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SPECIAL EDUCATION LEARNING ENVIRONMENTS INCLUSION VERSUS SELF-CONTAINED

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ABSTRACT

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Over the years, many special education trends have emerged and faded, each claiming to be the solution to providing students with special needs a greater chance for success. Each year, new requirements for graduation and new educational legislation are introduced to try and correct old problems of ensuring students with special needs are properly educated leaving educators, parents, and advocacy groups with uncertainty as to appropriate placement, for students with learning disabilities. Therefore, the question becomes: "What method of instruction best suits the needs of special education students?" This will be a convergent mixed methodology study on the differences of students with special needs placed in both self-contained and inclusion classrooms as it pertains to their success on the ELA and Algebra Regents examinations. The students selected for this will be from a culturally diverse suburban school district located in central Long Island New York. This research will focus on students with special needs, ages 14 to 18, within these classroom settings and the differences in achievement on state assessment measures. A descriptive statistical analysis using SPSS will be conducted on students over the course of five years (2015-2019) in both the ELA and Algebra 1 Regents. A correlation study will also be conducted as to determine the differences in students' relation to their success on both exams.

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I would like to thank my wife Gina and son, Shaun, for all their patience and understanding to allow me to be able to complete this. This is something that I always wanted to accomplish, to which they were always supportive. I will always be grateful.

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CHAPTER ONE: INTRODUCTION

Background of the Study

Those employed in public education find themselves regularly discussing and debating the pathway to universal student success. While the aforementioned success remains an often-elusive construct, student achievement is often measured through proficiency and mastery on summative assessments. These assessments are usually in the form of state and local exams, which gauge student competency, while simultaneously providing a barometer of instructional effectiveness. It is no secret that pressure and controversy have grown as what are often characterized as "high stakes tests" have consequences for both students and teachers alike. It is equally clear that the pressures associated with these enhanced rigor assessments present unique challenges to Special Education students and teachers as debate regarding the best model of instruction rages on.

A Special Needs student's instructional environment is delineated in the child's Individualized Instructional Plan (IEP), which is crafted as part of the Committee on Special Education CSE process. The CSE, which is comprised of the child's parent/guardian, educational professionals, and additional members (when appropriate), makes most appropriate educational setting decisions based upon available data and student needs in a least restrictive environment (Education of All Handicapped Children, 20 U.S.C. § 1400, 1975).

The general school of thought had been to place students, defined as having learning disabilities, in self-contained, special day classes, which were isolated from the mainstream student population, and taught by trained special education teachers, providing individualized instruction (Mauro, 2009). The definition of this setting is described by Mauro (2009) as "Placement in a self-contained classroom means … [the] child will be removed from the general school population for all academic subjects to work in a small controlled setting with a special education teacher. Students in a self-contained class may be working at all different levels, with different textbooks and different curricula." These self-contained classes were designed to offer structure, routine, and support for struggling students. It was also thought that trained personnel would provide the students with a stable social, emotional, and academic environment and that the expectations of these students would be appropriate for their current level of understanding. Although one might characterize a self-contained setting as restrictive in terms of analogous opportunities for special needs children, advocates contend that the model provides students a stable social, emotional, and academic environment with expectations appropriate for their current level of understanding. Proponents of self-contained instruction are resolute in their contention that the model provides the ideal setting for the delivery of education, as well as other related and required special services.

Recent years have brought an alternative to self-contained instruction, which purports to individualize teaching and learning in a less restrictive classroom setting. Rather than restrict the students' environment while anticipating educational growth, educators are given more consideration to place children with

learning disabilities in a class that promotes socialization and academic benefits (Kinney, 2007). This placement, referred to as inclusion, strives to keep special needs students in the traditional classroom, while bringing the necessary services to the mainstream setting (Power-de Fur, 1997; Wisconsin Education Association Council [WEAC], 2007). The WEAC (2007) reported:

> Inclusion is a term which 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. (p. 1)

The inclusive model brings the special education team into the mainstream classroom to work in conjunction with the regular educator (Wright & Wright, 2009).

Although each model has its benefits, the purpose of this study is to compare the inclusion and self-contained approaches by measuring their educational merits. Examinations such as these are imperative to understanding and defining the best practices for students with special needs as well as ensuring that current special education practices properly conform to data-driven research and not current economic or social trends (Bar-Lev, 2007). With the educational field in a constant state of flux and new trends and influences pressuring the system, the ability to judge and evaluate the validity of programs can become difficult due to a district's economic need or desperation (Rothstein, 2010).

Historical Perspective

Diversity of opinion and controversy relative to model superiority emerged the very moment Special Education instruction was born. This theoretical conflict stems from both the natural divergence of learned opinion and rapid creation of laws that instruct and dictate the ways public schools must proceed when educating students with special needs

As per The Individuals with Disabilities Act, the law does not provide a definitive mandate that dictates placement in a self-contained class but instead, outlines the need for special education students to be placed in the Least Restrictive Environment (LRE) appropriate to best serve their educational needs (IDEA, 2004). Legislators have recognized that inclusive classroom placement is not appropriate for every student, and that school districts must have an array of opportunities available for all students to service their learning needs.

The concept of LRE has been a topic of debate for many years as members of the education community failed to accept a universal construct. Other interpretations of IDEA have included the mainstreaming of special education students in inclusive classrooms for a specified portion of the school day (Wrightslaw, 2009). The concept of partial mainstreaming is based upon the premise that students basically earn their right to mainstreaming through academic success (Baker & Zigmond, 1995). Depending on the disability, and the effect of that disability on student achievement, the Individualized Education Plan committee then decides on the amount of mainstreaming per case. The more academically capable students will be mainstreamed for a greater length of time than those performing at a lower level (Wrightslaw, 2009).

To provide greater insight, this literature review focuses on the comparison between

inclusive and self-contained classroom environments. Topics discussed are the historic perspective, present day practices, conceptual framework, and the litany of challenges of special education placement, and learning styles. Such an examination allowed an accurate assessment of current practices in the field of special education.

Since the birth of our modern day educational system, people with disabilities have been misunderstood and miscataloged by mainstream society. Students with physical or mental disabilities were typically segregated from general education classes and often placed in self-contained settings. This exclusive philosophy was based upon the widely held belief that such profound disabilities dictated placement in a more restrictive environment by the nature of the student's academic and physical requirements, or needs during the school day (Winzer, 1993). Even after legislation was passed to provide more robust services and greater attention to the academic growth of "special needs" students, inclusion remained the exception rather than the rule for those with significant learning needs.

Learning disabilities were often more misunderstood than other disabling conditions due to the inconsistent nature of the symptoms (Baker & Zigmond, 1995). As a result, many children with learning disabilities were classified as being dumb or slow (Winzer, 1993). In the late 1960's, as public attention increased, the federal government began to follow the more prescribed Learning Disabilities Act, or PL 91-23, which essentially memorialized the requirement that schools provide support services for students with learning disabilities. The passage of PL 94-142, in 1975, further defined the identification and instructional placement of this population (USDE, 2007).

Under this mandate, students identified as special education were provided services

through the creation of self-contained classes. This type of placement appeared to be the best and most effective way of providing services and allowed students with special learning needs the ability to learn and develop academically (Pardini, 2002). These placements were staffed by special education teachers who received specific training to better qualify them for educating special needs students. The justification for both special education classes and instruction was that regular education teachers did not have the capability and knowledge base to provide focused services to students with specific learning needs (Pardini, 2002).

When discussing students with disabilities and least restrictive environment in today's educational system, the goal of both legislation and special education teachers has been to educate a student in a setting where learning and remediation can be maximized. In our contemporary educational climate, the question has become: Are students with learning disabilities finding more or less success when placed in self-contained class settings? There have certainly been a large number of educational leaders who argued that students should be provided inclusive placements in order to truly integrate them into the school environment (Holloway, 2001). Advocates of inclusion have claimed that any segregation, even based on disabilities or performance, can have only profoundly negative results (Kavale, 2002).

There have been a multitude of studies extolling the virtues of both the self-contained and inclusion models of instruction. Similarly, educators have spent considerable time and effort researching the academic and social emotional advantages and disadvantage of the two divergent models. Our literature review reveals that the comparisons between the inclusive and self-contained classroom environments

have garnered differing results, with ample evidence to support both sides of the discussion.

Statement of the Problem

With the focus on providing a social and academic educational setting suited to the needs of students with disabilities, educators have endeavored to determine the proper instructional environment for children with special needs (USDE, 2007). At the very foundation of this dilemma rests a poignant query that properly frames the overarching question: What methods are best utilized to educate students with special needs in order to provide the academic rigor necessary for success, while offering the psychological, social, and educational benefits of the regular classroom environment?(Fore, Hagan- Burke, Burke, Boon, & Smith, 2008).

It is important to note that federal and state law and related policies, and subsequent placement practices are very specific with regards to special needs students. Schools must provide students with special needs programs that include all necessary services without compromising exposure to the general student population (Rothstein, 2010; Wrightslaw, 2009).

When creating and implementing a student's IEP, the concept of "least Restrictive environment" is always in the foreground of thought. To ensure social adjustment and growth, it is important to provide as much exposure to the mainstreamed population as possible without impairing the student's education (USDE, 2004). This dual paradigm serves as the guidepost of efforts as parents and educators seek the appropriate balance

for ultimate student success (Kauffmann, Bantz, & McCullough, 2002). The dynamics of Least Restrictive Environment and the best method for achieving this elusive construct is a topic of considerable debate in the education community. For decades educators have been asking themselves "How do we provide an appropriate education and support for students with special needs without totally segregating them from the regular population?"

When addressing the educational needs of children with severe disabilities or limitations, students are regularly placed in settings more conducive to their academic/social level as established by their physical and mental limitations (Yell, 2004). These integrated placements are most beneficial when the academic needs of students possessing moderate learning disabilities can be accommodated with focused instruction, while still benefitting from the social/ educational interaction of a regular education setting. (Kinney, 2007).

On the opposite side of the spectrum, advocates for self-contained special education placement believe that students with special needs are better suited for an environment where individualized education can be focused and these needs are better met in a homogenous special day class setting (Mauro, 2009). Placement in a self-contained classroom allows for students to access specially trained teachers and aides in a smaller instructional setting, allowing further support for both academic and social miscues. These types of services are not as prevalent in a normal, integrated classroom setting, adding to further disconnect on the part of the student (Stout, 2007). While these smaller setting placements allow for greater time and instruction to be provided to struggling students, there is certainly concern over lost social interaction with typical

peers when placed in a self-contained setting. Students placed within this restrictive setting have little access to the regular education population except during times such as physical education and non- academic electives (Colarusso, 2004). When referencing these homogenous placements Chen (2009) stated, "there are specific cases of students who, without doubt, need more personal and unique interventions" (p. 1). The belief that students with certain learning disabilities and behavior traits flourish in a smaller, and academically focused setting classroom adds to the belief that self -contained placement is something necessary for a student's overall success. Proponents of self-contained instruction argue that students identified as having a learning disability should not be placed in an inclusive environment because it is the same environment from which they were removed for having academic shortfalls. It is further argued that placing these children in this type of setting again is not conducive to a student's learning needs. (Halloway, 2001)

Individuals opposed to self-contained settings claim that removing students from their peers is not a valid option in addressing the social and academic needs of a child. The general belief of inclusion advocates is that schools are obligated to place students with disabilities in regular classrooms and integrate special education teachers and aides into that environment (Colarusso, 2004).

Purpose of the Study

Since the introduction of PL 94-142, the law that defines special education service parameters in America, there has been a lack of review and research on the academic advantages of either self-contained or inclusion instruction on NYS

regents exam success on both students with special needs in both types of settings as well as those regular education students assigned to receive instruction in inclusion classrooms.

The purpose of this study was to compare both types of instructional settings with regards to the success of all students associated with these programs on the New York State Regents' Exam.

This study examines the New York State Regents scores of select high school students in a suburban district. Of the three sample groups, one sample group consists of students placed in a self-contained class setting, another is a regular education classroom setting, the last being students from inclusive classroom environments. It is important to note that both the self-contained and inclusion groups are receiving core content instruction directly related to the New York State Regents Exams that are being measured and compared. New York State Regents scores will then be analyzed to determine and compare the proficiency and mastery levels of each group over a two-year academic period.

While this data is the key topic of this study, the need to identify and address the thoughts and opinions of the staff who serves students with special needs is important. It is their thoughts and opinions that can mold a classroom environment to be successful. Reviewing the pre-conceived notions of those faculty members serving these types of students can also help to identify inconsistencies and differences in the perception of inclusive classroom environments.

Theoretical/Conceptual Framework

Within the educational field, proponents of both self-contained and inclusion instruction have passionately argued the merits of their chosen model for students with special needs (Kinney, 2007; Stout, 2007). In this study the two modes of thought,

- Vygotsky (1978), who supports the inclusive setting as fundamental in the development of cognition. Within his general theory of child development, Vygotsky created a philosophy of educating children with special needs. Based on these ideas, Vygotsky believed that the overall development a child with special needs is improved by the social interaction created within that environment. This environment will add to the overall remediation of children with special needs. Within his studies he coined the term "Positive deferential approach", which can be interpreted as a favorable societal outlook on a child with a disability from a point of view his/her strengths, not weaknesses. His criticism of self-contained settings within special education were seen as a combination of lowered student expectations, limited curriculum, and social isolation from one's peers (Fuchs & Fuchs, 1994).

- Kauffman, McGee, and Brigham (2004), who supports that the full continuum of placement options for students with disabilities. Kauffman (2006) defined special education as specially designed instruction that meets the unusual needs of an exceptional learner…the single most important goal of special education is the finding and capitalizing on exceptional learners' abilities (p.13). Kauffman (2002) argued that special education must be improved, not discontinued and that the labeling of students within homogeneous groupings will only add to identifying the individual needs of

students that will promote social/academic growth.

Those who prescribe to the theory of inclusion as being better suited for students with special needs claim that self-contained classrooms increase social differences between classified and non-classified students due to the absence of social settings and interactions in a self-contained model (Vygotsky, 1978). It is believed that "including children with disabilities with their peers in the general education classroom allows for more interactions to fall within the zone of proximal development" (Kinney, 2007, para. 17), a key factor in student learning and advancement. Interactions within an inclusionary setting allow for enhanced learning and growth within the special needs population. (Vygotsky, 1978).

On the opposing side of this argument, proponents of a self-contained setting claim that by placing all students within an inclusionary model special education is in danger of "losing its way in the single-minded pursuit of full inclusion" (Kauffmann, 2004) (p. 613). Many who align to the theory of self-contained state that students with special needs are in need of focused individualized attention that can only be given with efficiency, in a more restrictive setting (Mauro, 2009). A self-contained setting allows students access to instructional staff focused on addressing their specific learning needs through such support not normally available in an inclusive classroom (Stout, 2007).

Contrary to the theory of inclusion, individuals such as Kauffmann claim that students who require more intensive instruction and support through differentiation are best serviced in a self-contained special education environment" (Kauffman, 2004). Kauffmann et al. (2004) conducted numerous studies involving self-contained

placement and concluded that differentiated instruction can often be best delivered in a self-contained setting.

Within these two differing pedagogical approaches, there are perceived differences in the implementation and learning of material between students with special needs. What needs to be further evaluated and understood is how these differences translate into student's success. While both modes of thought (Vygotsky and Kauffman) provide academic support and structure for students with special needs, the ability to understand how these methods translate into not only physical data but teacher perceptions of student success is necessary to ensure progression of current academic policies and practices.

The differences in academic supports and overall focal points of instruction make each one of these vastly different from the other. While students within both the ICT and self-contained setting are supported in differing ways, the measurements of success are the same in terms of all being required to complete a formalized assessment such as the NYS Regents exam. Within both these settings, students with similar learning differences are expected to know and understand the current curriculum as it relates to the NYS Regents exam. It is important to evaluate and determine what method best prepares them for such an assessment and the measures of success each subgroup within these settings may or may not have.

Research Questions

The following questions guided this study:

1. Is there a significant difference in the academic achievement of both disabled and non-disabled students involved in an inclusive classroom.
2. Are their significant differences in the academic achievement of disabled students enrolled in both the inclusion and self-contained settings as it relates to NYS ELA and Algebra 1 Regents?
3. Are their significant differences in student achievement of inclusive and self-contained learning environments as it relates to gender, poverty and ethnicity?
4. What are teachers/administrators attitudes/perceptions of inclusive and self-contained classroom settings in terms of student achievement and success of all students within these learning environments?

Significance of the Study

With the introduction of PL 94-142 in 1975, American schools have struggled to provide appropriate learning opportunities for students with disabilities (Protigal, 1999) and the goal has remained elusive, presenting new and more complex challenges to each passing generation. The focus of today's educational system should be to ensure that the nation's special educators are providing effective, timely services

to those in need and promoting equity and growth throughout the system. To this end, it is time for a major review and inventory of both the successful practices and failures of the past (Admin, 2010).

While the past twenty years have brought countless movements aimed at identifying the gaps and inadequacies in special education instruction, a single, definitive method for effective special needs teaching and learning remains elusive. Each year, new requirements and fresh legislation are introduced in an effort to address and correct old problems in the system (Tough, 2008). The frequency of these well-intentioned shifts often increase confusion, leaving educators, parents, and advocacy groups with uncertainty as to appropriate placement and Least Restrictive Environment, for students with learning disabilities. While the constant introduction of new concepts and policies, accompanied by flashy methodologies and the promise of better teaching, continues at rapid pace, there is rarely time for new initiatives to produce results, leaving a population in desperate need of a clear course of action (Culp, 2008). The question becomes: Are our current methods of training and thought working to address the achievement gap or are we doing more harm than good? It is the hope of this study to provide insight to this question and allow for educators to find answers to ultimately inform and guide special education placement.

Researcher Assumptions

Based upon the research conducted through literary review indications are that those students within the inclusionary setting will fare better than that of students prescribed to self-contained setting. This belief, while not based in factual analysis is based on

personal observations. What I have learned from these personal observations is that given the increase in teaching personal that are certified in both special education and content, I am curious as to the significance of the differences in student success from each described program. Furthermore, I believe that because of this there may significant change as to the success of student within the self-contained setting.

Definition of Key Terms

The following terms were used in this study:

Inclusion (ICT). Regular classroom placement of any length of time during the school day (Mauro, 2009).

Individuals with Disabilities Education Act (IDEA). A reaffirmation of PL 94- 142 passed in 2004 (USDE, 2007).

Individualized Education Plan (IEP). A legal document for all special education students serviced under PL 94-142, or as it has been renamed, IDEA. The purpose of the IEP is to determine the goals and objectives planned for the student. The length of time, if any that the student may spend in a mainstream setting, as well as the handicapping condition are identified (PL 94-142, 1975).

Mainstreaming. The WEAC (2007) affirmed that "mainstreaming has been used to refer to the selective placement of special education students in one or more regular education classes" (p. 1).

New York State Regents exams. A standardized assessment used by the state of New York to measure yearly academic achievement in all core subject areas.

PL 94-142. A special education law passed by Congress in 1975. The PL 94-142, which was the most sweeping legislation of its time (PL 94-142, 1975).

Self-contained class. A segregated classroom environment for the placement of special education students (Mauro, 2009).

Summary

The goal of the research provided was to accurately assess the quality of both an inclusion and self-contained model within an economically diverse suburban setting, through the utilization of NYS Regents data over a two-year period in two core subject areas (Math, English). The main goal of the study is to offer insight, without slant or bias, as to the effectiveness of each educational environment and how the particular model impacts student success on state assessments of all students associated. This data and the accompanying conclusions can then serve to inform class structure and placement decision within the school setting.

As with any system where success can be measured, routine maintenance is needed to be sure educators are providing the most appropriate and effective instructional opportunities to every student, regardless of disability or handicap. This investigation of student achievement will provide stakeholders within the educational field (parents, teachers, administrators) the tools to make informed placement decisions relative to LRE. It is incumbent upon institutions to regularly assess and evaluate practices, and this research allows for the comparison of the two prominent special education instruction models utilized in the field. By comparing students' New York State Regents performance after being instructed in a self-contained or inclusion classroom, educators

and parents can determine the desired model, without subjectivity or bias.

In Chapter Two of this study, a review of the literature found allows for insight into special education placement and the issues of each that directly impact it. Past research from studies involving self-contained versus inclusive placements were compared and contrasted. Additional educational factors were presented for the influence these factors can have to determine their impact on the education and placement. The methodology utilized in the study was presented in Chapter Three.

An analysis of found data, summary of findings, and recommendations are discussed in Chapter Four and Chapter Five.

CHAPTER TWO: LITERATURE REVIEW

The research reviewed included articles from content specific journals and a variety of educational magazines which contained specific articles, studies or reports on the topic of inclusion. An electronic search was conducted using basic internet searches on Yahoo, Excite and Google. The following data bases were searched: Academic Search Premier, Master FILE Premier, ERIC, Middle Search Plus and Primary Search.

Background

Since the introduction of special education classes and related services within the public education system, there have been opinions and controversy as to which educational environment is best for students with learning disabilities. This theoretical conflict stems from the creation of laws that instruct and dictate the way a public school must proceed when educating students with special needs

As per The Individuals with Disabilities Act, the law does not provide a definitive mandate that dictates placement in a self-contained class but outlines the need for special education students to be placed in the Least Restrictive Environment (LRE) appropriate to best serve their educational needs (IDEA, 2004). Legislators have recognized that inclusive classroom placement is not appropriate for every student, and that school districts must have an array of opportunities available for all students to service their learning needs.

While litigation set the groundwork for special education, the results did not address inclusion in specific terms. Brown v. Board of Education (347 U.S. 483) is seen as the first case which opened the door for inclusion practices. While this case dealt with racial issues, its basic premise was applied to special education. Advocates viewed segregation based on

race as being similar to segregation because of disability. Proponents of inclusion believe the inclusion movement is similar to the civil rights movements of the 60's in that it guarantees students with disabilities have the same rights to attend educational programs as other minority groups (Stainback & Stainback, 1992).

The concept of LRE has been a struggle for many within the educational world to agree upon and accept universal procedures. Other interpretations of IDEA have included mainstreaming as the placement of special education students in inclusive education classrooms for a specified portion of the school day (Wrightslaw, 2009). The assumption is that a student basically earns the right to mainstreaming through academic success (Baker & Zigmond, 1995). Depending on the disability and the effect it has on student achievement academically, the Individualized Education Plan committee will then decide on the amount of mainstreaming per case. The more academically capable students will be mainstreamed for a greater length of time than those performing at a lower level (Wrightslaw, 2009).

To provide greater insight and comparison, this literature review focuses on the comparison between inclusive and self-contained classroom environments. Topics discussed are the historic perspective, present day practices, conceptual framework, and the litigation and challenges of special education placement, and learning styles. Such an examination allowed an accurate assessment of current practices in the field of special education.

Historical Perspective

Since the birth of our modern-day educational system, people with disabilities have been misunderstood and miscataloged by mainstream society. Students with physical or mental disabilities were generally segregated from general education classes and were often placed in self-contained classrooms. Such profound disabilities dictated placement in a more restrictive environment by the nature of the student's academic and physical requirements, or needs during the school day (Winzer, 1993). Even after legislation was passed to provide better care and academic needs of those classified as "special needs", care was exercised in mainstreaming decisions involving severe disabilities.

Learning disabilities were often more misunderstood than other disabling conditions due to the inconsistent nature of the symptoms (Baker & Zigmond, 1995). Many children with learning disabilities were often classified as being dumb or slow (Winzer, 1993). In the late 1960's, after considerable public outcry, the federal government began to identify and address the need for proper identification of learning disabilities with the Children with Specific Learning Disabilities Act, or PL 91-23. This law required that schools provide support services for students with learning disabilities.

Under this mandate, students identified as special education were provided services through the creation of self-contained classes. This type of placement appeared to be the best and most effective way of providing special services and allowed students with special learning needs the ability to learn and develop academically (Pardini, 2002). These placements offered special education teachers who received specific training to better qualify them for educating special needs students. The reasoning behind the creation of such a placement was the thought that regular education teachers did not have the capability

and knowledge base to provide focused services to address special education students' specific learning needs (Pardini, 2002).

When discussing students with disabilities and least restrictive environment in today's educational system, the goal of both legislation and special education teachers has been to educate a student within an environment where learning and remediation can be maximized.

NCLB (2002) supports IDEA (2004) by stressing that educators are accountable for the education of all students. All students must participate in the assessment process mandated by the state (IDEA & NCLB). IDEA (2004) requires all teachers to participate in the development of the IEP and stresses accountability at the state level. The district educators define the standards set by the state for reading, math, language arts, and science along with standards of achievement (Cox, Herner, & Demezyk, 2006: Fusarelli, 2006).

PL 94-142 which is now known as IDEA or The Individuals with Disabilities Education Act of 1990 has helped increase services across the landscape of special education. The key element from this legislation gave students with disabilities the right to a free and appropriate public education in the least restrictive environment. All of these services were to be in writing in a document called an IEP or individual education plan. IDEA defines the least restrictive environment as one where students with disabilities are included in general education classroom settings to the maximum extent appropriate. To deny this inclusive placement, schools are required to prove a student cannot, even with additional aids and services, receive any academic or social benefit from the general classroom placement (IDEA, 1990).

With parents requesting inclusion at an increasing rate, it is crucial that educators

and researchers examine the effect inclusion has on the disabled student. The literature reveals that the main reasons for inclusion seem to be based on projected gains for the student in the area of social development and academic achievement. The premise is that students feel at home in the general education classroom and therefore will gain more academically as well as learn the necessary skills needed in order to develop friendships.

In our current day educational system the question has become: Are students with learning disabilities finding more or less success when placed in self-contained class settings? The argument from many educational leaders has been for students to be provided inclusive placements in order to be truly integrated in the school environment (Holloway, 2001). Advocates of inclusion have claimed that any segregation, even based on disabilities or performance, can have only profoundly negative results (Kavale, 2002).

To better address the two types of learning models discussed, there have been numerous studies and articles outlining both educational settings and their benefits. Within these studies, both sides provide statements and evidence to support their contentions. The review of literature included studies of classroom placement, as well as other important components that directly impact the education of students with learning disabilities. These components play a major role in student learning. Comparisons were made between inclusive classroom and self-contained classroom environments with differing results.

Inclusive Classroom Environments

Advocates of an inclusion model have claimed that self-contained classrooms accentuate social differences when devoid of social interaction in a regular educational setting. It is further thought that a lack of social interaction might limit a student's development and lead to the differences that are typically seen in many people with disabilities (Dixon & Verenikina, 2007). It is believed that these deficits become additionally debilitating and impede remediation when a student's day is devoid of the social interaction found in a more inclusive setting.

Inclusion, a process of meshing general and special education, is a reform initiative designed to achieve a unified system of public education (Clark & Breman, 2009). In inclusive classrooms, all children and youth should be active and fully participating members of the group. This view of education considers diversity within the student population as the norm, which ensures a high quality of education for each student. A high-quality education makes provision for meaningful curriculum, effective teaching, and necessary supports for each student, which are typical of inclusive classrooms. Clark and Breman (2009) suggested that with the correct implementation of full-inclusion, academic outcomes could increase. Clark and Breman (2009) stated,

> *Although the original intent of the inclusion model has been to provide services for students identified for special education in the least restrictive environment, the principles can be used for many students who may need help in academic achievement and social-behavioral dimensions of their school lives who may not qualify for such services but who, indeed, could benefit from extra support. (p. 8)*

By educating students in two different settings, schools are promoting social

labeling and that can limit a child's progress by setting achievement goals too low (Fink, 2004). Feelings of being left out, or removed from society, can manifest themselves when separated from the general education population and have a profound effect on student achievement levels (Dixon & Verenikina, 2007). Those in favor of inclusion believe schools attempting to have two different educational settings are inefficient due to the duplication of services and are promoting segregation and discrimination (Hooks, 2010).

Research indicates that when a student with severe disabilities is placed in a general education class, they show better social development, increased social interaction, enhanced skill acquisition and generalization, better health, more interdependence, greater success in meeting the objectives of their IEP's and more normalized adult functioning. Their presence gives classmates and others in the community more positive attitudes toward children with disabilities (Hunt et al., 1991, as cited in Simon & Karasoff, 1992). The same study by Hunt, et al., 1991, further revealed that for students with mild disabilities, integrated placements result in higher academic achievement and greater social and emotional growth. Brown-Abdelmageed (2007) found that students with disabilities participating in the regular education curriculum achieved advanced scores on standardized tests higher than students who did not participate in inclusion programs. The frequency with which students who have disabilities are educated alongside their nondisabled peers in general education classrooms has increased considerably, affecting virtually every aspect of contemporary schooling.

Lorna Idol conducted a study of inclusion programs utilizing four elementary schools, two middle schools, and two high schools located within a large metropolitan area. The purpose of the study was to determine how much effect, if any, the inclusion of

students with disabilities was having on the eight schools involved in the study (Idol, 2006). Subsequently, Idol hoped to gain further insight on the inner workings of each school and how they addressed students with disabilities and their placement in the most least restrictive environment. The rationale for this research was to "describe what happens in schools as educators move toward more inclusive educational practices, moving from simply providing students with schooling opportunities in the LRE to the provision of full inclusion services" (p. 78).

Within the research, Idol concluded students with learning disabilities can benefit from inclusive placement. She found state test data showed marked academic improvement for students with learning disabilities placed in inclusive environments (Idol, 2006). Another conclusion found in the study was the correlation between inclusion and students behavior. Behavioral incidents among students with learning disabilities placed in inclusive classrooms were reduced when compared to self-contained placement. Both teachers and administrators within the study concluded that students within an inclusive placement, provided with proper supports, were able to be successful within that setting (Idol, 2006). The study concluded that inclusive classroom placement could be effective for students with learning disabilities depending on the student's individual needs. Even though this study showcased inclusion as a definite pathway towards educating students with special needs, it was also noted that a self-contained classroom setting was still needed for those students needing further reinforcement of skills and for those students requiring a modified curriculum.

Data collected from administrators, teachers, families, and project providers

throughout the nation identified different beliefs about inclusion, suggesting that inclusion is not only a classroom placement in school but also a family and community participation issue. Since beliefs about inclusion determine its effectiveness in schools, Schwartz, Odom, and Sandall (2010) called attention to some of the different views of inclusion. Schwartz et al. (2010) explained that in some settings, inclusion meant first, that children with handicaps attended the same academic program. In these programs, regular education and special education teachers shared the role of a lead teacher. Second, in some programs, inclusion meant having children with and without disabilities enrolled in self-contained programs.

Self-Contained Classroom Environments

When discussing inclusion classroom models, there are many who feel that these educational settings can do more harm than good. There is a belief that schools are following an educational trend rather than what is best for students with disabilities and their academic goals (Holloway, 2001). In many instances, inclusion advocates would like all students, regardless of their disabilities, to have their educational needs met in an inclusive setting, regardless of the services and accommodations required (Fink, 2004).

One prominent critic of move towards a whole inclusionary model is Mathew Kauffmann, a professor from the University of Virginia who has continued to proclaim the negative effects on inclusion in the classroom. Kauffmann argued that a reliance on inclusion can create a false sense of being that can be more detrimental to the student. Such an association allows for the assumption that all students' needs are being competently accommodated regardless of their ability levels (Kauffmann, 2014). The movement toward

making inclusion the primary method of education with our special needs population has promoted the perception that special education is regarded as something negative. The push to have students moved to an inclusionary setting is being done regardless of a student's ability to achieve in a general education setting (Kauffmann, 2004). Placing students, regardless of their ability levels, in regular classes has resulted in the minimization of and the negative impact upon student growth and achievement. It creates an impression that students can perform regardless of their abilities in a regular education setting. Kauffmann proposed that educators are misusing the special education system by placing students in programs for which they do not qualify, even as graduation requirements are increasing and tests are mandated (2014).

Daniel and King (1998) also found there was a higher instance of behavior problems in inclusion classrooms, which meant more distractions and less time spent on curriculum and academics. The outcomes for non-disabled students in classes that include peers with disabilities have been identified as a barrier to encompassing inclusion into all facets of edcuation. (Staub & Peck, 1995).

The fear that placement in special education self-contained classes stigmatizes children is what drives placement in regular education (Holloway, 2001). The misconception about self-contained special education placement is that it is seen as special or different. It inevitably results in identifying and stigmatizing children by segregating them from their peers without disabilities. It is defective in structure because it is a separate system (Kauffmann, 2002).

Proponents of self-contained classroom placement fear that as the move toward inclusion becomes more prominent, the individuality of special education may be

forgotten. Educators must be careful to allow special education to retain its own identity and remain equitable for all involved (Hardman & Dawson, 2008).

Opponents of inclusion for all students with disabilities have argued that while the inclusion movement has provided some positive outcomes, it has also had a harmful effect on this population. Students placed in a full inclusion setting have become an expectation (Fink, 2004). Many advocates of inclusion feel that the general classroom setting is the only way students with special needs will receive fair treatment and be given the same education as other students within the public school setting (Kauffmann, 2004). The resulting actions of this thought process has created a very blurred lined between special education and regular education (Zigmond, 2003).

In Kauffmann's studies, he assessed both self-contained and inclusive classrooms for students with learning disabilities and measured academic data and behavioral data to assess the success of inclusion versus self-contained classrooms (2002). He concluded self-contained classes to be preferable for students with learning disabilities.

Studies by Idol and Fore et al.

To better gauge the effectiveness of two contradicting elements in the educating of students with special needs, two prominent studies that compared and contrasted the effectiveness of inclusive classrooms versus self-contained classes were performed in 2006 and 2008 by Fore, a professor of literacy at Concordia in Austin Texas in 2008 and Idol, an professor of special education at the University of Georgia in 2006.

The Idol (2006) study of inclusion involving four elementary schools, two middle schools, and two high schools located in "a large, metropolitan school district in

a southwestern city" (p.77). The purpose of the study was to determine whether or not the inclusion of students with disabilities was having on the schools in which they were introduced. The idea of the study was to better understand how each school adapted to the inclusion of special needs students into the classroom when addressing LRE. As defined by Idol, "inclusion is a student with special needs attending a general school program in age appropriate classes 100 percent of the school day". (p.78)

The study by Fore in 2008, compared inclusion with self-contained classroom environments through the study of 57 high school students identified as having a learning disability. While Fore stated that research has been done as to the effectiveness of inclusion of elementary students, little research had been done to determine the effectiveness of inclusion over self-contained in a high school setting. (p56)

The rationale for both of these studies was to effectively determine "what happens" when educators move toward more inclusive educational practices within a school setting. This definition moves past LRE to include full inclusion services throughout a school building. (Idol, p.78)

Within both these studies, elements of success were identified such as the different disabilities present among the students in the schools as well as the time special education students spent inside inclusive classrooms. The personnel made available to support these students was also taken into account along with the general feeling of staff members regarding inclusion and students with special needs, including any changes in discipline and overall classroom management. The staff's perceptions and attitudes in regard to the effect of inclusion on the regular education student

population was also studied. (Fore et al., 2008; Idol, 2006).

The schools involved in Idol's (2006) study were chosen from "well-developed special education programs" in buildings where the staff felt that their approach to the education of students with disabilities was appropriate (p. 79).

The two schools involved in the Fore's (2008) research were from suburban districts located in the southeastern United States. The study involved 57 learning disabled high school students comprised of 42 boys and 15 girls, and the amount of time these students spent in inclusive settings varied depending on the needs of the students involved (Fore et al., 2008). Of the students involved in the study, 19 were ninth graders, 18 were tenth graders, 13 were eleventh graders, and seven were in the twelfth grade (Fore et al., 2008).

Assessment Methods

Both studies employed the use of qualitative and quantitative methods to gauge placement effectiveness.

In the Idol (2006) research, quantitative data were derived from state wide test results for all students involved in the study and qualitative data was gathered through interviews with staff at the participating campuses.

The Fore study (2008) used the Grade Level Test Short Form of the Multilevel Academic Survey Test (MAST) to measure academic success. The MAST is an assessment that, though not solely intended for use with special education students, is often used with this population to measure academic ability (Fore et al., 2008). This test

was then given to not only the subjects being studied but to 366 students to ensure reliability. The MAST results and student behavioral data were analyzed, then comparisons were made between students with learning disabilities placed in both inclusive and self-contained classroom settings (Fore et al., 2008). Within Idols's study, educators were provided several various instructional models to promote cohesiveness, while in the Fore study, educators were not instructed to change instruction in any way.

In the Idol Studies conducted, both the special education teacher and regular education teacher were given these models that allowed for all students with the classroom setting to receive support. This "cooperative teacher model" allowed the regular education teacher and the special education teacher to work in tandem to deliver instruction to their students (Idol, 1997).

The Fore study (2008) measured academic and behavioral achievement in inclusive classes taught by a regular education teacher. These inclusive classes consisted of 25 students per class, with no more than 20% of the students identified as learning disabled (Fore et al., 2008). In contrast, self-contained classes were taught by special education teachers who served only students identified as needing special education services No regular education students were placed in these self-contained classes (Fore et al., 2008).

Research Findings

Idol's 2006 study concluded that students with learning disabilities can benefit from inclusive placement. The state test data showed marked academic improvement for students with learning disabilities placed in inclusive environments. In addition, behavioral incidents among students with learning disabilities in inclusive classrooms were reduced when compared to students within a self-contained placement. Teachers and administrators involved in the study concluded inclusive placement can be a valid placement for students with learning disabilities provided proper supports were in place to reinforce learning (Idol, 2006).

In Fore's 2008 study it was determined that inclusive environments had no direct advantage over self-contained environments for students with learning disabilities. Researchers found "no significant differences" between those within an inclusion environment and self-contained (Fore et al., 2008, p. 65). The improvements rates seen in students in an inclusionary setting were proportionate with those within a self-contained environment (Fore et al., 2008). Fore stated that, "class placement for students with disabilities did not correlate with academic achievement" (p. 67).

While Idol's 2006 study was in support of inclusive placements for students with learning disabilities, he continued to stress appropriate placement and to not follow "trends". He further stated that students with special needs must not be "sold short" trying to treat them as though they are no different than the regular education students within the inclusionary settings. The delivery of special adaptations and a modified curriculum is sometimes necessary to serve student needs. Educators need to evaluate

each student before deciding whether an inclusion or self-contained environment is an appropriate placement (Idol, 2006).

Foster & Pearson Study

A study was created by Michael Foster and Erin Pearson with the goal in mind to determine whether the proportion of time spent in an inclusive educational setting, a process indicator of the quality of schooling for children with autism, improves the overall outcomes of students with disabilities, mainly autism. Within this study 484 children were utilized within the primary diagnosis of autism. Within this study the end result was to see depending upon which setting who was more likely to progress to college. The two groups examined consisted of students who were not educated in an inclusive setting to those that 75%-100% of their time in a general education classroom.

Within this study Foster and Pearson utilized the National Longitudinal Transition Study-2 (NLTS2). This is a 10-year study of youth with disabilities who were receiving special education services in public or state-supported special schools. The NLTS2 uses a nationally representative sample of youth in special education who were between the ages of 13 and 16 on December 1, 2000. Within the study conducted, 434 individuals were selected that had a primary diagnosis of autism based on parent report and were included in these analyses. The study by Foster and Pearson collected data biannually in 5 waves from 2001 to 2009. The data collected in Wave 2 data looked for characteristics of the school program and home environment. Within this wave, student exposure was measured in terms of the percentage of time spent in a regular education classroom. In the 4th Wave, collected in 2007, for the outcome

measures in terms of student success they were grouped into 4 classifications; drop-out, graduated, received a certificate of completion or attended a post-secondary program.

Overall, the study conducted suggested that inclusivity does not improve educational or functional outcomes for children with autism. Interestingly, this aforementioned limitation of inclusion is in itself biased based upon the feelings of individuals making the determinations of placements, the success of students in an inclusive setting are overestimated in terms of students with disabilities completing high school or moving on to post-secondary institutions.

As stated previously, there are perceived differences in the implementation and learning of material between students with special needs. As with other researchers and theorist's conclusions, there are significant differences in the teaching and learning of students with special needs as defined by their classroom setting. What needs to be further evaluated and understood is how these differences translate into student's success. While both Vygotsky and Kauffman models provide academic support and structure for students with special needs, the differences between the two are staggering. In essence, the ability to understand how these methods translate into not only physical data but teacher perceptions of student success are necessary to ensure progression of current academic policies and practices.

While students within both the ICT and self-contained setting are supported in differing ways, the measurements of success are the same in terms of all being required to complete the NYS Regents exam. Within both these settings, students with similar learning differences are expected to know and understand the current curriculum as it

relates to the NYS Regents. In reality, it is important to evaluate and determine what method best prepares students for such an assessment and the measures of success each subgroup within these settings may or may not experience. It is the unique differences in instruction and student achievement within these assessments that are important to note and evaluate.

Summary

As with most complex questions, there are indicators for both inclusion and self-contained each which provide merit to their argument. In today's educational setting, the term Special education has become tainted and stigmatizing. The focus labels have become very prevalent and can cause setbacks for those students with special needs in attaining social and emotional benchmarks. Individualized education is important in addressing the needs of students to reach their goals. Whether this can be done in a self-contained or inclusionary setting is still in debate. As discussed in Idols research, there are certainly indications that the inclusionary model needs further study and critique.

Inclusion is a highly controversial and emotional topic within the educational world. Within the educational system, all stakeholders continue to have varied reactions towards inclusion. Interestingly, the research indicates that when appropriately implemented a successful inclusion program has many benefits for both students of special needs and their regular education counterparts.

It is certainly safe to observe that the needs of students are addressed with more accuracy in an inclusionary model than that of self-contained. Current subjective view,

based on my own experiences and the research conducted for the literature review, is that students receive more of an equal and substantive education within an inclusionary model.

I am further curious to research about the behavioral differences between both models after reviewing the work that Kaufmann completed within his study. It is important to note that an inclusionary model is only as good as the training and support provided to not only students but the teachers that participate within an inclusion model.

Chapter Three gives careful attention to the study methodology and Chapter Four was devoted to analyses of the NYS Regents scores over a two-year period in two core subject areas. In addition, the chapter subject areas survey conducted on individuals includes testimonials from all learning environments discussed and their opinions on students' success within each. In Chapter Five, the results of the research data were discussed along with recommendations for future placement, practices, and research.

CHAPTER THREE: METHODOLOGY

Rationale for Research Approach

The intent of this research was to attain insight into the most beneficial academic setting for high school aged students with learning disabilities. This will be a convergent mixed method, utilizing quantitative and qualitative data collected (Creswell). All data collected from both the quantitative and qualitative studies will be evaluated concurrently to compare the similarity or dissimilarities presented.

This study included data from the NYS Regents examinations, as well as questionnaires (see Appendix A) completed by select special education teachers. Each set of data was analyzed to directly compare the academic success between students placed in self-contained special education settings and those placed in inclusive settings. Furthermore, data collected from non-IEP students in both the ICT and regular education setting was analyzed to determine differences in academic proficiency. This research was initiated to broaden the scope of analysis involving special education placement, and its effects on all within the academic population both to themselves and those students designated as “regular track “ regents students. One way to assure placement decisions are appropriate is to utilize current academic data and determine which approach is reaping the best results.

Research Setting and Context

Comparisons were made between the Regents scores of high school students with learning disabilities involved in varying degrees of classroom settings. Currently, regents scores by subject area are disaggregated by time spent in regular education classrooms. Upon analyzing the disaggregated scores, a determination was made as to the academic significance. The objective was to draw a definitive line between the academic achievement of students with learning disabilities placed in self-contained classrooms and students with learning disabilities placed in inclusive education environments.

In addition to the quantitative data, teachers within the special education setting completed a questionnaire regarding student progress in both classroom environments. In addition to this, Special Education Chairs and supervisors were asked to share personal commentaries on inclusion and self-contained environments.

Within these surveys special education staff expressed their opinions on the respective benefits and deficits of each which enhanced the analysis of the data.

Research Sample and Data Sources

The methods used in this study allowed for an unbiased assessment of both the self-contained and integrated co-teaching models of special education settings by measuring student progress through the currently accepted standard for assessing academic achievement in a New York school, the NYS Regents in English and Math, coupled with the special education personnel questionnaire. Student data will be collected through the student management system, Infinite Campus, to allow for access to student

assessment scores and other pertinent information such as gender, grade level, ethnicity, poverty and IEP designation.

New York Regents Exams

In 1878, the Regents of the University of the State of New York implemented the first statewide system of standardized, high-stakes secondary school exit exams. Its goals were to assess student performance in the secondary-school curricula and award differentiated graduation credentials to secondary school students (NYSED 2008). About one hundred institutions participated. The five studies examined on that first occasion were algebra, American history, elementary Latin, natural philosophy, and physical geography. Over the course of one hundred years, the NYS Regents exams have become the standard testing format to determine student's readiness to exit the NYS school system. They identify the knowledge, skills and competencies that all NYS students should acquire by the time they complete high school and to assess student progress toward these academic standards.

Regents exams are scored on a scale from 0 to 100. In order to qualify for a "local diploma," the lowest available in New York, students entering high school before the autumn of 2005 were required to score at least 55 on all five core examinations. The score requirements for a local diploma were then raised for each subsequent entry cohort until the local diploma was eliminated altogether for students entering high school in the fall of 2008. For all subsequent cohorts, the local diploma has only been available to students with disabilities.

First and foremost, we ensure the meaningfulness or validity of the NYS Regents exams follow methodical and rigorous test-development procedures. The Regents exams administered to our students each year follow a robust development process, intentionally aligning these assessments to the specific standards being measured within that subject area (NYSED).

Questionnaire

The special education teachers and administrator's questionnaire was selected to add another dimension to the Regents data. Walonick (1993) commented on the use of a questionnaire:

[When completing a questionnaire,] unlike other research methods, the respondent is not interrupted by the research instrument. Written questionnaires reduce interviewer bias because there is uniform question presentation. Unlike in-person interviewing, there are no verbal or visual clues to influence a respondent to answer in a particular way. (p. 1)

In this study, educators with experience in the field of special education are able to express their personal opinions without bias or outside pressure.

Using the theoretical and conceptual frameworks of Vygotsky (1978) and Kauffmann et al. (2004), a questionnaire was created to obtain the perceptions and opinions of special education teachers. The questionnaire will be distributed via google forms. Before accessing the questionnaire, special education personnel within the selected district were informed of the study (see Appendix B) and that their personal information would not be disclosed and any and all personal information would be kept

confidential.

Population and Sample

Disaggregated Regents scores from the English language Arts and Mathematics subtests were collected for 2016, 2017, 2018 and 2019 for students with learning disabilities in grades nine, ten, and eleven at a suburban public school on Long Island, New York. In 2018, 323 students with learning disabilities, in the selected grades, participated in the English Language arts and Mathematics Regents testing. In 2019, 356 students with learning disabilities, in the selected grades, participated in the English Language arts and Mathematics Regents testing.

Along with the academic data, a special education staff questionnaire was used to provide additional insight into the study. The teachers selected to complete the study were from the same district as the students. A list of special education staff members was obtained from the selected district, including email addresses, encompassing all faculty members that instruct within the ICT setting as well as self-contained. In addition to these selected teachers, a random sampling of regular-education teachers that co-teach within the inclusion setting will be asked to complete the survey.

Data Analysis Methods

The Regents data will be collected in the areas of English Language Arts and Mathematics for 2018 and 2019 for students with learning disabilities in grades nine through eleventh. Then, the Regents scores of students with learning disabilities placed in both regular and self-contained classrooms will grouped into three placement categories: >79%, 65-79%, 55- 64% and <55%. As per the NYSED, students identified

as receiving scores between a 55 and 64 are considered passing. Scores were measured by the number of students with learning disabilities within the two settings scoring Below Basic, Basic, Proficient, and Advanced from each of the four categories. For the purpose of this study, all 4 groups of scores will be analyzed along with their placement to determine the success of students within that particular setting. Below Basic and Basic scores were combined to allow for a comprehensive comparison.

The ELA and Mathematics Regents data will then be disaggregated by placement categories, and then crafted into percentages. Students Individual Education plans will be reviewed to allow for an accurate comparison of the collected data. The current student management system, Infinite Campus will be utilized to create an "AdHoc" providing students information such as Regents grade, ethnicity, gender, IEP placement, ENL and poverty. All students participating in this study will be given a code based upon their student number to ensure anonymity. The SPSS program will be utilized to provide descriptive statistical analysis in terms of the two larger groups within the self-contained and inclusion classroom settings; students identified with special needs and those with no classification.

Within each of these groupings, a subgroup such as gender, sex and poverty will be further evaluated utilizing descriptive statistics. Once defined, an analysis of the students taking the ELA and Algebra 1 exam within each of those groups for the first time, examining the differences between them within their academic settings. Items such as mean, standard deviation, p-value and standard error will all be evaluated within all groups. An independent t-test will also be completed looking at the correlation between a student taking both he ELA and Algebra 1 NYS Regents. This

will allow for the measurement and comparison of all subgroups.

The results of the special education staff questionnaires will be recorded, then analyzed and graphed. The responses on the special education staff questionnaire will be evaluated to determine prevailing opinions about best practices for this student population. The special education staff provided the questionnaire were selected as the target group due to their expertise in the field of special education as well as their working knowledge of the students being evaluated within both academic programs.

Issues of Trustworthiness

This research conducted was to provide an accurate depiction of students identified with special needs and how their placements play a factor in success. In order to maintain anonymity all scores were collected in raw data form with no students' names attached. No actual student involvement was needed or solicited. The data was derived from the districts management system utilizing student's identification numbers. The names of students involved in testing were omitted and the special education staff questionnaires did not include any student information. The names of those who participated in the questionnaire will not published or retained assuring anonymity.

Limitations and Delimitations

1. The level and effectiveness of collaboration between the special education and regular education teacher in their inclusion teams.
2. The level of support and trainings for each inclusion team and how these practices translate to the classroom with regards to practice and procedure.

3. The level of support and professional development for those teachers assigned to self-contained classroom settings.
4. The CSE committee's decision as to placement of students within an inclusion setting and the determination of each student's LRE. Many of the decisions have an element of subjectivity as to each student's placement.
5. Other factors considered in this study included teacher quality, second language issues, and socio- economic influences. The utilization of one school district to gather these results, and the size and years utilized, will hopefully negate the above-mentioned factors and any negative influences on this study. This also holds true for the questionnaire provided to those staff members serving the students selected in this study. This questionnaire will also measure the bias held by those about the validity of both instructional settings.

Summary

The methods used in this study for comparison of special education placement incorporated Regents data, as well as special education personnel perspectives on the academic issues surrounding placement. The two years of Regents scores, coupled with the responses, allowed for a more comprehensive analysis of the data.

The sample in this study included every high school student with learning disabilities who took the Regents test in 2018 and 2019 within the ICT and self-contained setting, which provided substantial data for evaluation. The disaggregated Regents scores, in the areas of English Language Arts and Mathematics, as well as the special education placement information, allowed for a direct comparison of student achievement.

The special education staff questionnaire will be used to factor in professional perspectives. The questionnaire was made available to 46 special education personnel throughout the selected district via Google Forms. The results were analyzed, compared, and contrasted.

This study may help provide a succinct analysis of the data received to form a conclusive analysis of the current practices used in learning disabilities placement in a high school setting as it relates to the benchmarks created by the NYS Regents exams. The methods used to obtain data were deemed reliable through research and design. The resulting findings were discussed in Chapter Four. In Chapter Five, research results and recommendations for future research were disclosed.

CHAPTER FOUR: FINDINGS AND RESULTS

Overview

The research in this study included four years of Regents data that were analyzed for similarities between special education placement environments and academic achievement. The assessment results were graphed and percentages used to display the data more clearly. The results were divided into two categories: Below Basic/Basic, and Proficient/Advanced. The Regents data will be collected in the areas of English Language Arts and Mathematics for the years 2016, 2017, 2018 and 2019 for students with learning disabilities in grades nine through eleventh. Then, the Regents scores of students with learning disabilities placed in both regular and self-contained classrooms will grouped into three placement categories: >79%, 65-79%, 55-64% and <55%. As per the NYSED, students identified as receiving scores between a 55 and 64 are considered passing. Scores were measured by the number of students with learning disabilities within the two settings scoring Below Basic, Basic, Proficient, and Advanced from each of the four categories. For the purpose of this study, all 4 groups of scores will be analyzed along with their placement to determine the success of students within that particular setting. Below Basic and Basic scores were combined to allow for a comprehensive comparison.

Sampling and Population

The special education teachers' questionnaires were collected from 55 of the special education teachers directly related to the student data. These teachers were sent an e-mail containing the questionnaire for this study. Of the total of 55 questionnaires

were collected and then analyzed, representing 75% of the special education personnel and affiliates at the targeted school.

Before examining the data collected for this research, several issues were considered. First, the NYS Regents data was examined. The disaggregated NYS Algebra and ELA data used in this study displayed academic achievement for the ELA and Algebra Regents in 2016, 2017, 2018 and 2019. The data was inclusive of NYS high school students who had been identified as learning disabled at the time of the testing. The total number of learning-disabled students involved in the 2016 in the NYS Regents ELA and Algebra 1 Regents exam was 305. The total number of learning-disabled students involved in the 2017 in the NYS Regents ELA and Algebra 1 Regents exams were 321. The total number of learning-disabled students involved in the 2018 in the NYS Regents ELA and Algebra 1 Regents exams were 323. The total number of learning-disabled students involved in the 2019 in the NYS Regents ELA and Algebra 1 Regents exams were 356.

Research Questions

The following questions guided this study:

1. Is there a significant difference in the academic achievement of both disabled and non-disabled students involved in an inclusive classroom.
2. Are there significant differences in the academic achievement of disabled students enrolled in both the inclusion and self-contained settings as it relates to NYS ELA and Algebra 1 Regents?
3. Are there significant differences in student achievement of inclusive and self-contained learning environments as it relates to gender, poverty and ethnicity?

4. What are teachers/administrators attitudes/perceptions of inclusive and self-contained classroom settings in terms of student achievement and success of all students within these learning environments?

Regents Data Analysis- Research Questions 1 & 2

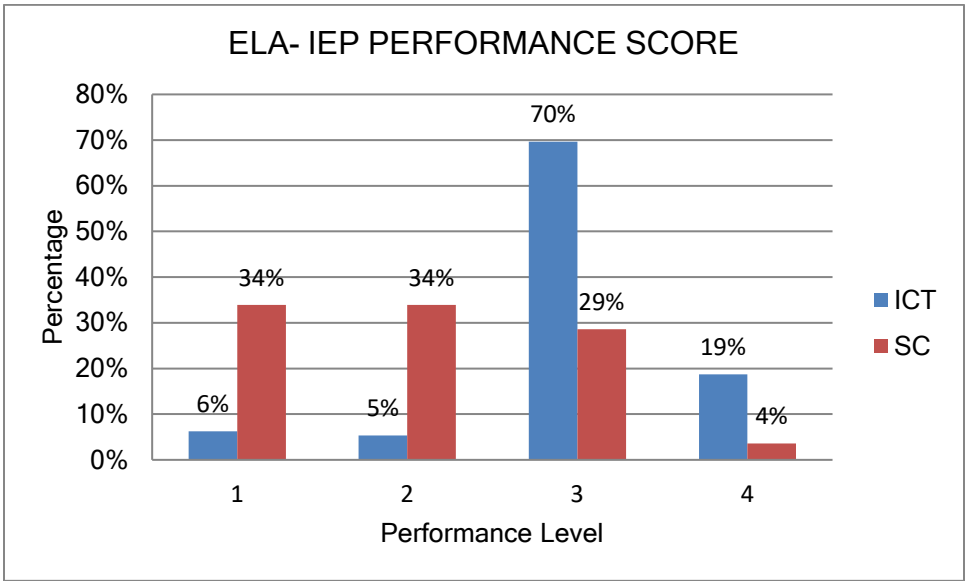
Within the data provided below the first two research question were addressed, and analyzed. These data sets allowed for in depth study of student achievement, comparing regular education students and that of students identified as having an IEP.

1. Is there a significant difference in the academic achievement of both disabled and non-disabled students involved in an inclusive classroom.
2. Are there significant differences in the academic achievement of disabled students enrolled in both the inclusion and self-contained settings as it relates to NYS ELA and Algebra 1 Regents?

The data were categorized into four groups; Below Basic (1), Basic (2), Proficient (3), and Advanced (4). Of the high school students with learning disabilities who took the ELA and Algebra 1 Regents exams in 2016, 2017, 2018 and 2019 (see Figure 1 through 4), the differences in scores between student placement categories was significant. For the special education students placed in inclusive and self-contained classrooms in the area of ELA (see Figure 1).

Figure 1

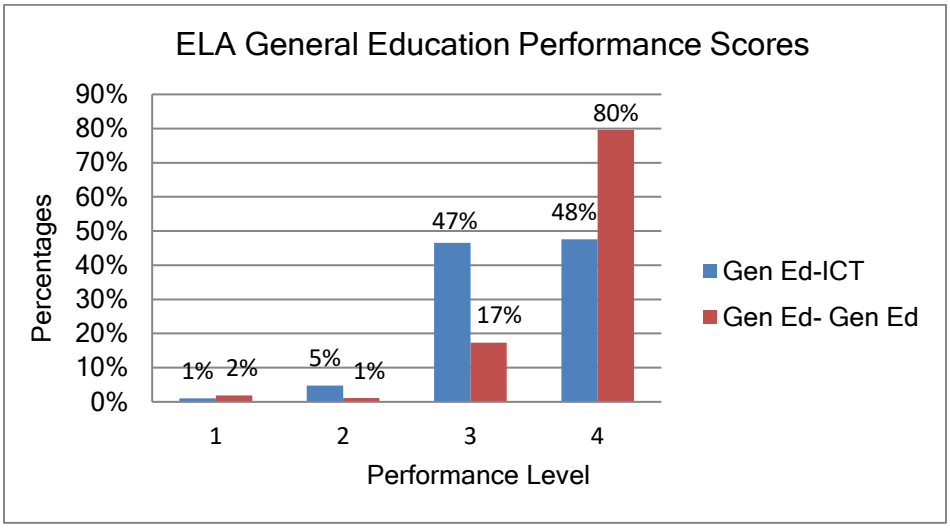
ELA- IEP PERFORMANCE SCORE



Amid the high school students with learning disabilities who were placed in ICT courses, 89% scored Proficient/mastery and 11% scored Below Basic or Basic. Of the students placed in Self-contained classes, 33% scored Proficient/mastery and 68% scored Below Basic or Basic (see Figure 1). With regards to the regular education students attending both ICT and homogenous classroom settings (see figure 2).

Figure 2

ELA GENERAL EDUCATION PERFROMANCE SCORES

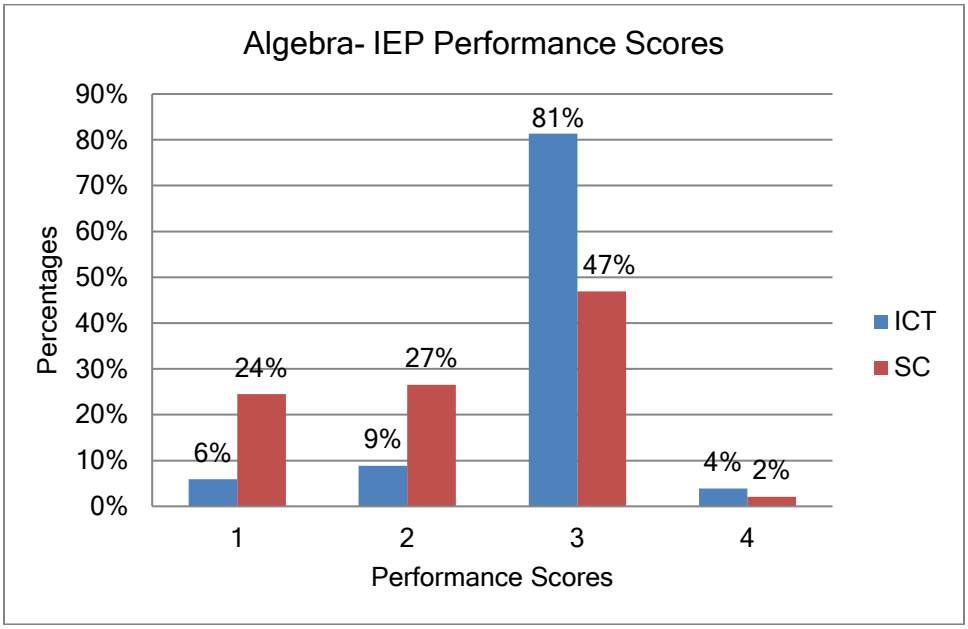


Amid the high school students identified as regular education students who were placed in ICT courses, 95% scored Proficient/mastery and 6% scored Below Basic or Basic. Of the students placed in homogeneous classes, 97% scored Proficient/mastery and 3% scored Below Basic or Basic (see Figure 2). In addition to this, it was determined that 80% of those students achieved a mastery (4) rating as opposed to regular education students in an ICT classroom, achieving 48% Mastery (4).

The 2016-2019 Algebra Regents results were (see Figure 3) similar to those of the English Language Arts results. Of the students placed in inclusive settings, 85% scored Proficient/Mastery and 15% Below Basic/Basic. Those students placed in Self-contained settings, scored 49% Proficient/Mastery and 51% Below Basic/Basic.

Figure 3

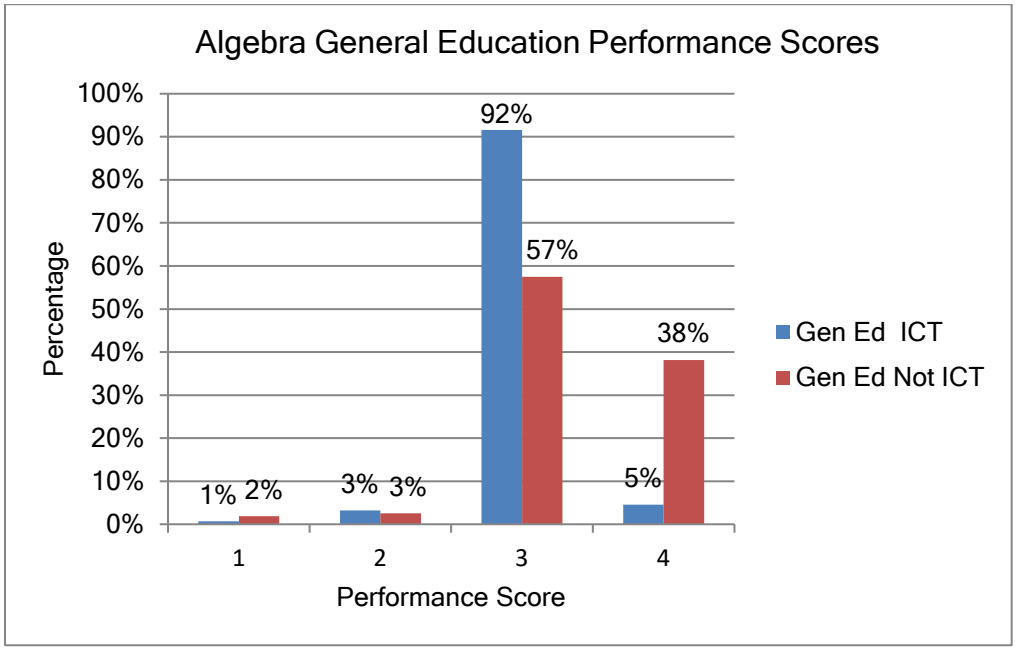
ALGEBRA IEP PERFORMANCE SCORES



When measuring the Algebra scores of students with regular education students placed in inclusive classes, 97% scored Proficient/mastery and 3% scored Basic. Of the students placed in homogeneous classes, 95% scored Proficient/mastery and 5% scored Below Basic or Basic (see Figure 2). Additionally, it was determined that 38% of those students achieved a mastery (4) rating as opposed to regular education students in an ICT classroom, achieving 5% Mastery (4).

Figure 4

ALGEBRA GENERAL EDUCATION PERFORMANCE SCORES



In interpreting the data, the focus was to further breakdown the subgroups associated with both exams with regards to race. English Language Arts and Algebra performance scores for all IEP students by race and further by breakdown of placement (see Figure 5, 6, 7 and 8).

Of the high school students with learning disabilities taking the Algebra Regents Exams in the years 2016- 2019, 92% identified as Asian scored Proficient/Mastery, 71% identified as Black scored Proficient/Mastery, 75% identified as Hispanic scored Proficient/Mastery and 92% identified as White scored Proficient/Mastery. Additionally, 10% identified as Black scored Below Basic, 10% identified as Hispanic scored Below and 3% identified as White scored Below Basic.

Table 1

ALGEBRA SCORE- REGULAR EDUCATION VS. SPECIAL EDUCATION

Gen Ed Math ICT	N	Mean	Std. Deviation	Std. Error Mean
Special Ed	308	76.93	6.609	.377
Regular Ed	1187	81.57	9.669	.281

The mean score on the Algebra regents for students with an IEP was 76.93 (SD = 6.609) and mean score on the Algebra regents for students with no IEP was 81.57 (SD =9.669) . According to the t-test, evidence suggests a statistically significant difference between the algebra scores of the two groups of students, t(1491) = -7.94, p (.000) < .05

Table 2

ALGEBRA SCORE- IEP SELF CONTAINED VS. ICT

1-IEP SC, 2 IEP ICT	N	Mean	Std. Deviation	Std. Error Mean
1	49	61.08	11.784	1.683
2	92	72.12	10.278	1.072

The mean score on the Algebra regents for students with an IEP in an SC class was 61.08 (SD = 11.78) and mean score on the Algebra regents for students with IEP in ICT class was 72.12 (SD =10.28). According to the t-test, the null hypothesis cannot be rejected. There was not enough evidence to suggest a significant difference between the means on the Algebra Regents of the two groups of students, t(139) = -5.767, p(.21) > .05.

Table 3

ALGEBRA SCORE REGULAR ED AND IEP PLACEMENT

Placement in Math	Mean	N	Std. Deviation
IEP in SC Class	61.08	49	11.784
IEP In ICT Class	72.12	92	10.278
Gen Ed in ICT Class	77.03	496	7.771
Gen Ed in Gen Ed Class	84.71	858	6.596
Total	80.61	1495	9.312

The mean score on the Algebra regents for students with an IEP in an SC class was 61.08 (SD = 11.78) and mean score on the Algebra regents for students with IEP in ICT class was 72.12 (SD =10.28).

The mean score on the Algebra regents for General Ed students in a General Ed was 84.71 (SD = 6.59) and mean score on the Algebra regents for General Ed students in an ICT class was 84.71 (SD =7.77). Overall, the students taking the Algebra regents examination over a 4 year period (1495 in total), the mean score was 80.61 (SD= 9.31).

Table 4

ENGLISH LANGUAGE ARTS- PERFORMANCE SCORES IEP VS NON-IEP

IEP	N	Mean	Std. Deviation	Std. Error Mean
IEP	303	76.74	15.334	.881
No IEP	1486	87.81	10.990	.285

The mean score on the ELA regents for students with an IEP was 76.74 (SD = 15.334) and mean score on the ELA regents for students with no IEP was 87.81 (SD =10.990) . According to the t-test, evidence suggests a statistically significant difference between the algebra scores of the two groups of students, t(1787) = -14.849, p (.000) < .05.

Table 5

ELA SCORE IEP PLACEMENT

Placement in English	N	Mean	Std. Deviation	Std. Error Mean
IEP in SC Class	56	57.46	15.410	2.059
IEP In ICT Class	105	75.78	9.966	.973

The mean score on the ELA regents for IEP students in a self-contained class was 57.46 (SD = 15.410) and mean score on the ELA regents for IEP students in a ICT class was 75.78 (SD = 9.966) . According to the t-test, evidence suggests a statistically significant difference between the algebra scores of the two groups of students, t(159) = -9.127, p (.008) < .05.

Table 6

PLACEMENT IN ENGLISH

IEP in SC Class	Mean	N	Std. Deviation
IEP In ICT Class	57.46	56	15.410
Gen Ed in ICT Class	75.78	105	9.966
Gen Ed in Gen Ed Class	81.97	371	9.374
Total	89.23	1257	10.918

The mean score on the ELA regents for students with an IEP in an SC class was 57.46(SD = 15.41) and mean score on the ELA regents for students with IEP in ICT class was 75.78 (SD =9.96).

The mean score on the ELA regents for General Ed students in a General Ed was 89.23 (SD = 10.91) and mean score on the ELA regents for General Ed students in an ICT class was 81.97 (SD =9.37). Overall the students taking the Algebra regents examination over a 4 year period (1789 in total), the mean score was 85.94 (SD= 12.54).

Within the data collected, there were measurable differences between students within the

ICT self-contained classrooms in both ELA and Algebra 1. It is important to note students with an inclusion class out performed their peers that were placed in self-contained classroom. In many cases, students placed in the inclusion classroom fared almost 10% higher in proficiency and that of students placed in a self-contained classroom. Additionally, regular education students placed in an inclusion classroom did not perform as well as those regular education students in both proficiency and mastery.

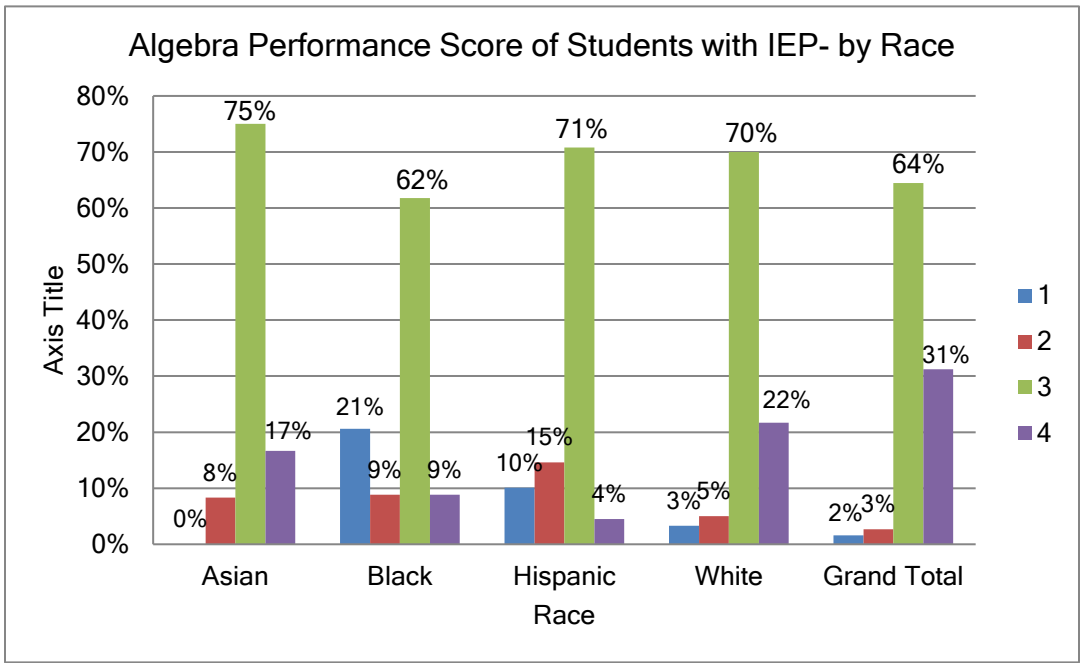
Research Question 3 - Regents Data Analysis

Research question 3 were the focus of the following data, outlining and identifying students with IEPs and identifying various sub-group information. Such information was important in determining differences in student success rates and achievement levels.

3. Are there significant differences in student achievement of inclusive and self-contained learning environments as it relates to gender, poverty and ethnicity?

Figure 5

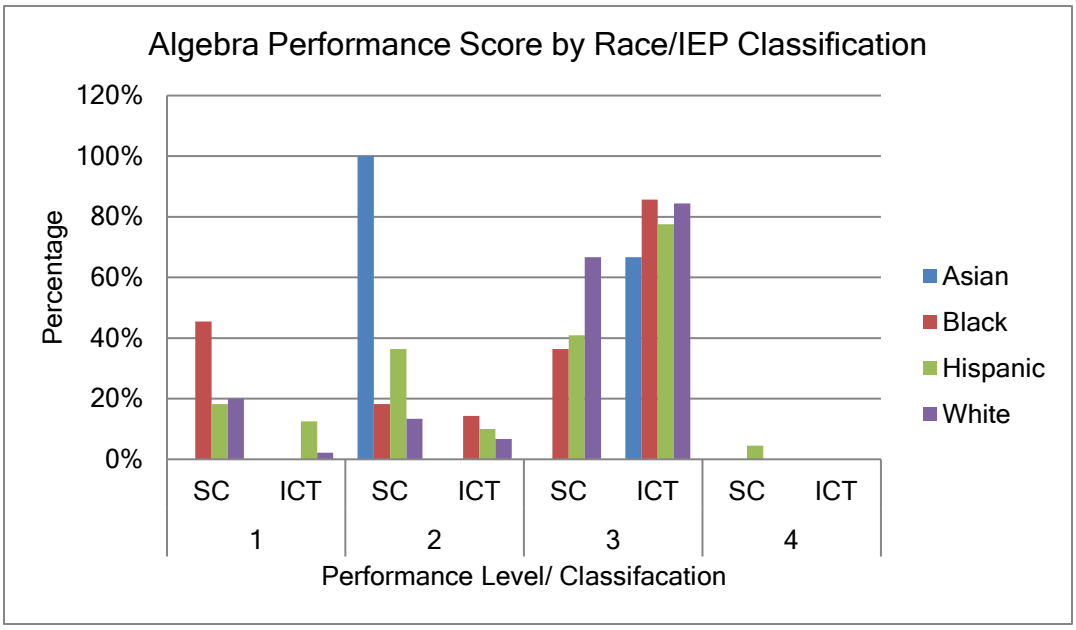
ALGEBRA PERFORMANCE SCORES OF STUDENTS WITH IEP-BY RACE



Of the students placed in both Inclusive and Self-contained classes, broken down by race, taking the Algebra Regent, 67% identified as Asian scored Proficient/Mastery in ICT, 86% identified as Black scored Proficient/Mastery in ICT and 36% Proficient/Mastery in SC, 78% identified as Hispanic scored Proficient/Mastery in ICT and 41% Proficient/Mastery in SC, and 84% identified as White scored Proficient/Mastery in ICT and 67% Proficient/Mastery in SC (see Figure 6).

Figure 6

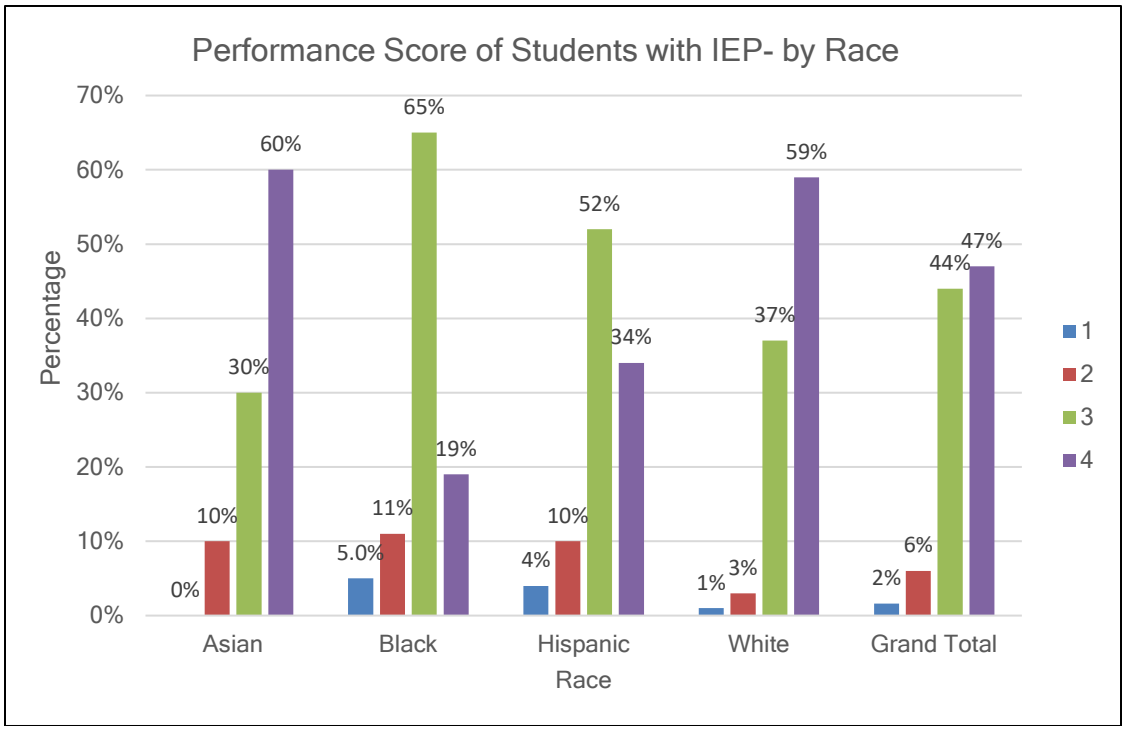
ALGEBRA PERFORMANCE SCORE BY RACE/IEP CLASSIFACATION



The ELA scores were similar to those in Algebra, showing similar characteristics. Of the high school students with learning disabilities taking the ELA Regents Exams in the years 2016- 2019, 90% identified as Asian scored Proficient/Mastery, 84% identified as Black scored Proficient/Mastery, 86% identified as Hispanic scored Proficient/Mastery and 96% identified as White scored Proficient/Mastery. Additionally, 10% identified as Asian scored Below Basic/Basic, 16% identified as Black scored Below Basic/Basic, 14% identified as Hispanic scored Below Basic/Basic and 4% identified as White Below Basic/Basic (see Figure 7).

Figure 7

PERFORMANCE SCORE OF STUDENTS WITH IEP- BY RACE



Of the students placed in both Inclusive and Self-contained classes, broken down by race, 90% identified as Asian scored Proficient/Mastery in ICT, 74% identified as Black scored Proficient/Mastery in ICT and 40% Proficient/Mastery in SC, 80% identified as Hispanic scored Proficient/Mastery in ICT and 39% Proficient/Mastery in SC, and 86% identified as White scored Proficient/Mastery in ICT and 75% Proficient/Mastery in SC (see Figure 14).

Figure 8

ELA PERFORMANCELEVELS BY RACE/IEP CLASSIFACATION

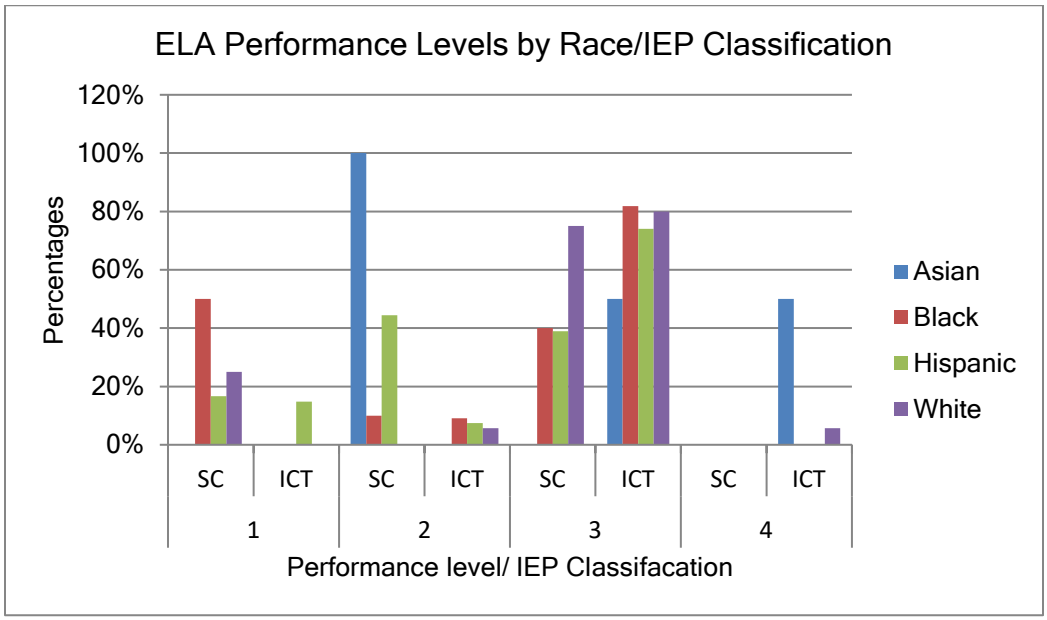


Table 7

ALGEBRA PERFORMANCE SCORE POVERTY VS. NON-POVERTY

	Poverty	N	Mean	Std. Deviation	Std. Error Mean
ALG Score	Yes	839	77.30	9.315	.322
	No	656	84.84	7.401	.289

The mean score on the Algebra regents for students of poverty was 77.30 (SD = 9.315) and mean score on the Algebra regents for students with no poverty was 84.84 (SD =7.401) . According to the t-test, evidence suggests a statistically significant difference between the algebra scores of the two groups of students, t(1493) = -16.973, p (.000) < .05.

Table 8

ALGEBRA PERFORMANCE SCORE MALE VS. FEMALE

M/F	Mean	N	Minimum	Maximum	Std. Deviation
Male	79.81	790	29	100	9.969
Female	81.51	705	42	100	8.433
Total	80.61	1495			9.312

The mean score on the Algebra regents for Male students was 79.81(SD = 9.969) and mean score on the Algebra regents for female students with no poverty was 81.51 (SD =8.433) . According to the t-test, There was not enough evidence to suggest a significant difference between the means on the Algebra Regents of the two groups of students, t(139) = -5.767, p(.21) > .05.

Table 9

DEPENDENT VARIABLE: ALGEBRA MULTIPLE COMPARISONS

Score

Tukey HSD

		Mean Difference			95% Confidence Interval	
(I) Race	(J) Race	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Asian	Black	8.660*	1.170	.000	5.46	11.86
	Hispanic	6.795*	.940	.000	4.23	9.36
	Mixed	-2.842	1.723	.466	-7.55	1.86
	White	-.091	.923	1.000	-2.61	2.43
Black	Asian	-8.660*	1.170	.000	-11.86	-5.46
	Hispanic	-1.865	.870	.202	-4.24	.51
	Mixed	-11.502*	1.686	.000	-16.11	-6.90
	White	-8.751*	.852	.000	-11.08	-6.42
Hispanic	Asian	-6.795*	.940	.000	-9.36	-4.23
	Black	1.865	.870	.202	-.51	4.24
	Mixed	-9.637*	1.535	.000	-13.83	-5.44
	White	-6.886*	.489	.000	-8.22	-5.55

Mixed	Asian	2.842	1.723	.466	-1.86	7.55
	Black	11.502*	1.686	.000	6.90	16.11
	Hispanic	9.637*	1.535	.000	5.44	13.83
	White	2.751	1.525	.371	-1.41	6.92
White	Asian	.091	.923	1.000	-2.43	2.61
	Black	8.751*	.852	.000	6.42	11.08
	Hispanic	6.886*	.489	.000	5.55	8.22
	Mixed	-2.751	1.525	.371	-6.92	1.41

*. The mean difference is significant at the 0.05 level.

An analysis of variance (ANOVA) on the New York State Algebra Regents scores yielded statistically significant effect on the test scores of the New York State Algebra Regents at the p<.05 level for the five races (Asian, Black, Hispanic, Mixed, and White) [F(4, 1490) = 69.25, p<.001] SC (see figure 13). A Tukey HSD test was used to determine where any significance exists at p < .05. The Post hoc comparisons showed several statistically significant differences.

When comparing the mean scores for Asian students on the New York State Algebra Regents exams (M = 83.64, SD = 7.25) the results indicate significantly higher mean scores than for Black Students (M =

74.98, SD = 11.05) as well as Hispanic Students (M = 76.85, SD = 8.86).

When comparing the mean scores for Black students on the New York State Algebra Regents exams (M =74.98, SD = 11.05) the results indicate significantly lower scores than for Asian students (M = 83.64, SD= 7.25), Mixed race students (M = 86.48, SD = 5.04), and White students (M = 83.73, SD = 8.14).

When comparing the mean scores for Hispanic students on the New York State Algebra Regents exams (M = 76.85, SD = 8.86) the results indicate significantly lower scores than for Asian students (M = 83.64,SD = 7.25), Mixed race students (M = 86.48, SD = 5.04), and White students (M = 83.73, SD = 8.14).

When comparing the mean scores for Mixed race students on the New York State

Algebra Regents exams (M = 86.48, SD = 5.04) the results indicate significantly higher scores than for Black Students (M = 74.98, SD = 11.05) as well as Hispanic Students (M = 76.85, SD = 8.86).

When comparing the mean scores for White students on the New York State Algebra Regents exams (M = 83.73, SD = 8.14) the results indicate significantly higher scores than for Black Students (M = 74.98,SD = 11.05) as well as Hispanic Students (M = 76.85, SD = 8.86).

Interestingly, multiple comparisons of races, especially with the regards to NYS Algebra Regents performance, showed significant outcome differences. When comparing Asian students with other races, there was enough evidence to suggest a significant difference between the Asian subgroup, when comparing them to both the Black and Hispanic subgroups both showing a significance of .00 with a standard error of 1.17 and .94 respectively. When comparing Black students with other races, there was enough evidence to suggest a significant difference between the Black subgroup when comparing with the Asian, Mixed and White subgroups, all showing a significance of .00 with a standard error of 1.17, 1.68 and .852 respectively.

When comparing Hispanic students with other races, there was enough evidence to suggest a significant difference between the Hispanic subgroup when comparing with the Asian, Mixed and White subgroups, all showing a significance of .00 with a standard error of .94, 1.535 and .489 respectively. When comparing Mixed students with other races, there was enough evidence to suggest a significant difference between the Mixed subgroup when comparing them to both the Black and Hispanic subgroups, both showing a significance of .00 with a standard error of 1.686 and 1.535 respectively. When comparing White students with other races, there was enough evidence to suggest a significant difference between the White subgroup, when comparing them to both the

Black and Hispanic subgroups, both showing a significance of .00 with a standard error of .852 and .489 respectively. Within this data it shows that the two groups that have significant differences to others is that this data suite clearly indicates that Black and Hispanic subgroups perform significantly differently on the NYS Algebra Regents exam.

Table 10

ALGEBRA PERFORMANCE SCORE BY RACE

Race	Mean	N	Std. Deviation
Asian	83.64	98	7.250
Black	74.98	118	11.054
Hispanic	76.85	540	8.855
Mixed	86.48	33	5.044
White	83.73	706	8.144
Total	80.61	1495	9.312

The mean score on the Algebra regents for Asian students was 83.64 (SD = 7.25). The mean score on the Algebra regents for Black students was 74.98 (SD = 11.05). The mean score on the Algebra regents for Hispanic students was 76.85 (SD = 8.85). The mean score on the Algebra regents for Mixed students was 86.48 (SD = 5.04). The mean score on the Algebra regents for White students was 83.73 (SD = 8.14).

Table 11

STATISTICAL ANALYSIS OF ELA REGENTS BY POVERTY

Poverty	N	Mean	Std. Deviation	Std. Error Mean
Poverty	998	81.63	13.632	.432
Not Poverty	791	91.37	8.276	.294

The mean score on the ELA regents for students with poverty was 81.63 (SD = 13.632) and

mean score on the ELA regents for students not identified in economic need was 91.37 (SD = 8.276) . According to the t-test, evidence suggests a statistically significant difference between the algebra scores of the two groups of students, t(1787) = -17.685, p (.000) < .05.

Table 12

STATISTICAL ANALYSIS OF ELA REGENTS BY GENDER

M/F	Mean	N	Std. Deviation
Male	84.22	954	13.071
Female	87.90	835	11.612
Total	85.94	1789	12.542

The mean score on the ELA regents for Male students was 84.22 (SD = 13.07) and mean score on the ELA regents for Female students was 87.90 (SD =11.61).

Table 13

STATISTICAL ANALYSIS OF ELA REGENTS BY ENL DESIGNATION

ENL ENG	Mean	N	Std. Deviation
ENL English	68.41	105	15.931
Not ENL English	87.03	1684	11.449
Total	85.94	1789	12.542

The mean score on the ELA regents for ENL students over a 4 year period was 68.41 (SD = 15.93) and mean score on the ELA regents for non ENL students was 87.03 (SD =11.44).

Table 14

MULTIPLE COMPARISONS OF ELA REGENTS BY RACE

Score

Tukey HSD

		Mean Difference			95% Confidence Interval	
(I) Race	(J) Race	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound

Asian	Black	11.868*	1.380	.000	8.10	15.64
	Hispanic	10.146*	1.118	.000	7.09	13.20
	Mixed	-1.996	2.312	.910	-8.31	4.32
	White	.898	1.092	.924	-2.09	3.88
Black	Asian	-11.868*	1.380	.000	-15.64	-8.10
	Hispanic	-1.722	1.040	.462	-4.56	1.12
	Mixed	-13.864*	2.276	.000	-20.08	-7.65
	White	-10.970*	1.013	.000	-13.74	-8.21
Hispanic	Asian	-10.146*	1.118	.000	-13.20	-7.09
	Black	1.722	1.040	.462	-1.12	4.56
	Mixed	-12.142*	2.127	.000	-17.95	-6.33
	White	-9.249*	.609	.000	-10.91	-7.59
Mixed	Asian	1.996	2.312	.910	-4.32	8.31
	Black	13.864*	2.276	.000	7.65	20.08
	Hispanic	12.142*	2.127	.000	6.33	17.95
	White	2.894	2.114	.648	-2.88	8.67
White	Asian	-.898	1.092	.924	-3.88	2.09
	Black	10.970*	1.013	.000	8.21	13.74
	Hispanic	9.249*	.609	.000	7.59	10.91
	Mixed	-2.894	2.114	.648	-8.67	2.88

*. The mean difference is significant at the 0.05 level.

An analysis of variance (ANOVA) on the English Language Arts (ELA) scores yielded statistically significant effect on the test scores of the New York State ELA Regents at the $p<.05$ level for the five races (Asian, Black, Hispanic, Mixed, and White) [$F(4, 1784) = 80.23$, $p<.001$] (see figure 22).

A Tukey HSD test was used to determine where any significance exists at $p < .05$. The Post hoc comparisons showed several statistically significant differences.

When comparing the mean scores for Asian students on the New York State ELA Regents exams ($M = 90.91$, $SD = 8.60$) the results indicate significantly higher mean scores than for Black Students ($M = 79.04$, $SD = 14.06$) as well as Hispanic Students ($M = 80.76$, $SD = 14.02$).

When comparing the mean scores for Black students on the New York State ELA Regents exams (M = 79.04, SD = 14.06) the results indicate significantly lower scores than for Asian students (M = 90.91, SD = 8.60), Mixed race students (M = 92.90, SD = 9.19), and White students (M = 85.94, SD = 12.54).

When comparing the mean scores for Hispanic students on the New York State ELA Regents exams (M = 80.76, SD = 14.02) the results indicate significantly lower scores than for Asian students (M = 90.91, SD = 8.60), Mixed race students (M = 92.90, SD = 9.19), and White students (M = 85.94, SD = 12.54).

When comparing the mean scores for Mixed race students on the New York State ELA Regents exams (M = 92.90, SD = 9.19) the results indicate significantly higher scores than for Black Students (M = 79.04, SD = 14.06) as well as Hispanic Students (M = 80.76, SD = 14.02).

When comparing the mean scores for White students on the New York State ELA Regents exams (M = 85.94, SD = 12.54) the results indicate significantly higher scores than for Black Students (M = 79.04, SD = 14.06) as well as Hispanic Students (M = 80.76, SD = 14.02).

A multiple comparison of ELA Regents results indicates that race had a significant impact upon student performance. When comparing Asian students with other races, there was enough evidence to suggest a significant difference between the Asian subgroup when comparing them to both the Black and Hispanic subgroups, both showing a significance of .00 with a standard error of 1.380 and 1.118 respectively. When comparing Black students with other races, there was enough evidence to suggest a significant difference between the Black subgroup when comparing with the Asian,

Mixed and White subgroups, all showing a significance of .00 with a standard error of 1.38, 2.276 and 1.013 respectively. When comparing Hispanic students with other races, there was enough evidence to suggest a significant difference between the Hispanic subgroup when comparing with the Asian, Mixed and White subgroups all showing a significance of .00 with a standard error of 1.118, 2.127and .609 respectively. When comparing Mixed students with other races, there was enough evidence to suggest a significant difference between the Mixed subgroup when comparing them to both the Black and Hispanic subgroups both showing a significance of .00 with a standard error of 2.276 and 2.127 respectively. When comparing White students with other races, there was enough evidence to suggest a significant difference between the White subgroup when comparing them to both the Black and Hispanic subgroups, both showing a significance of .00 with a standard error of 1.013 and .609 respectively. This data shows significant differences on NYS ELA performance for Black and Hispanic subgroups.

Table 15

STATISTICAL ANALYSIS OF ELA REGENTS BY RACE

Race	Mean	N	Std. Deviation
Asian	90.91	129	8.601
Black	79.04	154	14.061
Hispanic	80.76	627	14.017
Mixed	92.90	31	9.192
White	90.01	848	9.293
Total	85.94	1789	12.542

The mean score on the ELA regents for Asian students was 90.91 (SD = 8.60). The mean score on the ELA regents for Black students was 79.04 (SD = 14.06). The mean

score on the ELA regents for Hispanic students was 80.76 (SD = 14.01). The mean score on the ELA regents for Mixed students was 92.90 (SD = 9.19). The mean score on the ELA regents for White students was 90.01 (SD = 9.29).

When looking at subgroups among students with an IEP, it was clearly seen that students of color perform better in an inclusion classroom than that of a self-contained classroom. This is particularly noticeable among black students in both Ela and Algebra 1. When looking at IEPs overall, it was seen that Black and Hispanic students underperformed among other races in both ICT and self-contained classrooms.

Research Question 4 - Results of the Special Education Questionnaire

Within research question 4, the questionnaire was provided to special education staff that directly interacts with students identified with and IEP. This survey allowed for personal feeling and biases to be identified.

4. What are teachers/administrators attitudes/perceptions of inclusive and self-contained classroom settings in terms of student achievement and success of all students within these learning environments?

Interestingly, the special education teachers who participated in the questionnaire selected inclusion as the best instructional choice for students with learning disabilities. Most supported inclusion on the bases of social and academic interaction. The special education personnel declared that separation in self-contained classroom environments was more of a handicap than the students' learning disabilities.

Question 1. In your opinion, is there a positive correlation between students with learning disabilities placed in self-contained classes and their results on the Regents (ELA and Algebra 1) exams when compared to students with learning disabilities who are placed in inclusive classes?

Of those responding, 33.5% believed that there is a positive correlation between students with learning disabilities placed in self-contained classes and their results on the ELA and Algebra Regents when compared to students with learning disabilities who are placed in inclusive classes. Conversely, 20.5% stated that no correlation exists.

Many studies would support the differences between inclusion and self-contained classrooms. Kauffmann et al. (2002) found that self-contained placement can have benefits for special education students when appropriate. Proponents of Vygotsky (1978) argued self-contained classrooms limit achievement by the isolation inherent in such placement. Signor et al. (2003) concluded inclusive classrooms have academic benefits over self-contained classes.

Question 2. In your opinion, what are the biggest differences between self- contained classes and inclusive learning environments with regards to student achievement?

The majority of special education teachers declared the biggest difference between self-contained classroom placement and inclusive classroom placement was in the delivery of special education services. Of those responding, 35.4% believed self-

contained classes allowed for better delivery of these services, and 27.3% indicated that self-contained classroom environments allowed for enhanced learning for students with learning disabilities. Also, 16% felt self-contained classroom environments promoted positive peer interactions, while 31% indicated self- contained classroom environments allowed for negative peer interaction for students with learning disabilities.

Of the special education teachers responding, 55% believed inclusive classroom environments allowed for better delivery of special education services. Countering those who favored self-contained placement, 65.9% of the special education teachers surveyed specified that inclusive classroom environments promoted positive peer interaction, while 61% declared student learning was enhanced in inclusive classroom environments. Only 5.5% indicated that inclusive classroom environments promoted negative peer interactions.

Vygotsky (1978) believed learning is directly tied to social interaction, which was supported by 51% who responded that inclusive classrooms promoted positive peer interactions, and 65% who thought learning was enhanced in inclusive classrooms. McDonnell et al. (2003) determined inclusive classrooms can even eliminate the need for self-contained classes due to the positive effects of peer interaction.

Question 3. In your opinion, what are the major benefits of self-contained placement for students with learning disabilities?

The majority of responses collected focused on academic instruction. Respondents indicated that the major benefit of self-contained classroom placement was a higher teacher-student ratio allowing for more individualized instruction and

assessment. This personalized instruction allowed more time and energy to be spent per student. Many believed that special education teachers in self-contained classroom settings can promote student learning at the right pace for students with learning disabilities.

Many educators responded self-contained classes are smaller and more focused than inclusive classes. These teachers believed students with learning disabilities may feel more comfortable and less exposed to potential ridicule or peer pressure in these smaller homogeneous environments. Most were careful to qualify this position with a note of caution. The directors believed, though these benefits can be positive, educators should still try to place students with regular education students as much as possible stressing the additional importance of inclusion for social interaction.

Several teachers expressed their contention that self-contained placement was superior to inclusive placement due to the more specialized training of the special education teachers. These educators affirmed special education teachers were better trained in specific teaching techniques tailored to the learning-disabled student population. The belief that special education teachers had more experience in dealing with students with learning disabilities than their regular education counterparts was shared by most directors. In addition, these respondents declared that self-contained classes allowed teachers to utilize differentiated instruction more effectively than teachers in inclusive environments. This instruction was believed to be more student-specific; thus, more beneficial to students with learning disabilities.

Several educators expressed that there was absolutely no benefit to self-

contained classes. These respondents believed self-contained classes were never the right environment for students with learning disabilities. These teachers felt inclusion is a right, not an option, for these students. These individuals affirmed that self-contained classes are too far removed from the mainstream, both in instruction and in contact with the regular education population. One teacher believed self-contained classes are merely a way of isolating students for the benefit of the school, not the student. They contended that self-contained classes allow educators to misdiagnose students as learning disabled, merely as a way of controlling certain behaviors.

Kauffmann et al. (2002) supported the idea that self-contained classes offer a superior delivery of services. Self-contained classes can actually reduce poor behaviors and promote higher learning (Kauffmann et al., 2002). Kauffmann et al. (2004) considered inclusive classrooms limited in the ability to provide individualized instruction as effectively as self-contained classes.

Question 4. In your opinion, what are the major benefits of inclusive placement for students with learning disabilities?

The majority of respondents cited academic instruction to be the major benefit of inclusive placement for students with learning disabilities. In contrast with self-contained classroom environments, respondents declared that instruction in inclusive classroom environments was more in line with the regular education curriculum as well as with preparing students for NYS Regents exams. It was expressed that students with learning disabilities learn and respond at a higher level when placed in inclusive classroom environments due to peer interaction. One respondent stated, “Students are exposed to the full range of the general curriculum and are able to participate in learning

groups using the regular population that is impossible to replicate in self-contained environments."

Within the questionnaire some educators declared that inclusive settings are better academically because of the availability of grade level appropriate books, materials, and activities that better prepare students with special needs for state level assessments. These respondents explained self-contained classes often lack the materials that are readily available in inclusive classrooms. These teachers believed that self-contained class materials are often inferior to those in the mainstream. They also asserted students in inclusive settings have more access to labs and other academic opportunities not available to those in self-contained classes.

By nature, self-contained classes are segregated from the regular education student population to varying degrees. A constant theme among those participating in the questionnaire was the importance of social learning through immersion in inclusive classes. Some of the respondents felt students with learning disabilities become stronger academically when challenged by the regular education students.

Another opinion expressed by the special education personnel was teachers in inclusive settings are better in touch with the grade level expectations which are covered on the NYS ELA and Algebra 1 exams. Some responded that students placed in self-contained classrooms sometimes receive less exposure to grade level expectations by the nature of these environments and that such expectations can be missed in lieu of meeting the specific goals set forth in students' IEPs.

Several teachers noted that inclusive settings lead to better support and self-esteem, promoting better academic success. Teachers believed social interaction

enabled students with learning disabilities to have the opportunity to learn through inclusion with regular education students. As one teacher stated, “We do not separate people with learning disabilities in the real world, so why separate them in school if they can be successful in an integrated environment?”

One consistent comment that was displayed in the questionnaire was self-contained classes were better suited for students with severe disabilities and not students with learning disabilities. Many declared that inclusion is always the best choice for students with learning disabilities, and self-contained classes were inappropriate for students with learning disabilities due to the isolation from the regular education curriculum. Such isolation was considered detrimental to the academic and social aspects of the student. These respondents declared inclusive classes were always superior for this student population.

McDonnell et al. (2003) concluded inclusive classrooms benefit everyone involved; students with disabilities as well as regular education students. Dixon and Verenikina (2007) feared self-contained classes can severely limit a child’s future by the isolation and subsequent social stigmas associated with such placement. Some viewed self-contained classroom placement as merely a wasteful duplication of services serving no distinct educational purpose (Hooks, 2010).

Question 5. Given your experience, which educational environment are parents of students with learning disabilities most likely to support or endorse?

More than one-half, 69%, believed parents of students with learning disabilities would most likely endorse inclusive classroom placement for their child as opposed to

self-contained placement. Only 32% declared parents of students with learning disabilities would endorse self-contained classroom placement for their child.

Question 6. What, if any, academic problems do you perceive in self-contained class placement for students with learning disabilities?

Given three areas to consider, 70% indicated peer interaction was the main problem in self-contained classroom environments. Many of the teachers, 45.1%, felt academic instruction was the primary area of concern in self-contained classroom environments. A few of the respondents, 13.7%, felt the biggest problem in self-contained classroom environments was the delivery of special education services. These results are in line with the social development theory of Vygotsky (1978). Without peer interaction, students will not perform to their potential.

Question 7. What, if any, academic problems do you perceive in an inclusive education setting for students with learning disabilities?

Given three areas to consider, 76% of the teachers felt the delivery of special educational services was the most critical problem for students with learning disabilities placed in inclusive classroom settings, and 22% declared instruction was the main problem in inclusive classroom environments. Only 14% of the people questioned indicated peer interaction was the biggest deficit for students with learning disabilities placed in inclusive classroom environments. Kauffmann et al. (2004) would support these results in that students placed in inclusive classrooms could not be provided the same individualized attention as would be provided in self-contained classes.

Summary

The data indicated high school students with learning disabilities who are placed in inclusive classroom environments score higher on the NYS Regents Exams in the areas of English Language Arts and Algebra. The responses to the questionnaire were divided between teachers preferring self-contained classes and those preferring inclusive classes. Individuals identified their opinions on the strengths and weaknesses of both placement environments through the utilization of the questions provided in the questionnaire.

Of those responding, 65% of them believed inclusive classrooms provided the best interaction with non-disabled peers. Some stated that inclusive classes enhanced learning through the exposure to materials and curricular demands not always present in self-contained classes. A few participants felt self-contained classes were too isolated from the general student population, thus restricting students with learning disabilities from the benefits of inclusive classes.

Many participants (35%) felt self-contained classes offered the best availability of special education services. In addition, some believed self-contained classes offered better instruction due to the small class size and specially trained educators within the classroom to address individual student needs. Though teacher's personal opinions varied, their projection of parental preferences was clear. More than half (68.5%) felt parents would prefer inclusive placement for their child with learning disabilities over self-contained classroom placement. A small percentage (31.5%) believed parents would prefer self- contained classes over inclusive classes.

In Chapter Five, conclusions were discussed and recommendations made. The

implications for special education placement were explored and presented. In addition, recommendations for effective special education placement and recommendations for future research were examined.

CHAPTER FIVE: FINDINGS, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to weigh the academic merits of the inclusive placement versus self-contained placement for high school students with learning disabilities. Teachers, administrators, support groups, and parents have been faced with placement decisions involving these two settings for many years. Researchers have formed conclusions and educators have expressed opinions regarding each placement environment, and pros and cons of each system has been examined.

Implications of Findings

Proponents of both self-contained and inclusive settings have provided strong arguments for their positions. Within both opposing views, beliefs have ranged from the purely academic to the overall social development of the students involved. Many view self-contained classrooms as discriminatory (Decatur, 2007), while others view inclusion as an environment that can allow for limited delivery of valuable special educational services (Kauffmann et al., 2004). Overall, there have been very few studies that have attempted to find a link between special education placement for students with learning disabilities and academic success on state assessments.

The instruments used in this study were the NYS Regents exam in ELA and Algebra 1 and the special education teacher questionnaires. The Regents provided accurate academic and placement data allowing for an unbiased assessment of student achievement in the areas of Mathematics and English Language Arts. The questionnaire provided expert opinions on

the preferred educational setting for students with learning disabilities held by those that interact and educate students with special needs.

Together, these tools allowed for insight into special education placement and student academic success with relation to achieving success on state assessments needed for graduation.

In Chapter Three and Chapter Four, the reliability of the NYS Regents Exams as an indicator of student success was discussed at length. This state "tool" has been a staple of NYS education and assessment for over 100 years and has allowed for the effective assessment of students. Given the exhaustive research and the years of reliable application, this assessment was the best choice for academic data for this research in terms of evaluating the success of students with special needs.

The special education questionnaire was field-tested by special education teachers, to ensure validity and reliability. The data derived from this research tool was analyzed to obtain professional opinions for this research. Special education teachers within the district sampled for the study provided their expert ideas and beliefs on both inclusive and self-contained special education classroom environments for students with learning disabilities. The responses from the questionnaires, combined with the NYS Regents data, allowed a well-rounded assessment of placement and achievement.

Relationship to Prior Research

The data from the ELA and Algebra 1 regents and the special education questionnaires were analyzed for a comparison between self-contained classroom environments and inclusive classroom environments. All analysis and findings were viewed

through Vygotsky's (1978) theory of social development, which clearly states that social interaction is paramount in the development of cognitive functioning, as well as the conceptual framework of Kauffmann et al. (2004), discussing that the trend toward inclusion is detrimental to the development of cognition due to the poor delivery of essential special education services in inclusive classroom settings.

The ELA and Algebra 1 Regents data collected was disaggregated according to the time students with learning disabilities spent in inclusive and self-contained classroom environments and the corresponding academic scores. This data was then graphed to easily track the academic differences between those placed in inclusive classrooms and Self-Contained settings, academic achievement was determined by the designations of Below Basic, Basic, Proficient, and Advanced.

Special education questionnaires were examined and graphed to show the attitudes, perceptions, and preferences in special education placement from those with expertise. Special education teachers were selected for this study due to their background in the field of special education.

Just as Idol's 2006 study, concluding that students with learning disabilities can benefit from inclusive placement. The NYS Regents test data showed marked academic improvement for students with learning disabilities placed in inclusive environments. While Idol's 2006 study was in support of inclusive placements for students with learning disabilities, he continued to stress appropriate placement and to not follow "trends". The delivery of special adaptations and a modified curriculum is sometimes necessary to serve student needs. (Idol, 2006). Within my own studies between test analysis and professional

questionnaires, I support the determinations within Idol's study.

Within the research, Idol concluded students with learning disabilities can benefit from inclusive placement. She found state test data showed marked academic improvement for students with learning disabilities placed in inclusive environments (Idol, 2006). Another conclusion found in the study was the correlation between inclusion and students behavior. Behavioral incidents among students with learning disabilities placed in inclusive classrooms were reduced when compared to self-contained placement. The study concluded that inclusive classroom placement could be effective for students with learning disabilities depending on the student's individual needs.

The study conducted by Michael Foster and Erin Pearson to determine the effectiveness of an inclusive educational setting. Overall, the study conducted suggested that inclusivity does not improve educational or functional outcomes for children with autism. Interestingly, their belief was that the success of students in an inclusive setting are overestimated in terms of students with disabilities completing high school or moving on to post-secondary institutions. Within the data collected within my own study, students placed within an inclusive setting are far more successful in terms of proficiency and mastery on NYS assessments and Regents. Furthermore, the success rate of students of color, classified with an IEP, are much higher than that of their counterparts within a self-contained classroom setting.

In Kauffmann's studies, he assessed both self-contained and inclusive classrooms for students with learning disabilities and measured academic data and behavioral data to assess the success of inclusion versus self-contained classrooms (2002). He concluded self-contained

classes to be preferable for students with learning disabilities. Many advocates of inclusion feel that the general classroom setting is the only way students with special needs will receive fair

treatment and be given the same education as other students within the public school setting (Kauffmann, 2004). The resulting actions of this thought process has created a very blurred lined between special education and regular education (Zigmond, 2003). While there is a definitive blur between the regular and special education, in many cases this has allowed for students with IEPs to excel within their coursework and state assessments, while still receiving IEP modifications.

Research provided in support of inclusion indicates that when a student with severe disabilities is placed in a general education class, they show better social development, increased social interaction, enhanced skill acquisition and generalization, better health, more interdependence, greater success in meeting the objectives of their IEP's and more normalized adult functioning. Their presence gives classmates and others in the community more positive attitudes toward children with disabilities (Hunt et al., 1991, as cited in Simon & Karasoff, 1992).

This had shown true in the perceptions and feelings of those participating the questionnaire conducted, adding to the feelings cataloged in the benefits of inclusive settings in the beliefs of educators. Special education students placed in an inclusive setting are better off both socially and academically.

Within the research conducted, it is plausible that inclusive settings are beneficial to the support necessary for student success. The thoughts and feelings of theorists such as Kaufmann are not indicative of the current trends and data provided within this current study or the previous ones.

Research Question 1. Is there a significant difference in the academic achievement of both disabled and non-disabled students involved in an inclusive classroom.

Self-contained classroom placement has a definite purpose for students with learning disabilities who are severely limited in their academic ability to a level below regular education curriculums and expectations. As Kauffmann et al. (2002) reported, some students require services not found in a regular education or inclusive setting. These students need a classroom environment that provides more support and more individualized attention than an inclusive classroom can offer (Kauffmann et al., 2002).

The data analyzed in this study supported the belief self-contained classroom placement can have a detrimental influence on some students with learning disabilities which contradicts Kauffmann et al. (2004) and Kauffmann et al. (2002) that self- contained classes are superior to inclusive classes. Self-contained classroom placement can limit a student's academic growth as seen by the data collected on the ELA and Algebra 1 Regents exams. The data collected from both the NYS ELA and Algebra Regents showed a relationship between low scores and those placed in self- contained classes for extended periods of time. In many cases, student success on these state created assessments were significantly higher within the special needs population, provided their placement was in an ICT setting. Within the data collected on the ELA Regents exam, IEP students in inclusion classrooms outperformed those within self-contained by more than double the amount, having 89% of them score a 3 or 4 as opposed to 33% within the self-contained classroom setting.

Within the Algebra Regents, the performance was very similar, having IEP students within the ICT setting outperform those within self-contained by nearly twice the amount,

scoring 85% in performance area of 3 and 4 as opposed to 49% within the self-contained setting. It is to be noted that IEP students within the self-contained classroom setting did better in math but not at the level that would compare to the performance scores within the ICT classroom.

When comparing those regular education students in both homogeneous grouping and ICT settings, the data collected is similar in both the ELA and Algebra regents. While both settings overall achieved the same overall passing rates, students within the homogeneous groupings attained a much higher percentage of mastery than those placed within the ICT setting. Respectively, in Algebra Regular education students within the ICT setting scored 5% mastery as opposed to 38 percent in the homogeneous settings and within the ELA regents, 48% scored at a mastery level (4) in the ICT classroom as opposed to 80% in the homogeneous settings.

Within both these settings, regular education students performed relatively similar when combining proficiency level and above. When analyzing the data closer, there was a significant difference in each group's Mastery levels, showing students in homogeneous grouping vastly surpassed those in inclusion settings. This evidence showed students defined as regular education similarly performed well but did not gain the skills necessary for Mastery in an inclusion setting.

Research Question 2. Are there significant differences in the academic achievement of disabled students enrolled in both the inclusion and self-contained settings as it relates to NYS ELA and Algebra 1 Regents?

Self-contained classroom placement has a definite purpose for students with learning

disabilities who are severely limited in their academic ability to a level below regular education curriculums and expectations. As Kauffmann et al. (2002) reported, some students require services not found in a regular education or inclusive setting. These students need a classroom environment that provides more support and more individualized attention than an inclusive classroom can offer (Kauffmann et al., 2002).

The data analyzed in this study supported the belief self-contained classroom placement can have a detrimental influence on some students with learning disabilities which contradicts Kauffmann et al. (2004) and Kauffmann et al. (2002) that self- contained classes are superior to inclusive classes. Self-contained classroom placement can limit a student's academic growth as seen by the data collected on the ELA and Algebra 1 Regents exams.

The data collected from both the NYS ELA and Algebra Regents showed a relationship between low scores and those placed in self- contained classes for extended periods of time. In many cases, student success on these state created assessments were significantly higher within the special needs population, provided their placement was in an ICT setting. Within the data collected on the ELA Regents exam, IEP students in inclusion classrooms outperformed those within self-contained by more than double the amount, having 89% of them score a 3 or 4 as opposed to 33% within the self-contained classroom setting.

Researchers in the *Success for All* study concluded everyone benefits when students with disabilities are placed in inclusive classrooms (WEAC, 2007). The Regents data and the special education directors' questionnaire results indicated that inclusion is not only a better setting academically, but holistically, for students with learning disabilities. Students with learning disabilities placed in inclusive classroom environments performed better on the

Algebra and ELA tests than those placed in self-contained classroom environments. Some special education personnel declared inclusive placement for students with learning disabilities was preferred due to the exposure to mainstream instruction that was more aligned with the required skills on the NYS Regents. Also, respondents indicated inclusive placement also promotes interaction with regular education peers that enables social learning.

Research Question 3. Are their significant differences in student achievement of inclusive and self-contained learning environments as it relates to gender, poverty and ethnicity?

When analyzing all subgroups within the special and regular education setting ELA and algebra regents there were significant differences between those subgroups that are related to self-contained and inclusion settings. These differences ranged in the sub categories race and poverty status.

Of the students placed in both Inclusive and Self-contained classes on the ELA exam, broken down by race, 90% identified as Asian scored Proficient/Mastery in ICT, 74% identified as Black scored Proficient/Mastery in ICT and 40% Proficient/Mastery in SC, 80% identified as Hispanic scored Proficient/Mastery in ICT and 39% Proficient/Mastery in SC, and 86% identified as White scored Proficient/Mastery in ICT and 75% Proficient/Mastery in SC.

Of the students placed in both Inclusive and Self-contained classes, broken down by race, taking the Algebra Regent, 67% identified as Asian scored Proficient/Mastery in ICT, 86% identified as Black scored Proficient/Mastery in ICT and 36% Proficient/Mastery in SC, 78% identified as Hispanic scored Proficient/Mastery in ICT and 41% Proficient/Mastery in SC, and 84% identified as White scored Proficient/Mastery in ICT and 67%

Proficient/Mastery in SC.

This breakdown shows significant differences in achievement of all races between achievement scores from both the ICT and self-contained placements, especially within the black and Hispanic subgroups on both exams. These differences show an inconsistency in success among certain subgroups and a need to further review ways in which to improve upon the current standards in use. Further study of these two particular subgroups is needed to address issues in equity and overall success. A further analysis for reasons of placement would also be warranted to identify the reasons for such academic assignments as set forth by the student's IEP.

While there was a significance in the students of poverty and how they achieved on the Algebra ad ELA exams, the mean score on the Algebra regents for students of poverty was 77.30 and mean score on the Algebra regents for students with no poverty was 84.84. The mean score on the ELA regents for students with poverty was 81.63 and for students with no poverty was 91.37. In both cases a statistical significance was found in their achievement rates.

Research question 4. What are teachers/administrators' attitudes/perceptions of inclusive and self-contained classroom settings in terms of student achievement and success of all students within these learning environments?

The data analyzed from the special education questionnaire indicated that a majority of Special Education personnel believe that inclusive settings are most beneficial when schools provide proper support and services to students with learning disabilities. Regular classroom teachers combined with special education teachers provide the best inclusive environment. Holloway (2001) believed that proper support was more important than placement

environments. Idol (2006) concluded the biggest failure is to pretend students with disabilities are not different from students without disabilities. Given this, inclusive placement and regular instruction practices are only components in the placement equation. Support is the key to success in the inclusion setting.

Holloway (2001) recommended the only way to truly judge the effectiveness of inclusion is to factor in the quality and availability of services and support. Regular education teachers must be educated in areas involving students with learning disabilities and their educational and social needs (Holloway, 2001; Idol, 2006). When everyone involved in the inclusive environment collaborates, success will follow.

Limitations of Study

In looking at the data collected, a number of questions arise that would allow for a further in-depth study of special education placement. While the data collected was comprehensive in terms of student achievement on state assessments, I believe a further study involving a larger grouping would be useful in solidifying the results collected. This would further allow for educators to know the validity of special education placements and its effect on students identified as having an IEP.

Furthermore, the differences in Regents mastery between regular and special education students not only calls for but actually demands further study. While the belief may be that students would gain the benefit of increased interactions with teachers within an inclusion setting, a higher number of students achieved mastery when grouped homogenously. This finding was not anticipated and needs to be studied with greater efficacy.

Implications for Effective Special Education Placement

The purpose of this research was to identify the academic strengths and weaknesses of self-contained classroom placement and inclusive classroom placement for high school students with learning disabilities. The research strongly supported inclusive classroom placement as the best choice for academic success with this population. As Vygotsky (1978) asserted, social interaction is the key to cognitive development. This interaction allows students to learn the ideas and concepts, then, through interactions with others, the application of these ideas and concepts occurs. Inclusive classrooms provide the social interaction that benefits students cognitively.

The implication for schools is to ensure effective academic placement for students with learning disabilities. Teachers, parents, administrators, and advocates need to consider Vygotsky's (1978) theory and place students in inclusive settings, if possible. The belief that separate classroom settings provide more effective delivery of services for students with learning disabilities appears flawed. Care must be exercised not to isolate this student population merely because they exhibit a disability. Placement must not exacerbate disabilities by providing a less than equal academic education.

Recommendations for Future Research

Given the data, teachers, administrators, support groups, and parents should consider the child's special education placement options carefully. There are strong indicators that students with certain disability levels should be placed into self-contained classes, and many students with learning disabilities should be placed in inclusive settings. Both environments have benefits for students, and both may be inappropriate depending on the specific needs of the child.

The Regents data indicated a high level of academic achievement in the group of students placed in inclusive classrooms; however, care must be taken when applying this information. Most higher functioning students with learning disabilities are often placed in inclusive classrooms than lower functioning students, so higher academic scores could be expected of this group. Additionally, the special education directors' questionnaire was used in conjunction with the Regents data to more clearly establish special education environment benefits and deficits. Most of the special educators expressed that inclusive placement has benefits that self-contained classrooms do not. It appears that academic success does occur more readily in settings where students with learning disabilities can learn along with their non-learning disabled peers. As Vygotsky (1978) posed:

> Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people and then inside the child. This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals. (p. 57)

Without considering Vygotsky's (1978) position, educators are inadvertently limiting student success academically.

The most important goal for schools is promoting academic skills that enable students to become as successful as possible in the world after graduation. This research presents evidence that by not placing students with learning disabilities in inclusive settings, one creates a Pygmalion Effect on students' future lives. Therefore, these environments can set dangerously low academic expectations, thereby adversely affecting successes after graduation.

The search for the most effective placement for students with learning disabilities has been at the forefront of efforts since the Education for all Handicapped Children Act (1975). However, while our Second Chapter included a review of current self-contained and inclusion trends and research, on both self-contained and inclusive environments for this student population there is a considerable absence of evidence based on performance studies. In this research, no studies involving students with learning disabilities after their graduation from the K-12 environment were available; therefore, further study into the success of students with learning disabilities in their post-high school academic and employment years would yield further insight into this topic.

Given Vygotsky's (1978) theory of social development, what holds true in K-12 education may hold true in college and employment environments. Any lack of cognitive development that occurred in the K-12 academic years would surely negatively impact any skilled endeavor in a student's future. Such an impact could have a greater impact on the overall psychological health and well-being of this population. Since educators are basically providers of the tools necessary for social assimilation, research in this area could help educators better understand the overall effects of special education placement on learning disabled students.

Given the results of this research, parents and educators may better understand the holistic implications of special education placement settings. By exploring the effects of these educational environments on students, only a small portion of the educational equation is reviewed. The ramifications of placement and the effects of this placement on continued learning would be a worthwhile investigation that could benefit everyone involved in the educational process.

Conclusion

This study was conducted to identify which special education environment provided the best academic results. The data collected strongly supported inclusive classroom environments over self-contained classroom environments for students with learning disabilities. The MAP data indicated the more a student with learning disabilities is in an inclusive academic classroom setting, the better the academic success. Responses from the special education directors' questionnaires provided expertise beyond the MAP data.

It appears that inclusive environments promote academic and social growth that self-contained classrooms do not. The inclusive settings promote social learning through interactions with the regular education students and staff. As Vygotsky (1978) believed, learning is a process that involves interactions with others. Vygotsky (1978) also affirmed students with disabilities are less likely to be handicapped when they are allowed to learn in an environment rich in mainstream interactions. This belief should be paramount in education. Students with learning disabilities need to be included, not segregated in schools. Kids Together (2010), a children's advocacy group, reported:

> Through inclusive education children with disabilities remain on a path that leads to an adult life as a participating member of society. Meeting all their needs together increases their ability to achieve academic and physical growth to their potential, and it enhances their overall quality of life. (p. 1).

Clearly the future of special education placement for students with learning disabilities should be aimed at furthering the trend toward inclusion in the nation's schools. Overall, the academic success and the enhancement of social development that inclusive settings promote cannot be ignored. Proponents of inclusion have stated that self-contained classrooms further handicap a student with a disability (Kids Together, 2010). As expressed by Kids Together (2010):

> Separate is not equal. If something is offered to all children it must be accessible to all children. Access should not be denied based on disability or any characteristic alone. Children with disabilities have a right to go to the same schools and classes as their friends, neighbors, brothers and sisters. They have a right to be afforded equal opportunities. (p. 1)

Couple this philosophy with the academic deficits associated with self-contained classroom placement, and it becomes clear the trend toward inclusive placement for students with learning disabilities is sound.

APPENDIX A

Survey Questions

1. In your opinion, is there a positive correlation between students with learning disabilities placed in self-contained classes and their results on the MAP test when compared to students with learning disabilities who are placed in inclusive classes?

2. In your opinion, what are the biggest differences between self-contained classes and inclusive environments?

3. In your opinion, what are the major benefits of self-contained placement for students with learning disabilities?

4. In your opinion, what are the major benefits of inclusive placement for students with learning disabilities?

5. Given your experience, which educational environment are parents of students with learning disabilities most likely to support or endorse?

6. What, if any, academic problems do you perceive in self-contained class placements for students with learning disabilities?

7. What, if any, academic problems do you perceive in inclusive education settings for students with learning disabilities?

APPENDIX B

Letter of Introduction

You are invited to participate in a research study conducted by John Murphy, doctoral student at Saint John's University. The purpose of this research is to determine the academic effectiveness of current special education placement options: inclusion versus self-contained. The data utilized in this study will be used to compare the academic achievement of high school students with learning disabilities in both environments.

The attached questionnaire will allow for your input on the subject. This data will provide the necessary human observation and expertise required to validate any findings brought to light by this study. Your participation is greatly appreciated.

Please complete this questionnaire as soon as possible.

Sincerely,

John Murphy

Doctoral Student (631) 241-1129

APPENDIX C

Saint John's University

School of Education

Informed Consent for Participation in Research Activities

"Special Education Learning Environments: Inclusion versus Self-Contained"

Principal Investigator John Murphy
Telephone: 631 241-1129 E-mail: johnmurphy6779@gmail.com

Participant_____Contact info _____

1. You are invited to participate in a research study conducted by John Murphy. The purpose of this research is to determine the academic effectiveness of current special education placement options.

2. a) Your participation will involve providing responses on an e-mailed questionnaire via Google Forms.

   b) The amount of time involved in your participation will be minimal; simply the time it takes to respond to the questionnaire.

3. There are no anticipated risks associated with this research.

4. There are no direct benefits for you participating in this study. However, your participation will contribute to the knowledge about special education placement.

5. Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

6. We will do everything we can to protect your privacy. As part of this effort, your identity will not be revealed in any publication or presentation that may result from this study and the information collected will remain in the possession of the investigator in a safe location.

7. If you have any questions or concerns regarding this study, or if any problems arise, you may call John Murphy, @ 631 241-1129.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.

_____	____	_____
Participant's Signature	Date	Participant's Printed Name
_____	____	_____
Signature of Principal Investigator	Date	Investigator's Printed Name

REFERENCES

Admin. (2010). *Special education has changed over the years*. Retrieved from http: geniuschildprogram.com/246/special-education-has-changed-over-time/

All Education Schools. (2010). *Special education history in the United States.* Retrieved from http://www.alleducationschools.com/education-careers/special-education/ All Education Schools special-education-history

Anderson, D. (2016). Inclusion and interdependence: Students with special needs in the regular classroom. Journal of Education and Christian Belief, 10(1), 43-59. doi:10.1177/205699710601000105

Bar-Lev, N. B. (2007). A user-friendly interactive handbook on special education placement and practices in Wisconsin. *Special Education in Plain Language.* Retrieved from http://www.specialed.us/pl-07/pl07-ieppro.html

Brown-Abdelmageed, L. (2007). The fully inclusive classroom. The academic impact of full inclusion on student's achievements as assessed on standardized testing protocols in middle school language arts. (AAT3258359)

Byrnes, M. (2008). Taking sides: Clashing views in special education (3rd Ed.). Dubuque, IA: McGraw Hill Contemporary Learning Series.

Carter, T. (2010). *The legacy of the 1960s in America.* Retrieved from http://www.suite101.com/content/the-legacy-of-the-1960s-in-america-a187369#ixzz13xVjnJHZ

Cassidy, S. (2004). Learning styles: An overview of theories, models, and measures. *Educational* ***Psychology*****,** ***24***(4), 419-444. doi: 10.1080/0144341042000228834

Chew, K. M. (2007). *Maybe mainstreaming isn't always for every student.* Retrieved

from http://blisstree.com/live/maybe-mainstreaming-isnt-always-for-%20every-student/?utm_source=blisstree&utm_medium=web&utm_campaign=b5hubs_migration

Colarusso, R. O. (2004). *Teaching every student, a mandate for today*. *Special education for all students*. Debuque, IA: Kendall/Hunt.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, California: SAGE Publications.

Culp, R. W. (2008). *Is special education fair?* Retrieved from http://newfoundations.com/PracEthics/Culp.html

Daggett, W. R. (2004). *Reforming high schools: Why, what, and how.* Retrieved from http://www.leadered.com/pdf/Reforming%20HS%20White%20Paper.pdf

Decatur, J. (2007). *Controversy in education: Inclusion vs. self-contained classrooms.* Retrieved from http://www.freewebs.com/jenndecatur/Inclusion_Vs_Self-Contained.pdf

Dieker, L. A., & Murawski, W. W. (2003). Co-teaching at the secondary level: Unique issues, current trends, and suggestions for success. The High School Journal, 86(4), 1-13. Retrieved from DOI: 10.1353/hsj.2003.0007.

Dixon, S. (2005). Inclusion-Not segregation or integration is where a student with disabilities belongs. Journal of Educational Thoughts, 39(1), 33-53.

Dixon, R. M. & Verenikina, I. (2007, February). *Towards inclusive schools: An examination of socio-cultural theory and inclusive practices and policy in New South Wales DET schools.* Paper presented at the *Exploring Modern Vygotskian Perspectives International Workshop.* Retrieved from http://ro.uow.edu.au/llrg/vol1/iss1/13/

Douvanis, G., & Hulsey, D. (2002). *The least restrictive environment mandate: How has*

it been defined by the courts? Retrieved from http://www.ericdigests.org/2003-3/courts.htm

Education for All Handicapped Children Act of 1975, 20 U.S.C. § 1400 *et seq.*(West 1976).

Elbaum, B. (2002, November). The self-concept of students with learning disabilities: A meta-analysis of comparisons across different placements. *Learning Disabilities Research & Practice, 17*(4)*,* 216-226. doi: 10.1111/1540-5826.00047

Evans, C. W. (2006). Towards inclusive teacher education: Sensitizing individuals to how they learn. *Educational Psychology*, *26*(4), 499-518. doi: 10.1080/01443410500342484

Findlaw. (2010). *U.S. Supreme Court, 347 U.S. 483 (1954).* Retrieved from http://caselaw.lp.findlaw.com/scripts/getcase.pl?court=us&vol=347&invol=483

Fore, C. I., Hagan-Burke, S., Burke, M. D., Boon, R. T., and Smith, S. (2008). Academic achievement and placement in high school: Do students with learning disabilities achieve more in one class placement than another? *Education and Treatment of Children*, *31*(4), 620-624.

Foster, M., Pearson, E. (2012). Is Inclusivity an Indicator of Quality of Care for Children With Autism in Special Education?. Pediatrics Nov 2012, 130 (Supplement 2) S179-S185; DOI: 10.1542/peds.2012-0900P

Friend, M. (2008). Co-teaching: A simple solution that isn‟t simple after all. Journal of Curriculum and Instruction, 3(3), 9-19.

Fuchs, D., & Fuchs, L. S. (1998). Competing visions for educating students with learning disabilities: Inclusion vs. full inclusion. *Learning Disability Quarterly*, *21*, 99-101.

Goodwin, S. & Bradley, B. (2009). *American cultural history 1960-1969.* Retrieved from

http://kclibrary.lonestar.edu/decade60.html

Hallahan, D. P. (2009). *Education of individuals with learning disabilities.* Retrieved from http://education.stateuniversity.com/pages/2173/Learning-Disabilities-Education-Individuals-with.html

Hardman, M. L., & Dawson, S. (2008). The impact of federal public policy on curriculum and instruction for students with disabilities in the general classroom. *Preventing School Failure*, *15*(2), 5-11.

Hartmann v. Loudoun Co., 118 F.3d 996 (4th Cir.1997).

Hechinger, J. (2007). *Schools accused of pushing mainstreaming to cut costs.* Retrieved from http://search.bridgew.edu/search?proxystylesheet=default_frontend&site=default_collection&client=default_frontend&output=xml_no_dtd&q=Schools+Accused+of+Pushing+doc&btnG=Search

Hehir, T. (2003, March). Beyond inclusion: Educators' 'ableist' assumptions about students with disabilities compromise the quality of instruction. *School Administrator.* Retrieved from http://findarticles.com/p/articles/mi_m0JSD/is_3_60/ai_98255580/

Holloway, J. H. (2001). Inclusion and students with learning disabilities. *Educational Leadership, 58*(6), 86-88.

Hooks, J. (2010). *Understanding classroom inclusion for children with special needs.* Retrieved from http://www.suite101.com/content/understanding-classroom-inclusion-for-children-with-special-needs-a232748#ixzz13nspCIQO

Idol, L. (1997). Creative collaborative and inclusive schools. *Journal of Learning Disabilities, 30*(4), 384-394. doi: 10.1177/002221949703000405

Idol, L. (2006). Toward inclusion of special education students in general education. *Remedial and Special Education*, *27*(2) 77-94.

Idol, L., Nevin, A., & Paolucci-Whitcomb, P. (1986). *Collaborative consultation.* Austin, Texas: Pro-Ed.

Juris, M. F., Ramos, V. V., & Castaneda, M. G. G. (2009). Learning and teaching crossroads. *Institute for Learning Styles Journal 1*, 1-19.

Kauffmann, J. M., Bantz, B., & McCullough, J. (2002). Separate and better: A special public school class for students with emotional and behavioral disorders. *Exceptionality, 10*(3), 149-170.

Kauffman, J. M., McGee, K., & Brigham, M. (2004). Enabling or disabling? Observations on changes in special education. *Phi Delta Kappan, 85*(8), 613-620.

Kennedy, J. F. (1961). Retrieved from http://www.mnddc.org/parallels2/pdf/60s/62/62-sallinger-pr.pdf

Kinney, S. (2007). *On learning disabilities: Part one*. Retrieved from http://stevekinney.net/post/506193608/on-learning-disabilities-part-one

Ladner, M. (2009). *Minorities in special education.* Retrieved from http://borderbeat.net/component/content/article/55-education/637-minorities-in-special-education

LearningRx. (2009). *History of special ed.* Retrieved from http://www.learningrx.com/history-of-special-education.htm

Lloyd, J. W. (2009). *S. A. Kirk.* Retrieved from http://special.edschool.virginia.edu/professionals/pix/Kirk.html

Manset, G., & Semmel, M. I. (1997). Are inclusive programs for students with mild disabilities effective? A comparative review of model programs. *The Journal of Special Education, 31,* 155-180.

Mauro, T. (2009). *Choose the right special education placement for your child*. Retrieved

from http://specialchildren.about.com/od/specialeducation/p/specialedrooms.htm

McDonnell, J., Thorson, N., Disher, S., Mathot-Buckner, C., Mendel, J., & Ray, L. (2003). The achievement of students with developmental disabilities in inclusive settings. *Education and Treatment of Children*, *31*(1), 224-236.

Mock, D. R., Jakubecy, J. J. & Kauffmann, J. M (2009). *Special education: Current trends.* Retrieved from http://education.stateuniversity.com/pages/2438/Special-Education.html#ixzz13y3ziWk6

Muenks, M. (2005). *Expanded MAP.* Retrieved from http://dese.mo.gov/divimprove/assess/Expanded_MAP.pdf

Osgood, R. (2005). *The history of inclusion in the United States.* DC: Gallaudet University Press.

Overton, T. (2004). Promoting academic success through environmental assessment. *Intervention in School and Clinic*, *39*(3), 147-153. doi: 10.1177/10534512040390030301

Pardini, P. (2002). *Special education: Promises and problems*. Retrieved from http://www.rethinkingschools.org/archive/16_03/Prom163.html

Placement. (2010). In *Special Education in Plain Language.* Retrieved from http://www.specialed.us/Parents/iepprocess/iep3.htm

Power-de Fur, L. A. (1997). *Inclusive education: Practical implementation of the least restrictive environment.* Gaithersburg, TN: Aspen Publishers.

Protigal, S. (1999). *Public law 94-142: Education of all handicapped children act.* Retrieved from http://www.scn.org/~bk269/94-142.html

Rea, P., Mclaughlin, V., & Walther-Thomas, C. (2002). Outcomes for students with learning disabilities in inclusion and pullout programs. *Council for Exceptional Children*, *68*(2), 203-223.

Roberts, M. (2008). *The individuals with disabilities: Why considering individuals one at a time creates untenable situations for students and educators.* (Master's thesis). Retrieved from http://uclalawreview.org/pdf/55-4-5.pdf

Rodriguez, C. M. (2009). The impact of academic self-concept, expectations and the choice of learning strategy on academic achievement: The case of business students. *Higher Education Research & Development*, *28*(5), 23-539. doi:10.1080/07294360903146841

Roncker v. Walter, 700 F.2d 1058 (6th Cir 1983).

Rothstein, L. J. (2010). *Special education law.* Thousand Oaks, California: SAGE Publishers.

Salzman, A. (2009, November 20). Special education and minorities. *The New York Times.* Retrieved from http://www.nytimes.com/2005/11/20/nyregion/nyregionspecial2/20ctspecial.html

School District of Wisconsin Dells v. Z. S., 295 F. 3d 671 (7th Cir.2002).

Schwartz, P. A. (2007). Special education: A service not a sentence. *Educational Leadership*, *64*(5), 39-42.

Schwartz, I. S., Odom, S. L., & Sandall, S. R. (2010). Including young children with special needs. http://www.newhorizons.org/spneeds/inclusion/information/schwartz3.htm

Scruggs, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-teaching in inclusive classrooms: A metasynthesis of qualitative research. Retrieved from cehd.gmu.edu/people/faculty/mmastrop/

Sharpe, W. (2007). *Special education inclusion: Making it work.* Retrieved from http://www.educationworld.com/a_curr/curr320.html

Signor, S., LeBlanc, M., & McDougal, J. (2003). *Academic achievement in self-*

contained vs. inclusive special education classes. Retrieved from http://docs.google.com/viewer?a=v&q=cache:atz811r_D2MJ:www.oswego.edu/~leblanc/nasp.ppt+Academic+Achievement+in+Self-Contained+vs.+Inclusive+Special+Education+Clas&hl=en&gl=us&pid=bl&srcid

Smith, S. (2001). *Involving parents in the IEP process.* Retrieved from http://www.asgc.org/ed-involving-parents.htm

Sternberg, R. J., & Zhang, L. (2001). *Perspectives on thinking, learning, and cognitive styles.* Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Stout, K. S. (2007). *Special education inclusion.* Retrieved from http://treehouseadvocacy.googlepages.com/SpecialEducationInclusion.doc

Thurlow, M. L. (2000). Standards based reform and students with disabilities: Reflections on a decade of change. *Focus On Exceptional Children*, *33*(3), 1-15.

Tough, P. (2008, September 5). 24/7 school reform. *The New York Times.* Retrieved from http://www.nytimes.com/2008/09/07/magazine/07wwln-lede-t.html

United States Department of Education. (2004). *Building the legacy: IDEA 2004.* Retrieved from http://idea.ed.gov/

United States Department of Education. (2007). *Thirty-five years of progress in educating children with disablilities through IDEA*. Retrieved from https://files.eric.ed.gov/fulltext/ED515893.pdf

United States Department of Labor. (2010). *Occupational outlook handbook, 2010-1011 edition.* Retrieved from http://www.bls.gov/oco/ocos070.htm

United States Department of Special Education. (2009). *Ideas that work.* Retrieved from http://www.ed.gov/about/offices/list/osers/osep/index.html

Valle, A., Cababach, R. G., Nunez, J. C., Gonzalez-Pienda, J., Rodriguez, S., & Pineiro, I. (2003). Multiple goals, motivation and academic learning. *The British Journal*

of Educational Psychology, 73, 71-87.

Vygotsky, L. S. (1978). *Mind in society.* Cambridge, MA: MIT Press.

Waldron, N. L., & McLeskey, J. (1998). The effects of an inclusive school program on students with mild and severe learning disabilities: An exploratory study. *Council for Exceptional Children*, *64*, 395-405.

Williams, R. M. (2007). A study of the effect of inclusion of students with disabilities in Grades 9- 12 on the ability of the comprehensive public high schools in the District of Columbia and prince George's County, Maryland to achieve adequate yearly progress on statewide assessments (doctoral dissertation). Retrieved from ProQuest Dissertations & Theses database. (AAT 3286973)

Winzer, M. (1993). *The history of special education: From isolation to integration.* DC: Gauladet Press.

Wright, P. W. D., & Wright, P. D. (2009). *Least restrictive environment (LRE) & FAPE*. Retrieved from http://www.wrightslaw.com/advoc/articles/idea.lre.fape.htm

Wrightslaw .(2009). *Inclusion, least restrictive environment (LRE), mainstreaming*. Retrieved from http://www.wrightslaw.com/info/lre.index.htm

Yell, M. (2004). *Legal guidelines and preferred practices*: *Placing students with disabilities in inclusive settings*. Bingley, England: Emerald Group.

Zigmond, N. (2003). Where should students with disabilities receive special education services? *The Journal of Special Education, (37)*3, 193-199.

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