic coding features. Significant statements were extracted from the interview data, which allowed the formulation of meanings and those meanings were organized into clusters of themes (Orr, 2009).

The results displayed a wide variety of inclusionary practices. These practices ranged from the participants acting as consultants, participants working as co-teachers, and resource room teachers. Students assigned to these educators were typically seen in the general education classroom or in the resource room for less than one or two hours per day. Seven of the teachers taught in self-contained classrooms, which meant that students spent at least half of the school day with them. The participants found a number of barriers to be present in the implementation of inclusive settings. The three major themes for these barriers included (a) negative attitudes of general education teachers, (b) lack of knowledge, and (c) lack of administrative support (Orr, 2009).

Khudorenko (2011) stated that educating students in inclusive settings provided the opportunity for them to become included in equal ways later in life. It has the ability to be significant not only socially and academically, but it can reduce their isolation and economic dependency. This information can be used not only with special education teachers, but it can be as a resource to create an atmosphere and culture that fosters the success of all students, students with disabilities and their nondisabled peers.

Fuchs (2010) explored the perceived barriers associated with inclusion. This research was based on a qualitative study that examined the general education teachers' beliefs and attitudes about the use of current mainstreaming practices. It was stated that now more than ever; general education teachers are responsible for educating a student population that consists of a wide range of learners (Fuchs, 2010). At one point in time, students with identified disabilities were educated in a separate classroom, but now, these students are to be educated in the general education classroom setting. Fuchs (2010)

stated that the push for the inclusion of students with disabilities has not always been echoed by increased knowledge, collaboration, and pre service experiences for future teachers. Laws that were created to help with the inclusion of students with disabilities have created situations for greater inclusion, but general education teachers often feel they are ill equipped to service the needs of such a diverse population.

Fuchs (2010) stated in this research that teachers' beliefs about inclusion influence their own ability to educate exceptional learners in the general education classroom. Teachers consistently reported the need for more training in the area of accommodations and modifications, not only in relation to instruction, but assignments and strategies that could be used in the classroom as well. The beliefs and attitudes of teachers about educating students with disabilities in the regular education classroom required examination so that school and teacher preparation programs could have a better understanding of the current challenges in the context of the teachers' classrooms so improvements could be made to pre service and in-service education. Runswick-Cole (2011) stated that inclusion was not just about those students with exceptionalities but was also about the attitudes and perceptions in schools changing to guarantee that no one student was excluded.

The method for conducting this study was qualitative. It focused on the general educators in a suburban area of a major Midwestern city. There were five participants and each was current elementary school teacher. They were also members of a master's degree cohort in a teacher leadership program. Ten teachers initially volunteered to participate. The participants were divided into two focus groups. Each focus group was

interviewed using a standard set of open-ended questions that were derived from the

research question. The research question posed was: What are general educators' beliefs

about current mainstreaming practices? After the initial focus group was piloted, five

teachers were selected to participate in follow-up interviews and classroom observations.

Each of the five teachers met these criteria: (a) currently teaching in a general classroom

setting, (b) had experience with students with disabilities in the general classroom setting,

and (c) were willing to participate in all subsequent portions of the study (Runswick-

Cole, 2011).

Not only were focus group interviews conducted, but individual interviews were

completed as well. The group interviews focused on the beliefs and attitudes of teachers

about the current inclusion practices. Once data were collected, the data analysis began.

This analysis included constant comparison analysis of participant responses. This form

of analysis was used to provide the researcher with emerging themes and notable

information during the data collection process. The results revealed common challenges

that became a hindrance in the process of educating students with disabilities in the

regular education classroom. The following themes emerged from the data collected: (a)

lack of administrative support, (b) teachers' perceived lack of support from special

educators and support staff, and (c) teachers' lack of sufficient preparation in their pre-

service programs (Runswick-Cole, 2011).

Although these themes emerged from this study, these issues and other issues

similar have emerged through other studies about the perceptions and attitudes of

teachers regarding the educating of students with disabilities in the general education

classroom. This study can serve as a guide to factors that should be addressed and discussed when discussing the implementation of a full inclusion or mainstreaming program (Runswick-Cole, 2011).

Ross-Hill (2009) conducted research that investigated the attitudes and perceptions of regular education teachers toward the mainstreaming practices in elementary and secondary classrooms. This research sought to improve the inclusive environment. This author examined whether or not there was a difference between elementary regular education teachers and secondary regular education teachers. The participants for this study consisted of 73 teachers from three public elementary and secondary schools in the rural, Southeastern United States.

The author discussed the NCLB and the role that this law would play in closing the achievement gap between disadvantaged and minority youth and their peers. NCLB also shed light on the fact that students with disabilities deserved to be educated with their nondisabled peers (Ross-Hill, 2009). They must be granted access to the general education curriculum. Although NCLB was acting in favor of students with disabilities, it was not the only act being implemented. The IDEIA also encouraged the inclusion of students with diverse learning needs and disabilities in the regular education classroom.

Placing students in the regular education classroom is a daunting task, and one that cannot be escaped. The attitudes and perceptions of teachers overall have produced mixed reports. Fuchs (2009) stated that the attitudes and perceptions that teachers have about inclusion influence their perceptions about their ability and capacity to educate students with exceptionalities in an inclusive setting. Background information provided

in this study showed when inclusion began, problems in the classroom emerged. One of

the problems that emerged was that teachers realized they were not prepared to teach

students with severe academic and social deficits.

Fuchs (2009) stated the participants in this study completed the Scale of Teachers'

Attitudes towards Inclusive Education, which consisted of 31 questions that address the

areas of general information, and advantages and disadvantages of inclusion and social

issues regarding inclusion. The format for this scale consisted of Likert-scaled questions.

The study used data derived from the survey that were coded and logged into a Statistical

Package for the Social Sciences (SPSS) database. The analysis of covariance was also

used to define the relationship between elementary and secondary regular education

teachers' attitudes towards inclusion.

The results indicated that most teachers actually supported the practice of

inclusion and felt that all students, students with disabilities and their nondisabled peers,

had a right to be educated in the regular education classroom and to be exposed to the

general education curriculum (Fuchs, 2009). There were consistencies between the

elementary and secondary attitudes toward inclusion, and there was a large percentage of

positive attitudes and confidence in teaching students with disabilities if provided with

the proper training and support. If they did not completely agree with the practice of

inclusion, they were neutral on the subject matter.

Full Inclusion on an International Scale

Full inclusion and fully inclusive practices are sweeping across school districts

throughout the United States, but inclusion practices are also seen on an international

scale (Wu-Tein, 2007). Many countries are now incorporating fully inclusive practices into their curriculum. Wu-Tein (2007) focused on the inclusive practices in Taiwan. Although Taiwan is implementing inclusion, it was not necessarily full inclusion. Many programs have been developed. They were first started on an experimental basis, but slowly became a part of the curriculum.

Taiwan has not perfected its implementation of special education services through inclusion, but some progress has been made. Although it is commendable that they are putting forth their best effort to collaborate with other professionals to ensure that all students are being educated to the best of their ability, there are also some downfalls. These downfalls included, but are not limited to, a lack of preparation, or a feeling that there has been a lack of acceptance into the regular education classroom, and little confidence to name a few (Wu-Tein, 2007).

Gorman (2010) stated that Ireland was moving toward more inclusive practices. A lack of teacher education about disabilities and working in the area of special education had been observed. As a result, Gorman (2010) stated that more professional workshops and educational opportunities regarding inclusion needed to be available to ensure the success of inclusion in Ireland.

The United States is always compared to other countries, but do we have a grasp on the practices used in the classrooms of other countries and how they can be helpful in our inclusive settings? Wu-Tein (2007) conducted a study that explored the components and characteristics that are critical when implementing a fully inclusive classroom. Educators, administrators, and other researchers need to understand that they will have

many challenges. These challenges can range from disruptions and discipline issues, lack

of confidence, inadequate support, and a lack of education about inclusion to how it is to

be implemented to bring about academic success for all students. One must be careful

and pay close attention to the material acquired when conducting an inquiry to assist in

any educational task. With inclusive practices, we are still growing and learning how to

successfully modify and accommodate for students with disabilities. Special education

for that reason has become a hot topic in Taiwan, and diligent work has begun to ensure

that they educate all students (Wu-Tein, 2007).

Full inclusion is not mandated by the laws that govern special education (Walton,

2011). The laws that govern special education do, however, state that a student must be

educated in his or her least restrictive environment. South Africa has been dealing with

injustice and discrimination for many years. This discrimination is also the case with

education. Efforts are being made to provide an equal and appropriate education for all

students, but it is not as prominent as it needs to be. If discrimination and injustice are

going to cease, this transition must take place in the classroom as well. Students with

disabilities are educated in a separate space with a separate curriculum.

Walton (2011) provided a different perspective of special education and special

education services. South Africa is a poor country and could greatly benefit from

educating all of its students together in an inclusive setting, but they do not. The authors

have expressed that if South Africa is to break away from the negative treatment and

exclusion of any group of people, it must begin in the classroom and teach students how

to work together in spite of their differences. Walton stated that society often excludes

students who are different, but these students deserve the same support, resources, and instruction as their nondisabled peers.

The authors did an excellent job of providing an example of how full inclusion is supposed to be used, although it is not being implemented properly in many countries. The United States is often compared to other countries and many try to review the strategies that are used in the United States and how successful those strategies are so that they might implement the same strategies. South Africa is attempting to make a move in the right direction, but they are still behind in the education arena (Walton, 2011).

Forlin (2010) addressed the need for adequate teacher preparation in inclusive classrooms globally. Before 2003, teacher preparation for inclusive classrooms was not a major concern for educators in Hong Kong. In 2003 and continuing into 2007, measures were taken to provide the opportunity for educators to take advantage of conferences, seminars, and a self-funded, postgraduate program. A new initiative was introduced in 2007. This initiative was an attempt by the Education Bureau to provide consistent and adequate programs to ensure that teachers are trained on inclusive practices. Hong Kong transitioned to whole schools in 2003, so that teachers could attend those seminars and conferences.

Brandes and Crowson (2009) considered the effects of the government funded course on teachers' outlooks on inclusive practices as well as their thoughts on self-efficacy in terms of inclusion. One focus of this author was the importance of teachers' attitudes toward inclusive practices. Brandes and Crowson suggested that one reason teachers may have negative attitudes toward inclusion was based on their comfort level

about interacting with students with disabilities. These attitudes and perceptions were created based on a number of factors. The author described many of the factors that helped to configure attitudes about inclusion and the perceptions of teachers with more positive attitudes about fully inclusive practices.

The procedure used for this study was a three-part survey, which was administered two times: once at the beginning and once at the end of the study. The first portion of the study addressed demographic information. The second portion was a scale that contained 15 items. The scale used was the Sentiments, Attitudes, and Concerns about Inclusive Education Scale. The last portion of this survey was the Teacher Efficacy for Inclusive Practices Scale. This scale consisted of 18 items that used a 6-point, Likert-type scale that ranged from *strongly disagree* to *strongly agree* (Brandes & Crowson, 2009).

Italy has incorporated fully inclusive practices since the 1970s because of a national policy that states that all students, regardless of disability, must be integrated into the regular education classroom (Begeny & Marten, 2007). For this purpose, many advocates in the United States have looked to Italy for examples and strategies on how successfully to implement fully inclusive classrooms. The author took an in-depth look into the last 20 years of research on fully inclusive practices in Italy. Of the studies researched, surveys were the most commonly used. Few studies used experimental methodology as their approach to determine the effectiveness of full inclusion.

Begeny and Marten (2007) provided two views on inclusion. Those views were full inclusion and how those practices actually affected students. It was stated that those

positive aspects and teachers who were in favor of inclusion were educators who provided an avenue for social growth among students with exceptionalities, and inclusive practices could help them in community living later in life. Another positive aspect was that teachers grew professionally when teaching in inclusive atmospheres. Drawbacks to inclusion ranged from inclusion being too complex, to the general education classrooms not being equipped to handle students with disabilities. Inclusion models cannot be successful unless a high volume of positive attitudes, accommodations, and adaptations are already in place and supported by all professionals who are working with exceptional learners. This group of professionals included the administrators and teachers' assistants.

Bengey (2007) questioned the quality of the research obtained on inclusion and inclusion practices. With a wide variety of research that was based solely on the attitudes and perceptions of educators, can one take that information and definitively say that inclusion is or is not a good practice? The author recommended that more empirical data were needed to hypothesize about what inclusion is and how it can be useful to not only students with exceptionalities, but all students.

Glazzard (2011) stated that the last 20 years have seen a significant policy move both nationally and internationally toward educational inclusion. An attempt to change the views and perceptions about students with exceptionalities has influenced not only policy but practice and legislation as well. This legislation and practice now emphasizes the rights of students with disabilities fully to participate and have equal opportunity rights in every aspect of life. It was stated in this study that despite inclusion dominating the educational realm, there was a lack of clarification regarding the actual translation

and implementation of inclusion in classrooms. Some literature suggests that inclusion was not about where a student was located for educational purposes, but rather the quality of learning and participation. Practitioners across the globe had different interpretations of who, what, and how inclusion should be implemented, and this difference in interpretation affects how inclusion is performed.

Glazzard (2009) assessed the barriers to inclusion in one primary school in the north of England. Qualitative data were collected from teachers and teaching assistants through the use of a focus group. The themes that emerged from the data collected were identified as key barriers to the effective implementation of inclusion. The themes that emerged were attitudinal barriers, one-to-one support, teamwork, standards agenda, location, parental resistance, and training and resources. Although these themes emerged, one theme was a key barrier to inclusion. Standards agenda emerged as the key barrier to student participation and achievement.

The barriers were not only evident in this school, but literature suggested that the themes were viewed as barriers in many schools across the nation. Further research is needed to provide a deeper understanding of inclusion and create opportunities for practitioners to reshape their practice (Glazzard, 2011). Orr (2009) stated that the opportunities that students with disabilities missed while they were being educated in the self-contained classrooms cannot easily be recuperated. Students with disabilities who were educated in separate classrooms or facilities that were not equal to the education being gained by their nondisabled peers may become ostracized, or negatively viewed adults.

A belief exists that students who are considered at risk, or who are the most susceptible, are students who need the most attention and support to be successful academically. Many are attempting to improve diagnostic assessments for schoolchildren, prevent the unnecessary closure of special schools, and remove the bias toward inclusion (Cabinet Office, 2010). Runswick-Cole (2011) used this research as a response to the call of the Cabinet Office to end bias toward inclusion and inclusion practices. It was stated that when talking or writing about inclusive education, it can be a difficult task because a lot of confusion exists about exactly what inclusion is. According to the Centre for the Study of Inclusive Education, inclusion entails, but was not limited to, (a) valuing all students and staff equally; (b) increasing the participation of students in; (c) reducing their exclusion from the cultures, curricula and communities of local schools; (d) reducing barriers to learning and participation for all students; (e) fostering mutually sustaining relationships; and (f) improving schools for staff and students.

Gal, Schreur, and Engel-Yeger (2010) stated that teachers' attitudes and perceptions of educating students with disabilities in inclusive settings are integral components to the success of inclusive practices. Runswick-Cole (2011) provided an overview of laws governing the educating of students with disabilities as well as provided both positive and negative implications surrounding the implementation of inclusive programs. The bias toward inclusion was challenged in this literature. The use of a critical disability studies perspective was applied, and Runswick-Cole drew on the idea of ableism and critiques of neo-liberal market systems in education. Many of the barriers to inclusion that are often hidden in our educational institutions were explored and revealed

through this literature. Gal et al. (2010) stated that there are other barriers to inclusion as well. Although attitudes and perceptions were key components in the attainment of inclusion, child factors and environmental factors must be taken into consideration as well.

By acknowledging the possible barriers and biases that many parents, educators, and other academic stakeholders have about the implementation of inclusion, educational institutions have the ability to identify areas of weakness and brainstorm possible remedies to these barriers and biased attitudes, so that all students are afforded a quality education. Unless these barriers are explored and addressed, inclusion practices will continue to present issues, for not only students with exceptionalities, but their nondisabled peers and educators alike (Runswick-Cole, 2011).

In Russian society there have been many measures and attempts to protect people with disabilities, but the present organization of education fails to meet the principles of the United Nations Convention on the Rights of Handicapped People (Khudeorenko, 2001). Some of the reasons listed for this failure included ineffective methods and forms of schoolings, lack of support from society, negative attitudes towards people with disabilities, and inadequate incentives as motivation to acquire a higher education. The United Nations adopted the Convention on the Rights of Handicapped People to ensure that the lives of people with disabilities were made easier by forbidding discrimination.

The perception that people with disabilities should be fully included was not one that has completely registered with many in this region. Khudorenko (2011) stated that educating students with disabilities offered them many opportunities. These

opportunities included, but were not limited to, joining the labor or workforce, being socially active, and learning how to provide for themselves. Special education and special education schooling was the only option for students with disabilities for many years in Russia. Although students were provided with the resources and support they needed, they were missing out on things, such as interacting with their external environment. This form of schooling excluded opportunities for social integration and reinforced segregation.

Inclusion of students with disabilities into the general school environment is not widely used; as a result, the entire society begins to suffer. There were several advantages of full inclusion, which included the absence of barriers during school, education on the basis of up-to-date technologies, adaptation and integration into society, opportunity for creative activity, shaping of students' spirit of mutual assistance and support, and competitive graduates. Although these were the potential advantages of including students with disabilities in the general education environment and not segregating them from their nondisabled peers, the students, and society will eventually suffer with a negative mindset and perception of these students (Khudorenko, 2011). Blandford and Paliokosta (2010) stated that part of the difficulty with incorporating inclusive practices was that the vocabulary around the description of inclusion was by no means consistent, and this lack of consistency leads to confusion. The suffering was evident in higher education rates of students with disabilities and the job market as well. Students with disabilities in Russian society generally had low paying jobs that were not permanent.

Inclusion not only included what a student will be taught, but where the student will be taught, and the environmental accommodations that must be made in the regular education classroom (Obiakor, 2011). Obiakor took an in-depth look into the attitudes and perceptions of teachers about inclusion and inclusive practices. Special education and general education teachers alike were expected to cope with students who had a variety of disabilities and learning needs in the regular education classroom. This form of education called for a great deal of collaboration. Teachers may not be prepared or supported successfully to implement this type of learning environment. Obiakor identified child, teacher, and environmental barriers that could arise as a result of the implementation of inclusion. Such barriers included the development of the failure syndrome, placement decisions creating unrealistic expectations, a lack of social justice, lack of knowledge of special education on behalf of the parent and a lack of collaboration.

Inclusion was stated as a philosophy of acceptance and belonging to the community so that a class was structured to meet the needs of all its students (Gal et al., 2010). With inclusive practices, the law states that there must be a continuum of services or placement options available for students to meet all needs. Those placement options indicated the choice of an adapted environment for groups of individuals that have certain characteristics and academic needs. This continuum of services is defined as the least restrictive environment. Gal et al. (2010) focused on three categories, which included the child category that covered various disabilities; the teacher category, which discussed and focused on teacher attitudes; and the environment category, which focused on

environmental, administrative, and programmatic factors. The relationship among those three factors was examined in this study.

The study was based on 62 preschool teachers who attended a workshop at a clinical laboratory at the University of Haifa in northern Israel. Gal et al. (2010) stated that the workshop's aim was to raise awareness of children with special needs and of the services available to those students and their families. Of the 62 teachers who signed in at the workshop, a convenience sample of 53 teachers was recruited. Each of these teachers signed consent forms. The teachers were asked to complete a questionnaire on demographic characteristics, attitudes toward children with disabilities, and accommodations they required for their integration into kindergarten. There were three questionnaires that functioned as the investigation tool to determine the attitudes of teachers and requirements for environmental accommodations. These questionnaires were a demographics questionnaire, The Attitudes Toward Disabled Persons Scale, and The Environmental Accommodations of School.

There were nine items on the demographics questionnaire that consisted of background information and work conditions. These items related to age, gender, education, and health. The Attitudes Toward Disabled Persons Scale consisted of 30 items, and respondents were to express their agreement or disagreement on a 6-point scale. The Environmental Accommodations of School (EAS) research tool was developed for this study. The questionnaire assessed the accommodations deemed necessary to improve the participation of students with disabilities participation in the kindergarten environment. The analysis of the data was performed using SPSS 14.

Cronbach's alpha coefficient was used to examine the internal consistency of EAS.

Independent *t test* was performed to assess the differences in the teacher's attitudes and

perceptions of requirements for accommodation according to their personal

characteristics and work conditions. Gal et al. (2010) used the Pearson *r* to examine

correlations between independent variables, such as teachers' characteristics and attitudes

towards people with disabilities.

      The results showed that there was no significant relationship between total score

of ATCP and past experiences with people with disabilities; however, three different

kinds of past immediacy to people with disabilities proved to relate diversely to teachers'

attitudes. The three kinds of past experiences were with (a) children with disabilities in a

close environment, (b) friends with disabilities, and (c) family members with disabilities.

Teachers who had friends with disabilities showed a significantly more positive attitude

than teachers who did not have disabled friends. Teachers with family members who

were disabled were more conscious and aware of necessary accommodations than

teachers who did not have friends or family members with disabilities (Gal et al., 2010).

The results of this study showed that attitudes of teachers were generally positive. The

generally positive attitudes may be explained by special expectations or a combination of

expectations and teacher characteristics. Although attitudes were generally positive,

there was a discrepancy with teacher attitudes and some specifically negative attitudes

they expressed in keeping with findings of previous studies.

Teacher Preparation

Teacher preparation was another factor of inclusion and inclusive practices that researchers have studied. Duchaine, Fredrick, and Jolivete (2011) focused on teacher coaching and performance feedback and how this feedback affected praise in inclusive classroom settings. This feedback was used to determine if teacher coaching increased positive behaviors in inclusive classrooms. This form of teacher coaching with performance feedback was called the behavior specific praise statements (BSPS). The study was conducted using three high school mathematics teachers. The main objective of this study was to provide teacher coaching that involved performance feedback to determine the effectiveness this practice could have on inclusive classroom settings. This study also observed the frequency of positive behaviors that appeared in class as a result of the behavior specific praise statements.

Elliots's work (2008) was important to teacher education and preparation for working in fully inclusive classrooms. The author provided strategies that could be used to promote positive behaviors in the classroom on behalf of all students. He also showed the importance of teacher coaching and education when implementing inclusive practices in the classroom. Educators must be properly educated and knowledgeable of the strategies that work in inclusive classrooms, which can be used to promote the participation and active engagement of all students (Elliot, 2008).

While educating students with disabilities, educators must ensure that the necessary modifications and accommodations are applied, while also ensuring the inclusion of exceptional learners in lessons and activities (Gal et al., 2010). This

inclusion was sometimes a difficult task. While participating in inclusive settings, students with disabilities may have feelings of fear or shame. This population of students may also have feelings of anxiety. These feelings were based on the fact that they may be ridiculed by their nondisabled peers if they participate in classroom discussions and activities and respond incorrectly. As a result, educators must have a variety of resources and tools to use in these cases. The BSPS was one of those tools that can be used in inclusive settings with students with disabilities and their nondisabled peers (Duchaine et al., 2011).

Bert, Fullerton, McBride, and Ruben (2011) stated that many had expressed concerns that both content area and secondary special education teachers are not adequately prepared to help all adolescents learn academic content (Blanton & Pugagh, 2007). The concern over lack of preparation along with other concerns was that educators, both regular and special educators, were not adequately prepared properly to differentiate lessons, nor were they highly qualified in specific content areas. These concerns were now coming to the forefront with more inclusive practices taking place across the United States. These concerns were factors that can greatly affect the success of a special education program, such as inclusion. Bert et al. (2011) stated that educators were the determining factor to student success. If educators were the determining factor to student success, teacher preparation should be at the forefront of the list of priorities.

Bert et al. (2011) identified the three types of teacher education programs, detailed what they were, and the effects they had on the educating of students with disabilities in inclusive settings. The three types of teacher preparation program models

are discrete, integrated, and merged. The discrete model was one that was most used.

The discrete model is when the special education and general education programs are

separate. The next model is the integrated model. The integrated model is when the

programs are still separate, but faculty members work together to create courses and/or

field experiences where the special education candidates learn about regular education

practices, and general education teachers learned about inclusive practices. The last

model of the three is the merged program. In this program, faculty members are to work

collaboratively to prepare general and special educators using one curriculum. The

courses and field experience were designed to teach future educators how to work will all

students.

The authors were all college professors in the school of education. They came

together to determine what strategies would be best to implement a curriculum that would

have the ability to teach all future educators the amount of information needed to

guarantee that students are adequately equipped to work with regular and special

education students. Bert et al. (2011) determined that a merged secondary and special

education curriculum was necessary. It was called the Secondary Dual Educators'

Program (SDEP). This program is a full time graduate program that would allow one to

obtain licensure as a secondary educator in a content area, licensure in secondary special

education, and a Master's Degree in Education.

The participants for this study consisted of 44 teacher candidates, which included

26 females and 18 males. Graduates were licensed in the following content areas: 3 in

math, 12 in social studies, 4 in health, 8 in science (i.e., biology, integrated science, and

chemistry), 9 in language arts/English, 1 in Spanish, 1 in business education, and 6 in art.

Surveys and interviews were used to collect the data for this research. The data reflected

that graduates from the SDEP merged program worked as content area teachers and

introduced and engaged in collaboration with colleagues (Bert et al., 2011). Principals

stated that graduates made useful offerings to content area teams that reflected their

preparation in a merged program. Graduates reported that content area teachers

appreciated and used their methods for differentiating instruction.

 Loiacono and Valenti (2010) focused on two factors that greatly affect education

today. The first factor was the alarming number of students with autism and autism

spectrum disorder in schools today. This problem was not one that was seen only in the

United States, but there were a large population of students with autism that can be

observed globally. The next issue was that teacher education programs were not

adequately equipping student teachers to work with this disability as well as many other

disabilities. The authors inspected (a) the increase of children diagnosed with autism in

the Southeastern region of New York over a 5-year period (2003-2007); and (b) the

number of applied behavior analysis (ABA) trained general education teachers in this

region who co-taught in inclusive classrooms that included children classified with

autism.

 Dymond and Gilson (2007) examined the preparation that was needed for

educators to successfully educate students with Autism Spectrum Disorder (ASD). The

authors stated that if special educators or general educators do not have the training

necessary to educate students who have been diagnosed with ASD, then one cannot

predict that the academic growth of these children will increase or improve (Dymond &
Gilson, 2007). Simultaneously, if these educators lacked knowledge in evidence-based
intervention methodologies as well as the necessary training to work with children
diagnosed with autism, are they considered to be highly qualified in keeping with the
spirit of NCLB? (Scheuermann, Webber, Boutot, & Goodwin, 2003).

The authors of this study recommended that future research be empirically
conducted to (a) compare the various ABA methodologies to determine the efficacy of
each intervention with children classified with ASD, and b) revise preparatory programs
for teachers in higher education to include ABA methodologies to ensure the proper
preparation of educators to teach children with ASD in inclusive settings. Based on the
research findings, institutions of higher education should continue to scrutinize their
curriculum and courses as well as revise their respective curricula to include ABA
intervention approaches, which would not only benefit children with autism but other
disabilities as well (Loiacono & Valenti, 2010).

Baber, Cooper, Kurtts, and Vallecorsa (2008) discussed the critical need for
highly qualified special education teachers in today's society as described by current
legislation in NCLB (2002). Since the legislation has been enforced, recent initiatives
have signaled teacher education programs to examine performance standards in
demonstrating preparation of effective teachers for diverse learners. Baber et al. (2008)
stated that, with over 6,000,000 children across the country receiving services, the
increased need for well-prepared teachers was critical. Data on increasing teacher

shortages in special education as well as a number of studies have amplified various aspects of this dilemma, including causes and possible remedies.

The purpose for this paper was to share (a) a process for creating an inclusion survey for teacher education faculty, (b) results from administration of this survey in one university setting, and (c) share examples of how outcomes of the survey were used to assist teacher education faculty in their own preparation for ensuring that their students meet state and professional standards required for teaching students with disabilities (Baber et al., 2008).

The methodology used in Baber et al. (2008) consisted of an inclusion task force that included representatives from the teacher preparation program, the university's office of disability services, and a member of the PDS partners, as well as both of the associate deans. An online survey was created that had three purposes: (a) to what extent faculty were including key inclusion competencies in course content and assessment, (b) how faculty rated their own inclusion knowledge and skills, and (c) what resources faculty felt they needed in order to more effectively integrate inclusion across program area. For data collection, the inclusion task force identified all the required licensure courses in core subject areas. Then, as many instructors as possible who taught these courses over the previous 2 years were identified, and were contacted via email. There were 242 surveys sent to faculty members with a 30% return rate. There were three significant limitations in the execution of the survey: (a) all faculties could not be located, (b) there had been a change in some of the course numbers, and (c) only a snapshot over the 2-year period could be provided.

The survey included both qualitative and quantitative feedback from faculty members. The quantitative data were in the form of a Likert-type scale survey for responses about the extent to which faculty included those key inclusion topics in course content. A rating scale was also used to describe (a) their knowledge and skill level to teach others to work with students with disabilities and (b) the extent to which their current knowledge bases reflected current best practices. Descriptive statistics were used to analyze these two sets of data. The qualitative data were in the form of open-ended questions. The authors read and re-read the responses to these questions looking for themes and seeking patterns across the data set.

Baber et al. (2008) stated that the results for each of the programs responses were meant to inform the specific program of the extent to which key competencies were addressed in content and assessment activities of the identified core courses of these programs. As a result, survey outcomes were reported to department chairs and department coordinators, and they were to decide how the information would be used. This information could serve as an effective tool to the guiding of specific program changes and needs in inclusive settings.

Furey, Penney, and Philpott (2010) explored the need for more innovative leadership in teacher education with an emphasis on professional developments for current teachers. Philpott et al. (2010) stated that, despite the fact that classroom teachers were assuming more responsibility in meeting the needs of all students, many of them did not feel prepared to instruct students of diverse cultural backgrounds or abilities. Similar findings had emerged across the country. Globally, research and literature was voicing

similar concerns about teacher readiness to meet the needs of students with exceptionalities.

Inclusive education once focused on the needs of those students with exceptionalities, but now it was a concept that was much broader and focuses on all students. With the expansion of this concept of learner differences, there was an urgent need for leaders to redevelop training practices for current teachers. Inclusive education was one that bridges the gap and embraces all differences (Zigmond et al., 2009). It focused on diverse teaching strategies and the empowerment of the classroom teacher with the tools, resources, and knowledge necessary to reach all students. Furey et al. (2010) stated that teachers who felt unprepared to meet the needs of students suffered a diminishing confidence in their own knowledge and skills. It was also stated that teacher attitudes were critical for the success of inclusion and impact classroom practices. As a result, this attitude can ultimately affect student achievement. There were six core areas focused on in this study for renewed professional development: (a) professional development for inclusive policy, (b) professional development for diversity, (c) professional development to nurture positive attitudes, (d) professional development for evidence based teaching strategies, (e) professional development for collaborative teaching, and (f) professional development for meaningful teaching.

The conclusion of this research conducted by Furey et al. (2010) suggested that providing administrators with the necessary support to enable teachers to engage in shared leadership in inclusion, would call for new models of professional development to be essential. These models of professional development must contain a wealth of

knowledge about meaningful and effective approaches to meeting the needs of a diverse student population.

Brown et al. (2011) stated that there were three major priorities that should guide leadership education when preparing leaders for their work of leading schools in a democratic society. Those three priorities were teaching leaders to understand the inequities of our society, teaching leaders to serve as agents for social transformation, and teaching leaders to help each and every student learn and succeed.

Students with exceptionalities had often been isolated or excluded from the classrooms and activities that their nondisabled peers had been allowed to participate in (Zigmond et al., 2009). They had experienced forms of social isolation and exclusion even after being integrated into the regular education classroom. Brown et al. (2011) stated that it was the duty of our educational system to end such oppression, to increase equity, and to make bold possibilities happen for all students. Brown et al. (2011) focused on the importance of bridging the gap between theory and practice. It was important to make connections between course material and the broader social context. This connection may allow future educational leaders to implement a broader, more inclusive approach in addressing issues of student learning and equity, as well as respect for diversity and culturally inclusive education. It was stated that leadership education needs to call educators to activism. Educational programs should promote educators that will challenge exclusion, isolation, and marginalism and create opportunities for learning for all students, those students with exceptionalities and their nondisabled peers by dealing with issues of context and achievement.

Burden, Lunce, Runshe, and Tinnerman (2010) focused on balancing the need to prepare pre-service teachers with the skills necessary to effectively participate in IEP's with the constraints of confidentiality as required by law. These skill sets were important to special educators, especially educators who work in fully inclusive classrooms. The need for adequate preparation led one university to develop scenarios that could be used as tools for teaching in teacher preparation programs on what was expected with this critical component of the academic career of a student with exceptionalities.

Three scenarios were created. Two of the scenarios were created for the secondary level and one at the elementary level. Burden et al. (2010) stated that faculty discussed the issue of meeting student educational needs while also observing the confidentiality provision. The important aspect of meeting student needs coupled with an effort to ensure student confidentiality was why the video simulation was developed. Research suggests that the use of case studies in the classroom served to intensify the learning experience for student participants. The use of both case studies and role play had also proven to be very effective resources in preparing future educators.

The development of the simulations included several members of the faculty, one member of the staff, and a graduate student. The faculty and staff members played the roles of a special education teacher, general education teacher, and an administrator. The graduate student played the role of the high school student. The simulations were generalized so that they could be used for a number of teaching situations. Two simulations were created to be used with secondary pre-service teachers. Both simulations were based on a student named Robert X, who was a high school senior who

had a learning disability. These simulations were based on classroom instruction, the

interactions, and necessary collaborations of the regular education (general education)

teacher and the special education teacher. Each simulation lasted approximately 15

minutes (Burden et al., 2010).

The results were based upon junior and senior pre-service secondary education

students that completed a 5-week field placement. The students were asked to view the

two videos on secondary education and reflect on them through electronic journals. The

intended use for these journals was to highlight the strengths and weaknesses of the case

studies. Pre-service K-12 special education teachers viewed all three videos and had

class discussions about the videos. Based on these in-class discussions and the ability

openly to reflect and discuss the videos, this group got a deeper meaning and

understanding from the scenarios (Burden et al., 2010).

Burden et al. (2010) stated that as the number of students served by special

education continues to grow, it is important that teacher educators provide the resources

necessary for both general and special education pre-service teachers to practice the skills

necessary to accommodate such a diverse population of learners. With new and creative

usage of technology, many of these obstacles can begin to be addressed. Future

implications and considerations for this research included the use of virtual simulations

that students can use to actively participate in particular case studies.

Having an understanding of inclusion, the purpose and how to implement

inclusive practices, and not being afraid to educate students with disabilities are all

important aspects of inclusion (Bradley et al., 2011). Bradley et al. provided readers with

background information about the NCLB. It was stated that in 2004 96% of students

with disabilities were being included in the general education setting, and over half

(52.1%) of these students were in the general education classroom the majority of the day

(79% of the school day). The past decade has shown a continuous progression toward

educating students with disabilities in the general education classroom, and the

importance of all teachers being prepared to work with a diverse student population.

With an increasingly rigorous curriculum and more stringent accountability measures,

one important concern was whether or not general education teachers had the skills

necessary to scaffold support in their classrooms and work collaboratively with special

educators, families, and other related service providers to improve academic success.

The study examined the perceptions of elementary and secondary education

majors toward the inclusion of students with disabilities prior to and after taking a course

on the integration of exceptional learners into the general education classroom. The

study was grounded and guided by Pajares's (1992) framework on beliefs, which states,

"Successful teaching and learning in the inclusive classroom is largely predicated on a

teacher's knowledge, skills, and dispositions, all of which can be undermined by a belief

system that is inconsistent with an inclusive paradigm" (McCrary & McHatton, 2011, p.

136).

General educators are now held accountable for and must take a more active role

in the educating of students with disabilities (Harr-Robins et al., 2012). As a result, this

research sought to answer: (a) What are the perceptions of elementary and secondary

education majors toward the inclusion of students with disabilities in their classrooms

prior to and after taking a course on integrating exceptional learners? (b) Is there a difference in perceptions about inclusion between elementary education majors and secondary education majors? And (c) What are the perceptions of general education majors about their own professional development and continued needs as a result of taking a course on integrating exceptional students? (Harr-Robins et al., 2012)

This study was conducted at a large urban research university in the Southeastern United States. All participants were enrolled in a course on integrating exceptional learners in the general education setting. This course was a two-credit course that met one evening per week. The course was designed for general education majors in an effort to provide a more in-depth understanding of the role they needed to play in the integration of students with disabilities. The course met for 2 hours each week, for 16 weeks, in the fall or spring semesters, and 10 weeks throughout the summer. The course was taught by an instructor or an adjunct instructor in the department of special education who has at least a master's degree in special education and had teaching experience (McCrary & McHatton, 2011).

The participants were comprised of both undergraduate elementary education majors and undergraduate secondary education majors who were enrolled in the course on integrating exceptional learners into the general education classroom. McCrary and McHatton (2011) collected data during the fall of 2006 and the spring and summer of 2007. The data were collected from different groups of students enrolled in different sections of the course. The data collection began at the beginning of the course. During this procedure, inclusion was not explicitly defined. During the second data collection

administration, which was at the end of the course, researchers were looking for an understanding of teachers' perceptions of inclusion and their sense of self-efficacy about teaching exceptional learners in the confines of the general education classroom and how their perceptions may have changed since the beginning of the course. To gain a deeper understanding of these perceptions, a series of open-ended questions were asked. The survey used in this research was an instrument that included 22 Likert-type items and had a Cronbach's alpha coefficient of .905. The response scales ranged from 1 to 5, with 1, strongly disagree, and 5, *strongly agree*, as well as a neutral category in the middle.

The analysis of the quantitative findings consisted of descriptive statistics, frequency of percentages of responses, and a repeated measures ANOVA to determine changes between times 1, 2, and differences between groups. The findings yielded that although participants were more positive about inclusion at the end of the course, 30.4% either did not agree or were undecided when they were asked if most students with disabilities could be educated in the general education classroom. The analysis of the qualitative data included the transcribing of responses to the open-ended questions. The responses derived from the qualitative data indicated that teachers were more willing to work with students with learning disabilities and hearing impairments as opposed to students with multiple disabilities. They also still generally viewed students with disabilities from a deficit perspective. The use of phrasing such as, "help these types of students," and "feel more comfortable in educating them," warranted further investigation. In interpreting the response data, the authors wondered whether changed behaviors naturally follow changed attitudes (McCrary & McHatton, 2011).

It has been suggested that attitudes and perceptions toward inclusion have an effect on the level of success experienced by students (Fuchs, 2010). Casale-Giannola (2010) conducted research to determine the relationship between teachers' attitudes about the inclusion of students with disabilities in a physical education classroom and the amount of practice attempts performed and the levels of success achieved by students with disabilities compared to their nondisabled peers. Physical education teachers are now responsible for teaching students with disabilities (Casale-Giannola, 2010). These students had mild to moderate disabilities. Possible disabilities may include, but are not limited to, mental retardation, learning disabilities and emotional/behavioral disorders. These students were being placed in physical education classes without the assistance of an aid. This inclusion has become an issue for many physical education teachers. They are trying to meet the needs of students with disabilities, without neglecting the needs of their nondisabled peers.

Although many studies have assumed that a positive attitude toward the inclusion of students with disabilities was necessary for the transition to be a successful one, many variables must be taken into consideration (Beacham & Rouse, 2010). These variables included the relationship between age of the teacher, teaching experience, gender, and educational preparation to name a few. Elliot (2008) stated that student grade level and the severity of student disability impact teachers' attitudes toward inclusion. Students with disabilities in the lower grades were viewed more favorably than were students in the higher grades, and students with less severe disabilities were viewed more favorably than were students with more severe disabilities (Ross-Hill, 2009).

Research suggested that teachers' attitudes were related to self-perceptions of competence, educational preparation, and experience in teaching students with disabilities (Elliot, 2008). The attitudes and perceptions of the teachers would be better if they perceived themselves as good teachers, had better preparation, and more experience in working with students with disabilities. The measure used in this study consisted of the PEATID-III questionnaire used to determine teachers' attitudes toward teaching inclusionary classes. This questionnaire consisted of a series of statements, which required teachers to express their beliefs about teaching students with exceptionalities in their regular physical education classrooms. The questionnaire was mailed to the school address of all elementary physical educators in the district who had given the administrator permission to conduct research in their schools. The main portion of this questionnaire consisted of 12 statements, such as, "*teaching students labeled as mild/moderate mental disabilities in regular physical education classes with nondisabled students will disrupt the harmony of the class*." The use of a 5-point Likert-type scale was provided for the respondents to answer each question.

After reviewing the completed questionnaires, 20 elementary physical education teachers were chosen as participants. Elliot (2008) stated these participants were assigned to one of two groups based on their attitudes and perceptions towards inclusion. Each group consisted of teachers that had experienced between 2 and 25 years. Each teacher was sent a packet of consent forms to distribute to the students in their classes. Students were observed in these classes if their parents consented to it.

Data from the observations were analyzed using a two-factor split-plot or mixed ANOVA design. The results suggested that there was no significant interaction between the teacher's attitude and the type of student, but the number of practice attempts was influenced by the teacher's attitude. A comparison of the marginal mean revealed that students taught by teachers with positive attitudes received significantly more practice attempts than students taught by teachers with negative attitudes. Elliot (2008) suggested that teachers with more positive attitudes were more effective teachers than those teachers with negative attitudes.

The acceptance of students with disabilities is not only an issue in the United States but abroad as well. Elliot's (2008) research was a replication of the study conducted by Forlin (2001) in Churchlands, Western Australia. The authors used Forlin's Inclusive Education Teacher Stress and Coping questionnaire, but it was adapted to more adequately reflect the implementation of inclusion in Ontario. The inclusion of students with disabilities was not only a trend in the United States but in other countries as well. Most teachers in Ontario had to deal with the fact that they were going to have the responsibility of educating students with disabilities in the setting of the regular education classroom. This inclusive setting was a significant change. It was stated that stress was not only an unavoidable by-product of significant change; it was an essential condition leading to constructive change as long as it was in manageable doses.

The most common reason cited for teacher stress in Ontario and ultimately quitting was a lack of support needed to adapt to the transition and changes that came with fully inclusive classrooms. The Canadian Teachers' Federation June 2001

Workplace Survey found that 47% of teachers quit before retirement because of stress and frustration (Brackenreed, 2011). The behavioral problems of students with special needs particularly presented a great challenge to many in inclusive academic settings. Studies of teachers' attitudes and perceptions were said to directly affect and influence the decision making and behaviors of the teacher's in the classroom (Glazzard, 2011). Teacher burnout was accredited to an inability to cope with this type of classroom environment.

This study, with financial assistance from Nipissing University, examined the perceptions of teachers in Northeastern Ontario regarding the stressors of inclusive classroom environments and the coping strategies used to deal with those stressors. Brackenreed (2011) stated the population consisted of teachers in Northeastern Ontario who were teaching students with disabilities and their nondisabled peers in the regular education classroom. These teachers were from four English public school boards and four English Catholic school boards from the region. From a population of 4,175 elementary and secondary school teachers, a sample of 269 teachers responded to the mailed, self-administered questionnaire.

The Teacher Stress and Coping Questionnaire is comprised of four parts. Part A sought information about students who have been identified by an identification placement review committee (IPRC), those students waiting to be identified, or those students who are considered at risk. Part B requested information about variables that could be considered potential stressors as a part of an inclusive environment. Part C was comprised of coping strategies that might be used by the teacher. Part D was composed

of a request for general information on external variables such as demographic information of the school and personal teaching data. The data collected in Part C of this study, which examined the usefulness of coping strategies, were discussed. The responses to the open-ended questions were recorded, organized, and categorized according to the findings of the questionnaire (Brackenreed, 2011).

With the measure, the Likert-type scale technique presented statements in which participants were supposed to express their agreement or disagreement using a 5-point scale. Each degree of agreement was given a numerical value between 1 and 5, where 1 being no use and 5 being a high level of usefulness. The data from the surveys, which were returned, were listed in a frequency distribution and analyzed using descriptive statistics of frequency, mean, and standard deviation of the distribution of the scores (Brackenreed, 2011).

The top 10 strategies identified for coping fell into one of four categories: personal coping strategies, professional coping, social coping, and institutional coping skills. Maintaining a sense of humor was stated as the most useful coping strategy. Ninety percent of the participants stated that discussing the situation with a colleague was the most valuable coping strategy. Eighty percent stated that discussing the situation with the principal was the next most advantageous coping strategy. The demands of educating students with disabilities were stated to be "staggering" in the general education classroom (Brackenreed, 2011). Although this concern was stated, many educators' perceptions of mainstreaming were positive, and they felt that students with disabilities would benefit from inclusion practices.

Hemmings, Kay, and Woodcock (2012) stated that moves toward the inclusion of students with special needs into mainstream classrooms brought about greater attention on how teachers were trained and supported. There was also a growing interest in the way practicing and pre-service teachers perceive and respond to students with disabilities. Questions have been raised about the preparation pre-service teachers were receiving and whether or not this preparation was sufficient (Bert et al., 2011). This question brings about a need to understand the beliefs, attitudes, and concerns that pre-service teachers have about inclusive classrooms. This concern about adequate teacher preparation was also a call to evaluate the effectiveness of current teacher education preparation programs that incorporate inclusive education experiences.

Inclusion was defined as belonging to, being rightly placed in a group of people, and having the rights and qualities that characterize members of that particular group (Zigmond et al., 2009). Inclusive education was a concept that is based on the idea that schools should provide the needs of all children in their communities, no matter the level of their ability or their disability. To accomplish this goal, professional developments have been a fundamental approach used to prepare in-service teachers for inclusive education. However, a greater focus has been placed on university lectures and course designs to prepare new teachers for the world of inclusion.

Hemmings et al. (2012) suggested that positive attitudes and confidence toward teaching in an inclusive setting were likely to yield more positive results and a continuation of success with the implementation of inclusive practices. It was surprising, however, that many teacher education programs offered little in the form of inclusive

education or even failed to address inclusion at all. This claim was supported by the fact

that many new teachers had a great deal of apprehension about inclusion and working

with students with disabilities. Some researchers have been arguing that the

incorporation of actual experience where pre-service teachers may gain knowledge

through working with students with disabilities may be more advantageous than a course

on inclusive practices (Orr, 2009). This type of incorporation into a teacher preparation

program could potentially decrease stress and increase positive attitudes about

mainstream practices and exceptional learners. This incorporation also provides an

opportunity for pre-service teachers to work collaboratively with stakeholders, such as

teachers, support teachers, and teacher aids.

Hemmings et al. (2012) attempted to develop a better interpretation of the

concerns of pre-service teachers before and after they experienced a one-off inclusive

education subject and its related practicum. This study also monitored changes that

occurred in the beliefs in relation to inclusive education of those particular pre-service

teachers. Three research questions guided Hemmings et al.'s (2012, p. 3) study:

- "What are the levels of concerns expressed by pre-service teachers prior to
  studying a subject in inclusive education? And, how do these measures relate
  to each other and self-efficacy?"

- "What are the levels of concerns expressed by pre-service teachers following
  completion of a subject in inclusive education? And, how do these measures
  relate to each other and self-efficacy?"

- "What changes, if any, occur in the level of concerns through the study of an

inclusive education subject?"

The participants chosen were pre-service teachers who were enrolled in their third year of a primary teacher education course at a large Australian regional university. The sample population consisted of 97 pre-service teachers in the first phase of the study. A survey was administered to those 97 pre-service teachers and was re-administered 5 months later to the same participants. Hemmings et al. (2012) used a survey as the sole means of data gathering for this study. The survey was divided into a number of parts and used a variety of question formats. Those parts and formats included Likert-type scales and open-ended questions. The Likert-type scale items were drawn from two sources: The Concerns about Inclusive Education Scale (CIES) and the Self-Efficacy toward future Interaction with People and Disabilities Scale (SEIPD). The CIES measured the participants' degree of concern about implementing inclusive education. The scale had 21 items. The SEIPD was made up of 15 items.

The participants were invited to complete the survey two times to assess if the same issues and concerns emerged, and if new experiences across a 5-month period would impact their responses. The first survey was carried out in a lecture held at the beginning of the sixth session of the study. The second survey administration took place at the conclusion of the session during the final lecture (Hemmings et al., 2012). In the results, there were four main areas of concern: acceptance, workload, resources, and academic standards. The concern for resources was the most important or the highest on the hierarchy of concerns based on this study. The results also established a degree of association between the four measures of concern. At both the pre-test and post test

phases, these correlations were generally at a moderate level. This study did indicate that perceptions and attitudes did not change much over a 5-month period.

Society is moving toward not only more inclusive schools but a more inclusive society. Hemmings et al. (2012) focused on pre-service teachers and their concerns about working in inclusive settings in an attempt to provide information and education that can ultimately create more successful inclusive classroom settings. With the demands being set on all educators (i.e., special education and regular education teachers), Hemmings et al. set a good foundation for others to follow. If we focused on pre-service teachers and adequately provided the knowledge and resources that would help them to feel they as if they were adequately equipped to service a variety of students and student needs, there may be an increase in the success of inclusive classrooms.

Implications

With an opportunity to take a holistic view at the implementation of full inclusion and factors that potentially determine the effectiveness of this implementation, this investigation has the potential to change the culture of this local school and school district. This investigation contains data and literature that will enlighten and educate people who wish to implement a positive change for all students, not only students with exceptionalities. The journey of correcting the barriers to success in our academic institutions must first begin with knowledge and a solid foundation.

This knowledge base and foundation can be presented through a series of professional developments for all teachers working with students with disability. The presentation of inclusion, what it is, and how effectively to implement it, as well as

resources and a support plan are components of a professional development that could positively affect how educators and administrators not only implement but facilitate inclusive practices. This investigation provides that foundation. This foundation is one that has the ability to extend to the creation of professional developments and workshops about working with students with disabilities, full inclusion, collaborative working environments, and teacher preparation. This investigation could also lead to further investigations about the importance of teacher attitudes and perceptions, teacher education programs, and the preparation that is necessary to work with an array of disabilities. This investigation is important for special education and regular education teachers as a result of the integration of students with exceptionalities into the regular education classroom.

Summary

The investigation of the effectiveness of the implementation of full inclusion and how certain factors can hinder or aid in this implementation is an important aspect of academic success for exceptional learners. In this section of the project study, the local problem has been reviewed, along with the rationale for conducting this study, the significance of the problem, and a review of literature on the topic of inclusion. The local problem was the failure of students with disabilities in a local southern high school to meet the district or state AYP goals set for the past 3 years. Those students were participating in a fully inclusive academic program. This project study was a vehicle that was used to investigate the inclusive program at this school and determined how certain factors affected the success of not only students with disabilities, but their nondisabled

peers as well. The factors that were focused on included teacher attitude/perceptions, level of education, exposure to students/people with disabilities, knowledge of special education laws, and level of support. This investigation used a mixed methods design that included a survey and one-on-one interviews.

Orr (2009) stated, "A truly inclusive school reflects the democratic philosophy whereby all students are valued, educators normalize difference through differentiated instruction, and the school culture reflects an ethic of caring and community" (p. 229). This investigation brought forth information that assisted in the growth and progress of inclusive classrooms. Philpott et al. (2011) stated that inclusive education was the global paradigm of care where the classroom teacher was seen as the primary support person for all students and where good teaching was characterized by a broad skill set. All necessary definitions have been defined, as well as a review of literature not only from Southern states, but across the world, that focused on inclusion and inclusive practices. Literature suggested there were positive aspects of inclusion and inclusive practices as well as negative aspects. These aspects were based on several varying factors. Research highlighted several factors, such as preparation, teacher perception, and level of education about educating students with disabilities, as important aspects in creating a successful inclusive atmosphere. I conducted an investigation to determine what factors were present at a local Southern high school and how they affected the educating of students with disabilities in the regular education classroom. This investigation consisted of gathering data through the use of a mixed methods strategy that incorporated data from a survey as well as one-on-one interviews.

Section two of this project study provided information about the study's

methodology. The methodology section includes the methods for collecting data, and the

intent and justification for using that method of collection. The methodology section also

includes the instruments that were used in data collection. Those instruments were the

TATIS and one-on-one interviews.   The evidence of the validity and reliability of those

instruments, as well as the analysis procedures that were used to analyze those

instruments, are located in the methodology section.

Section 2: The Methodology

Research Design and Approach Introduction

Educating students with exceptionalities in the regular education classroom was a controversial and daunting task (Cullen & Noto, 2010). King (2003) stated that inclusive education meant that all students in a school regardless of their strengths, weaknesses, or disabilities in any area become a part of the school community. Cullen and Noto (2010) stated that inclusion was the delivery model of choice among federal and state legislation officials. Inclusion and inclusive practices were built on the principle that all students should be valued for their exceptional abilities and included as important members of the community. As a result of this concept and the implementation of programs that include students with exceptionalities, many questions about the effectiveness of full inclusion have begun to arise. Public schools have been forced to disaggregate achievement data and take responsibility for the progress of students served under special education as a discrete subgroup of learners through laws such as NCLB (Forlin, 2011). This development brought about a need for greater exposure to the general education curriculum through inclusive services and encouraged the standardization of outcomes and measurements. Obiakor (2011) stated that although these derivatives were positive and sometimes popular, full inclusion seemed to have applicability and practicality problems, and as a policy, it continued to be controversial.

Intent for Mixed Methods Approach

I investigated in depth the implementation of full inclusion classrooms and the success of these classrooms based on the level of achievement through a mixed methods

approach. The intent for using a mixed methods approach was that it provided a holistic view of the implementation of inclusive services in this local high school and how those services affected not only teachers but students' progress and achievement levels as well. The ability successfully to implement inclusive services and a more inclusive learning community depends on several factors: (a) effective leadership and administrative support, (b) sufficient funding, (c) effective implementation systems, (d) availability of evidence-based supportive services, (e) stakeholder environment, (f) adequate professional development opportunities for teachers and other support personnel, (g) effective communication, and (h) problem-solving systems (Cullen & Noto, 2010).

The factors that were the focus of this investigation included teacher attitudes/perceptions, level of education, exposure to students/people with disabilities, knowledge of special education laws, and level of support in the classroom. I thoroughly investigated those factors through a survey and one-on-one interviews with teachers who worked in this high school at the time of data collection. A demographics sheet accompanied the survey. This demographics sheet allowed for the comparison of new teachers to novice teachers regarding the factors under investigation.

Before collecting any data, I obtained consent from the IRB (international review board). The IRB number provided with permission to collect this data is 02-24-15-0201623. I used a sequential mixed methods strategy in this project study. Data were collected in a sequential explanatory method, which meant the demographics data sheet and Teacher Attitudes Toward Inclusion Scale (TATIS) were completed first, followed by one-on-one interviews. This strategy allowed the elaboration or expansion of the

quantitative data collected with the vivid words and descriptions gained from the qualitative data. This method provided an opportunity for a comprehensive analysis of the research problem. I collected and analyzed the quantitative data first, followed by the collecting and analyzing of the qualitative data (Creswell, 2009). I used this method in an attempt to gather data about the perceptions and attitudes of teachers on the topic of full inclusion. I collected these data using the TATIS. The collection of qualitative data followed in an attempt to elaborate and refine the results obtained from the quantitative segment of the data collection. I also used EOC data as descriptive, secondary data. Although these data were secondary, they helped to paint a powerful picture of how factors previously stated affected the implementation of full inclusion at a local Southern high school. I analyzed these data to provide an idea of where the students' academic level was at the beginning of the school year and at the end of the school year in inclusive settings. These settings included a collaborative teaching environment (coteaching involving a special education and regular education teacher), compared to students participating in inclusive settings with the regular education teacher independently servicing students with disabilities as well as their nondisabled peers.

Quantitative Data

The forms of data collection included the survey TATIS and one-on-one interviews. I attempted to gain permission to use the TATIS by emailing the creator of the scale. The contact information was no longer valid and the creator no longer worked at the listed institution. I ultimately purchased the instrument through ETS.org. The first phase of the project study included two forms of data extraction, the TATIS and a

demographics data sheet. The TATIS is a scale that was developed because of a need to change teacher perceptions and shape attitudes and beliefs that are favorable to inclusion (Cullen & Noto, 2010). Prior to the TATIS, the participants completed a demographics sheet. The demographics sheet addressed (a) the subject area being taught, (b) gender, (c) age, (d) highest level of education, (e) level of interactions with person/students with disabilities, (f) level of training, (g) knowledge of the local legislation or policy that pertained to students with disabilities, (h) level of confidence in teaching students with disabilities, and (i) level of experience teaching students with disabilities. These data were coupled with the TATIS to compare the attitudes and perspectives of novice teachers compared to veteran teachers, special education teachers compared to regular education teachers, and teachers who worked in collaborative/coteacher settings compared to those regular education teachers who solely taught students with disabilities and their nondisabled peers.

An attempt to provide a focus that would help achieve attitudinal change revealed that it was necessary to identify the specific attitudes and beliefs that were critical to the success of inclusive education. After an extensive review of literature, Cullen and Noto (2010) described the critical attitudes and beliefs as (a) attitudes toward students with disabilities in inclusive settings, (b) beliefs about professional roles and responsibilities, and (c) beliefs about the efficacy of inclusion. Olson, Chalmers, and Hoover (1997) found that positive teacher responses to students with disabilities were strong predictors of the success of inclusion. Stanovich and Jordan (2002) found that teachers who subscribed to a disease model of disability made consistent attempts to reduce diversity in

their classrooms. On the other hand, teachers who viewed disabilities as developmental

challenges that could be improved through effective teaching tended to be more accepting

of the diversity. These teachers were also more persistent in their teaching efforts and

were more likely to employ evidence-based teaching.

Cullen and Noto (2010) stated that teachers who departed from their traditional

roles by accepting team teaching assignments exhibited greater assurance in their ability

to teach special needs students and more confidence in their feasibility of inclusion. The

research objective of investigating the effective methods for engendering positive

attitudes and beliefs toward inclusion was a justifiable one, but this objective required an

assessment tool that could measure change regarding the critical attitudes and beliefs

previously mentioned. The TATIS was developed in response to that objective.

Upon the completion of the survey, a scoring sheet was available to tally all

responses. Once tallied, I compared factor and total scale scores to the normative

standards listed in the provided tables to obtain *t* scores and percentile ranks. The *t* scores

had a mean of 50 and a standard deviation of 10. High scores meant that the participants'

attitudes and beliefs were highly supportive of inclusion. Low scores meant that the

participants' attitudes and beliefs were more supportive or in favor of traditional methods

of delivery. Prior to the TATIS, participants completed a demographics sheet. I did not

use this information to identify individuals, but it was used as a means of tracking data

and comparing different groups of educators (i.e., novice teachers and veteran teachers,

special education and regular education teachers, coteachers and independent teachers). I

only used this sheet for the creation of subgroups that provided descriptive data about the

teachers participating in the project study. The demographics sheet included questions such as the area of teaching/training (subject area), age, gender, level of education, level of interactions with people with disabilities, and level of interactions with students' with disabilities.

Qualitative Data

The second form of data collection was one-on-one interviews with teachers who were working in inclusive settings at the time of data collection. Those interviews ranged between 45 and 60 minutes. The interview was semistructured and contained open-ended questions that allowed for the presentation of perspectives on inclusion and inclusive practices through words. The questions in the interview addressed (a) planning, (b) administration/administrative support, (c) adequate supplies/support, (d) in-service training/professional development, (e) inclusive school environment, (f) positive inclusive practices, and (g) barriers successfully to implement inclusive practices. Although I created and asked a specific set of questions, there was time and opportunity for elaboration and personal stories/reflection based on the responses. The analysis of the responses consisted of a hand transcription of each interview. Following this transcription, I reviewed each set of transcriptions, took notes based on teacher responses, and created the categories. The comparison of notes and categories from each interview took place to identify common themes. I identified those themes and created a special file for each that entailed specific quotes from the transcription.

The secondary data incorporated into this project study included student test scores from the EOC assessment. These data only included student test scores from

inclusive classrooms. The use of the EOC assessment allowed for me and others

reviewing the data to determine student growth and success. These data were previously

collected and analyzed by an outside source who worked with the school district. I

requested these data through the Research, Evaluation, Assessment and Student

Information department. Upon approval, the department provided all necessary test

scores. The scores presented consisted of data that were previously collected and

analyzed by an outside entity working with the school district.

Justification

The research design I chose to use for this project study was the sequential

explanatory mixed methods design. Creswell (2012) stated that a mixed methods study is

conducted when a researcher has both quantitative and qualitative data, and both types

together can provide a better understanding of the research problem than either one can

alone. In this study, I investigated factors that affected the academic achievement of

students with disabilities in inclusive classroom settings. This study contained a

quantitative component, which was the attitudes and perceptions of teachers based on an

attitudinal scale. Although the study contained a quantitative component, it also

contained a qualitative one that focused on factors that affected student achievement.

These factors were (a) teacher attitudes and perceptions of inclusion, (b) level of

education, (c) exposure to people/students with disabilities, and (d) the knowledge of

laws that govern the educating of students with disabilities. Creswell (2012) stated,

"Quantitative data, such as scores on instruments can provide numbers that can be

statistically analyzed" (p. 535). I reviewed and analyzed student scores on the EOC

assessments for the past 3 years. These scores provided additional data used to elaborate upon findings from the TATIS and one-on-one interviews and assisted in answering the guiding questions. I needed not only to know how students performed on those assessments, but I needed to understand why. Creswell (2012) stated that qualitative data offered different perspectives on the topic and provided a complex picture of the situation. This picture was painted with one-on-one interviews with teachers who were currently (at the time of data collection) or had previously worked in an inclusive classroom setting.

The justification for the use of a mixed methods design was to ensure that a thorough investigation took place of inclusive classroom settings and the factors that contributed to the success and/or failure of those inclusive classroom settings. It was not useful to have quantitative data to determine whether teacher attitudes and perceptions were in favor of more traditional or inclusive teaching methods unless I knew how those attitudes and perceptions affected student achievement. The investigation of those factors could help with the creation of more inclusive classroom settings where all students were provided with the resources and support needed to reach academic success, ultimately leading to an inclusive atmosphere in the local high school to ensure that all students were viewed equally.

I incorporated a sequential explanatory method into this mixed methods project study. The forms of data that I collected and analyzed included an attitudinal scale, the TATIS, one-on-one interviews, and EOC assessment scores for the past 3 years. I collected the data at the local Southern high school where the problem was identified. I

provided the teachers the survey at the school and asked them to put the survey in a locked box in the library when completed. I also conducted the interviews at this location unless the participant requested an outside location; however, no participant requested an outside location.

The analysis took place at my home to ensure that no information was leaked and that all data remained confidential. The transcription and analysis of that transcription took place at my home as well. The integration of data included the initial analysis of the quantitative data. In an attempt to understand the quantitative data, the qualitative data were used to create common themes. The EOC assessment scores provided an added level of data to understand and gain a deeper understanding of the quantitative data.

Setting and Sample

The sample for this project study was drawn from the realistic population of educators who worked with students with disabilities at a local Southern high school. An ideal population of all educators who worked with students with disabilities in inclusive settings in this district was preferred. Because of the time constraints and limited resources, the sample came from one school where the problem had been identified. The profile of the school included a faculty that had a principal, vice principal, two assistant principals, and 77 full-time teachers. This school profile included exceptional education and English as a second language. The average teacher to student ratio was 22.5:1 for academic and optional courses and 20:1 for career and technology courses. The support staff consisted of a librarian/media specialist, a professional learning community (PLC) coach, three professional guidance counselors, four secretaries, an in-school suspension

monitor, a hall monitor, a family services specialist, a study hall monitor, an instructional

computer technician, and nine paraprofessionals. This local Southern high school also

received part-time assistance from other professionals: a school psychologist, an

occupational therapist, speech pathologist, social worker, and a nurse. One hundred

percent of the teachers held a bachelor's degree and a state teaching certificate/license.

Many faculty members held advanced degrees in either content area or education. The

student demographics consisted of 10% Asian, 85.77% Black, 6.52% Hispanic, and

6.97% White. There were 388 9th grade students, 361 10th grade students 313 11th

grade students, and 273 12th grade students. At this school, 70% of the students were

eligible for free and/or reduced lunch.

As a result of the small amount of time and limited resources effectively to collect

data from such a large population, a realistic population was selected. The realistic

population selection began with the teacher population that consisted of 77 faculty

members who worked in an inclusive setting. This inclusive setting meant they taught

courses that contained a mixture of students with disabilities and their nondisabled peers.

For the collection of quantitative data, the sampling method used was simple random

sampling. This sampling involved each person on the realistic population list being

assigned a number. A random sampling table was generated by a computer where

random number tables presented clusters of number strings that were randomly

generated. For the qualitative data, non-probability sampling was the method used. The

type of non-probabilistic sampling strategy applied was purposeful sampling.

The participants chosen to complete the questionnaire/attitude scale and demographics sheet were used as the population from which participants were pulled to complete the one-on-one interviews. Based on the desire to gain the viewpoints/perspectives of both special education and regular education teachers, the sample for the one-on-one interview used purposeful sampling. The sample size for the interviews consisted of 15 participants, and the sample size for the survey and questionnaire consisted of 40 participants. The secondary data of student test scores consisted of the following participants for the EOC assessments in 2012 with *swd* used for students with disabilities and *nds* used for nondisabled students:

- Algebra II, 27 swd and 340 nds

- Biology, 34 swd and 303 nds

- English I, 30 swd and 326 nds

- English II, 31 swd and 295 nds

- U.S. History, 27 swd and 308 nds

- Algebra I, 37 swd and 273 nds

The EOC assessment for 2013 included:

- Algebra I, 33 swd and 293 nds

- Algebra II, 20 swd and 210 nds

- Biology, 45 swd and 425 nds

- English I, 40 swd and 316 nds

- English II, 25 swd and 292 nds

- English III, 21 swd and 265 nds

- U.S. History, 19 swd and nds

The EOC assessment participants for 2014 included:

- U.S. History, 19 swd 287 nds

- Algebra I, 35 swd and 287 nds

- Algebra II, 23 swd and 265 nds

- Biology, 21 swd and 237 nds for

- English, 36 swd and 300 nds

- English II, 28 swd and 283 nds

- English III, 29 swd and 257 nds

The eligibility criterion for participants were that they had taught for at least 1 year, and they worked with students with disabilities in an inclusive setting. This form of inclusive work meant that participants may or may not have been working in the role of a teacher, but they could have been an administrator or facilitator who previously worked in an inclusive setting. Working in conjunction with a special education teacher was not an eligibility criterion because students with disabilities who were participating in a fully inclusive program only received services in the areas of language arts and mathematics (English and mathematics were the only courses where co-teaching took place), but they were to receive modifications and accommodations in all other subject areas. Teachers of other subject areas who did not include collaborative teaching were also to receive support and the resources from the special education department necessary to ensure academic success of those exceptional learners in their classrooms.

Those characteristics were critical to this project study and were present to ensure that the participants had the knowledge base about students with disabilities and worked with students with disabilities in an inclusive setting to answer the questions in the interview and questionnaire/attitude scale. The justification for this number of participants was that this number of participants was manageable based on the time frame and resources available for data collection. Although there were only 15 participants with the one-on-one interview, the questions presented during the interview were in-depth and allowed for rich responses based on teacher experiences with inclusion and inclusive practices.

Researcher-Participant Relationship

To establish a researcher-participant working relationship and ensure that participants felt comfortable being open and honest with me and on the attitudinal survey, I conducted an informal informational session. This session allowed me to provide potential participants with an overview of the study and to answer any specific questions that participants had. This time was also used to ensure participants of the procedures that were taken to ensure confidentiality and anonymity. For those teachers in the building whom I never worked with, the informational session was an opportunity for them to interact with me on a less formal level and receive general information. All participants were able to schedule a time to ask additional questions if they preferred to speak to me privately about the project study.

Protection of Participants

The measures to ensure protection of participants began with asking for permission from the principal of the high school. After permission was granted and a sample population was chosen, numbers were assigned to each participant to ensure anonymity. The number was placed on the attitudinal scale, so that the responses remained confidential. During the data collection phase, data were not shared with any individuals outside of the project or other participants. As a means of communicating only with those teachers who wished to participate in the project study, I placed a letter in each teacher's box asking for participants. This letter contained an outline of the project study, purpose, materials needed, and also guaranteed confidentiality. For those teachers who showed an interest and stated that they would like to participate, an informed consent letter was presented to them. At this point in time, even if participants changed their minds and decided that they no longer wished to participate, I respected their wishes. No harm came to any of the participants. The participants were only asked to complete the TATIS, demographics data sheet, and possibly the one-on-one interview, based on the purposeful sampling technique that was used to identify participants who met the criteria needed to complete the qualitative portion of the project study.

The participants were not to put their names on the demographic data sheet or the actual survey. The removal of personal information was another level of anonymity. The survey and demographics data sheet were hand delivered to each participant, and they returned the sheets to my school mailbox. Having teachers return the documents to my mailbox and not directly to me ensured that I did not know how the individual

participants responded. The descriptive data that were used in the project study consisted of student test scores that were analyzed by an outside entity. Data needed were requested through the Research, Evaluation, Assessment and Student Information division in the school district. This information did not contain any student names or information, which could allow them to be individually identified.

Data Collection, Sequential Strategies

The strategy used for data collection in this project study was the sequential explanatory design. Quantitative data were collected first and used as the main source of data. The collection of quantitative data was then followed by the qualitative data. Qualitative data were used further to explore and explain themes that emerged from the quantitative data.

Qualitative Data Collection

Qualitative data were collected from one-on-one interviews with educators who previously worked or were currently working at the time of data collection with students with disabilities in an inclusive setting after the collection of the quantitative data. To gain access to those participants, I communicated with the principal of the high school and asked for permission to communicate with teachers by placing a letter in their mailboxes requesting participants for the project study. The participants needed to complete the interview portion of the project study were teachers at the local southern high school or administrators who had worked in an inclusive setting. In conjunction with requesting permission to reach out to the faculty and solicit participants for the

study, I also asked the principal for permission to use a small office located in the library to conduct the interviews.

Upon receiving permission, a letter was placed in each teacher's box who met the criteria for the project study. Based on those teachers who agreed to participate, an ideal population was randomly chosen. It was from that population that the participants for the interview were reviewed, and 15 participants were purposefully chosen. This sampling took place to ensure that the teachers who had the ability to provide the most information or paint the most vivid picture of inclusive services at this local high school were chosen. The ideal population list included special education and regular education teachers who worked in inclusive settings. This population consisted of a variety of subject areas and years of teaching experience. The interviews ranged in length from 45 to 60 minutes. The interview was specifically designed to include novice and seasoned teachers as well as special education and regular education teachers to ensure that I was able to elaborate on the differences and similarities of both groups of educators. As a result of a limited amount of time, and with only me to transcribe interview discussions by hand, the number of participants was limited to 15 educators.

A letter with all necessary information pertaining to the project study was placed in each teacher's box who met the criteria. The letter provided information about the project study, the purpose, and disclosed how the information would be used. Each participant was asked again if he or she would like to participate in the study. At this point in time, if the participants were willing to participate, we continued to the next phase of the project study. A time was scheduled after school to meet and greet. The

meet and greet was a time of open discussion that was laid back where participants could

come and ask any questions they had or simply get to know me better and develop a

professional relationship before beginning the interviews.

Times were available before and after school to accommodate teachers'

schedules. If the times and location were not suitable for any participant, an alternative

to this space was made available. No teachers requested to meet in a different location.

Those aspects were discussed in the initial meet and greet, where participants had the

opportunity to ask questions about location, confidentiality, anonymity, and any other

concerns they had. This meet and greet was simply a time for the participant to get

comfortable with me and feel that he or she could trust me enough to be open and honest

throughout the data collection process.

The source of data for the interview consisted of questions about inclusion that

were researcher produced. The questions that were presented in the interview did not

directly ask participants if they were for or against inclusion; instead the questions

focused on the experiences teachers had with inclusion, the level of support they

received, whether or not they had a relationship or exposure to students with disabilities

on a personal level or only in the professional setting, the amount of education and/or

professional developments attended on inclusion, as well as their knowledge of the legal

parameters in reference to the educating of students with disabilities.

The system for tracking data gained from the interview sessions included

recording each interview. The interviews were then reviewed and transcribed by hand in

my home. After the data were transcribed, the transcriptions were reviewed and

prominent statements that stood out were highlighted, along with similar statements amongst different participants. This highlighted text was then placed in an Excel document and was reviewed to create categories. Each category received a folder. Another review of the transcription was then done to determine if any other statements fit into those categories. If so, they were added to those folders. The statements in each category were analyzed to create themes. Those themes were used to gain a deeper understanding of the quantitative data collected.

Triangulation

The credibility methods that were incorporated for the qualitative data included the restating of comments and statements made during the interview to ensure that I had an accurate account of what was said during the interview. I transcribed what they said and only what they said and did not alter any information gained in the interview. The direct transcription added to the triangulation of multiple data sources. Dependability methods included the use of an audiotape to record the interview sessions with each participant.

Methodological triangulation was used in this project study to establish validity. The triangulation of data meant that I used not only qualitative but quantitative data as well. The scores obtained from the TATIS, which determined if teachers were in favor of more inclusive practices or traditional forms of instruction delivery, were the main source of data. Although the TATIS was the main source of data collection, the use of different methods of data collection was used to triangulate the data. The findings from the interviews were incorporated as well as student test scores. These data were used to

corroborate or support themes that emerged from the quantitative data. I used the attitude scale as my main source of data, but I used the interviews and secondary data (student test scores) as well to triangulate the data. The quantitative data were collected first, followed by the qualitative data, which were used to elaborate upon the quantitative data collected. The descriptive data were then used as another means of elaborating upon and acted as another method of explaining data collected through the quantitative segment of the project study.

The qualitative data were recorded, transcribed, and coded. The qualitative data were a basic outline or classification system that reflected recurring regularities or patterns. Those patterns became the categories. These categories were analyzed and subcategories were created when necessary. Files for each category were created. All of the coded data were then placed in the necessary category file. Those files included the participant's identification numbers, line numbers, and all necessary excerpts. The categories were named. Data were then organized and presented in a narrative format.

Quantitative Data Collection

The driving force for data collection was the quantitative data. The quantitative data included the completion of the TATIS. The authors of the TATIS were Jess L. Gregory and Lori A. Noto. In an attempt to get approval to use and reproduce the TATIS, I emailed Jess Gregory to request permission to reproduce the instrument. I received correspondence that the email address used was no longer valid. I then bought the TATIS from ETS.org, (Educational Testing Service).

The TATIS was developed in response to the following observations. Those observations were (a) the success of efforts to create inclusive learning communities depends heavily upon the effectiveness of methods for engendering positive teacher attitudes and beliefs toward inclusion, and (b) because of shifts in educational policy, there have been dramatic changes in special education concepts, terminology, and teaching pedagogy in the past 8 years (Cullen & Noto, 2010). The former observation indicated a need for research on how best to assist teachers in the formation of positive attitudes and beliefs toward inclusion. This observation would require instrumentation. This instrument would need to be both reliable and valid in terms of measuring change in the attitudes and beliefs that were essential to the inclusion of students with exceptionalities into the regular education classroom. The observations along with the author's awareness to implement an effective practice for preparing American teachers for their roles as inclusive educators, led to the conclusion that an adequate assessment tool would need certain characteristics, as described by Cullen and Noto (2010, p. 5):

- Sufficiently broad to encompass the three key dimensions of teacher attitudes toward inclusion described in the literature review;
- developed on both in-service and pre-service teachers to assure maximum utility in all phases of professional development;
- developed in this country since attitudes on any subject tend to vary significantly by culture;
- developed in the last eight years to reflect the significant shifts in education that have occurred during this time frame;

- technically adequate in terms of validity and reliability.

Research about previous assessments that would meet these criteria was conducted. It was determined that no such instrument existed. The first stage of the project was the development of the Attitudes of Pre-Service Teachers Toward Inclusion Scale (APTAIS, Cullen & Noto, 2007). The APTAIS consisted of a 14-item questionnaire that was designed to measure the three discrete attitudinal factors described in the review of the literature (i.e., attitudes toward students with disabilities in inclusive settings, beliefs about professional roles, and responsibilities and beliefs about the efficacy of inclusion). This instrument was administered to 217 pre-service teachers and their responses were submitted to principal component analysis. This procedure revealed that three primary factors accounted for 62.86% of total variance. These factors exhibited primary component loadings ranging from .61 to .81 with a mean of .74. Communality scores for the 14 items ranged from .51 to .71 with a mean of .62. These results provided strong support for the construct validity of the instrument.

The internal consistency reliability of the APTAIS was confirmed with alpha correlation coefficients of .84, .82, and .82 for the three components and .88 for the total scale. After the construction and publication of the APTAIS, the author's progressed to the next phase of the project, which consisted of the refinement of the APTAIS into an instrument that would be useful in measuring the attitudes of all teachers, including in-service and pre-service teachers. To achieve this goal, a sample of 35 in-service teachers was surveyed, and the differences in their responses were tested against those of participants in the pre-service sample using a paired *t test*.

The results indicated that there was no item, factor, or total scale significant differences between groups. Because of these results, the authors concluded that the in-service and pre-service teacher samples were essentially the same. This conclusion was strengthened based on the fact that the majority of the pre-service teachers sampled were students in an internship-based master's degree program in education. The program requirements included that they work in public schools at least 30 hours a week while they completed their coursework. As a result, the authors' decided that a combined sample would provide a sound basis for the standardization and technical adequacy of what would be called the TATIS (Cullen & Noto, 2010).

The sample population for the TATIS consisted of 252 respondents with a gender composition of 64% female and 36% male. Educational status consisted of 77% of the respondents holding a bachelor's degree, 14% held master's degrees, and 9% held a degree beyond master's level. Of the participants, 82% had 0-3 years of teaching experience, and 18% had 4 or more years of teaching experience. In this sample, 37% was employed at an elementary school, 19% was employed at middle/intermediate schools, and 30% was employed at the high school level. In regards to experience with students with disabilities, 43% reported having minimal contact, and 30% reported having considerable/extensive contact. To confirm validity, the TATIS was subjected to a principal components analysis. This analysis confirmed its construct validity. The three factors that were revealed accounted for over 58% of the variance. Communalities for the 14 items ranged from .40 to .80 with a mean of .58. When the items were rotated using the Equamax method with Kaiser Normalization, the component loadings ranged

from .584 to .88 with a mean of .72. The items were found to lead on the expected

factors and the communalities were similar to those items of the APTAIS from which the

TATIS was developed. Those results confirmed that the TATIS was aligned with the

three factors identified from the literature and was designed to measure. The results

revealed that the strong factor loadings indicated good content validity. The reliability of

the instrument was assessed using the Cronbach alpha correlation procedure. The

measure was found to have an overall correlation coefficient of .821. The reliability

coefficients confirmed that the TATIS was a reliable instrument for measuring teacher

attitudes toward inclusion of students with mild to moderate disabilities. The alpha

reliability for the three components follows: (a) teacher perceptions of students with mild

to moderate disabilities (POS) .803, (b) beliefs about the efficacy of inclusion (BEI) .863,

and (c) perceptions of professional roles and functions (PRF) .680 (Cullen & Noto,

2010).

The process needed to complete the instruments by participants was that they

simply complete the 14-question Likert-scale survey. Upon the completion of the survey,

the responses were tallied using the provided scoring sheet. Once tallied, the factor and

total scale scores were compared to the normative standards listed in the provided tables

to obtain t-scores and percentile ranks. *T*-scores had a mean of 50 and a standard

deviation of 10. High scores on the TATIS meant that the respondents' attitudes and

beliefs were highly supportive of inclusion. Low scores suggested that the respondents'

attitudes and beliefs were more supportive of traditional service delivery models. The

raw data collected were available via the appendix section in the form of tables that

compared novice teachers to veteran teachers, special education teachers to regular education teachers, and teachers who worked in a collaborative inclusive setting, to teachers who do not. The comparison of different teacher groups (i.e., novice vs veteran, special vs regular education teachers) was determined using a t test.

The *t test* is an analysis of two populations, which was used to determine if there was a difference in the attitudes and perspectives of those different groups of educators on the subject of full inclusion. Only the group that contained teachers who received support versus those who did not receive support were used to answer the guiding question. Additional *t test* was conducted to provide supporting details to the study. An explanation of the data used and how they related to the factors that affected inclusion and inclusive practices was presented in a narrative format. The narrative explained the quantitative data that had been presented in the project study.

The archival data used were student test scores on the EOC assessments in the areas of language arts, mathematics, history, and science for the past 3 years. This data was analyzed using an ANOVA. To gain access to these data, a data request form was submitted to the Office of Research and Student Data in the district. This request included an outline of the project study and the IRB approval number. Once the necessary requirements were fulfilled, this department provided me with all the of the test scores in the necessary subject areas. Those scores were then analyzed and used as an additional layer of information to better understand the effectiveness of inclusion.

Based on the sequential explanatory data collection, the quantitative data were collected first. The data collection consisted of the scores on the TATIS, which

determined if teachers were in favor of inclusive practices or more traditional forms of teaching. Upon the completion of this phase of data collection, the one-on-one interviews were conducted. These data were transcribed by hand and analyzed, and themes were created to gain a deeper understanding of the results from the quantitative data. The archival data were then reviewed and analyzed to add a deeper understanding to the effectiveness of inclusion. These data were received upon the completion and submission of a proposal to the district office of Performance Management and Research. Upon completion of data analysis, the raw data were placed in the appendices.

Integration of Data

The integration of the quantitative and qualitative data took place when the qualitative data were reviewed and presented followed by the presentation of supporting themes that emerged from the qualitative data. A narrative presenting the qualitative data was used, and the results were presented in a way to help the reader understand and/or explain the results of the quantitative data. For example, if based on the quantitative data, one found that the attitudes and perceptions of teachers at this local high school were negative toward inclusion, the qualitative data would then be used to explain why teachers may have this negative attitude and vice versa, or present recurrent themes that were identified as possible reasons for negative or positive attitudes toward inclusive practices. The descriptive data were then used as another layer of information to either support or dispute the fact that attitudes and perceptions affected student performance in a negative or positive way.

Role of the Researcher

The role of the researcher in these data collection process had the potential to become ethically complicated as a result of the data collection-taking place at a school where I worked in an inclusive capacity. In the past, I worked as a special education teacher who worked in an inclusive setting with Algebra I teachers. I was working in the capacity of the special education coordinator at this local Southern high school during the data collection process. As the coordinator, I oversaw the special education department and acted as a liaison between the administrative staff and the special education teachers. In an effort to remove bias, decrease the likelihood of a breach of confidentiality, and to ensure the continuation of a positive professional and personal relationship, those teachers whom I worked with in an inclusive setting did not participate in this study. The exclusion of participants included two Algebra I teachers. Other teachers in the building I knew only on a professional level, and I had not worked with them in an inclusive setting, nor did I have a personal relationship with any other teachers in the building.

As a result of the exclusion of those teachers whom I worked with in an inclusive setting, the information gathered through surveys and interviews provided the maximum protection to the participants. The survey was anonymous. Participants were selected randomly, and they did not consist of teachers I knew on a personal level or whom I worked directly with. The focus of this project study was to produce information that could be used, not only to increase the effectiveness of inclusive classrooms at this local Southern high school, but to create a school wide atmosphere of inclusion. The focus on creating a more inclusive school atmosphere by providing knowledge coupled with the

participant volunteering to participate in the study assisted in the decrease of bias. My experience as a researcher, as well as a professional that worked in this local Southern high school, allowed me to have a firsthand experience of the success and failures of students with disabilities. I had a strong desire to ensure that all students were being treated fairly and are provided the support necessary to reach their full potential. The desire to see that fair treatment happened may have been a hindrance during the data collection process.

Data Analysis and Validation Procedures

The data collection, analysis, and interpretation of data took place during different phases of this project because a sequential explanatory design was used. After the first phase of data collection, demographics data sheet and TATIS were completed. The scores from the TATIS were tallied and compared to the normative standards to determine if teachers were in favor of inclusive practices or more traditional methods of educating students. Data from the one-on-one interviews were transcribed by hand and analyzed to find any emerging themes that explained or expanded upon the information gained as a result of the TATIS. Once all the data were collected and analyzed, I looked at themes that emerged from the qualitative data, as well as the attitudes and perceptions dominant in the quantitative data, and attempted to find connections between the two.

The TATIS was the sole method for collecting quantitative data. The scores for this scale were calculated by tallying the scores. A scoring sheet was provided with the scale to tally the responses. Once tallied, the factor and total scale scores were compared to the normative standards. Those standards were also provided with the scale. The

comparison took place to obtain *t*-scores and percentile ranks. The *t*-scores had a mean

of 50 and a standard deviation of 10. High scores suggested that the participants'

attitudes and beliefs were supportive of inclusion, although low scores suggested that the

participants' attitudes and beliefs were more supportive of traditional instruction and

delivery models.

Methodological triangulation took place to ensure the validity of both the

qualitative and quantitative data. I used the qualitative data to expand upon and find

connections between the quantitative data and the descriptive data used in the project

study. Once data were collected from the survey, the scores were used and compared to

the data collected from the one-on-one interviews. The questions asked in the one-on-

one interviews helped to explain some common trends found in the quantitative data.

Qualitative data were reviewed to find any common themes or trends among the

responses provided from the one-on-one interviews. Those forms of data were then

compared to the descriptive data to determine if teachers who had more positive attitudes

and perceptions of inclusive practices or negative attitudes and perceptions of inclusion

affected student performance on EOC assessments. The comparison assisted in

answering one of the guiding questions: What is the influence of teacher

attitudes/perceptions with the implementation of inclusive services?

Once all of data were collected and individually analyzed, these data were then

combined to compare different groups of educators. The groups were compared using a *t*

test effectively to analyze the quantitative data. Those groups included novice teachers

vs. veteran teachers, special education teachers vs. regular education teachers, and

teachers working in collaborative settings vs. teachers receiving consultation services. Level of education, exposure to people/students with disabilities, and knowledge of laws governing special education were compared to determine if those factors affected the attitudes and perceptions of teachers incorporating inclusive services. The only group comparison used to answer the guiding question consisted of those teachers who received support in their classrooms compared to those teachers who did not. Upon completion of the analysis and comparison, the descriptive data (student EOC assessment scores) were used to compare each of the previously mentioned groups to determine how the attitudes and perceptions affected those environments.

Time Table

The project study began immediately after receiving IRB approval. I began this study by first speaking with the principal and asking permission to speak with the faculty about the project study and provide detailed information on the project study, the data collection instruments, confidentiality, and presentation of results. It was during that meeting that I provided an outline of the study to all faculty, the consent form, and copies of the TATIS. Teachers were then instructed to return the consent form to my mailbox if they were interested in participating. Those participants were also instructed to complete the questionnaire on their own time and to return the completed questionnaire to a locked box that would be placed in the school library. The questionnaires were retrieved and analyzed over a three-week time period. The one-on-one interviews were conducted, transcribed by hand, and then analyzed. The analysis of the interviews was completed over a two-week time period.

Data Analysis Results

Inclusion is defined as the process of including children with special needs into the general education environment and providing their educationally relevant services in this environment (Wisconsin Educational Association Council, 2012). As a result, educators look at inclusion as a way to ensure that children with special needs receive the same level of rigor as all students in the core content areas, and they achieve the scores needed to demonstrate proficiency in those content areas (Barnes & Gaines, 2015).

A mixed methods design was used to gain an understanding of inclusion and to complete this project study. A mixed methods research design is a procedure for collecting, analyzing, and *mixing* both quantitative and qualitative methods in a single study or a series of studies to understand a research problem (Creswell & Plano Clark, 2011). A sequential explanatory design was used in this project study. The quantitative data (TATIS questionnaire) were collected and analyzed first. Upon completion of this analysis, the qualitative data (teacher interviews) were then conducted, and these data were analyzed to find any themes that would defend or refute the findings of the TATIS questionnaire results. These data were analyzed to determine the attitudes and perceptions of teachers in a local Southern high school to determine if those perceptions had an effect on the successful implementation of inclusion and student achievement.

Quantitative Findings

The value and impact of education has been clearly defined as a balance not only of achievement and learning, but also of the attitudinal, social, and personality-based effects on students (Daniel, 2002). For many educators, however, the practice of

inclusion remains clouded in controversy (Cohen, Forgan, Vaughn, & Klinger, 1998).

Teacher attitudes and beliefs toward inclusion have been found to be powerful predictors

of successful efforts to create inclusive learning communities (Gelheiser & Meyers,

1996). Data collected from the TATIS were used to gain a broader perspective of

inclusion and services by looking at teacher perspectives and attitudes on inclusion and

how that affected not only the implementation of inclusion but academic student success

as well.

Quantitative data were collected using the TATIS. This questionnaire, along with

the scoring rubric, is located in Appendices D and E. This questionnaire focused on three

areas: (a) teacher perceptions of students with mild to moderate disabilities (POS), (b)

beliefs about the efficacy of inclusion (BEI), and (c) perceptions of professional roles and

functions (PRF). The data showed that the teacher attitudes toward inclusion were not

greatly in favor of inclusion, but they were not completely against inclusion either. This

finding is evident and can be supported by an average t score of 54.1675. The individual

participant scores are located in Appendix F. The scores from the TATIS were used to

answer the first research question, which asked:

RQ1: What is the difference between teacher attitudes, teacher level of education,

support in the classroom, exposure to students/people with disabilities, and

knowledge of laws governing special education and the level of achievement of

students with disabilities educated in full inclusion classrooms?

$H_0 1$: When compared there is no difference of the amount of teacher

preparation, special education certification, teacher attitudes and perception

with the level of achievement of students with disabilities in full inclusion

classrooms.

H_a1: When compared there is a difference of the amount of teacher

preparation, special education certification, teacher attitudes and perception

with the level of achievement of students with disabilities in full inclusion

classrooms.

Data gained from the TATIS were used to compare different groups to determine

if the factors previously listed had a significant effect on teacher perceptions toward

inclusion. This analysis compared regular education teachers to special education

teachers using a *t test*. The *p* value and statistical significance for the two-tailed *p*

=.0306*, t*(38)=2.2462. It was found that by conventional criteria, this difference was

considered to be statistically significant. The confidence interval of the mean of regular

education minus special education equals -29.892. The 95% confidence interval of this

difference was from -56.832 to -2.952. The standard error of difference equaled 13.308.

Table 1 displays the *t test* results of the perceptions of regular education teachers

compared to the perceptions of special education teachers on inclusion. These data

showed that there was a statistically significant difference between teachers who held a

degree in special education and teachers who held a degree in regular education.

Table 1

Attitudes and Perceptions of Regular Education Teachers Versus Special Education Teachers

Group	*M*	*SD*	*SEM*	*N*
Regular education	48.936	33.276	5.793	33
Special education	78.829	23.911	9.038	7

The next group analyzed was teachers who held a bachelor's degree compared to teachers who held a master's degree. Table 2 shows the results for the *p* value and statistical significance were as listed. The two-tailed *p* value was $p = .1091$, $t(33) = 1.6468$. By conventional criteria, this difference was considered not to be statistically significant. The confidence interval of the mean of bachelor's degree minus master's degree equals -20.084. There was a 95% confidence interval of this difference, which was from -44.897 to 4.729. There was a standard error of difference equaled 12.196. Table 2 displays the *t test* results of the perceptions of teachers holding a bachelors degree compared to the perceptions of teachers holding a masters degree on inclusion. This difference in score was not considered to be statistically significant in terms of the perceptions of teachers who held a bachelor's degree compared to teachers who held a master's degree.

Table 2

Attitudes and Perceptions of Teachers Holding a Bachelors Degree Versus Masters Degree

Group	M	SD	SEM	N
Bachelors degree	39.191	30.348	9.150	11
Masters degree	59.275	34.775	7.098	24

Table 3 presents data, which were comprised of teachers who held a master's

degree compared to teachers who held an education specialist degree. The *p* value and

statistical significance are as follows. The *p* value and statistical significance *p* =.9631,

t(24) = 0.0467. By conventional criteria, this difference was considered to be not

statistically significant. The confidence interval included the mean of education

specialist minus masters degree equaled 1.225. There was a 95% confidence interval of

this difference from -52.905 *to* 55.355. The standard error of difference equaled 26.227.

Table 3 displays the *t test* results of the perceptions of teachers holding a specialist degree

compared to the perceptions of teachers holding a masters degree on inclusion. The

attitudes and perceptions toward inclusion were proven to be similar between teachers

that held a master's degree and teachers who held an education specialist degree.

Table 3

Attitudes and Perceptions of Teachers Holding a Specialist Degree Versus Masters Degree

Group	M	SD	SEM	N
Education specialist	60.500	51.619	36.500	2
Masters degree	59.275	34.775	7.098	24

Table 4 presents an analysis of teachers who held an education specialist degree compared to teachers who held a doctorate including the *p* value and statistical significance for the two tailed $p = .9181$, $t(3) = 0.1117$. By conventional criteria, this difference was considered to be not statistically significant. The confidence interval for the mean of education specialist minus PhD equaled -3.50. There was a 95% confidence interval of this difference from -103.25 to 96.25. The standard error of difference equaled 31.343. Table 4 displays the *t test* results of the perceptions of teachers holding a specialist degree compared to the perceptions of teachers holding a doctorate on inclusion.

Table 4

Attitudes and Perceptions of Teachers Holding a Specialist Degree Versus PhD

Group	*M*	*SD*	*SEM*	*N*
Education specialist	60.50	51.62	36.50	2
PhD	64.00	20.88	12.06	3

This group also proved to not have a statistically significant difference in the attitudes and perceptions toward inclusion. The next group, which involved the comparison of teachers who held a bachelor's degree compared to teachers who held a doctorate, had the largest difference in values. Although this group had a large difference in values, the difference was not statistically significant including the *p* value and statistical significance for the two-tailed $p = .2134$, $t(12) = .13141$. By conventional criteria, this difference was considered to be not statistically significant. The confidence interval for the mean of bachelor's degree minus PhD equaled -24.809. There was a 95% confidence interval of this difference from -65.944 to 16.325. The standard error of difference equaled 18.879. Table 5 displays the *t test* results of the perceptions of teachers holding a Bachelors degree compared to the perceptions of teachers holding a Doctorate degree on inclusion.

Table 5

Attitudes and Perceptions of Teachers Holding a Bachelors Degree Versus PhD

Group	*M*	*SD*	*SEM*	*N*
Bachelors degree	39.191	30.348	9.150	11
PhD	64.000	20.881	12.055	3

The analysis of these data showed that there was not a statistically significant difference in the level of education in relation to the type of degree held by the participant. This factor did not have a significant effect on the attitudes and perceptions toward inclusion. The one area that did have a statistical significance was when I compared teachers who held a degree in special education compared to teachers who held a degree in regular education. This comparison revealed a statistically significant difference. This difference showed that teachers who had specific training in the area of special education and inclusion favored inclusive practices over traditional forms of content delivery compared to teachers who received training in the regular education field.

The next group that was compared based on the score results of the TATIS to determine if this factor had an effect on the attitudes and perceptions of inclusion were teachers who received support in the classroom compared to teachers who did not. This support could be in the form of an inclusion teacher (special education teacher), a special education assistant, or a special education teacher on a consultation basis. The *p* value and statistical significance for the two-tailed was $p = .5731$, $t(38) = 0.5684$. By

conventional criteria, this difference is considered to be not statistically significant. The

confidence interval of the mean of Support minus No Support equaled -8.530. The 95%

confidence interval of this difference was from -38.913 to 21.852. The standard error of

difference equaled 15.008. Table 6 displays the *t test* results of the perceptions of

teachers who received no support from a special education teacher in the classroom

compared to the perceptions of teachers who did receive support from a special education

teacher in the classroom on inclusion.

Table 6

Attitudes and Perceptions of Teachers Receiving Support Versus No Support

Group	*M*	*SD*	*SEM*	*N*
Support	46.917	39.205	16.006	6
No support	53.447	33.014	5.662	34

These data showed that there was no statistically significant difference in the

attitudes and perceptions of teachers who received some type of support in the inclusion

setting and teachers who did not. The next set of data that were analyzed compared

teachers who had exposure or experience with people who have a disability outside of the

classroom setting compared to teachers who did not have any exposure or experience

with dealing with disabilities outside of the classroom setting. The *p* value and statistical

significance showed the two-tailed $p = .0993$, $t(38) = 1.6898$. By conventional criteria,

this difference is considered to be not quite statistically significant. The confidence

interval included the mean of No Exposure minus Exposure equaled -33.298. The 95%

confidence interval of this difference as from -73.190 to 6.593. The standard error of

difference equaled 19.705. Table 7 displays the *t test* results of the perceptions of

teachers having no exposure compared to the perceptions of teachers who had been

previously exposed to a person with a disability on inclusion.

Table 7

Attitudes and Perceptions of Teachers Previously Exposed Versus No Exposure

Group	*M*	*SD*	*SEM*	*N*
Exposure	23.367	22.957	13.254	3
No exposure	56.665	33.288	5.473	37

This data analysis showed that there was not a statistically significant difference

in the attitudes and perceptions of those who had personal relationships or outside

exposure/experience with a person(s) who had a disability compared to those individuals

who had not been exposed to anyone with a disability outside of the classroom. The last

category to be analyzed was comprised of those teachers who had a poor, average, good,

or very good knowledge of the laws governing special education. The data analysis for

the *p* values follows: the *p* value and statistical significance for the two-tailed $p = .2547$,

$t(22) = 1.1695$. By conventional criteria, this difference is considered to be not

statistically significant. The confidence interval was the mean of Poor minus Average

equaled 15.139. The 95% confidence interval of this difference was from -11.707 to

41.985. The standard error of difference equaled 12.945. Table 8 displays the *t test*

results of the perceptions of teachers having poor knowledge of special education laws

compared to the perceptions of teachers having average knowledge of special education

laws.

Table 8

Attitudes and Perceptions of Those Having Poor Knowledge Versus Average Knowledge

Group	*M*	*SD*	*SEM*	*N*
Poor knowledge	58.500	28.027	11.442	6
Average knowledge	43.361	27.291	6.433	18

The *p* values and statistical significance for teachers who had an average level of

knowledge compared to teachers who had a good level of knowledge about special

education laws were two-tailed *p* = .2127, *t*(27) = 1.2763. By conventional criteria, this

difference is considered to be not statistically significant. The confidence interval was

the mean of Average minus Good, which equaled -15.639. There was a 95% confidence

interval of this difference from -40.780 to 9.503. There was a standard error of

difference, which equaled 12.253. Table 9 displays the *t test* results of the perceptions of

teachers with an average knowledge of special education law compared to the perceptions

of teachers having a good knowledge of special education law.

Table 9

Attitudes and Perceptions of Those Having an Average Knowledge v Good Knowledge

Group	*M*	*SD*	*SEM*	*N*
Average knowledge	43.361	27.291	6.433	18
Good knowledge	59.000	38.750	11.684	11

The p value and statistical significance for teachers having a very good level of knowledge compared to teachers who had a good level of knowledge are the two-tailed *p* = .4111, $t(14) = 0.8473$. By conventional criteria, this difference is considered to be not statistically significant. The confidence interval of the mean of Very Good minus Good equaled -18.240. There was a 95% confidence interval of this difference from -64.410 to 27.930. The standard error of difference equaled 21.526. Table 10 displays the *t test* results of the perceptions of teachers having very good knowledge of special education laws compared to the perceptions of teachers having good knowledge of special education laws.

Table 10

Attitudes and Perceptions of Those Having Very Good Knowledge Versus Good Knowledge

Group	*M*	*SD*	*SEM*	*N*
Very good	77.240	42.676	19.085	5
Good	59.000	38.750	11.684	11

The *p* value and statistical significance based on the analysis of teachers who had

an average level of knowledge of special education laws compared to teachers who had a

very good knowledge of special education laws are the two-tailed $p = 0.0412$, $t(21) =$

1.478. By conventional criteria, this difference is considered to be statistically

significant. The confidence interval based on the data consisted of the mean of Average

minus Very Good equaled -33.879. The 95% confidence interval of this difference was

from -66.280 to -1.478. The standard error of difference equaled 15.580. Table 11

displays the *t test* results of the perceptions of teachers having average knowledge of

special education laws compared to the perceptions of teachers having very good

knowledge of special education laws.

Table 11

Attitudes and Perceptions of Those Having Average Knowledge Versus Very Good
Knowledge

Group	*M*	*SD*	*SEM*	*N*
Average	43.361	27.291	6.433	18
Very good	77.240	42.676	19.085	5

The *p* value and statistical significance for teachers who had poor knowledge of special

education laws compared to teachers who had very good knowledge of special education

laws is the two-tailed $p = 0.4034$, $t(9) = 0.8768$. By conventional criteria, this difference

is considered to be not statistically significant. The confidence interval was the mean of

Poor minus Very Good which equaled -18.740. There was a 95% confidence interval of

this difference was from -67.089 to 26.609. The standard error of difference equaled

21.373. Table 12 displays the *t test* results of the perceptions of teachers having poor

knowledge of special education laws compared to the perceptions of teachers having very

good knowledge of special education laws.

Table 12

Attitudes and Perceptions of Those Having Poor Knowledge Versus Very Good
Knowledge

Group	*M*	*SD*	*SEM*	*N*
Poor	58.500	28.027	11.442	6
Very good	77.240	42.676	19.085	5

The *p* value and statistical significance for the data analysis for teachers who had

poor knowledge of special education law compared to teachers that had a good

knowledge of the law for the two-tailed $p = .9782$, $t(15) = 0.0277$. By conventional

criteria, this difference is considered to be not statistically significant. The confidence

interval was the mean of Poor minus Good, which equaled -0.500. There was a 95%

confidence interval of this difference from -38.942 to 37.942. There was a standard error

of difference, which equaled 18.036. Table 13 displays the *t test* results of the

perceptions of teachers having poor knowledge of special education laws compared to the

perceptions of teachers having good knowledge of special education laws.

Table 13

Attitudes and Perceptions of Those Having Poor Knowledge Versus Good Knowledge

Group	M	SD	SEM	N
Poor	58.500	28.027	11.442	6
Good	59.000	38.750	11.684	11

There was no statistically significant difference between teachers who had a poor knowledge of the laws governing special education, and teachers who had an average knowledge of the law. There was no difference between teachers who had a good knowledge of the law and teachers who had a very good knowledge of the law. There was however, a statistically significant difference in the attitudes and perceptions about inclusion of teachers who had an average knowledge of the laws governing special education, and teachers who had a very good knowledge of the laws governing special education.

Overall, the quantitative data collected showed that the factors listed did not have a statistically significant effect on teacher attitudes and perceptions toward inclusion. There were only two of the factors that had a statistically significant difference in attitudes and perceptions. The first was under the category of education discipline. The only group comparison that had a statistically significant difference was the comparison of special education teachers versus regular education teachers. The second factor that proved to have a statistically significant difference fell under the knowledge of laws that govern special education category. In this category, there was a statistically significant

difference between teachers who had an average understanding of the laws that govern

special education and teachers that had a very good understanding of the laws that govern

special education.

Literature stated that there were several factors that affected the successful

implementation of inclusive learning communities. Cullen and Noto (2010) stated that

these factors included effective leadership and administrative support, sufficient funding,

effective implementation systems, availability of evidence-based supportive services,

stakeholder involvement, adequate professional development opportunities for teachers

and other support personnel, and effective communication and problem solving systems.

A couple of those factors were analyzed using the quantitative data. Those factors

included administrative or other evidence based supportive services in terms of an

assistant, inclusion teacher, or consultation. Other factors, including professional

development opportunities, understanding of inclusion, and support, were elaborated

upon with the addition of the qualitative data that were collected and analyzed.

Test scores received from the district office of research and development were

reviewed and analyzed to add dimension to the project study. These data received

consisted of the EOC scores for the years of 2012, 2013, and 2014. These data were used

to accept or refute the null hypothesis presented. The null and alternative hypotheses

stated:

- Ho1: When compared there is no difference of the amount of teacher

  preparation, special education certification, teacher attitudes and perception

  with the level of achievement of students with disabilities in full inclusion

classrooms.

- Ha1: When compared there is a difference of the amount of teacher preparation, special education certification, teacher attitudes and perception with the level of achievement of students with disabilities in full inclusion classrooms.

The analysis of the EOC data consisted of the comparison of students with disabilities and their nondisabled peers. These data were used as descriptive data to add another layer of depth to the project study. The analysis of each EOC assessment through the use of an ANOVA proved that the null hypothesis can be rejected. The *F* value for each assessment was greater than the *F* critical value; therefore, the null hypothesis can be rejected. The ANOVA analyses for each EOC assessment are located below.

2012 EOC assessment analyses. Table 14 displays EOC data, which compared 340 nondisabled peers to 27 students identified as having a disability. The statistical analysis for this assessment included $F(1,365) = 16.66$, $p < 5.49\text{E-}05$.

Table 14

Algebra II

Group	*M*	*SD*	*N*
SWD	16.814	4.666	27
NSWD	22.661	7.336	340

Table 15 displays EOC data for Algebra I, which compared 273 nondisabled

peers to 36 students identified as having a disability. The statistical analysis for this

assessment included $F(1,308)=36.02$, $p < 5.47\text{E-}07$.

Table 15

Algebra I

Group	M	SD	N
SWD	19.756	9.607	36
NSWD	30.897	10.733	273

Table 16 displays EOC data for biology, which compared 303 nondisabled peers

to 34 students identified as having a disability. The statistical analysis included $F(1, 335)$

$= 25.457$, $p < 7.43\text{E-}07$.

Table 16

Biology

Group	M	SD	N
SWD	17.21	5.8	34
NSWD	24.01	7.69	303

Table 17 displays EOC data for English I, which compared 326 nondisabled peers

to 30 students identified as having a disability. The statistical analysis included $F(1,$

$354)=66.13$, $p < 7.18\text{E-}15$.

Table 17

English I

Group	*M*	*SD*	*N*
SWD	20.83	6.63	30
NSWD	34.21	8.81	326

Table 18 displays EOC data for English II, which compared 295 nondisabled peers to 31 students identified as having a disability. The statistical analysis included $F(1,324) = 37.61, p < 2.5\text{E-}09$.

Table 18

English II

Group	*M*	*SD*	*N*
SWD	22.83	6.68	31
NSWD	32.29	8.31	295

Table 19 displays EOC data for U.S. History, which compared 308 nondisabled peers to 27 students identified as having a disability. The statistical analysis included $F(1, 333) = 65.73, p < 9.98\text{E-}15$.

Table 19

U.S. History

Group	*M*	*SD*	*N*
SWD	22.9	8.10	27
NSWD	35.46	7.67	308

2013 EOC assessment analyses. Table 20 displays EOC data for Algebra I, which compared 293 nondisabled peers to 33 students identified as having a disability. The statistical analysis included $F(1, 324) = 32.73$, $p < 2.41E\text{-}08$.

Table 20

Algebra I

Group	*M*	*SD*	*N*
SWD	18.51	6.16	33
NSWD	28.61	9.94	293

Table 21 displays EOC data for Algebra II which compared 210 nondisabled peers to 20 students identified as having a disability. The statistical analysis included F(1, 228) = 17.18, p < 4.77E-05.

Table 21

Algebra II

Group	M	SD	N
SWD	18.85	4.27	20
NSWD	26.66	8.29	210

Table 22 displays EOC data for biology, which compared 425 nondisabled peers to 45 students identified as having a disability. The statistical analysis included $F(1, 468) = 31.16$, $p < 4.03E-08$.

Table 22

Biology

Group	M	SD	N
SWD	19	6.87	20
NSWD	26.53	8.76	2101

Table 23 displays EOC data for English I, which compared 316 nondisabled peers to 40 students identified as having a disability. The statistical analysis included $F(1, 354) = 61.31$, $p < 5.7E-14$.

Table 23

English I

Group	*M*	*SD*	*N*
SWD	24.87	8.39	40
NSWD	35.73	8.20	316

Table 24 displays EOC data for English II, which compared 292 nondisabled peers to 25 students identified as having a disability. The statistical analysis included $F(1, 315) = 24.94$, $p < 9.18E\text{-}07$.

Table 24

English II

Group	*M*	*SD*	*N*
SWD	21.36	7.83	25
NSWD	30.98	9.32	292

Table 25 displays EOC data for English III, which compared 265 nondisabled peers to 21 students identified as having a disability. The statistical analysis included $F(1, 284) = 25.90$, $p < 6.53E\text{-}07$.

Table 25

English III

Group	*M*	*SD*	*N*
SWD	18.66	7.15	25
NSWD	28.49	8.63	292

Table 26 displays EOC data for U.S. History, which compared 306 nondisabled peers to 19 students identified as having a disability. The statistical analysis included $F(1, 323) = 26.71$, $p < 4.13\text{E-}07$.

Table 26

U.S. History

Group	*M*	*SD*	*N*
SWD	27.15	6.23	19
NSWD	35.84	7.15	306

2014 EOC assessment analyses. Table 27 displays EOC data for U.S. History, which compared 287 nondisabled peers to 19 students identified as having a disability. The statistical analysis included $F(1, 304) = 19.61$, $p < 1.32\text{E-}05$.

Table 27

U.S. History

Group	M	SD	N
SWD	27.31	7.91	19
NSWD	35.08	7.37	287

Table 28 displays EOC data for Algebra I, which compared 287 nondisabled peers to 35 students identified as having a disability. The statistical analysis included $F(1, 320) = 35.30$, p $< 7.35E-09$.

Table 28

Algebra I

Group	M	SD	N
SWD	18.28	6.98	35
NSWD	28.16	9.51	287

Table 29 displays EOC data for Algebra II, which compared 265 nondisabled peers to 23 students identified as having a disability. The statistical analysis included $F(1, 286) = 17.05$, $p < 4.77E-05$.

Table 29

Algebra II

Group	M	SD	N
SWD	17.52	7.52	23
NSWD	25.52	9.02	265

Table 30 displays EOC data for biology, which compared 237 nondisabled peers to 21 students identified as having a disability. The statistical analysis included $F(1, 256)$ = 13.50, $p < 0.00029$.

Table 30

Biology

Group	M	SD	N
SWD	19.80	6.29	21
NSWD	27.34	9.20	237

Table 31 displays EOC data for English I, which compared 300 nondisabled peers to 36 students identified as having a disability. The statistical analysis included $F(1, 334)$ = 40.71, $p < 5.87\text{E-}10$.

Table 31

English I

Group	M	SD	N
SWD	25.02	6.72	36
NSWD	33.97	8.09	300

Table 32 displays EOC data for English II, which compared 283 nondisabled peers to 28 students identified as having a disability. The statistical analysis included F (1, 309) = 29.58, $p < 1.09E-07$.

Table 32

English II

Group	M	SD	N
SWD	22.21	8.29	28
NSWD	31.61	8.79	283

Table 33 displays EOC data for English III, which compared 257 nondisabled peers to 29 students identified as having a disability. The statistical analysis included $F(1, 284) = 18.332$, $p < 2.54E-05$.

Table 33

English III

Group	M	SD	N
SWD	20.62	7.82	29
NSWD	28.40	9.10	257

The analysis of this data supported and answered the guiding question: When comparing the amount of teacher preparation, special education certification, teacher attitudes and perception with the level of achievement of students with disabilities in full inclusion classrooms there is a difference. These data were evidence that students with

disabilities who participated in a fully inclusive academic program were not as successful as their nondisabled peers for a time span of at least 3 consecutive years and did not meet the target achievement gap for the subgroup for students with disabilities.

Although students with disabilities often perform below their nondisabled peers, there is an achievement gap set by each district as a target gap for students with disabilities compared to their nondisabled peers. The student population at this school did not meet the target achievement gap and the gap widened each year. During the identified 3-year period, the achievement gap was -34.4. The target gap was -31.5 to -32.2. None of the groups were equally balanced. Tables containing the individual test group comparisons are located in Appendix F. This lack of performance achievement was linked to the lack of information and knowledge about inclusive practices, the attitudes, and perceptions of inclusion, as well as the level of exposure or experience working with students with disabilities.

Qualitative Findings

Qualitative data can provide information about the quality of standardized case records and quantitative survey measures, as well as offer some insight into the meaning of particular fixed responses (Engel & Schutt, 2014). I transcribed the interviews by hand. This transcription consisted of me listening to the interviews and writing down the dialogue between myself and the interviewee. This dialogue was then typed into a Microsoft document. A list of the interview questions can be located in Appendix E. I used member checking during the interview to establish credibility of the transcription. A software program was not used to analyze the transcription data. From the data, six

nodes or categories were created. These categories are listed in Table 34. The following sections describe each category and the themes that were created based on data drawn from the interviews for each category.

Table 34

Coding Node/Categories, Explanations for Each Category and Emerging Themes

Coding nodes	Explanation	Emerging theme
1. Understanding of inclusion	Does the teacher understand what inclusion is? What is their definition of inclusion?	1. Misunderstanding of inclusion
2. Experience with inclusion	What experiences has the interviewee had with inclusion? Have these experiences been positive or negative?	2. Inclusion is difficult; more difficult with lower functioning students
3. Exposure	Has the interviewee been exposed/had a relationship with a person who has a disability outside of school? And if so, how did this affect their inclusive practices?	3. Lack of exposure makes creating an inclusive environment difficult
4. Support	What level or types of support have been received to aid with the implementation of inclusion? Has this support been helpful?	4. More support is needed for successful implementation of inclusion
5. Inclusion strategies	What strategies have been introduced to create a classroom where all students have access to the curriculum?	5. No actual inclusion strategies; use of IEP modifications/accommodations only
6. Professional developments	What professional developments or workshops have been attended on inclusion or collaborative teaching? Were they helpful? Is more training necessary?	6. More workshops and professional developments are needed

Category 1: Understanding of inclusion. The practice of educating students with disabilities in the regular education classroom is a practice known as inclusion. Inclusion has become the service delivery model of choice among state and federal education officials (Angelides, 2008). The first category focused on the individual participants' definition of inclusion. Royster, Reglin, and Losike-Sedimo (2014) stated teachers did not feel they had the understanding and knowledge of inclusion and an acceptable confidence level in implementing inclusion. This lack of understanding may be one factor that caused the implementation of inclusion to not be successful.

Question one of the interview questions asked, "What is your understanding of inclusion?" To this question, several terms and phrases were commonly used. Those terms were least restrictive environment, co-teaching, collaborate, accommodations, modifications and support services. There were statements by over 50% of the participants that stated their understanding of inclusion was an atmosphere where a special education teacher or a special education assistant worked collaboratively with a regular education teacher to service a classroom population that consisted of both students with disabilities and their nondisabled peers. Some of the comments were, "Yes, inclusion is when two teachers plan, co-teach together and share the same classroom" (Teacher A). "My understanding of inclusion where two teachers collaborate on lesson plans and the content subject area to deliver instructions, to not only the regular education population but also the special education population" (Teacher B).

One minor theme that emerged from these statements was that teachers were not clear in their understanding of inclusion. Although many teachers stated that co-teaching

was the major component of inclusion, others stated that the special education teacher was the one responsible for teaching those students with disabilities. Comments stating this minor theme follow:

> My understanding of inclusion is that the inclusion teacher is there to support those students who have IEP's first and foremost and the entire class as necessary. To differentiate the instruction, re-state things in different ways, and make sure the time requirements are being met, etc. (Teacher A)
>
> Well, my understanding of inclusion is that the teacher, the regular education teacher, will have inclusion students in her classroom and to help with the teaching of the skills in the classroom. The special education teacher will come into and assist the teacher to address any types of instructional strategies to help the special needs students to understand a little bit more better than what the regular education teacher is actually doing for the entire class. And the inclusion teacher can help other students that are not special education students, I guess. (Teacher B)

The third minor theme that emerged from the qualitative data were that teachers felt that inclusion was merely allowing students with disabilities to go into the regular education classroom or environment as often as possible. Literature stated that, more often than not, inclusion had been misunderstood and/or abused by both special education and general education teachers. In some instances, teachers still knew little about the goals of inclusion and how to implement it effectively. Unfortunately, one common practice was that, after the student was identified as having a learning disability and the

IEP was written, students were often *included* in the regular classroom with no IEP modifications or accommodations at all (Costley, 2013).

The major theme or finding that was derived from the statements to question one, after the analysis of transcriptions, was that there was a common misunderstanding about inclusion. After further analysis, it was found that this understanding was not only on the part of the regular education teachers, but some of the special education teachers as well.

Category 2: Experience with inclusion. The category, experience with inclusion, focused on the teachers' experiences with the implementation of inclusion. Teachers were given the opportunity to provide stories or their thoughts about previous or current inclusive practices. Urton, Wilbert, and Hemmemannm (2014) stated that current research provided evidence of the positive influence of sense of self-efficacy and personal experience regarding attitudes toward inclusion for children with special educational needs. Question two of the interview questions stated: Tell me about your previous experience(s) with the implementation of inclusion. The terms that were most often used in the answers to this question were accommodations, modifications, and co-teaching. There were three minor themes that emerged from this category: inclusion is easier with an assistant or co-teacher, the success of inclusion is often dependent upon the ability level of the students, and the co-teaching relationship is a very important aspect of inclusion and the regular education teacher is not always receptive to receiving assistance from a special education teacher.

Minor theme one focused on the special education teacher or assistant coming into the regular education classroom and working collaboratively with the regular

education teacher to successfully implement inclusive strategies and to focus on those students with disabilities. Comments to support this minor theme follow. "Some of my experience has been fairly easy. Umm, especially when I have students who have assistants. They help me with the modifications. I have not experience any, umm, serious problems in my twelve years of teaching with modifications" (Teacher A). "Well it has its advantages and disadvantages. Umm, the advantages are you have two teachers working collaboratively to deliver instructions so where one teacher's strengths are, the other teachers may can learn cause that may be that teachers' weakness" (Teacher B).

Minor theme two focused on the ability levels of students with disabilities. Based on statements provided by various teachers, inclusion can be more successful when working with students who have mild disabilities as opposed to students with moderate or severe disabilities. Statements to support this minor theme follow.

I have positive feelings about it. I feel that every child, no matter what deserves a chance to learn in the least restrictive environment. So, I do agree with that, so, umm, I just feel okay about students being in the classroom if they are able to be in the classroom. Now, low functioning, they may not be able to depending on the special education teacher as far as them saying yes or no. (Teacher A)

It's the ones who are on 1st, 2nd, 3rd level that I feel like I can't really help them and meet them especially with large class sizes, and I can't really make sure that the work is differentiated enough for them because the reading barrier prevents them from understanding. (Teacher B)

Minor theme three focused on the co-teaching relationship and how that relationship affected the success of inclusion in the classroom. This relationship was also difficult to build upon if one teacher was not willing to give up control and work collaboratively with other educators and/or paraprofessionals. Based on comments made during the interview sessions, both special education and regular education teachers had difficulty adjusting to a collaborative teaching relationship. Comments to support this theme are as follows.

> I know that inclusion really depends on what the co-teaching relationship is like, and both teachers in the classroom sharing a common goal for students, as well as common expectations of behavior. In my opinion, when inclusion works well, it is because the teachers are both on the same page and when it doesn't work well, it is because the teachers have very different expectations that they don't necessarily find common ground in. (Teacher A)
>
> Inclusion was hard at first. My inclusion, as far as the inclusion teachers coming in, I was not very welcoming. Especially as far as allowing the teacher to give a whole lot of input because I was so used to being the teacher in charge, that it kinda, at the beginning kinda caught me off guard of how to release that control of being in charge. (Teacher B)
>
> Some teachers are more receptive of inclusion versus others because you have to give up some control of our classroom and some teachers you can say are kind of like old school. They believe that there should be one teacher in the classroom

and they might can have an assistant. But some will probably look at you as an

assistant although you have the same degree that they have. (Teacher C)

Upon further analysis of the minor themes, one major theme emerged: inclusion

can be difficult. The two key factors that have caused negative experiences with

inclusion have been based on the co-teaching relationship between regular and special

education teachers and the ability levels of those students with disabilities who are placed

in an inclusive environment.

Category 3: Exposure. Exposure in this project study referred to the amount of

time or the relationships built between the participant and a person with a disability

outside of school. Each participant was asked if he or she had friends or family members

with a disability, or if the only relationship or exposure on a direct basis was based on

classroom interactions with students. The interview questions that directly focused on

exposure/relationships with someone who has a disability follows:

- Have you been exposed to people with disabilities outside of school, or only
  in the classroom?

- Do you feel that more exposure to students with disabilities makes it easier to
  create an inclusive classroom setting?

Responses to these interview questions provided insight as to how more

experience or exposure/relationships with someone who has a disability affects how

teachers interacted with students with disabilities, or how they created an inclusive

atmosphere to ensure that students with disabilities were included. Several of the

participants had no outside relationships or direct exposure or interactions with someone

who had a disability. Although several members (26%) had no experience with someone

who had a disability, 40% of the participants were influenced to go into education

because of the experiences with someone (e.g., family, friend, and classmate) that had a

disability. There was only one theme that emerged from the analysis of the transcription

based on exposure: the lack of exposure can make creating an inclusive atmosphere

difficult. Direct statements to support this theme follow:

> I think so. It would help me. You know, like I stated, this inclusion thing, I was
>
> kind of like taken aback by it. Now, I'm more open to it, so, umm, you know, I
>
> think that as you have more in the classroom, I think you will be able to
>
> understand how to be able to assist them better with the help of the inclusion
>
> teacher and then you would be able to okay, I guess really teach them in a better
>
> way. So I think exposure is good. (Teacher A)

Teacher B said, "I think so. I think it would be more helpful just so you could have more

insight into how they function and what they need, what their needs are."

Only 13% of the participants felt that exposure/relationships with someone who

had a disability would not be a factor in the successful implementation of inclusion or

inclusive services. These participants felt that as educators, it should not matter if a

student had a disability or not. The important factor was that they cared about students as

a whole.

Category 4: Support. Villa (2005) stated that one factor that significantly

affected teachers' attitudes toward inclusion was support. The fourth category focused

on support. The category that focused on support specifically asked questions about the

levels and types of support that the participants were receiving to assist with the implementation of inclusive practices. The interview question that directly addressed the category of support was, "What level/types of support are you receiving, or have you previously received?"

There was only one theme that arose when analyzing the statements that correspond with this category: Teachers felt that they needed more support. Only 22% of the participants received support from the special education department on a consistent (daily) basis. There were statements that alluded to little or no support from the administration, and those teachers who did not receive any support stated they felt the support of the special education department was necessary for successful implementation of inclusion. Teacher A stated, "I would like for someone from the special education department to periodically come into the classroom and assist me with some of my students. I don't have the same one-on-one help; you know from the department like I desire." Teacher B stated, "I think my kappa kids get a lot of support from administration, and I think beyond that, I don't know how much the administration is even aware of the other ones." Teacher C stated, "For the first two years of teaching I received nothing. I just kinda had to deal with it the best I could."

These statements along with others provided statements that supported the theme that teachers would feel more prepared and capable of providing the services necessary for students with disabilities if they had additional support. For teachers who had not been formally trained in the area of special education or worked in an inclusive atmosphere, they were asked if they were provided with workshops or professional

developments by the administration to ensure the success of inclusion in their school; the answer was no.

Category 5: Inclusion strategies. Category five focused on inclusion strategies. This category specifically focused on the educational and/or environmental strategies that were introduced or implemented to create an inclusive classroom environment where all students had access to the curriculum. Haman (2013) stated that successful implementation required that not only were all teachers highly qualified in their content areas but that they are also capable of developing strategies and interventions to meet the needs of a diverse population of students, including students with disabilities. The recurrent terms and phrases that emerged during analysis were modifications, modify assignments, and peer groups. The major theme that emerged from the analysis of participant statements was that teachers may not understand or have not been trained on strategies to use in an inclusive environment. Most of the participants used the modifications and accommodations outlined in a student's IEP. There were 60% of the participants who gave specific strategies. Of that 60%, 100% stated that they used grouping as their sole inclusion strategy. The interview question that focused on inclusion strategies included, "What type of inclusion is/has been implemented in your classroom?"

Participant statements that supported this major theme included the following: I have my class set up into teams. We have five teams in the class. So I put students together, higher achieving, middle achieving and lower achieving students together so they can work as a team and so that the more challenged

students have a built in support system, so that if I can't necessarily help them because I'm helping somebody else, somebody on their team can help them, and that way I'm giving my inclusion students a support system. (Teacher A)

Umm, I pair people up. I might, if a child has problems finishing 50 questions in a timely manner, I will take what they can accomplish in the amount of time that they can. And I will give extra time on tests. I rarely give tests because it's all work based learning. But for instance, they had a certification test. I gave them two days instead of one day to do the test. (Teacher B)

Teacher B also stated, "A few inclusion strategies are read alouds, umm re-reading to students for clarification, preferential seating arrangements for certain students and frequent breaks, especially during assessments with students."

There were only three other strategies mentioned from all of the participant statements: providing handouts to students, large print for the visually impaired students, and whole group instruction. The lack of inclusion strategies was an indicator that teachers were not very knowledgeable about strategies that can be used to create a more inclusive atmosphere.

Category 6: Professional development. Category six focused on professional development. This category specifically focused on what types of professional developments or workshops the participants have attended on inclusion or working with students with disabilities in an inclusive setting. This category also focused on the aspect of collaborative teaching, workshops, or professional developments about collaborative teaching and whether or not these trainings were effective. Shady, Luther, and Richman

(2013) stated that teachers felt they had insufficient training and practical support, and lacked access to information required to enable them to feel confident in implementing inclusive practices. The interview questions that focused on the category of professional development and collaborative teaching follow:

- What professional developments have you attended, to assist with the educating of students with disabilities?
- What is collaborative teaching?
- Have you been given the opportunity to attend any workshops on inclusion or collaborative teaching? And if so, was it helpful?

The major theme that emerged after the analysis of the participant statements was that more professional developments were needed to ensure that teachers were adequately equipped to service students with disabilities in an inclusive setting. Statements to support this theme included, Teacher A stated, "I have taken none because I thought that they were all geared for special education teachers. I didn't know that we were allowed to go to any of those. Are there any available?" Teacher B stated, "No. I have not had any specified training or anything like that."

Of the participants, 50% had never had any training or attended any workshops on working with students with disabilities, or on inclusion. Of the 50% who had attended workshops on inclusion, 70% were special education teachers who had formal training in working with students with disabilities and attended workshops on a regular basis as a mandate for their subject area.

The qualitative data that were analyzed provided information that can be used to not only explain why the overall group scores on the TATIS were not greatly in favor of inclusion, as well as answer the second research question. The second research question asked, "What is the influence of teacher attitudes and perceptions on the implementation of inclusive practices in the regular education classroom?"

The themes from the qualitative data showed that participants did not have an accurate understanding of the goals of inclusion, did not possess a variety of instructional strategies available or in place to create an inclusive environment, nor had many of the participants received the ongoing training necessary effectively to implement inclusion.

As a result of the lack of training and a solid knowledge base on the part of the regular education teachers, and limited support on behalf of the special education teachers, the limited support and lack of training caused the participants to have a negative attitude and/or perception of inclusion. The influence of this attitude and/or mindset and the lack of knowledge accounted for the lack of instructional strategies, implemented to ensure that an inclusive environment had been created. Although the quantitative data showed that not all factors listed had an effect on the attitudes and mindsets of the participants, one of the two factors that did prove to be statistically significant was special education certification and knowledge of laws governing special education. This evidence was directly linked to the emergence of the theme from the qualitative data that participants need more training in the area of inclusion.

Conclusion

The inclusion of all students in regular schools was a result of the international movement towards providing equal opportunities and access for all learners in the same schools whenever possible (Forlin, 2011). With the movement toward more inclusive education, it was deemed necessary that teacher education and preparation undergo a major shift to ensure that educators were prepared for this change. Forlin (2011) stated that effective inclusive practices had been found to depend to a noticeable extent to the sentiments of teachers about the nature of the disability and their perceived roles in supporting students with special education needs.

A mixed methods approach was implemented to determine the attitudes and perceptions of educators at a local Southern high school and how these attitudes affected the implementation of inclusive services in the regular education classroom. The instrument used to determine whether these attitudes and perceptions were in favor of inclusive methods or more traditional methods of service delivery was the TATIS. The three factors that were focused on were (a) teacher perceptions of students with mild to moderate disabilities, (b) beliefs about the efficacy of inclusion, and (c) perceptions of professional roles and functions. A demographics data collection sheet was presented with this scale. The demographics sheet asked questions, such as (a) you are teaching, special education or regular education and subject area; (b) gender; (c) age; (d) highest level of education; (e) level of training on educating students with disabilities;(f) level of interactions with people with disability; (g) level of confidence in teaching students with disabilities, and (h) level of experience teaching a student with disability. The

information gained from this demographics sheet was used to compare different subject areas, the mindset of veteran teachers vs. novice teachers, and the difference in educational trainings (i.e., teachers who hold bachelor's degree compared to teachers who hold a higher degree such as a master's degree or higher), and special education vs. regular education teachers. A comparison of the level of confidence in veteran teachers compared to novice teachers and the level of training on educating students with disabilities took place.

The qualitative data were collected through one-on-one interviews. The one-on-one interviews were recorded and notes and memos were documented during the interviews in the margins of an interview sheet. The interviews were then transcribed by hand and analyzed. Important statements were documented so that codes could be created. Each interview was analyzed and codes noted from each. The interviews as a whole were then analyzed to find any common codes throughout the interviews. Those codes were then used to create categories. The information gained from the one-on-one interviews were used to explain why the attitudes discovered through the TATIS were in favor of the traditional service delivery or inclusive service delivery methods. Statements recorded in the interviews were used to support themes and categories found through the TATIS. Secondary data were used in this project study. Student test scores (for students with disabilities and their nondisabled peers) were presented for students participating in fully inclusive educational programs. This descriptive data helped to paint a more vivid picture of the effectiveness of full inclusion and how the factors previously stated affected this implementation. By using a mixed methods design, an accurate description

of the factors that affected the implementation of inclusive services as well as how those factors positively or negatively affected the implementation of inclusive practices was investigated. The information gained was used to create a more successful inclusive environment that met the needs of all students. The upcoming section of the project study provides information about the specific data gathering procedures as well as the outcome based on the data.

Section 3: The Project

Introduction

The integration of children with disabilities into the mainstream or inclusive classrooms has been a main topic of debate for educational professionals for the past 25 years (Starczewska, Hodkinson, & Adams, 2012). Many teachers who work in an inclusive capacity encounter challenges when they are faced with supporting group of students with a diverse ability level. As school districts begin implementing inclusion plans, the diversity in many classrooms has increased to encompass children with a variety of disabilities. Based on the findings from the research, teachers in a local Southern high school do not have a thorough understanding of inclusion. The data analysis also revealed that teachers in this local Southern high school had a slightly negative attitude and/or perception of inclusion. These factors may have contributed to students with disabilities having less success than their nondisabled peers in the areas of English I, II, III, Algebra I, II, U.S. History, and Biology based on EOC assessments.

As a result of the findings, this study will lead to a professional development. This professional development will focus on inclusion and inclusive classroom practices. Royster et al. (2014) stated that teachers in both regular education and special education needed professional development to master effective instructional and interpersonal skills in the delivery of classroom-based instruction for students with disabilities. The components of this professional development include whole group presentations that focus on inclusion, forms of inclusion (i.e., coteaching/consultation), inclusive classroom strategies, and differentiation.

The adult learning theory supported the implementation of professional development to create a solid knowledge base on the topic of inclusion and increase the likelihood that educators will begin to incorporate more inclusive strategies into their classroom practices. In 1984, Knowles developed the andragogical model of adult learning and education (Royster et al., 2014). Andragogy posits that adult learning is reliant on several factors, which include the prior experiences of adults, the level of knowledge and understanding, and attitudes and beliefs (Weber-Mayrer, Piasta, & Yeager Pelatti, 2015). Knowles's initial framework of andragogy was based on the belief that the presented content and material must be learner-centered. Weber-Mayrer et al. (2015) stated that the andragogical framework of adult learning was one that urged the presenters and creators of professional development events to understand the unique characteristics of individual learners as well as their experiences and incorporate them into the activities that will take place during the professional development as much as possible.

Purpose

Nishimura (2014) stated that the purpose of professional development was to increase the levels of knowledge to sustain and support new practices until that practice became embedded into the teachers' and schools' daily practice. The purpose of this training is to ensure that teachers have an understanding of how to adapt the curriculum to meet the needs of a diverse group of learners in inclusive classrooms. The target audience will include teachers, school facilitators, learning coaches, and school administrators. Professional developments can prove to be effective when there is a

variety of participants. The content of the professional development will focus on

curriculum needs of all students and include research-based practices. It will be directly

linked to the district and school-wide goals. I propose that the professional development

training and evaluation be extended over a period of time to allow for active learning and

practice. Follow-up activities that provide coaching and feedback opportunities as well

as additional development activities should be included in professional developments

with an inclusion focus (Lee, 2013).

The purpose of this professional development is to ensure that educators and other

faculty and staff members have a solid foundation and thorough understanding of

inclusion and inclusive practices. This foundation is necessary to ensure that all students

are able to access the general education curriculum in the regular education classroom

and have an equal opportunity to achieve academic success. This series of three 5-hour

professional development sessions, which will be presented during teacher in-service

week, will make certain that all teachers are equipped with the resources necessary to

ensure all students have access the general education curriculum.

This series of workshops will not only include dissemination of information but

also hands-on activities that participants can engage in and work cooperatively with other

professionals to gain a better understanding of inclusion. This professional development

will take place during teacher in-service, which will occur the week prior to the start date

of school. Follow-up activities and discussions will take place monthly during team-wide

PLC meetings. At the conclusion of the professional development, participants will be

asked to complete an evaluation of the series of workshops and share information on

whether or not the series was useful and practical and regarding whether they could implement and use the strategies presented in their classrooms.

These workshops will provide an in-depth look into inclusion, explain what it is, provide tools and resources to assist with differentiation, and provide information about the various forms of inclusion. The workshops will address six key areas of inclusion: (a) inclusion defined, (b) planning for individual student needs in the inclusive classrooms, (c) systematic instruction in inclusion classrooms, (d) peer relationships and support, (e) collaborative inclusive service delivery, and (f) evaluation. As a result of completing the inclusion professional development, the learning outcomes or tasks that teachers and additional stakeholders will be able to complete include the learner being able to:

- define inclusion based on guidelines as established by IDEA, which will be informally measured by the completion of a KWL chart at the conclusion of the professional development;

- work collaboratively to gain a concrete foundation of inclusion and inclusive practices, which will be informally assessed by the completion of a KWL chart;

- adequately define and provide examples of differentiated instruction, which will be assessed by the response to a handout in which the participant will be provided information on a traditional classroom setting and they will determine how to differentiate that setting and/or curriculum;

- assess the general education classroom environment and curriculum to determine the level of accessibility to all learners that will be assessed by the

analysis of a sample curriculum and classroom environment, which the

participants must alter to ensure accessibility to all learners;

- assess the present level of performance for students and determine what

   resources, accommodations, and modifications are necessary to achieve

   academic success, which will be assessed by the completion of a needs

   assessment; and

- effectively communicate and work collaboratively with general education

   teachers, special education teachers, and community stakeholders, which will

   be assessed by the completion of a lesson plan where a variety of stakeholders

   are involved, such as a special education and regular education teacher.

A detailed, hour-by-hour outline of the daily events and activities is located in Appendix

A.

Rationale

Based on the data analysis, teachers in this local Southern high school not only

have an overall slightly negative attitude toward inclusion, but they also do not have a

strong understanding of the basics of inclusion. This fact may have played a role in the

lack of achievement of students with disabilities who participate in a fully inclusive

educational program compared to their nondisabled peers. As a result, the project chosen

was a professional development. The proposed professional development will provide

information necessary to build a solid knowledge base on inclusion and will provide

resources that can be implemented into the classroom.

Review of Literature

Philpott et al. (2010) stated that there has been much concern about the level of preparedness and readiness of teachers, new and old, facing the challenges of contemporary classrooms. Many teachers do not feel prepared to instruct students of diverse cultural backgrounds or abilities (Philpott et al., 2010). Costley (2013) stated that being prepared gives teachers a sense of ownership over their teaching and a real commitment to their acquired beliefs about inclusion and inclusive practices. Professional development is crucial in providing continual updates on effective teaching practices, tools and technology, and providing support in areas of need or interest. The National Early Childhood Technical Assistance Center (2011) reported that professional developments were useful when attempting to prepare all educators to provide and promote quality inclusive settings for all students. The professional development will comprise 3 days of training to focus on the various aspects of inclusion. Royster et al. (2014) stated that research revealed that effective professional development provided regular education teachers with knowledge and skills in how effectively to communicate for the purpose of solving classroom problems and providing continuity across instructional settings.

Teachers involved in the instruction of special needs students must embrace human diversity as an expected and valued characteristic among students (Lee, 2013). To achieve this goal, a growing number of schools are implementing inclusion programs in which students with disabilities are placed in the general classroom and participate in activities with their nondisabled peers. There are many documented cases in the

literature that present effective inclusion programs. Inclusion has proved to be successful

when it concentrates on several key factors: (a) ongoing professional development for

regular and special education teachers; (b) teachers knowledgeable about special

education terms, laws, and issues; (c) positive teacher attitudes toward inclusion (d)

effective collaborations between special and regular educators; (e) individualized support

for students with disabilities; and (f) instruction that recognizes each student's

chronological age, personal preferences, and individual potential structured around a

curriculum to accommodate learning styles of a diverse student population (Royster et al.,

2014). One method that can be used to ensure that students have access to high-quality

educational experiences in the regular classroom setting is to use professional

developments to promote the transition to high quality lessons and strategies being

implemented in the classroom (Weber-Mayrer et al., 2015).

Professional development opportunities and workshops/trainings are critical when

attempting to ensure success in any profession. These workshops help to increase

efficiency and the ability to compete in a global economy (Walker, 2010). Hunzicker

(2011) related the ineffectiveness of workshops to the great amount of information

disseminated during the presentation with little time for real classroom application.

Traditional approaches to workshops and professional developments are no longer

effective because they simply disseminate information and do not adequately prepare

teachers for the challenges they may encounter throughout their career when faced with a

wide variety of students and ability levels (Schleicher, 2011). Starczewska et al. (2012)

stated that mainstream teachers received little to no mandatory training on disabilities and

possible issues that may arise as a result of those disabilities. In many countries, to ensure that teachers are adequately prepared, intensive professional developments have been required (Forlin & Sin, 2010).

Gorman and Drudy (2010) stated that of school factors, teachers are the most important factor regarding student achievement. Teacher effectiveness is directly linked to teacher preparation. Therefore, teachers must be involved in professional preparation and development to create an effective inclusion classroom (Gorman & Drudy, 2010). The legislature has attempted to improve professional developments; in the process, they addressed the role of the educator and the idea that professional training and/or development is provided and necessary for professional growth (Lee, 2013).

In 2001 President George W. Bush signed into law NCLB. This act was one that reauthorized the ESEA of 1965. As a result of NCLB, the term professional development was one that encompassed activities and resources that made positive contributions to teachers' content knowledge based on the subjects they taught (Walker, 2010). Walker also stated that professional developments were an integral part of schools and/or school systems and their efforts for academic improvement. The knowledge gained from professional developments is not limited to educators, but also to administrators and school wide stakeholders. Professional developments have the ability to provide professional growth regarding a knowledge base to provide the tools necessary successfully to educate all students, as well as provide students an opportunity to meet content and achievement standards; are high-quality, sustained, intensive, and classroom-

focused; are not short, one-day events; and support the recruitment and hiring of highly qualified teachers (NCLB, section 910 (34); Walker, 2010).

McMaster (2012) stated that the aspiration or goal of Special Education 2000 was to bring about or create a world-class inclusive education system. There were programs and initiatives in place to ensure that effective professional developments on inclusion were available for educators to participate in. The National Staff Development Council, which was later named Leaning Forward, is one such group. This council has actively investigated professional developments and has driven the creation of effective professional development opportunities for educators. "Effective professional development is not about meeting the requirements of a list, it is about carefully considering and planning according to desired outcomes and standards that will contribute to success" (Lee, 2013, p. 24).

Leaning Forward (2011) reported that the standards for staff development were originally written as 27 standards and then revised to 12 standards for teacher professional development. In 2011, NSDC made a second and final revision of the 12 standards to 7 standards for professional learning (Learning Forward, 2011). Learning Forward depended upon a professional support system of other professional educational associations and organizations to create and revise the seven standards for professional developments. Those standards are learning communities, leadership, resources, data, learning designs, implementation, and outcomes (Learning Forward, 2011).

Warren and Miller (2013) stated that the effectiveness of professional development was dependent upon the interactions that occurred between the

learner/participant, the context, and what was learned. Darling-Hammond and Richardson (2009) researched and reported on several studies that identified and prioritized the professional needs of educators regarding professional developments. They began with content, classroom management, teaching students with disabilities, and finally technology.

Other researchers searched for information about the importance of professional developments conducted interviews. Jenkins and Yoshimura (2010) conducted interviews of inclusive classroom teachers and reported that they found little evidence that those teachers were provided with information and/or resources concerning students with disabilities or practices that could be effective in inclusive classroom settings. Those limitations on resources and materials called for professional training that was directly related to the increase of teachers' abilities and confidence to teach and support all students in an inclusive classroom setting, differentiate instruction, and participate in professional collaboration (Lee, 2013).

Many general education teachers do not have confidence in their abilities to teach a diverse group of students, which includes students with disabilities, because of a lack of training and preparation on how to support the needs of students with disabilities in the general education classroom (Jenkins & Yoshimura, 2010). "Effectively including students in general education requires general education teachers to have a basic knowledge about special education and the skills to teach students with disabilities" (Jenkins & Yoshimura, 2010, p. 2).

Nishumura (2014) stated that the transition to inclusion would take the efforts of several school stakeholders, including teachers, administrators, and other staff members, to ensure they have the skills necessary to implement and support inclusion and inclusive practices. Corkum, Bryson, Smith, Griffen, and Hume (2014) stated that educators' beliefs regarding the efficacy of inclusion-based curricula correlated positively with their level of training and/or professional development. Those teachers who have more training demonstrated more positive attitudes toward inclusive based strategies.

Self-efficacy is stated to be a person's mindset concerning his or her abilities to carry out and perform certain tasks (Dodge-Quick, 2011). The mindset of many general education teachers regarding their abilities successfully to educate students with disabilities varies based on several factors: training/professional developments, experience, knowledge, and the school culture. Dodge-Quick (2011) stated that many regular education teachers consistently had a negative mindset and did not feel adequately prepared successfully to implement inclusive practices or to ensure that all students, even those with disabilities, had the access and support necessary to be successful academically.

Many variables contribute to positive educational outcomes for students (Gorman, 2010). One such variable is teacher preparation. To ensure that educators are prepared to work with a diverse group of students, they must participate in professional developments that are grounded in research-based practices. In an effort to ensure that educators are adequately prepared with the resources and knowledge, as well as feel more confident in their abilities to work in an inclusive capacity, teachers must have some form of ongoing

training and/or professional development (Schleicher, 2011). Male (2011) stated that it was generally accepted that teacher attitudes and expectation impacted significantly upon students' educational outcomes. Therefore, it is critical to the creation of a positive mindset and school culture that is geared toward inclusion, to provide professional developments that will not only provide a knowledge base for teachers, but also ensure that they have a better attitude toward inclusive practices.

In this project study, several factors will be addressed during the interview portion of the data collection, including experience with students with disabilities, knowledge of the laws governing special education, type of inclusion that was implemented; whether it was co-teaching or on a consultation basis, and level of support. Casale (2011) stated that with limited foundational knowledge of special education legislation and limited educational strategies to address the needs of those students with disabilities, general education teachers need supplementary assistance and access to resources that will focus on inclusion. The access to materials and resources about inclusion can be obtained through professional developments and continued support from administrators (Casale, 2011). A great deal of research in the literature suggests there are many benefits of effective professional development and coaching (Hadar & Brody, 2010).

Special education delivery is a service, not a place; as a result, the types of inclusive programs and extent to which students are included and exposed to the general curriculum varies from school to school. Thus, professional developments should not be general, but should be directly linked to the objectives, goals, and culture of the school (Starnes, 2011). Implications for Inclusive Schooling (2014) reported that effective

professional development was not about working in isolation, but facilitated and empowered teachers to work collaboratively with their colleagues to create communities of practice that were centered on a common goal.

Lee (2013) stated that we could not prepare educators for every disability and every possible scenario based on that disability because that would be impossible. To ensure that they are as prepared as possible, professional developments are vital. This implementation of professional developments is an opportunity for educators to act as lifelong learners and increase their knowledge base as well as allow them access to instructional resources and strategies that could be used based on their deficit areas regarding knowledge and information, the strengths and weaknesses of their students, and what research has highlighted as best practices for use in inclusive classroom settings.

The transition from exclusion and separate placements for students with disabilities to a more inclusive classroom and school culture has gradually happened during the past couple of decades. This transition has taken place as a result of the creation of laws and initiatives by advocates for more inclusive practices and for students with disabilities to have access to the general education curriculum. Lupart, Irvine, Loreman, and McGhie-Richmond (2010) stated that inclusion meant that all students, regardless of their differences, have their educational needs met in the general education classroom and school context. To ensure that this transition was successful, educators, administrators and additional school stakeholders had to have support. This support is provided by implementing professional developments and workshops that focused on inclusion (Lee, 2013).

The search for information pertaining to the importance and success of professional developments as a means of ensuring an increase in the use of inclusive practices in the regular education classroom setting entailed the use of the ERIC database. Search terms used were *professional development, professional development and inclusion, inclusive classroom practices, teacher attitudes towards inclusion* and *inclusion workshops.*

Project Description

The description for the professional development includes a three-day series of workshops for teacher, administrators, instructional facilitators, PLC coach, and other school stakeholders. The needed resources that I cannot provide personally are a facility and the use of a Promethean board. Although this series of workshops can greatly assist in the development of more positive attitudes and perceptions about inclusion, there are also some barriers.

Barriers to Professional Development

Although there are many advantages to professional developments, there are also disadvantages as well. Schlauch (2013) stated that colleges and universities that educate and instruct students who are going into the field of education have the task of ensuring that these students understand the importance of continued training to ensure that all students are afforded a quality education in the least restrictive environment. This job is not limited to higher education but to the public school systems as well. These organizations should also promote a continuance of education through professional development opportunities.

Many states do not mandate that teachers attend professional developments on

inclusion. The amount of required professional development as well as the types of

professional development vary between school districts and states. Schleicher (2011)

explained that teachers stated that there was not much of an incentive to attend or

participate in professional developments that focused on inclusion and inclusive efforts.

Administrators and school stakeholders must find a way to encourage educators to gain a

better understanding of inclusion because more and more students with disabilities are

placed in regular education classrooms. Strategies that prove effective in one school

might not be applicable in another based on unique needs and beliefs. An additional

factor is that many teachers are accustomed to working alone, and this approach to

instruction places great limitations on their knowledge, experience, and implementation

of best practices (Guskey, 2009).

Woodcock, Hemmings, and Kay (2012) stated that many single modules or

workshops on inclusion have limited or little change in the attitudes and perceptions of

teachers toward inclusion. Nishimura (2014) stated that professional developments,

when only used or exposed to once, may not be enough to sustain educators or resonate

enough with educators to cause them to use and implement more inclusive classroom

practices.

Lyndon and King (2009) stated that the time it takes to implement professional

development, the need for support from school administration, and cost are barriers to

continuous professional development. An additional barrier is a lack of teacher

engagement. Hadar and Brody (2010) stated that professional development programs are not effective if teachers are not actually engaged in the workshop.

School culture is another limitation that could hinder the effectiveness of professional developments. Lupart et al. (2010) stated that striving for authentic inclusion through the day-to-day tensions was difficult for administrators, but it was needed when working to create an inclusive school environment. The needs of educators and students can vary greatly, but those needs have the ability to influence the strengths and weaknesses of a school. This factor should guide administrative decisions regarding professional developments on inclusion.

Barriers that exist to the successful implementation of effective professional developments that have the ability to reform current dated practices when educating students with disabilities must be recognized for academic institutions and public education as a whole to progress to a state that guarantees all students are equally able to access the general curriculum and achieve academic success. For this barrier to be broken, there must be stronger affiliations between public school systems and universities. There must also be more collaboration in school buildings. This collaboration may allow for greater support of educators on their journey to implementing inclusive classroom strategies (Guskey, 2009).

Actions can take place on the administrative level to support inclusion workshops. For example, the school's calendar, which should indicate important events, should include professional developments as well as a designated time to conduct those professional developments. Administrators should not stop there; they must consider the

current culture of the school, and what culture and climate they wish to create and plan

for professional developments based on those factors. Additional incentives that may

come in the form of support or teacher recognition for those teachers who have chosen to

participate should be a consideration (Lyndon & King, 2009; Schleicher, 2011).

Professional development and educator enrichment opportunities that are

provided during regular teacher work hours and during the actual work calendar may

offer the ability to build mastery and explicit experiences that are based on immediate

needs. Those educational improvements may have the influence to bring about change

when teachers and students have the option to take part in learning and professional

development opportunities that take place throughout the entire calendar year (Walker,

2010).

Professional learning communities are one way to incorporate yearlong learning

opportunities. Professional learning communities have the ability to influence teacher

behavior and affect their mindset and attitudes by presenting opportunities for

collaboration, professional growth, and reflection during real time implementation of

inclusive classroom strategies into their current practices and are proving to be a useful

form of professional development (Darling Hammond & Richardson, 2009).

Proposal Implementation

The proposal for implementation will take place in two forms. The first is in

written form to the school administration. I will formally request time during teacher in-

service week to present to the faculty about inclusion. If I am unable to have three days

during this time, I will then request a formal meeting where we can discuss alternatives to

this plan. Such alternatives include monthly workshops with the PLC Coach and those teachers who have students with disabilities in their classrooms. The timetable for submitting this proposal is by May 21st. This day was previously scheduled for all to submit all requests of faculty and staff that wish to present during in-service week. This request must be submitted in writing, outline the presentation, and explain why one thinks it is necessary and/or beneficial to the faculty and staff as a whole.

The second form of implementation will take place in November. The Division of Exceptional Children has a district wide, three-day conference each November. These conferences focus on a variety of areas pertaining to special education. Participants who wish to present at this 3-day conference must complete a proposal and provide a detailed outline of the presentation to the Division of Exceptional Children, and they will determine if one is allowed to present or not.

No students will be involved in this workshop. There will, however, be a review of teacher data based on student test scores. Each individual teacher receives student scores based on the formative assessments taken during the school year. Teachers will have the opportunity to review their individual data and determine how the students with disabilities compared to their nondisabled peers, identify the areas in which all students performed poorly, the areas in which students with disabilities performed poorly, and collaborate with colleagues to determine how more inclusive classroom strategies may assist in increasing the level of achievement for all students in those classrooms. This professional development is intended to be a group effort on the part of the administration, classroom teachers, learning coaches, and school facilitators to review the

goals for the school, student data, and strategies that can be implemented to not only achieve those school wide goals, but create a more inclusive atmosphere where student achievement is expected of all students.

The roles of the teachers, administration, and other school stakeholders will be that of the learner. They will participate in these series of professional developments to gain a better understanding of inclusion and inclusive practices. All information and resources directly provided will come from me. Additional information and resources will be added as a result of collaborative activities in the professional development. All participants will work in an academic setting; therefore, they may have additional resources to add to these series of professional developments and will be welcomed during that time. I will assume the responsibility of providing all of the necessary information, handouts, data presentation, and other materials during the professional development. I will request that a promethean board and space are available to accommodate a large number of participants. As a result, the provided space and technology will be the responsibility of the school.

Evaluation

Sallee (2010) stated that there is a direct link between professional developments activities and teaching practices. Those schools that were distinguished held professional development activities, which included an analysis of instructional practices, used data, emphasized collaboration, used similar instructional strategies, and allowed for evaluations of the activities by participants. As a result, this professional development will have an evaluation that is comprised of several components at the end of this series

of workshops to determine if teachers feel that the workshop as a whole, and the resources and strategies presented are helpful in bringing about a better understanding of inclusion, inclusive practices, students with disabilities, and differentiated instruction.

The evaluation process for this professional development will be comprised of several elements. Some of those elements will continue on after the professional development. The first evaluation procedure will include the completion of a K-W-L chart at the end of each day. The participants will notate throughout the presentation the things they know, the aspects of inclusion they want to know, and what they have learned. I will be able to gauge whether or not participants are gaining any new strategies or gaining new information informally through this method. Participants will also be asked to complete activities that focus on accessibility and differentiated instruction.

All participants will complete a survey at the end of the 3-day period. This evaluation will be available for both the teacher in-service before the start of school as well as the special education conference. The participants will leave this survey for me to determine if the professional development did provide information needed to create more successful inclusive classroom settings. The final component to the evaluation will be a review of student formative assessment data at the beginning, middle, and end of the school year. All students are required to participate in a universal screener, the MAP assessment, which determines areas of strength and weakness. Student data will be analyzed and discussed in monthly PLC meetings where teachers and the PLC Coach will be able to determine and discuss the strategies being implemented to ensure that all students are able to access the general curriculum and whether or not those students with

disabilities are making any gains, or are performing closer to the ability level of their nondisabled peers. A more in-depth discussion will then take place about what strategies have worked and which ones have not, as well as why these strategies have or have not worked, and if they are in fact being implemented with fidelity.

The use of formative assessment data, which will include the analysis of student data on beginning of the year, mid-year, and end of year assessments, will provide data necessary to link the success of professional developments, implementation of new inclusive practices, progress of teacher self-efficacy, and the academic achievement of students (Casale, 2011). In an effort to ensure the effectiveness of many facets of the professional development, a series of activities will be incorporated specifically to assess the six learning objectives. Those activities include the completion of a K-W-L chart, identification of differentiated strategies when provided a scenario outlining a traditional classroom setting or curriculum, the collaborative creation of a lesson plan, and a needs assessment sheet.

The key stakeholders who will participate in this evaluation process are the classroom teachers and members of the administrative team. Individual teachers will have the opportunity to review data several times throughout the school year in monthly PLCs to determine if strategies that are being implemented are successful or not. It is the goal of the professional development to provide such strategies that can be used in any subject. It is also the goal of the professional development and evaluation process to determine if teachers are differentiating instruction for all learning levels; if so, what strategies are being used.

Project Implications

There has been much concern over the readiness of educators to face the challenges that emerge as a result of contemporary classrooms that support students with disabilities. Classroom teachers are taking on more responsibility and accountability to meet the needs of a widely diverse group of students, but many of them do not feel prepared to educate students with varying disabilities (Philpott et al., 2010).

School stakeholders must understand that providing professional developments about inclusion and encouraging a positive attitude and/or perception of inclusion and inclusive practices will not happen in a professional development by itself (Forlin & Sin, 2010). Professional development can, however, be effective in bringing about the change necessary if it is supported through systematic changes in curriculum, pedagogy, assessment, and an overall educational reform. Ongoing and consistent professional developments are, however, an essential component of the move toward fully inclusive classrooms, schools, and ultimately public education (Forlin & Sin, 2010).

There are many implications for social change as a result of this project study. The focus of this project study was to investigate the effectiveness of inclusion. Data allowed the emergence of the fact that many educators who do not have a special education background do not fully understand inclusion or the critical role they play in educating students with disabilities. As a result, the implementation of professional developments has the ability to bring about a positive social change through the presentation of resources and strategies, collaboration and co-teaching skills between the regular education and special education teachers and an overall stronger foundation in

relation to the knowledge base that all school stakeholders will possess on the topic of inclusion. This change has the ability to create a more positive mindset and perception of inclusion, inclusive practices, and assist with the transition into a more contemporary academic culture. The first implication for social change includes yearlong workshops or professional developments that focus on inclusive classroom strategies and how to effectively educate students with disabilities in the regular education classroom. The introduction of ongoing professional developments has the ability to increase self-efficacy and professional learning among professionals and ultimately increase success for all students.

By establishing and encouraging professional developments for not only educators, but members of the administrative staff as well, this form of training can assist in the alignment of classroom practices, school culture, and organizational goals. The results of this project study could stimulate an increase in special education courses that are taught or special education content that is presented to pre-service teachers. As our society is transitioning to become more inclusive in our educational institutions, educators must have the foundation and knowledge necessary to service a wide variety of students. This project study brought to light the importance of educators having a knowledge base of effective inclusive practices not only in this local Southern high school, but also for public education in general.

The IDEA calls for students with disabilities across the United States to have access to the general education curriculum and to be reasonably included in general education environments with their peers. Costley (2013) stated that one of the most

important aspects of an effective inclusion program was the positive attitudes of the teachers. It is also important to understand how teachers perceive inclusion and inclusion practices and gain an understanding of whether or not they have the knowledge necessary to implement inclusive practices.

Costley (2013) also provided information based on a personal interview that, more common than not, inclusion has been misunderstood and/or abused by school districts, special education teachers, counselors, and teachers. In some instances, teachers, principals, and special education teachers still know little about the philosophy/goals of inclusion and how to implement and maintain the practice. Unfortunately, one common practice is that after a student is identified with a disability and the IEP is written, that student is often included in the regular classroom with no IEP modifications at all. The teacher is left to struggle grasping for modifications with no additional support system, which is the true intention of inclusion (J. Paxton, personal communication, September 1, 2011). As a result of this issue, which was also identified in this local Southern high school, a series of professional developments will be implemented to ensure that teachers have a solid knowledge base effectively to implement inclusion.

These series of workshops will consist of 3 days of training, which will involve dissemination of information, collaborative groups, and team building activities for co-teaching pairs. Teachers will have the opportunity to gain knowledge about inclusion, create sample lesson plans, and learn how to differentiate based on different student

ability levels. There are six learning objectives that are linked to the series of professional developments, which follow:

- Define inclusion based on guidelines as established by IDEA by the end of the professional development, which will be informally measured by the completion of a KWL chart at the conclusion of the professional development.

- Work collaboratively to gain a concrete foundation of inclusion and inclusive practices, which will be informally assessed by the completion of a KWL chart.

- Define and provide examples of differentiated instruction, which will be assessed by the response to a handout where the participant will be provided information on a traditional classroom setting and they will determine how to differentiate that setting and/or curriculum.

- Apply strategies for assessing the general education classroom environment and curriculum to determine the level of accessibility to all learners, which will be assessed by the analysis of a sample curriculum and classroom environment that the participant must alter to ensure accessibility to all learners.

- Determine the present level of performance for students and determine what resources, accommodations, and modifications are necessary to achieve academic success, which will be assessed by the completion of a needs assessment.

- Communicate effectively and work collaboratively with general education

teachers, special education teachers, and community stakeholders, which will

be assessed by the completion of a lesson plan where a variety of stakeholders

are involved, such as a special education and regular education teacher.

These objectives will ensure that teachers are adequately equipped with the tools

necessary to drive effective instruction and ensure that the classroom environment and

curriculum are accessible to all students.

Section 4: Reflections and Conclusions

Project Strengths and Limitations

Inclusion is a concept that teachers generally accept, but there are many concerns about the implementation of inclusive practices (Higginson & Chatfield, 2010). Those concerns include a lack of knowledge and experience as well as the need for continued learning in a collaborative environment where support and resources could be provided (Higginson & Chatfield, 2010). This investigation of inclusion and services provided insight into the attitudes and perceptions of educators in a local Southern high school. This study showed that teachers in a local Southern high school had a slightly negative overall attitude toward inclusion. There was also a statistically significant difference between the mindset and perceptions of regular education teachers compared to special education teachers. This investigation uncovered the fact that students with disabilities had scored considerably lower on state mandated assessments for at least 3 consecutive years compared to their nondisabled peers.

This lack of academic achievement was partly because of the lack of knowledge of and slightly negative attitudes towards and perceptions of inclusion. As a result, a series of professional developments will be implemented into the teacher in-service week. This series will provide knowledge about the concept of inclusion as well as strategies to assist teachers in effectively implementing inclusive practices. This series of professional developments will be followed up during monthly PLC meetings to ensure an ongoing form of support to all teachers.

This study was a project study that used a mixed methods approach to ensure that the data collected were both reliable and valid. This study included student test scores from more than 200 students and survey responses from 40 educators. I completed the analysis of the data by hand and not by an outside agency or service. As a result, the data analysis process was sound and thorough. The project that will be implemented as a result of the data, which indicated a lack of understanding of inclusion as well as a slightly overall negative attitude toward inclusion, is a professional development. The project has the ability to foster a more positive attitude toward inclusion and provide valuable information that can transform classroom practices so that all students are able to access the general curriculum and achieve academic success.

There were some limitations to the study, which included that the study was based on and conducted in one local Southern high school. Inclusion programs and practices vary greatly from teacher to teacher and type of school (i.e., elementary, middle, high). As a result, the study may have been more reliable if it included data from each level of schools. The professional development that has been created is geared toward the needs and goals of one local Southern high school as opposed to other schools in that district. There is a wealth of knowledge, strategies, and modeling that could assist educators with the effective implementation of inclusion and inclusive practices. As a result, a 3-day training may not suffice to provide the foundation for classroom and ultimately school transformation. Additional trainings must be introduced to ensure that practices are effective and successful with the student population present.

Recommendations for Alternative Approaches

Alternative approaches to addressing this problem could include a possible evaluation of the inclusive practices in this local Southern high school and other high schools in the region. This evaluation could include an evaluation of test scores as well and a review of the inclusive practices that are being used in those schools. The evaluations of these schools would bring about a discussion of inclusive practices that are in place at those schools where students with disabilities are performing at the level of or exceeding their nondisabled peers.

The second possible approach could be a revision to the curriculum. There is a division of the district that is responsible for the creation of the curriculum. If data that had been collected and analyzed were taken to this department and they were able to see a trend in the lack of success of students with disabilities in inclusion programs, they could create revisions to the curriculum or set certain accommodations and modifications in the curriculum that focused on that subgroup of students specifically.

Alternative definitions to the problem may include that educators do not have a negative attitude toward inclusion, but they have not had students with disabilities in their classroom before; as a result, they are not used to implementing nontraditional forms of content delivery. Other alternatives could include teachers having students who have severe disabilities. As a result of those disabilities, students may need additional support services successfully to access and retain the general education curriculum.

If either the lack of experience with or the severity of the disabilities of students is the problem, teachers who have not had to service students with disabilities could be

provided a teacher mentor who is a special education teacher. These teachers would

collaborate on classroom strategies, accommodations, and modifications. The pair or

group would meet once or twice monthly after school to discuss progress and problems,

as well as solutions to those problems. Another solution would include an observation of

those students who fail to achieve academic success in the general education classroom.

After several observations, an IEP team meeting would take place to discuss the

observations and additional support services that could be added if necessary to assist this

student with academic achievement.

Scholarship, Project Development, Leadership and Change

Throughout the process of completing this project study, I learned of several key

factors. As a special education teacher, I had a great deal of background knowledge and

information that I once assumed was common knowledge. Researchers must take

themselves out of the position of persons who are well versed in the area of study and

delve into all possible research pertaining to their topic. In this case, I learned a great

deal about inclusion and the difference in inclusive programs in the United States and

abroad.

Advocates in the United States have worked diligently for decades to ensure that

students with disabilities were afforded the same rights as their nondisabled peers.

Nevertheless, there are still many states that have separate schooling for students with

disabilities. The process of gaining information so that a sound body of literature could

be presented was at times overwhelming. There is a wealth of information about

inclusion, but much of this information is specific to a certain disability, such as autism,

or specific learning disability. Little information guides educators on how to go about educating students with disabilities in general.

The fact that many teachers are unaware of the actual disabilities that their students have also emerged through the data collection process of this study. Teachers are provided with copies of the necessary accommodations and modifications for individual students, but this information does not specify the disability. This could sometimes act as a hindrance to an educator. For example, if a student has ADHD and continues to disrupt class because the student cannot stay seated or is easily distracted and the assigned seat is in the back of the classroom where the student can view everything that other students are doing, this disability can impede the success of that student. Although being easily distracted is one aspect of educating a student with ADHD, additional information could help ameliorate the situation. Thus, information is critical to the success of inclusion and inclusive practices.

As a practitioner, scholar, and educator, I have learned a great deal about data collection, data analysis, and strategies that could be useful as a special education teacher. Many strategies are available to use in inclusive classroom settings, but as an inclusion coteacher, I tried to emulate the practices of my coteacher to ensure that students with disabilities were not singled out and that the content was not so modified that it did not meet the requirements of the specified curriculum. As a result, I was not adequately servicing my students.

The data collection and analysis process were tedious and time-consuming. I chose the mixed methods design because it would make the collection process and

findings more valid and reliable. However, I did not realize just how time consuming the analysis would be. The time and attention to detail when collecting and analyzing data were critical to the success of this project.

Reflection on the Importance of the Work

This project study was one of great importance, even more so than I originally imagined. Advocates for students with disabilities have fought to ensure that they were no longer excluded and were at least afforded an opportunity to have access to the general education curriculum and learn in a setting that contained not only students with disabilities, but their nondisabled peers as well. While conducting research on inclusion and services, there was a great deal of literature and research suggesting that in many cases, inclusion was another form of exclusion. While students were physically located in a setting with their nondisabled peers, they were still unable successfully to access the general education curriculum and achieve academic success for many reasons. Those reasons could include, but were not limited to, a lack of knowledge and understanding on behalf of the teacher, a negative attitude and/or perception of the teachers and other faculty and staff members, limited resources for students with disabilities in inclusive settings, and a lack of implementation of the contemporary instructional strategies that are needed to educate a diverse group of learners.

As a special education teacher, I was unaware of how much training regular education teachers received on the topic of special education. I was also closed off to the idea that there are people in our society who have never personally interacted with someone with a disability. Therefore, I began the process of research and data collection

with the mindset that I had a solid foundation and understanding of inclusion and what was necessary to create an effective inclusive atmosphere. However, I realized I was learning a great deal about what strategies and resources it would take to ensure that all students were academically successful. With a larger number of students with disabilities working toward regular high school diplomas and accounting procedures and measures created to directly link teacher effectiveness to student performance, it is critical that teachers educate themselves on contemporary forms of content presentation and inclusive practices. Inclusion is not limited to physical space, but is a movement that is focused on the integration and academic success of students with disabilities.

Scholar

The Merriam-Webster dictionary stated that a scholar is a specialist in a particular branch of study, specifically the humanities, a distinguished academic. In an attempt to be a scholar on the academic topic of inclusion, I had to recommit to the role of a learner and not that of a professional or specialist in that content area. My knowledge needed to be refreshed and expanded upon in the areas of not only special education as a whole but specifically inclusion. I have previously worked in an inclusive setting, but I have had limited training in that area. When I completed my course of study, teachers were being trained to work in a pull out capacity. Those students with disabilities were receiving services from the special education teacher in the areas of language arts and mathematics and remained in the regular education classroom with their nondisabled peers for the remainder of their classes.

After reviewing a large amount of literature on the topic of inclusion, I felt that I gained the knowledge necessary to act as a resource to other teachers and academic/school stakeholders, as well as a change agent. I felt that I accessed information and resources that I could use in my own co-teaching classroom setting, as well as provide to other teachers and administrators in an effort to increase the inclusive practices in my school.

Practitioner

Merriam-Webster defines a practitioner as one who practices or a person who regularly does an activity that requires skill or practice. With this investigation, I had to act as a practitioner and not only read about the topic of inclusion, but completely immerse myself in the topic of inclusion and gain as much information as possible on the topic. While I was learning about this topic, I was still working in a co-teaching environment and used many of the strategies I read about in my inclusive classroom environment. In an effort to ensure accessibility for all of my students, I shared those resources with the teachers I worked with in a co-teaching environment.

Project Development

Thomas Eklund stated that a project developer is one that handles tasks that focus on moving a project in an effort to ensure its success (Eklund, 2015). The investigation of inclusion emerged in an effort to ensure that all students were provided with a quality education where all students were held to a high standard. Through the course of this investigation, I have gained a wealth of knowledge and learned about strategies and available resources that would be instrumental in moving, not only my classroom, but my

school in a progressive state. One activity that has been added to my school environment was the Best Buddies organization. This organization has allowed for one-on-one interactions and exposure to students with disabilities outside of the classroom environment. This organization assisted teachers and students as well who had not previously had interactions with students with disabilities. The lack of exposure was one of the targets focused on in this investigation. Other aspects of being a project developer included the dissemination of information to my co-teachers and other community stakeholders.

Implications, Applications, and Directions for Future Research

The implications for social change based on this project study have the ability to change curriculum guidelines, revolutionize teacher education programs, and possibly draw attention to the need for continued education on inclusive practices and who effectively to educate students with disabilities. Research that was gathered during the investigation of inclusion, as well as data collection, exposed the idea that many regular education teachers have had little to no training about special education and working with students with disabilities. As a result, students with disabilities are not receiving an education that is individualized and based on their physical and academic needs. A theme of a slightly negative attitude and/or perception of inclusion were one of the themes that emerged from the data analysis. This theme was based on the responses of teachers at a local Southern high school, but there are many other cases in the literature that reported a lack of knowledge and a negative attitude toward inclusion for many teachers who did not receive training in that area.

With high levels of accountability, teachers, schools, and school districts having to transition to more contemporary forms of content delivery in an effort to ensure all students are academically successful, teacher, and other school stakeholders must be trained to work with a diverse group of students. If this transition to inclusion was achieved, schools and school districts in this community as well as worldwide could possibly see a transformation in student achievement that meets the rigorous standards that are set before students today. By learning and implementing strategies that address all learning levels, students will not only have the ability to witness (through modeling) but also participate in high levels of learning. Students will be able to analyze, synthesize, and apply the knowledge they have gained in the classrooms to not only academic tasks, but in life as well.

When thinking about the ways in which we learn, many people are familiar with three general categories: visual, auditory, and kinesthetic learners. Beyond these three general categories, many theories of and approaches toward human potential have been developed. Among them is the theory of multiple intelligences, developed by Dr. Howard Gardner, Professor of Education at Harvard University (Garner, 2009). The term differentiation is one that is used when discussing inclusion and inclusive practices. Differentiation is simply providing alternate ways to access the same content. The differentiation of content is necessary when working with students with disabilities. Many teachers are comfortable with and continue to use traditional teaching methods, but this project study has the ability to propel educators to start implementing and using more

contemporary instructional strategies that will allow all students to have access to the general education curriculum.

The recommendations for practice and future research are that additional research is needed to investigate the effectiveness of inclusion and inclusive practices. This research should focus on all school levels (K-12) and investigate the different types of inclusion programs that are being implemented in various schools. Studies have shown that teachers indicate a need for more training regarding teaching students with disabilities in an inclusive capacity. Researchers should investigate and determine if professional developments can bridge the gap in theory and practice when educating students with disabilities.

This study was limited to one local Southern high school. Teachers who have students with disabilities in their classrooms were solicited for participation in this study. Therefore, there was a limited scope on the types of inclusive practices and school goal regarding inclusive practices and creating an inclusive school atmosphere. The generalizability of this study was limited to high schools that are comparable in size and characteristics on inclusion and the type of inclusion program implemented. The following list of implications for future research was compiled to generate further thought.

- To what extent does the amount of pre-service education help or hinder the implementation of inclusive practices?
- To what extent do professional development activities help teachers apply effective inclusive practices in the classroom?

- To what extent are the inclusive practices implemented linked to, or a reflection of the school vision and mission?

Conclusion

Inclusive education promotes educational values of diversity, equity, and social justice. It is about entitlement of all children to a quality education, irrespective of their differences (Gorman & Dublin, 2010). Upon completing an investigation of inclusion and services, it was discovered that students with disabilities in a local Southern high school, as well as state-wide, failed to measure up to their nondisabled peers. Upon further investigation of inclusion, the fact that many teachers did not have a solid foundation or understanding of inclusion was unearthed. This level of understanding is a critical factor in the success of inclusive practices as well as student achievement because educators are a pivotal element in student success.

Students with disabilities have been allowed to assimilate and join the general education classroom, but data show that their educational needs are not being met. In an era of high stakes testing and teacher accountability, it is imperative that teachers are armed with the knowledge and confidence necessary to educate all students. To ensure that inclusion does not become another form of exclusion, teachers, administrators, and other school stakeholders must be cognizant of more contemporary forms of content delivery that will allow students of all learning levels to not only access the curriculum, but foster academic growth as well.

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Appendix A: The Project

Day 1: Putting Together the Pieces

How Does It Feel to Have a Disability?

- 8:00: Opening (Are you a good communicator of information?)
- Peanut Butter & Jelly Activity (Work in pairs of 3)
  - Report out based on results
- 8:30: Power point presentation (Putting Together the Pieces)
- Think/Pair/Share: What did you learn, already know, still want to know
- 9:30: In My Shoes (How does it feel to have a disability)
- Intellectual Disability (ID)
  - This unit introduces the concept of intellectual disabilities, and helps participants understand the causes and how they affect the functioning of the brain. Participants learn that people with intellectual disabilities have hopes, dreams, and goals like everyone else and are able to live very productive lives.
- Activity: Difficulty Understanding
  - Difficulty understanding: Have 2 students sit back to back. Give one student a paper with an abstract shape on it. Without seeing each other, he/she must explain to the other student how to draw the shape. Give the second student a pencil and piece of paper. He/she must draw the shape following the first student's directions. What were the problems? What would have helped?
- Learning Disability (LD)
  - By comparing the human brain to a computer, the Learning Disabilities unit teaches participants how the brain takes in, sorts, stores, and shares information and how learning can be impacted when someone has a learning disability affecting one or more of these areas.
- Activity: Backwards
  - Write a number of different sentences backwards on a piece of paper. Giving them very little time, ask different students to read them correctly. Keep interrupting the student by urging them to hurry or tell them "This should be easy for you."
- Physical Disability
  - The Physical Disabilities unit is designed for participants to learn about the various causes of physical disabilities, the definitions of terms such as "disability" and "handicap", and attitudinal and architectural barriers. Participants also get hands-on experience with adaptive equipment and assistive technologies.
- Activity: Using One Hand
  - Have students try different activities using only one hand. Tying their shoes; Going through the lunch line and eating lunch; Opening a jar that has a screw-on lid; Playing catch; Holding a stack of papers and handing out one at a time; and

Going to the bathroom. Discuss the problems the students had. What if they couldn't use either hand? What problems would there be if they were in a wheelchair AND couldn't use their hands?
- 12:30-1:30: Lunch
- 1:30-2:00: Closure
- Gallery Walk: What did you learn today

Day 2: Putting Together the Pieces

What Is Inclusion?

- 8:00: Opening (How good are you at following instructions?)
- Create a Story Activity (Whole Group-participants must create a story adding one sentence that does not contain the letter e)
- 8:30: Inclusion Power point presentation
- Inclusive Education
- Think/Pair/Share: What did you learn, already know, still want to know
- 10:00: Support Services Available
- Models of Inclusive Education
  - CoTeaching (what is coteaching, models of coteaching)
  - Consultation (what is consultation)
- What is my role (regular education, special education teacher(s)
- 12:00: Lunch
- 1:00: CoTeaching/Consultation Activity (What it Is/What it is Not)
- CoTeaching Power point presentation
- Participants will review tasks and determine if it is indicative of practices that should be seen in co-teaching classrooms
- 2:30: Closing/Reflection
- Gallery Walk: What did you learn today

Day 3: Putting Together the Pieces

Little Red Schoolhouse: How long have we been differentiating

- 8:00: Opening
- Toolbox Activity: Participants will work in groups of 3-5
- Report out about tools necessary to prepare today's students
- 8:30: Power point presentation
- Differentiating Instruction: Beginning the Journey
- Review and Discuss what it means to differentiate
- 9:30: Do as I Do
- Modeling Differentiation (Think/Pair/Share)

- 10:00: Gallery Walk: Complete gallery walk (add new information)
- Share out on information gained throughout three-day workshop
- 11:00: Putting Together the Pieces
- Review of previous information
- Discuss how pieces fit together
- 12:00: Additional Resources
- Provide additional resources (books, websites, etc.): Participants are free to review books, work with online sites and discuss presentation materials with presenter and other participants
- 1:00: Closure
- Evaluation

Power Point Presentations and Handouts

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[1] Retrieved from: http://www.hcschools.org/exed/Opening%20In-service%20Presentations/Mary%20Ann%20Voss%20-%20Modifications%20and%20Adaptation%20in%20Inclusive%20Education/Inclusive%20Education.ppt on November 21, 2015
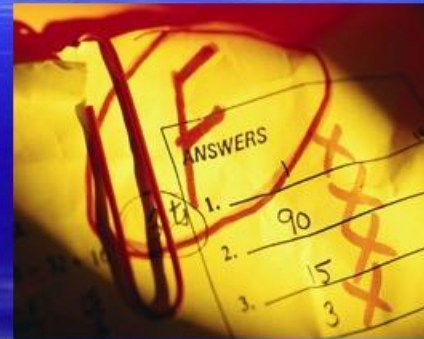
1 Retrieved from: http://www.hcschools.org/exed/Opening%20In-service%20Presentations/Mary%20Ann%20Voss%20-%20Modifications%20and%20Adaptation%20in%20Inclusive%20Education/Inclusive%20Education.ppt on November 21, 2015

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[1] Retrieved from: http://www.hcschools.org/exed/Opening%20In-service%20Presentations/Mary%20Ann%20Voss%20-%20Modifications%20and%20Adaptation%20in%20Inclusive%20Education/Inclusive%20Education.ppt on November 21, 2015

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[1] Retrieved from: http://www.hcschools.org/exed/Opening%20In-service%20Presentations/Mary%20Ann%20Voss%20-%20Modifications%20and%20Adaptation%20in%20Inclusive%20Education/Inclusive%20Education.ppt on November 21, 2015

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[1] Retrieved from: http://www.hcschools.org/exed/Opening%20In-service%20Presentations/Mary%20Ann%20Voss%20-%20Modifications%20and%20Adaptation%20in%20Inclusive%20Education/Inclusive%20Education.ppt on November 21, 2015

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[1] Retrieved from: faculty.mu.edu.sa/download.php?fid=172630

Differentiated Instruction Defined

"Differentiated instruction is a teaching philosophy based on the premise that teachers should adapt instruction to student differences. Rather than marching students through the curriculum lockstep, teachers should modify their instruction to meet students' varying readiness levels, learning preferences, and interests. Therefore, the teacher proactively plans a variety of ways to 'get at' and express learning."

Carol Ann Tomlinson

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[1] Retrieved from: faculty.mu.edu.sa/download.php?fid=172630

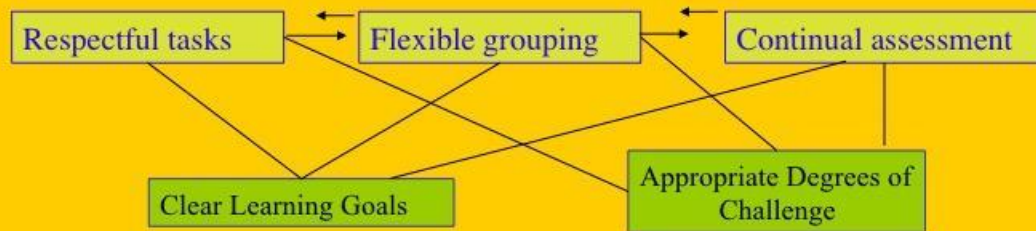## Key Principles of a Differentiated Classroom

- The teacher is **clear about** what matters in **subject matter**.

- The teacher understands, appreciates, and **builds upon student differences.**

- **Assessment** and **instruction** are **inseparable**.

- The teacher adjusts **content, process, and product** in response to student **readiness, interests**, and **learning profile.**

- All students participate in **respectful work**.

- Students and teachers are **collaborators** in learning.

- Goals of a differentiated classroom are **maximum growth** and **individual success**.

- **Flexibility** is the hallmark of a differentiated classroom.

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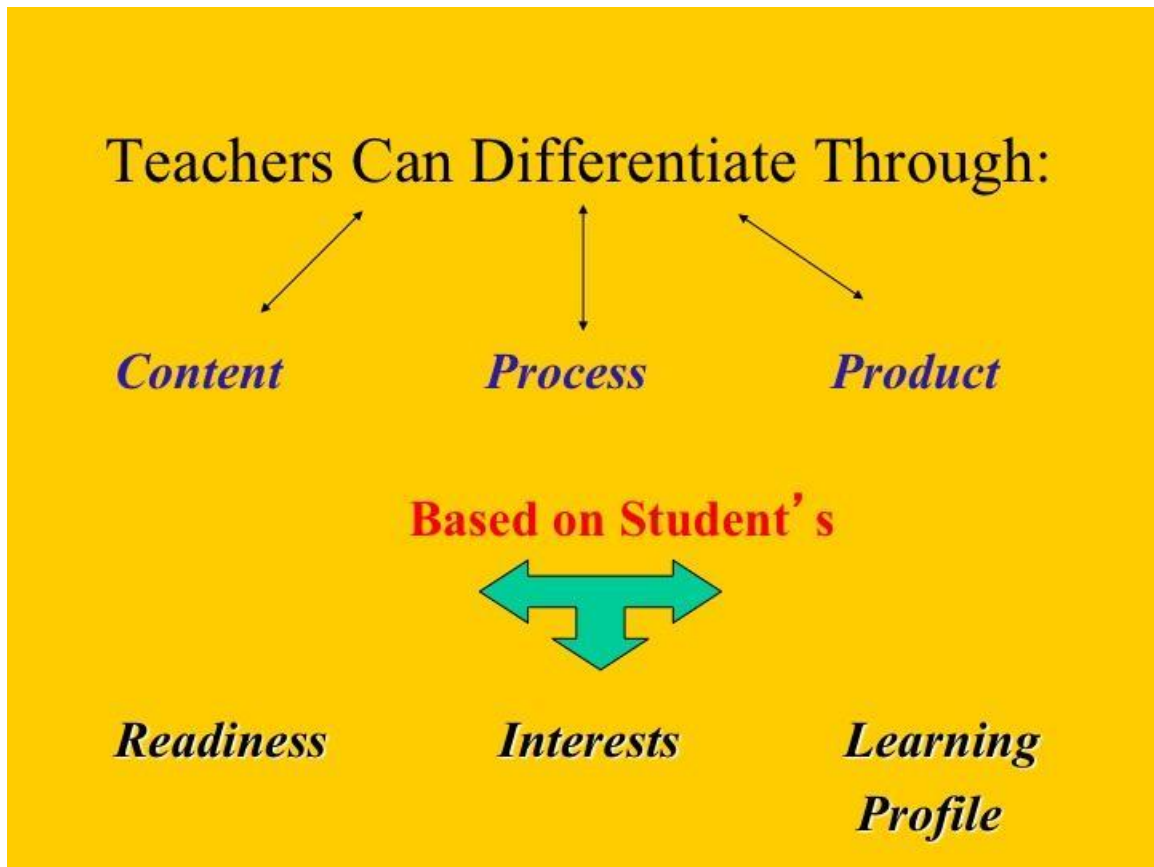[1] Retrieved from: faculty.mu.edu.sa/download.php?fid=172630

Two Views of Assessment

Assessment is for: **Assessment is for:**

Gatekeeping — — — — — → *Nurturing*

Judging — — → *Guiding*

Right Answers — — — — → *Self-Reflection*

Control — — — → *Information*

Comparison to others — — → *Comparison to task*

Use with single activities — — → *Use over multiple activities*

1

THINKING ABOUT ON-GOING ASSESSMENT

STUDENT DATA SOURCES

1. Journal entry
2. Short answer test
3. Open response test
4. Home learning
5. Notebook
6. Oral response
7. Portfolio entry
8. Exhibition
9. Culminating product
10. Question writing
11. Problem solving

TEACHER DATA MECHANISMS

1. Anecdotal records
2. Observation by checklist
3. Skills checklist
4. Class discussion
5. Small group interaction
6. Teacher – student conference
7. Assessment stations
8. Exit cards
9. Problem posing
10. Performance tasks and rubrics

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[1] Retrieved from: faculty.mu.edu.sa/download.php?fid=172630

Assessment in a Differentiated Classroom

- Assessment drives instruction. (Assessment information helps the teacher map next steps for varied learners and the class as a whole.)

- Assessment occurs consistently as the unit begins, throughout the unit and as the unit ends. (Pre-assessment, formative and summative assessment are regular parts of the teaching/learning cycle.)

- Teachers assess student readiness, interest and learning profile.

- Assessments are part of "teaching for success."

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[1] Retrieved from: faculty.mu.edu.sa/download.php?fid=172630

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[1] Retrieved from: faculty.mu.edu.sa/download.php?fid=172630

Best Practices for Standards-based Instruction

Activities and Assignments

From:

- Teacher presentation
- Whole-class instruction
- Uniform curriculum

- Short-term lessons
- Memorization and recall
- Short responses, fill-in-the-blank
- Same assignments

To:

- ➤ Students experiencing concepts
- ➤ Centers, groups, variety
- ➤ Topics by students' needs or choice
- ➤ Extended activities
- ➤ Application and problem solving
- ➤ Complex responses, evaluations and writing
- ➤ Multiple intelligences, cognitive styles

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[1] Retrieved from: faculty.mu.edu.sa/download.php?fid=172630

Best Practices for
Standards-based Instruction

Student Work and Assessment

From:

- **Products for teacher / grading**
- **No student work displayed**
- **Identical, imitative products**
- **Feedback = scores or grades**

- **Seen / scored only by teacher**
- **Teacher grade book**

- **Standards set during** grading

To:

- Products for real events / audience
- High quality / all students
- Varied and original products
- Substantive, varied, formative feedback
- Public displays and performances
- Student-maintained portfolios, assessments
- Standards co-developed with students

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[1] Retrieved from: faculty.mu.edu.sa/download.php?fid=172630

Planning a Focused Curriculum

Means Clarity About

What Students Should:

Know → **Facts** (Columbus came to the "New World"
Vocabulary (voyage, scurvy)

Understand → **Concepts** (exploration, change)
Principles/Generalizations (Change can be both positive and negative.
Exploration results in change. People's perspectives affect how they
respond to change).

Be Able to Do → **Skills**
Basic (literacy, numeracy)
Thinking (analysis, evidence of reasoning, questioning)
Of the Discipline (graphing/math/social studies)
Planning (goal setting; use of time)
Social
Production

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[1] Retrieved from: faculty.mu.edu.sa/download.php?fid=172630

These are **the facts, vocabulary, dates, places, names, and examples** you want students to give you.

The know is massively forgettable.

"*Teaching facts in isolation is like trying to pump water uphill.*" Carol Tomlinson

Understand

Major Concepts:

These are the written **statements of truth**, the core to the meaning(s) of the lesson(s) or unit. These are what **connect the parts of a subject** to the student's life and to other subjects.

It is through the understanding component of instruction that we teach our students to truly grasp the "**point**" of the lesson or the experience.

Understandings are purposeful. They focus on the **key ideas** that require students to understand information and **make connections** while evaluating the relationships that exit within the understandings.

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A Student who UNDERSTANDS Something can…
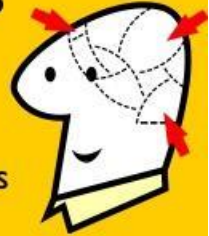
- Combine it appropriately with other understandings
- Pose new problems that exemplify or embody the concept
- Create analogies, models, metaphors, symbols, or pictures of the concept
- Pose and answer "what-if" questions that alter variables in a problematic situation
- Generate questions and hypotheses that lead to new knowledge and further inquiries
- Generalize from specifics to form a concept
- Use the knowledge to appropriately assess his or her performance, or that of someone else.

[1] Retrieved from: faculty.mu.edu.sa/download.php?fid=172630

Able to Do

Skills
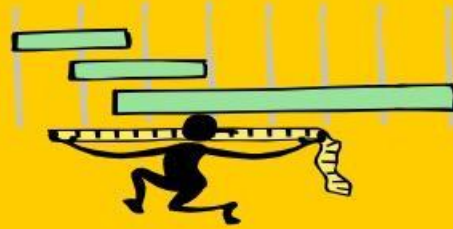
These are the basic skills of any discipline. They include the thinking skills such as analyzing, evaluating, and synthesizing. These are the skills of planning, the skills of being an independent learner, the skills of setting and following criteria, the skills of using the tools of knowledge such as adding, dividing, understanding multiple perspectives, following a timeline, calculating latitude, or following the scientific method.

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Developing a Tiered Activity

1. Select the activity organizer
   - concept
   - generalization

   Essential to building a framework of understanding

2. Think about your students/use assessments
   - readiness range — skills, reading, thinking, information
   - interests
   - learning profile
   - talents

3. Create an activity that is
   - interesting
   - high level
   - causes students to use key skill(s) to understand a key idea

4. Chart the complexity of the activity

   High skill/ Complexity

   Low skill/ complexity

5. Clone the activity along the ladder as needed to ensure challenge and success for your students, in
   - materials – basic to advanced
   - form of expression – from familiar to unfamiliar
   - from personal experience to removed from personal experience
   - equalizer

6. Match task to student based on student profile and task requirements

[1] Retrieved from: faculty.mu.edu.sa/download.php?fid=172630

Designing a Differentiated Learning Contract

A Learning Contract has the following components

1. **A Skills Component**
   - Focus is on skills-based tasks
   - Assignments are based on pre-assessment of students' readiness
   - Students work at their own level and pace

2. **A content component**
   - Focus is on applying, extending, or enriching key content (ideas, understandings)
   - Requires sense making and production
   - Assignment is based on readiness or interest

3. **A Time Line**
   - Teacher sets completion date and check-in requirements
   - Students select order of work (except for required meetings and homework)

4. **The Agreement**
   - The teacher agrees to let students have freedom to plan their time
   - Students agree to use the time responsibly
   - Guidelines for working are spelled out
   - Consequences for ineffective use of freedom are delineated
   - Signatures of the teacher, student and parent (if appropriate) are placed on the agreement

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[1] Retrieved from: faculty.mu.edu.sa/download.php?fid=172630

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Leadership in Differentiation

To be effective in using differentiation, site administrators and central office should be:

Consistent:

- Use vocabulary that is clear and commonly understood by the principal, the parent, the teacher

- Articulate the philosophy: Kids differ.

- State the expectations: all of us must g row in responsiveness. That we must change / grow / differentiate is non-negotiable; the path that we each may take is negotiable.

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Leadership in Differentiation

Insistent:

- Require that differentiation be part of teacher plans
- Require that differentiation be part of school plans
- Require that differentiation be part of all staff development
- Link differentiation to observations, feedback, peer review, mentoring, evaluations

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Individualized Education Program
Present Level of Performance Training
(General Education Curriculum)

Division of Special Education
Compliance Support and Monitoring Department

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2

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

2

Performance Area

- "Performance Area" of the PLP identifies specific achievement areas such as:

  - Reading
  - Writing
  - Math
  - English Language Development
  - Behavior
  - Social/Emotional
  - Study Skills

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Present Level of Performance: Assessment/Monitoring Process

Section E: Present Level of Performance

Performance Area:
Assessment/Monitoring Process:

State/District Assessment Results:

Current Performance/Assessment Summary (including student strengths, needs and impact of disability)

_____

_____

_____

_____

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Assessment/Monitoring Process

Multiple Measures

Curriculum/Standards Based Tests

Teacher Input

Observations

Writing Samples

Parent Input

Portfolios

Norm Referenced Tests (e.g., WJ-III, KTEA)

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Present Level of Performance: State/District Assessment Results

Section E: Present Level of Performance

Performance Area:

Assessment/Monitoring Process:

State/District Assessment Results:

Current Performance/Assessment Summary (including student strengths, needs and impact of disability)

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Present Levels of Performance:
Current Performance/Assessment Summary

Section E: Present Level of Performance
Performance Area:
Assessment/Monitoring Process:

State/District Assessment Results:

Current Performance/Assessment Summary (including student strengths, needs and impact of disability)

_____
_____
_____
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Current Performance/Assessment Summary: Elementary Reading Example

Strengths: Lydia is able to read first grade literature books independently. Her fluency score is 61 words per minute, slightly under the target of 65 words per minute. Her score for answering comprehension questions is 5/10 and her vocabulary score is 5/10 both of which are below target. She reads common sight words at second grade level. Lydia can blend words with 2 and 3 letter consonant blends as well as words with short and long vowel patterns. She is able to apply phonics skills to decode words during structured reading time.

Needs: Lydia is unable to comprehend grade level reading texts. She has difficulty stating main ideas, answering "how" and "why" questions and reading with comprehension in other subject areas such as Social Studies and Science. She also has difficulty attending to task, participating in classroom discussions and completing follow up reading comprehension assignments.

Impact of Disability: Lydia's specific learning disability impairs her ability to read which impacts her involvement and progress in the general education curriculum.

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary:
Strengths

Establish baseline performance level by:
- Identifying strengths
- Reviewing results of curriculum based assessments
- Identifying standards mastered
- Describing classroom academic performance

Example

Lydia is able to read first grade literature books independently. Her fluency score is 61 words per minute, slightly under the target of 65 words per minute. Her score for answering comprehension questions is 5/10 and her vocabulary score is 5/10 both of which are below target. She reads common sight words at second grade level. Lydia can blend words with 2 and 3 letter consonant blends as well as words with short and long vowel patterns. She is able to apply phonics skills to decode words during structured reading time.

[1]

Current Performance/Assessment Summary:
Needs

Identify areas of need by:

- Documenting areas of difficulty
- Determining standards that need to be mastered
- Describing classroom performance

Example

Lydia is unable to comprehend grade level reading texts. She has difficulty stating main ideas, answering "how" and "why" questions and reading with comprehension in other subject areas such as Social Studies and Science. She also has difficulty attending to task, participating in classroom discussions and completing follow up reading comprehension assignments.

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary:
Impact of Disability

Does the student's disability impact his/her involvement and progress in the general education curriculum?

○ "No"…*"The student's disability does not impact his involvement and progress in the general education reading curriculum."*

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary:
Impact of Disability

o The impact statement includes:

- The student's disability

- How the disability is manifested, and

- That the disability impacts involvement and progress in the general education curriculum

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary:
Impact of Disability

○ Student's Disability

- • Specific Learning Disability
- • Emotional Disturbance
- • Speech and Language Impairment
- • Autism
- • Intellectual Disability
- • Orthopedic Impairment

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary:
Impact of Disability

o How it is manifested

- Impaired ability to read
- Impaired ability to write
- Impaired ability to do mathematical calculations
- Impaired ability to listen
- Impaired ability to speak
- Impaired ability to build or maintain interpersonal relationships

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary:
Impact of Disability

- Impacts <u>involvement</u> and <u>progress</u> in general education curriculum

    - Eva's specific learning disability impairs her ability to write <u>which impacts her involvement and progress in the general education curriculum</u>

    - John's emotional disturbance impairs his ability to build or maintain interpersonal relationships which <u>impacts his involvement and progress in the general education curriculum</u>

[1]

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary:
Impact of Disability

Document the impact of the disability by:

- Indicating the student's disability
- Describing how the disability manifests itself in a performance area
- Stating that this impacts the student's involvement and progress in the general education curriculum
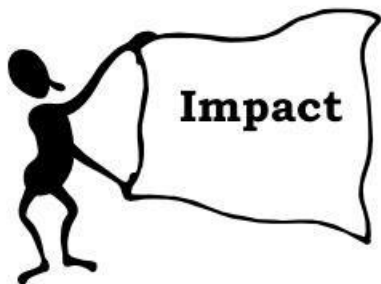
Impact

Example

Lydia's specific learning disability impairs her ability to read which impacts her involvement and progress in the general education curriculum.

12

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

2

Example: Reading Goal

Needs	**Goal**
Lydia is unable to comprehend grade level reading texts. She has difficulty stating main ideas, answering "how" and "why" questions and reading with comprehension in other subject areas such as Social Studies and Science. She also has difficulty attending to task, participating in classroom discussions and completing follow up comprehension assignments.	When given a selected 3rd grade expository passage, Lydia will state the main idea and supporting details in the passage 75% of the time in four out of five trials as measured by student work samples and teacher charted data.

12

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

2

Current Performance/Assessment Summary: Elementary Math Example

Math:

Max has grown in his ability to add and subtract single digit numbers without use of manipulatives. He is able to write and identify numbers from 1 to 100 without the use of a model. Max is experiencing difficulty in place value and regrouping. Max is having difficulties due to deficits in his abilities which impact his involvement and progress in the general education curriculum .

[1]

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary:
Strengths

STRENGTHS: Max has grown in his ability to add and subtract single digit numbers without use of manipulatives. He is able to write and identify numbers from 1 to 100 without the use of a model.

Does this description of student's strengths give you enough information to understand where the student is currently functioning in math computation and application?

Is the information based on math standards?

1

[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary:
Strengths

STRENGTHS: Max has grown in his ability to add and subtract single digit numbers without use of manipulatives. He is able to write and identify numbers from 1 to 100 without the use of a model.	**STRENGTHS (REVISED)**: Classroom teacher reports Max is able to count, read and write whole numbers to 100 without the use of a model. He can add and subtract facts to twenty. Results of curriculum-based assessments indicate that he is able to write and solve number sentences involving addition and subtraction. He can solve addition and subtraction word problems with one and two digit numbers without regrouping.

1

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0
on December 12, 2015.

Current Performance/Assessment Summary:
Needs

NEEDS: Max is experiencing difficulty in place value and regrouping.

What are the student's needs in math application?

Is this sufficient information to develop appropriate goals and objectives?

[1]

[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary:
Needs

NEEDS: Max is experiencing difficulty in place value and regrouping.	**NEEDS (REVISED):** Max has difficulty adding and subtracting multi-digit numbers with regrouping due to lack of under-standing of place value. He does not know basic multiplication facts or understand how to compare simple fractions. He has difficulty choosing the correct operations to solve multi-step word problems. In addition Max's has difficulty following directions and recalling previously learned information.

1

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary:
Impact of Disability

IMPACT OF DISABILITY: Max is having difficulties due to deficits in his abilities which impact his involvement and progress in the general education math curriculum.

Does this statement contain all three required elements?

[1]

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary: Impact of Disability

IMPACT OF DISABILITY	IMPACT OF DISABILITY
Max is having difficulties due to deficits in his abilities which impact his involvement and progress in the general education curriculum.	(REVISED): Max's specific learning disability impairs his ability to do mathematical calculations which impacts his involvement and progress in the general education curriculum.

1

[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary:
Elementary Math - Revised

STRENGTHS:
Classroom teacher reports Max is able to count, read, and write whole numbers to 100 without the use of a model. He can add and subtract facts to twenty. He is able to write and solve number sentences involving addition and subtraction. He can solve addition and subtraction word problems with one and two digit numbers without regrouping.

NEEDS: Classroom teacher reports that Max has difficulty adding and subtracting multi-digit numbers with regrouping due to lack of understanding of place value. He does not know basic multiplication facts or understand how to compare simple fractions. He has difficulty choosing the correct operations to solve multi-step word problems. In addition Max's has difficulty following directions and recalling previously learned information.

IMPACT OF DISABILITY: Max's specific learning disability impairs his ability to do mathematical calculations which impacts his involvement and progress in the general education math curriculum.

1

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Example: Elementary Math Goal

Needs	**Goal**
Classroom teacher reports that Max has difficulty adding and subtracting multi-digit numbers with regrouping due to lack of under-standing of place value. He does not know basic multiplication facts or understand how to compare simple fractions. He has difficulty choosing the correct operations to solve multi-step word problems. In addition Max's has difficulty following directions and recalling previously learned information.	When given a mixture of 10 math problems requiring both single and multi-step solutions, Max will determine how and when to break a problem into parts with 85% accuracy in 4 out of 5 trials as measured by student work samples.

1

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary:
Secondary Writing Example

STRENGTHS: Dorene is able to write complete sentences using capital letters and correct punctuation. She is able to express her ideas in writing and is able to write a paragraph with a main idea and supporting details with modeling from the teacher.

NEEDS: Teacher reports that Dorene has difficulty developing her ideas into well-organized, multiple paragraph essays independently. She does not revise first drafts of her work which often results in careless errors and confusion in content. She demonstrates a limited range of vocabulary and descriptive language in her writing. She has difficulty with correct paragraph structure and often her paragraphs do not begin with a topic sentence and/or end with a concluding sentence.

IMPACT OF DISABILITY: Dorene's specific learning disability impairs her ability to write which impacts her involvement and progress in the general education curriculum.

1

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Example: Secondary Writing Goal

Needs	Goal
Teacher reports that Dorene has difficulty developing her ideas into well-organized multiple paragraph essays. She does not revise first drafts of her work which often results in careless errors and confusion in content. She demonstrates a limited range of vocabulary and descriptive language in her writing. She has difficulty with correct paragraph structure and often her paragraphs do not begin with a topic sentence and/or end with a concluding sentence.	Following teacher-led prewriting activities, Dorene will produce a multiple paragraph composition that includes an introductory paragraph with a topic sentence, supporting paragraphs with facts, details, and explanations, and with a concluding paragraph which summarizes key points, scoring a 4 on a 5 point writing rubric on 3 out of 4 essays.

[1]

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Analyze PLPs from one of your student's IEPs and answer the questions below

- Are the Performance Areas correctly identified?

- Is relevant assessment and monitoring information included?

- Do the current performance/assessment summary narratives include:
  - Strengths
  - Needs
  - Impact statements with all 3 required elements?

- Do identified needs in PLPs link to goals?

[1]

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

Current Performance/Assessment Summary
Example: Secondary Reading

- **Strengths:** Tim is able to decode familiar multi-syllabic words. He uses context clues to read unfamiliar words. Tim has learned to use the headings of expository texts to increase literal comprehension.
- **Needs:** Tim needs to improve his reading fluency and vocabulary. He has difficulty with text analysis skills, especially in character and plot analysis. He has difficulty initiating classroom and work related tasks and following through to completion.
- **Impact of disability:** Tim's specific learning disability impairs his ability to read which impacts his involvement and progress in the general education curriculum.

[1]

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[1] Retrieved from: https://www2.ed.gov/parents/needs/speced/iepguide/index.html?exp=0 on December 12, 2015.

DIVISION OF
SPECIAL EDUCATION

Division of Special Education

213-241-6701

1

Co-Planning for Student Success

This information packet is for co-teaching partners who wish to improve their planning practices. Collaborative planning, or co-planning, is about teachers coming together to plan for instruction in diverse classrooms including students with disabilities. This packet will focus on answering the following questions:

∀ Why is commitment to planning vital to an effective co-teaching partnership?
∀ What planning process do co-teaching pairs use to effectively plan instruction?
∀ What planning tools are needed to assist in co-planning?
∀ How do co-teachers determine their roles and responsibilities?

Commitment to Co-Planning

To be effective, co-teaching partners must routinely schedule planning time. Ideally, an hour a week of uninterrupted time should be set aside to share information, monitor student progress, plan lessons, and devise teaching strategies (Hawbaker, Balong, Buckwalter, & Runyun, 2001; Walther-Thomas, Korinek, McLaughlin, & Williams, 2000). Formalizing and structuring the planning process provides co-teachers the opportunity to plan content, integrate Individualized Education Program (IEP) goals into lessons, differentiate instruction and assessment, and determine appropriate accommodations. It also allows teachers to determine co-teaching variations, form student groups, and assign teaching responsibilities.

Beginning and experienced co-teachers alike may use the *Collaborative Planning Questionnaire* (see Appendix A) to assess their co-planning practices and determine areas of strength and need. Once the collaborative planning questionnaire is completed, co-teaching partners are ready to determine areas for improvement by examining the "We need to do this!" statements. For example, co-teachers may have marked exclamation points by statements pertaining to curricular adaptations, differentiation for individual needs, and the use of co-teaching variations. In future planning, they will consider the variations of co-teaching and differentiate practice activities and assessments based on student needs. They will also seek professional development in the areas about which they need more information.

Structuring the Planning Process

According to Villa and Thousand (2005), "Although many incentives appeal to specific individuals, the one incentive that is common to and highly valued by everyone engaged in education and educational reform is time — time for shared reflection and planning with colleagues" (p.65). Therefore, effective co-planners honor the time they have together by determining a meeting place and time, coming prepared, limiting interruptions, and staying focused. Figure 1 provides an overview of the planning process.

Effective planning teams use a meeting agenda (see Appendices B and C for the Co-Planning Meeting Agenda Template and a completed example). An agenda helps partners follow specific procedures, clearly communicate, and build a sense of purpose (Friend & Cook, 2007). Specifically, the meeting agenda serves as a guide to review and reflect, to list issues and tasks for planning instruction, and to assign responsibilities. The roles of timekeeper and recorder should be decided at the start of the meeting and listed on the agenda.

Figure 1. **Planning Process**

Pre-Plan
  ∀ Preview upcoming content
  ∀ Write down individual student needs, resources, and activities
  ∀ Consider student IEP goals and accommodations
  ∀ Prepare mentally

Review, Reflect, Evaluate
  ∀Reflect on teacher and student performance
      o What worked well?
      o What didn't work?

Plan Lesson
  ∀Discuss "big picture" issues first
  ∀Discuss content
      o Analyze difficult concepts and skills
  ∀Plan content delivery
      o Consider co-teaching variations
  ∀Design practice activities
  ∀Plan individual and group evaluation

Assign Roles and Responsibilities
  ∀Identify needed materials
  ∀Clarify teaching responsibilities
  ∀Write out lesson plans for both teachers

Evaluate
  ∀ Debrief
  ∀ Praise each other's efforts
  ∀ Critique the week's activities
  ∀ Use problem-solving strategies
  ∀ Revisit roles and responsibilities regularly

See Example Agenda

See Example Lesson

Roles and Responsibilities

Co-teachers should consider roles and responsibilities that capitalize on each partner's strengths and expertise. The following section describes potential roles for co-teachers.

- Before Co-Planning Meeting (Pre-Planning)

Each teacher should come to the planning meeting prepared. This means that a certain amount of pre-planning must take place.

The general educator is the content specialist and should bring to the planning meeting the Curriculum Framework, textbooks, and other relevant resource materials. He/She should begin to reflect on the "big ideas" and critical concepts that will be taught and share them with his co-teaching partner at the meeting.

The special educator is considered the behavioral and learning specialist. Because the special educator focuses on the individual needs of students with disabilities, he/she provides important student information gleaned from IEPs. Student-at-a Glance forms and behavior plans may be shared at the meeting or given to the co-teacher in advance. It is critical that students' IEP goals, accommodations, and behavior plans are considered as teachers plan instruction. Special educators benefit from having access to the Curriculum Framework for the content they will co-teach. Knowing the particular objectives and essential knowledge and skills will support the special educator in thinking about appropriate teaching and learning strategies for the lesson.

- During Co-Planning Meeting

The general educator clarifies instructional objectives; the specialist clarifies relevant IEP goals or objectives.

The special educator considers students' accommodations.

Both teachers brainstorm possible teaching techniques and activities.

Both teachers determine the roles each will play in instruction based on student needs and the variations of co-teaching to be used.

Both teachers volunteer to prepare and gather materials for the lesson.

One teacher acts as a scribe and provides a written copy of plans.

- After Co-Planning Meeting

Both teachers prepare and gather materials for the lesson.

- After the Co-Taught Lesson (Evaluation)

Both teachers evaluate student outcomes.

The special educator monitors progress on IEP goals with the general educator's input.

Both teachers reflect upon their co-teaching relationship.

Both teachers record notes regarding changes and suggestions for future lessons to be shared at the next planning session.

- Planning Tools: The co-teaching partners use a variety of tools to assist in planning their lessons and units. The following section presents potential tools for teachers.

Teacher Tools

- Lesson Plan Books or Planning Template
- Dieker's (2006) planning book is unique in that it is designed for both the general and the special education teacher.
- Address classroom concerns proactively
- Receive ongoing administrative support
- Nurture a sense of classroom community
- Evaluate student performance
- Reflect on practice and strive for improvement
- Support each other   Incorporating these attitudes and actions into co-planning and co-teaching will help to build productive and collaborative planning sessions to design effective lessons for all students.

This Considerations Packet was prepared by Tina Spencer and Sue Land (November, 2008).

Tool B4: Differentiated Instruction Rubric

Why this tool is important: Differentiation is used to accommodate the range of student abilities that exist within a single classroom. This ensures all students receive meaningful and relevant instruction that connects to their prior knowledge and addresses their individual needs. Research has demonstrated that effective differentiated instruction incorporates many of the elements listed in the rubric. The rubric provides a way to assess evidence of differentiated instruction in the classroom. Some elements of this rubric are based on the work of Carol Ann Tomlinson (see references and resources).

How to use this tool: This tool can be used by individual teachers to self-assess or by other individuals at the request of the teacher to provide peer feedback One should not expect to see (or use) all of the components listed on this rubric in any one lesson, but, over time, evidence related to all sections should emerge. Complete the items below by providing a rating (0 = not evident, 1 = minimally evident, 2 = partially evident, 3 = fully evident) for each section. After completing this rubric – on one occasion or multiple occasions (to have increased data points) – information can be used to guide discussions about excellent differentiation skills and any areas needing improvement.

KNOWLEDGE-CENTERED CLASSROOM	0 1 2 3	Evidence
• The'lesson'is'based'on'clear'objectives'(based'on'learning'goals' and'content'standards),'and'all'students'are'supported'to'meet' those'objectives.' • Students'are'presented'with'tasks'that'are'appropriately' challenging'(e.g.,'from'questioning,'student'work)'and'focused'on' achieving'the'learning'objectives.'		
LEARNER-CENTERED CLASSROOM	0 1 2 3	Evidence
• The'teacher'demonstrates'an'understanding'of'individual'student' skills'and'characteristics.' • The'classroom'instruction'and'classroom'environment'are' culturally'sensitive.'		
PACING	0 1 2 3	Evidence
• The'teacher'provides'adequate'time'to'gauge'student'prior' knowledge.' • Students'have'sufficient'time'to'meet'the'lesson'objectives'given' different'learner'needs.'		
GROUPING	0 1 2 3	Evidence
• The'teacher'utilizes'varied'instructional'groupings'(whole'group,' small'groups,'partners,'heterogeneous,'and'homogenous'groups).' • The'teacher'interacts'with'all'of'the'different'groups'during'the' course'of'the'lesson."' • The'teacher'circulates'among'the'groups'to'ensure'students'are' learning'and'provide'feedback.'		
MATERIALS	0 1 2 3	Evidence
• The'materials'in'the'classroom'environment'allow'for'all'learner' needs'(i.e.,'materials'at'different'levels,'allow'for'multiple'learning' styles.)' • The'materials'are'accessible'by'students.'		

7

Tool B1: Differentiated Instruction Rubric

Why this tool is important: Differentiated instruction is used to address students' diverse learning needs. Differentiated instruction recognizes differences in student background knowledge, experiences and interests; intentional planning is needed to attend to student needs in the classroom. Research has demonstrated that effective differentiated instruction incorporates many of the elements listed in the rubric. This rubric provides a way to assess evidence of differentiated instruction in the classroom. It is divided into two sections. NOTE: This rubric is based on Tomlinson's (2010) Differentiated Instruction Model (see Toolkit references for complete citation).

1. Practices'that'can'be'observed'in'the'classroom'''
2. Elements'of'lesson'planning'that'can'be'reviewed''

How to use this tool: This tool can be used by individual teachers to self assess or by other individuals at the request of the teacher to provide peer feedback. One should not expect to see (or use) all of the elements listed on this rubric in any one lesson, but, over time, evidence related to all sections should emerge. Complete the items below by providing a rating (0 = not evident, 1 = minimally evident, 2 = partially evident, 3 = fully evident) for each section. After completing this rubric – on one occasion or multiple occasions (to increase data points) – information can be used to guide discussions about excellent differentiation skills and any areas needing improvement.

PRACTICES THAT CAN BE OBSERVED IN THE CLASSROOM		
HIGH QUALITY CURRICULUM	0 1 2 3	**Evidence**
• Big'ideas,'or'essential'questions,'and/or'lesson'objectives'are'clearly' identified'so'students'can'understand'why'the'concepts'are'important.'		
RESPECTFUL TASKS / TEACHING UP	0 1 2 3	**Evidence**
• Students'are'presented'with'tasks'that'are'appropriately'challenging'(e.g.,' questioning,'student'work).'' • Students'are'actively'engaged'in'tasks'that'are'appropriately'challenging.''		
FLEXIBLE GROUPING	0 1 2 3	**Evidence**
• Students'are'grouped'in'a'variety'of'ways'(e.g.,'whole'group,'small'groups,' partners).'		
CONTINUAL ASSESSMENT	0 1 2 3	**Evidence**
• The'teacher'interacts'with'all'students'during'the'lesson'to'check' understanding'and'provide'feedback. ! • The'teacher'conducts'different'types'of'assessments'throughout'the' lesson'(e.g.,'informal'checks,'questions,'assignments).'! • The'teacher'uses'assessments'that'are'used'to'monitor'students''learning' in'relation'to'essential'questions/lesson'objectives. !		
BUILDING COMMUNITY	0 1 2 3	**Evidence**
• All'students'are'respected'and'supported;'positive'and'encouraging' language'is'used.' • Individual'and'group'achievements'are'celebrated.'		

Assistive Technology Introduction

The Individuals with Disabilities Education Act (IDEA), a federal law on special education that was reauthorized in 2004, requires schools to consider a student's possible need for assistive technology devices and services whenever an Individualized Education Program (IEP) is developed.[102] In addition, the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act require schools to provide assistive technology for students with disabilities, if needed to assure equal access to the school's programs and services. Both of these laws also require that schools provide instructional materials in accessible formats to students who need them.

Today's technologies have the ability to dramatically change the lives of students with disabilities, enabling them to access the curriculum, participate in learning activities alongside their peers, personalize their learning, and achieve their full potential. An understanding of assistive technologies and accessibility will help school personnel make informed decisions when they evaluate students' needs.

Considering the Need for Assistive Technology

The principal reason for providing assistive technology in school is to enable students to meet the instructional goals set forth for them. School personnel should look at tasks that each student needs to accomplish, the difficulties the student is having, and the ways that various devices might help the student better accomplish those tasks.

There are many factors that need to be examined when assistive technology devices and services are being considered for a student—including educational goals, personal preferences, social needs, environmental realities, and practical concerns.

Also critical are the various services that will support the student's use of assistive technology. These services can include customizing a device, maintaining or repairing the device, and providing training and technical support.

Examples of Assistive Technology

- When text is available in a digital format, a number of adaptations are possible: A student with a learning disability can listen to the text using a software program that converts the text to speech (See the Student Spotlight on page 18.)

- A student with low vision can enlarge the text or change its color on the computer to make it easier to read.

- A student who is blind can use a software program that translates the text into braille. If desired, the document can be printed using a braille embosser.

- Communication books with pictures representing frequently used messages can help a nonverbal student to communicate.

- Timers can be used to show how much time an activity will take, helping students pace themselves through activities.

- Line magnifiers, which enlarge a line of text, can be helpful to students with vision impairments, as well as students with learning disabilities who have difficulty focusing on one line of text at a time.

- Seat cushions can help students with physical disabilities maintain the posture needed to use their arms or hands effectively. For students who have difficulty with attention, some

As the examples above illustrate, universally designed curricula do not necessarily eliminate the need for assistive technology. Rather, they work together to meet students' needs.

The National Center on Universal Design for Learning (http://www.udlcenter.org/) is an excellent online resource for learning about universal design. Founded by CAST, this national center provides research evidence, implementation guidelines, examples, news, resources, videos, self-paced modules, and more. Its UDL Guidelines section offers a rich collection of examples and resources (http://www.udlcenter.org/implementation/examples) that teachers can use with students.

The growing use of tablets and mobile devices has been accompanied by a remarkable growth in the number of applications, or apps, available for these devices.
Many assistive technology tools can also be helpful for students without disabilities. For example, an application that reads text aloud may be helpful for students who are learning English. The same application may be useful to students who need to improve their skills in proofreading their own written work. Providing all students with access to these devices helps realize the goal of accommodating the needs of all students.

Accessible Instructional Materials

Federal law requires public schools to provide an equal opportunity to students with disabilities to participate in, and receive the benefits of, the educational program. When applied to instructional materials, this requirement means that any materials used for instruction must be accessible to students with disabilities. In instances when that is not possible, accommodations or modifications must be provided.

Resources

SETT Framework
http://www.joyzabala.com/Documents.html
SETT is an acronym for Student, Environments, Tasks, and Tools—all of which need to be fully explored when assistive technology tools are considered or selected. The website offers a set of forms for collaborative decision making developed by assistive technology expert Joy Zabala.

National Dissemination Center for Children with Disabilities
http://nichcy.org/schoolage/iep/meetings/special-factors/considering-at
This national center offers a wealth of information on related to infants, toddlers, children, and youth with disabilities, including research-based information, publications, newsletters, and a question/answer service. The website includes a checklist that can guide schools in considering assistive technology.

Mobile Apps
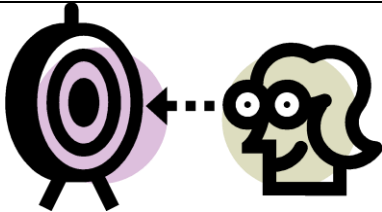
Apps as Assistive Technology (AT)
http://www.mainecite.org/index.php/apps-as-assistive-technology-at
The Maine Department of Education's assistive technology program has created this resource page to help consumers and AT professionals learn more about the mobile devices and apps that are currently being used with students.

Our Favorite Apps
http://www.gatfl.org/

Goals	Objectives	Outcomes

A goal is a statement of intent or vision that is not necessarily measurable. The aim, the vision, usually the catalog description of a course or program.	Measurable Objectives are small steps that lead toward a goal.	SLOs overarching specific observable characteristics, developed by local faculty, to determine or demonstrate evidence that learning has occurred as a result of a specific course, program, activity, or process.

Objectives: Objectives are small steps that lead toward a goal, for instance the discrete course content that faculty cover in a discipline. Objectives are usually more numerous and create a framework for the overarching Student Learning Outcomes which address synthesizing, evaluating and analyzing many of the objectives.

Student Learning Outcomes (SLO): Student learning outcomes (SLOs) are the specific observable or measurable results that are expected subsequent to a learning experience. These outcomes may involve knowledge (cognitive), skills (behavioral), or attitudes (affective) that provide evidence that learning has occurred as a result of a specified course, program activity, or process. An SLO refers to an overarching outcome for a course, program, degree or certificate, or student services area (such as the library). SLOs describe a student's ability to synthesize many discreet skills using higher level thinking skills and to produce something that asks them to apply what they've learned. SLOs usually encompass a gathering together of smaller discrete objectives (see definition above) through analysis, evaluation and synthesis into more sophisticated skills and abilities.

Clearly defined, measureable student learning outcomes

- Focuses teaching practices, syllabi, daily activities, and assessments on a single target--SLOs
- Improves feedback to students which powerfully improves success
- Validates both what we are teaching and why we are teaching it
- Promotes robust dialogue among the faculty & stimulates productive departmental conversations
- Enhances interdisciplinary cooperation
- Contributes to more rigorous curriculum review with a focus on outcomes
- Encourages consistency of standards between sections
- Maintains high standards
- Directs teaching to be more learning-centered
- Improves student learning by focusing on good practices
- Develops reciprocity and cooperation among students,
- Encourages active (verses passive) learning,
- Provides prompt feedback
- Emphasizes task on time
- Communicates high expectations
- Respects diverse talents and ways of learning

Why Faculty are the Drivers in Assessment

- Faculty have the primary responsibility for facilitating learning (delivery of instruction)
- Faculty are already heavily involved in assessment (classroom, matriculation)
- Faculty are the content experts
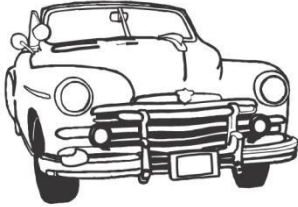
  - Who Provides the Assessment Vehicle and Keeps Gas in It? Administrators!
  - **The Role of Administrators**
    - Establish that an assessment program is important at the institution
  - Institutionalize the practice of data-driven decision making (curriculum change, pedagogy, planning, budget, program review)
  - Create a neutral, safe environment for dialogue

Faculty DON'Ts…

- Avoid the SLO process or rely on others to do it for you.
- Rely on outdated evaluation/grading models to tell you how your students are learning.
- Use only one measure to assess learning
- Don't criticize or inhibit the assessment efforts of others.

Faculty DOs...

- Participate in SLO assessment cycle
- Make your learning expectations explicit
- Use assessment opportunities to teach as well as to evaluate.
- Dialogue with colleagues about assessment methods and data.
- Realize you are in a learning process too.
- Focus on assessment as a continuous improvement cycle.

Professional Development Evaluation Tool
INCLUSION PROFESSIONAL DEVELOPMENT EVALUATION FORM
Title of course/workshop: Click here to type name of the event.
Date: Click here to enter date.   Location: Where was event held?
To what extent do you feel the goals/objectives for this course/workshop were accomplished?
☐1 – Not at all
☐2
☐3
☐4
☐5 - Completely
Comments: Type comments here.
How would you rate the overall effectiveness of the instructor(s)—preparation, style, methods, rapport—for this courses/workshop?
☐1 – Not at all
☐2
☐3
☐4
☐5 - Completely
Comments: Type comments here.
To what extent did this course/workshop provide you with useful ideas which you expect to apply to your own professional/personal situation?
☐1 – Not at all
☐2
☐3
☐4
☐5 - Completely
Comments: Type comments here.
What suggestions do you have for improving this course/workshop? Type comments here.
Would you recommend this course to a co-worker?
☐YES   ☐NO   ☐MAYBE
          Why or why not? Type comments here.
What, if any, suggestions do you have for additional courses/workshop which might be organized in the future? Type comments here.
7.   Other comments? Type comments here.

KWL Chart (Informal Evaluation Method for Professional Development)

KWL Chart

Name_____   Topic_____

What I <u>KNOW</u>	What I <u>WANT</u> to Know	What I <u>LEARNED</u>

Appendix B: TATIS Scores

Participant	Gender	Teaching	Age range	Percentile Range
1	Female	Regular	45 and above	24
2	Female	Regular	26-35	54
3	Female	Regular	45 and above	1.4
4	Male	Regular	45 and above	24
5	Female	Regular	45 and above	99.4
6	Male	Regular	45 and above	0.1
7	Female	Regular	45 and above	50
8	Female	Regular	26-35	69
9	Female	Regular	36-45	54
10	Male	Regular	36-45	97
11	Female	Special	36-45	76
12	Female	Regular	45 and above	88
13	Male	Regular	45 and above	69
14	Female	Regular	45 and above	50
15	Male	Regular	26-35	46
16	Female	Special	26-35	99.9
17	Female	Regular	25 or below	69
18	Male	Regular	36-45	24
19	Female	Regular	36-45	50
20	Male	Regular	45 and above	12
21	Male	Special	45 and above	88
22	Male	Regular	45 and above	16
23	Female	Regular	45 and above	97
24	Female	Special	26-35	46
25	Male	Regular	36-45	0.1
26	Male	Regular	36-45	99.5
27	Male	Regular	26-35	46
28	Male	Special	45 and above	46
29	Female	Regular	26-35	88
30	Female	Regular	45 and above	46
31	Male	Regular	45 and above	99.4
32	Female	Regular	36-45	99.9
33	Female	Regular	26-35	24
34	Female	Special	26-35	99.9
35	Male	Special	36-45	96

36	Male	Regular	45 and above	24
37	Male	Regular	26-35	46
38	Male	Regular	36-45	24
39	Female	Regular	45 and above	0.1
40	Male	Regular	36-45	24
			Overall Percentile	54.1675
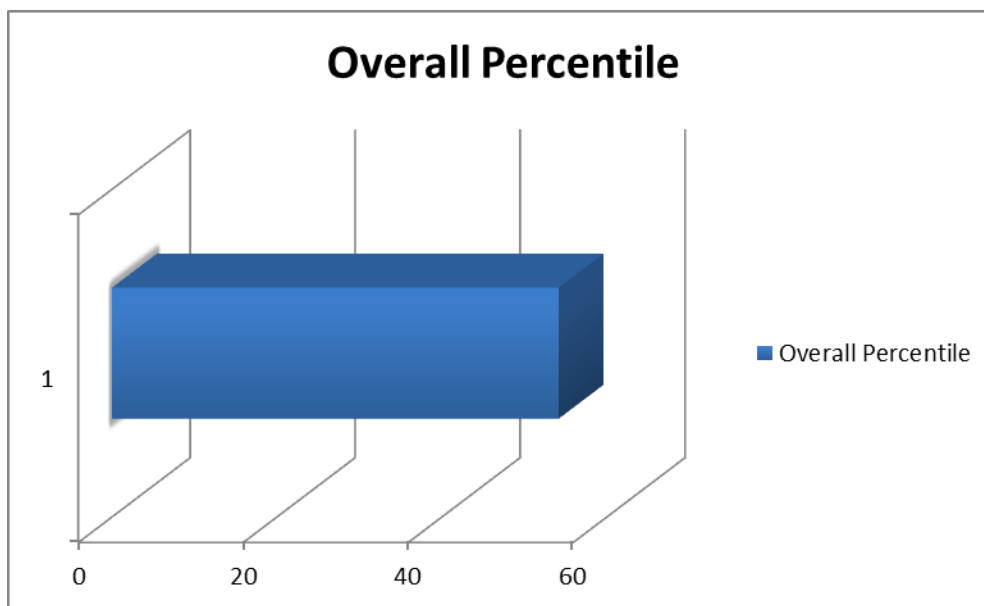
Appendix C: Demographics Sheet

1. I am teaching:

Special education   ____
Regular education   ____

2. I am: 1. Male   ____   2. Female   ____

3. What is your age:

25 years or below   ____   3. 36-45 years   ____
26-35 years   ____   4. 45 years or above   ____

4. My highest level of education completed is:
Bachelor's Degree   ____   3. Education Specialist   ____
Master's Degree   ____   4. Other, please specify   ____

5. I have had significant/considerable interactions with a person with a disability
Yes   ____   2. No   ____

6. I have had the following level of training on educating students with disabilities:
None   ____   2. Some ____   3. High (At least 40hrs) ____

My knowledge of legislation or policy as it pertains to children with disabilities:
None ____   2. Poor ____   3. Average ____ 4. Good ____ 5. Very Good ____

My level of confidence in teaching students with disabilities is:
Very Low ____ 2. Low ____ 3. Average ____ 4. High ____ 5. Very High ___

My level of experience teaching a student with a disability is:
Very Little ____ 2. Some ____ 3. High ____

Appendix D: TATIS Scale

Appendix A: Teacher Attitudes Toward Inclusion Scale (TATIS).

Directions: The purpose of this confidential survey is to obtain an accurate and valid appraisal of your perceptions of the inclusion of students with mild to moderate disabilities in regular classrooms. It also contains questions pertaining to your beliefs about professional roles, attitudes toward collegiality, and perceptions of the efficacy of inclusion (i.e., whether or not you believe that inclusion can succeed). Because there are no "right" or "wrong" answers to these items, please respond candidly.

Definition of Full Inclusion: For the purposes of this survey, full inclusion is defined as the integration of students with mild to moderate disabilities into regular classrooms for 80% or more of the school day. Under federal special education law, mild to moderate disabilities include Learning Disabilities; Hearing Impairments; Visual Impairments; Physical Handicaps; Attention Deficit Disorders; Speech/Language Impairments; and mild/moderate Emotional Disturbance, Mental Retardation, Autism, or Traumatic Brain Injury.

Use the following scale for all items:

1=Agree Very Strongly (AVS), 2=Strongly Agree (SA), 3=Agree (A), 4=Neither Agree nor Disagree (NAD), 5=Disagree (D), 6=Strongly Disagree (SD), 7=Disagree Very Strongly (DVS)

	1 AVS	2 SA	3 A	4 NAD	5 D	6 SD	7 DVS
1. All students with mild to moderate disabilities should be educated in regular classrooms with non-handicapped peers to the fullest extent possible.	O	O	O	O	O	O	O
2. It is seldom necessary to remove students with mild to moderate disabilities from regular classrooms in order to meet their educational needs.	O	O	O	O	O	O	O
3. Most or all separate classrooms that exclusively serve students with mild to moderate disabilities should be eliminated.	O	O	O	O	O	O	O
4. Most or all regular classrooms can be modified to meet the needs of students with mild to moderate mild to moderate disabilities.	O	O	O	O	O	O	O
5. Students with mild to moderate disabilities can be more effectively educated in regular classrooms as opposed to special education classrooms.	O	O	O	O	O	O	O
6. Inclusion is a more efficient model for educating students with mild to moderate disabilities because it reduces transition time (i.e., the time required to move from one setting to another).	O	O	O	O	O	O	O
7. Students with mild to moderate disabilities should not be taught in regular classes with non-disabled students because they will require too much of the teacher's time.	O	O	O	O	O	O	O
8. I have doubts about the effectiveness of including students with mild/moderate disabilities in regular classrooms because they often lack the academic skills necessary for success.	O	O	O	O	O	O	O
9. I have doubts about the effectiveness of including students with mild/moderate disabilities in regular classrooms because they often lack the social skills necessary for success.	O	O	O	O	O	O	O
10. I find that general education teachers often do not succeed with students with mild to moderate disabilities, even when they try their best.	O	O	O	O	O	O	O
11. I would welcome the opportunity to team teach as a model for meeting the needs of students with mild/moderate disabilities in regular classrooms.	O	O	O	O	O	O	O
12. All students benefit from team teaching; that is, the pairing of a general and a special education teacher in the same classroom.	O	O	O	O	O	O	O
13. The responsibility for educating students with mild/moderate disabilities in regular classrooms should be shared between general and special education teachers.	O	O	O	O	O	O	O
14. I would welcome the opportunity to participate in a consultant teacher model (i.e., regular collaborative meetings between special and general education teachers to share ideas, methods, and materials) as a means of addressing the needs of students with mild/moderate disabilities in regular classrooms.	O	O	O	O	O	O	O

Appendix E: TATIS Scoring

Guide

(T-Scores have a mean of 50 and a standard deviation of 10; Percentile ranks range from 1 to 99)

Part 1: TATIS Factor Scores			
Item	Factor 1: POS	Factor 2: BEI	Factor 3: PRF
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
Factor Raw Scores	Add 1-6	Add 7-10	Add 11-14
Factor T-Scores (See tables 6 to 8)			
Factor Percentile Ranks (See tables 6 to 8)			
Part 2: TATIS Full Scale			
Total Raw Score	Raw score POS = _____ + (32-Raw Score BEI = _____) + Raw Score PRF = _____ = _____ TATIS Total Raw Score		
Total T-Score (See table 5)			
Total Percentile Rank (See tables 5)			

Appendix F: Flyer to Solicit Participants

Don't Allow Inclusion to Become Another Form of Exclusion

Are you providing your students with all of the resources and support necessary to be successful not only in school, but in their communities and later in life as well? The first step is to ensure that we are creating an inclusive atmosphere for all learners. What is an inclusive classroom environment, you ask? Come and find the answers to this question and many more.

Please see Pamela McKinley if you are interested in participating in a project study that can provide information on several factors that greatly influence the effectiveness of inclusive classroom settings. This study will allow you to investigate inclusion services and how you can best implement these services into your regular education classroom. If you have any questions or are willing to be a participant in this project study, please stop by room 135 for additional information, or call me at (901) 628-2554. I look forward to speaking with you.

Appendix G: Interview Questions

- What is your understanding of inclusion?
- Tell me about your previous experience(s) with the implementation of inclusion?
- Describe your ideal classroom? Would it contain students with disabilities?
- What type of inclusion is/has been implemented in your classroom?
- What level/types of support are you receiving, or have you previously received?
- Have you been exposed to people with disabilities outside of school, or only in the classroom?
- What are your thoughts/feelings about educating students with disabilities in the regular education classroom?
- Do you feel that more exposure to students with disabilities makes it easier to create an inclusive classroom setting?
- What professional developments have you attended, to assist with the educating of students with disabilities?
- What is collaborative teaching?

-Have you been given the opportunity to attend any workshops on inclusion or collaborative teaching? And if so, was it helpful?