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Special Education Learning Environments: Inclusion Versus Self-Contained

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by

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Dr. Terry Reid, Dissertation Chair	March 4, 2011 Date
Dr. Sherry DeVore, Committee Member	March 4, 2011 Date
Dr. Doug Hayter, Committee Member	March 4, 2011 Date

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work at Lindenwood University and that I have not submitted it for any other college or university course or degree.

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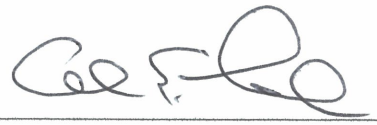
Signature:  Date: 3/4/11

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Abstract

The field of special education has been challenged by the quandary over which educational environment provides the best academic opportunities for students with learning disabilities: self-contained versus inclusive. Proponents of self-contained classroom placement have insisted students with learning disabilities placed in self-contained classrooms receive better instruction due to the reduced class sizes and the efficient delivery of special education services. Proponents of inclusive classroom placement expound inclusive classrooms allow students with learning disabilities to engage in enhanced learning via emersion into the regular education population. To assess both learning environments, disaggregated data from the Missouri Assessment Program (MAP) were collected from the Missouri Department of Elementary and Secondary Education. A total of 23,647 Communication Arts scores and 23,633 Mathematics scores were collected from 2008 and 2009. Student MAP scores were grouped into three time classifications: students placed in inclusive classes for >79%, 40-79%, and <40% of the school day. Then, student MAP scores were separated into two achievement levels: Below Basic/Basic and Proficient/Advanced for comparison. In addition to the MAP data, a questionnaire was e-mailed to special education directors in Missouri public schools. This questionnaire was designed to elicit input on self-contained classes versus inclusive classes from these professionals. After analyzing the data, a relationship was found between academic success on the MAP and time spent in inclusive classes. Further study should be conducted to determine the relationship between special education placement and post graduation success.

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Chapter One: Introduction

Background of the Study

The success of special education students is greatly determined by the environment in which they receive their education (Mauro, 2009). The educational environment in which students with disabilities are placed is decided during the development of the Individualized Education Plan (IEP) and is based on the students' needs (Placement, 2010). First, assessments are performed to determine the current level of functioning and the amount of special services required for the student (Placement, 2010). Then, the determination of placement is based on serving the student in the least restrictive environment (LRE), or the most appropriate educational setting (Education of All Handicapped Children, 20 U.S.C. § 1400, 1975).

For many years, placement was a self-contained special day class, which was isolated from the mainstream student population, and a trained special education teacher provided individualized instruction (Mauro, 2009). Mauro (2009) stated:

> 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. Self-contained classes offer structure, routine, and appropriate expectations. (p. 1)

Although restrictive in the social and academic realm, this model provided the ideal setting for the delivery of education, as well as other special services that might be required (United States Department of Education [USDE], 2007).

In recent years, a different delivery model has become more prevalent in the field of special education. Rather than restrict the students' environment while anticipating educational growth, educators are giving more consideration to placing students with learning disabilities in an environment that promotes socialization and academic benefits (Kinney, 2007). This placement is referred to as inclusion (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 was to compare the inclusion and self-contained approaches by measuring their educational merits. Such an examination is necessary to ensure that current special education practices properly conform to data-driven research and not current economic or social trends (Bar-Lev, 2007). With so many peripheral influences present in public school systems, it is easy to confuse solid, appropriate academic directions with current trends born of economic need or desperation (Rothstein, 2010). To be truly successful, America's public schools need to be aware of data-supported teaching techniques by clearly establishing academic goals and closely monitoring student progress toward these goals (Bar-Lev, 2007).

Historical Perspective

To understand the field of special education, it is important to study the roots within the American educational system prior to the passage and adoption of Public Law (PL) 94-142 in 1975 (Learning RX, 2009). The 1950s were wrought with social change both in this country and abroad (Carter, 2010). The Soviet Union was showing its power and potential dominance as a world military and social power and threat. The continued spread of Communism throughout Asia tore at capitalistic, democratic ideals (Encyclopedia.com, 2001).

Monumental legislation was pointing the way to a new, truly integrated, America. Decisions, such as *Brown v. Board of Education* (1954), changed perceptions about what public schools should be (Findlaw, 2010). Interest in the field of special education began with the passage of PL 85-905 and PL 85-926 (USDE, 2007). The former allowed federal loans for captioned films for deaf public school students, and the latter provided funding for the training of special teachers to work with the mentally retarded (USDE, 2007).

For many years, American schools did their best to serve severely handicapped children without much guidance from the government (Learning RX, 2009). The more specialized approaches toward students with special needs started to take shape in the 1960s. It was during this era when America began to reassess not only its place in the field of education, but its position in the modern world (USDE, 2007).

With America's interests turning toward redefining itself as a world power and leader in all things technological, it made sense to push educational programs to meet these emerging trends (Goodwin & Bradley, 2009). It was a time to reassess and take inventory of the events and attitudes of the preceding decades and establish a new

direction (Encyclopedia.com, 2001). It was an emotional era of triumph over evil, jubilation in victories, and a deep sense of paranoia and competitiveness (Carter, 2010). America was changing rapidly and so were its educational institutions (Encyclopedia.com, 2001). As these changes began to take shape, special education became directly linked to new directions in teaching, curriculum, and the classification and categorization of students (Osgood, 2005).

During the Kennedy administration, a federal panel was assembled to explore ways "to consider a national approach to the prevention and management of mental retardation" (Kennedy, 1961, p. 1). Kennedy (1961) argued, "We, as a nation, have far too long postponed an intensive search for solutions to the problems of the mentally retarded. That failure should be corrected…" (p. 1). In the years following, both the Kennedy and Johnson administrations kept special education legislation at the forefront of their agendas (John F. Kennedy Presidential Library, n.d.). Two of the most era-defining pieces of special education legislation were PL 88-156, and PL 88-164, respectively (USDE, 2007). These initiatives dictated support for states' special education laws, as well as established the Division of Handicapped Children and Youth under the auspices of the United States Office of Education (USDE, 2007). The foundation was laid for the future of special education and the services included under its umbrella (USDE, 2007).

As the need and desire to continue adding and refining special education services grew, so did the subgroups represented (Douvanis & Hulsey, 2002). As researchers began investigating neurological processing problems, or brain-injury as it was often called, categorization of these minor disabilities began to take shape (Osgood, 2005). The term

learning disabled, was adopted after a special educator, Samuel Kirk, from the University of Illinois, first used the term to describe behaviors and learning problems encountered in a certain percentage of school children (Lloyd, 2009). Kirk's studies prompted a parent support group to form the Association for Children with Learning Disabilities (Osgood, 2005). As the acceptance of the concept and the adoption of the term became more widespread, the idea of including moderate and mild handicapping conditions under the special education umbrella began to take shape (Osgood, 2005).

During the 1970s, new legislation continued to be introduced, and the most important law of its kind, PL 94-142, was enacted in 1975. This act specified:

> All handicapped children have available to them, within the time periods specified in section 612(2) (B), a free appropriate public education which emphasizes special education and related services designed to meet their unique needs, to assure that the rights of handicapped children and their parents or guardians are protected, to assist States and localities to provide for the education of all handicapped children and to assist and assure the effectiveness of efforts to educate handicapped children. (Education of All Handicapped Children, 20 U.S.C. § 1400 *et seq.*, 1975, 612(2) (B)

With the passage of this legislation, a new era began, one full of research, referral, identification, and for the most part, placement within self-contained class settings (USDE, 2007). Even students with minor disabling conditions were served in self-contained classroom settings for at least a portion of the school day (Pardini, 2010). Such placement was considered the best classroom setting due to the homogeneous student population, as well as the small student-to-teacher ratio (Pardini, 2010).

After PL 94-142 was enacted, the IEP began to be developed to ensure personalized assessment and evaluation of each student (All Education Schools, 2010). Contained in the IEPs were handicapping conditions, current performance levels, hours of special education placement, and projected goals and objectives for the upcoming school year (USDSE, 2009). Placement decisions were based on the requirement that each student would be served in the least restrictive environment (LRE), an attempt to keep special education students from being separated from the rest of the students in other programs (Education of All Handicapped Children, 20 U.S.C. § 1400, 1975). Special educators tried to balance special placement with proper mainstreaming, or regular classroom placement (United States Department of Education [USDE], 2009).

New amendments and laws helped define the growth of special education throughout the 1980s to the present. Most notable were PL 98-199, which expanded special education services from the time of birth, and PL 101-476, that defined the Individuals with Disabilities Act (IDEA). The IDEA was a restatement of the nation's commitment to special education services in schools (USDE, 2007). Several new challenges, such as the Americans with Disabilities Act became law in 1991 (USDE, 2007).

Conceptual Framework

The benefits of special education placement environments have been argued by proponents of inclusive and self-contained classroom environments (Kinney, 2007; Stout, 2007). In this study, the social development theory (Vygotsky, 1978) provided the framework to examine the inclusive learning environment. The conceptual perspectives

of Kauffman, McGee, and Brigham (2004) were used to investigate the self-contained learning environment.

Proponents of inclusion have asserted self-contained classrooms accentuate social differences through the absence of regular social interaction (Vygotsky, 1978). Those who subscribe to Vygotsky's (1978) theory of social development have believed "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 element in social development. These interactions within the inclusive learning environment allow for enhanced learning (Vygotsky, 1978).

Kauffmann et al. (2004) asserted that special education is in danger of "losing its way in the single-minded pursuit of full inclusion" (p. 613). Other proponents of self-contained special education placement have espoused the need for individualized education that can usually be found only in a self-contained setting (Mauro, 2009). Such placement allows for the utilization of specially trained teachers and aides, as well as support personnel not normally available in an inclusive classroom (Stout, 2007). Kauffmann et al. (2004) affirmed, "If inclusion is to be truly inclusive, students who require extensive differentiation may be best served in a self-contained special education environment" (p. 3).

Vygotsky's (1978) theory coincides appropriately with the concept of inclusion (Kinney, 2007). As students intermingle with peers socially, as well as academically, enhanced learning takes place. 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.

Statement of the Problem

Educators in the field of special education have long wrestled with many questions pertaining to the proper educational environment for students with special needs (USDE, 2007). The over-arching question has been: How do educators effectively educate students with special needs without denying them access to the psychological, social, and educational benefits of the regular classroom environment (Fore, Hagan-Burke, Burke, Boon, & Smith, 2008)? Legislation regarding special education is very specific in the area of placement and educators must provide all necessary services without compromising exposure to the general student population (Rothstein, 2010; Wrightslaw, 2009).

In the development of an IEP, it is important to provide as much exposure to the mainstreamed population as possible without impairing the student's education (USDE, 2004). The placement of students with special needs has always been difficult to balance and achieve (Kauffmann, Bantz, & McCullough, 2002). How do educators provide an appropriate education and support for students with special needs without totally segregating them from the regular population?

When serving students with severe disabilities, such as profound mental illness, or severe retardation, needs and supports are determined by the student's physical and mental limitations (Yell, 2004). Placement becomes more complicated when serving students with moderate or minor disabling conditions such as learning disabilities or borderline retardation (Yell, 2004). This population still needs the expertise of a special education teacher, yet may benefit from the educational opportunities in the regular classroom (Kinney, 2007).

Proponents of self-contained special education placement have cited the need for an individualized education that can usually be found only in a self-contained special day class setting (Mauro, 2009). Such placement allows for the utilization of specially trained teachers and aides, as well as support personnel not normally available in a mainstream classroom (Stout, 2007). Unfortunately, such placement allows the student little access to the regular education population except during times such as physical education and non-academic electives (Colarusso, 2004). Chen (2009) declared that "there are specific cases of students who, without doubt, need more personal and unique interventions" (p. 1). Holloway (2001) suggested:

> When we consider that many students were first identified as being learning disabled precisely because of their lack of academic success in general education classrooms, we must ask, is it educationally reasonable to place these students back in inclusive classrooms? (p. 86)

Opponents of segregated placement have argued that segregation is never the right answer, especially for students with minor disabilities (WEAC, 2007). The belief is rather than separating the special needs students into special day class settings, schools should place these students in regular classrooms and integrate special education teachers and aides into that environment (Colarusso, 2004).

Purpose of the Study

Since the enactment of PL 94-142, the groundbreaking special education law which helped define the nation's philosophy on special education, there has been a scarcity of research to determine the academic benefits of either placement setting (Holloway, 2001). The purpose of this study was to measure the effectiveness of the

self-contained classroom setting for students with learning disabilities as compared to the inclusive classroom setting. This study examined the Missouri Assessment Program (MAP) scores of all special education middle school students in Missouri with learning disabilities. One sample group consisted of students in self-contained special day class settings, and the other group consisted of students placed in inclusive classroom environments for varying lengths of time. Another component of this research was a questionnaire completed by 55 special education directors. The questionnaire was intended to shed light on current trends in special education placement, as well as determine the success of these trends within the groups studied.

Research Questions

The following questions guided this study:

1. What is the relationship between a self-contained placement for a student with learning disabilities and the student's performance on the MAP?

2. What is the relationship between an inclusive placement for a student with learning disabilities and the student's performance on the MAP?

3. Based on the opinions of special education directors, what modes of instruction, or best practices, are most effective for students with learning disabilities?

Significance of the Study

Since the inception of PL 94-142 in 1975, American schools have struggled to provide appropriate learning opportunities for students with learning disabilities (Protigal, 1999). That goal has proven to be more and more elusive with each passing generation, and the future seems even dimmer than the recent past (State University.Com, 2009). The focus at this point should be to ensure that the nation's special education system is

providing the services promised from the time of its inception (Admin, 2010). It is time for a major review and inventory of the successes and or failures of the past (Admin, 2010).

During the past twenty-five years, many special education trends have emerged and faded (Admin, 2010). Each year holds the promise of a new, successful adoption of educational policy and application (Daggett, 2004). Each year, it seems as if the problems of years' past become more and more out of control (Tough, 2008). Each year, new requirements and new legislation are introduced to try and correct old problems (Tough, 2008) leaving educators, parents, and advocacy groups with uncertainty as to appropriate placement, or LRE, for students with learning disabilities. Every year, educators attend in-services to assist them in becoming better and more effective teachers (Culp, 2008). Therefore, the question becomes: Is all of this working or are educators simply grasping at straws? The findings from this study may provide new insight into the long debated issue of special education placement.

Limitations of the Study

The limitations included the following:

1. The level of collaboration between the special education teacher and the regular education teacher was unknown.

2. Individual interpretations of special education laws and practices by special education directors may have biased their responses on the questionnaire.

3. The IEP committee's decision as to the severity of the learning disability for each student, which determines the LRE, may be based on subjective data.

4. Other factors to consider were the confounding variables that were impossible to control. These variables included teacher quality, second language issues, and socio-economic influences. Though the direct influence of these issues was not determinable, it was believed that the use of such a large sample group minimized any negative influences on the results of this study.

Definition of Key Terms

The following terms were used in this study:

Inclusion. 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).

Learning disability (LD). The Missouri Department of Elementary and Secondary Education [MODESE] (2002) defined learning disabilities as a disorder in "the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculation" (p. 1).

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).

Missouri Assessment Program (MAP*)*. A standardized assessment used by the state of Missouri to measure yearly academic achievement (MODESE, 2009).

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

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

Summary

The purpose of this research was to accurately assess the quality of both educational environments without slant or bias toward either one. Since the main goal of any educational research is to provide insight and better understanding into educational protocols and practices, the main thrust of this research was to shed light on current strengths, or reflect areas that are in need of improvement or refinement in the area of special education placement for students with learning disabilities.

As with any system as massive as public schools, maintenance is needed to be sure educators are providing the best and most appropriate educational opportunities possible to every student, regardless of disability or handicap. This study provided results that will assist educators, parents, and school officials in making valid placement decisions. As with all institutions, schools need to periodically refer to current research to determine whether the path they are currently pursuing is still viable. There are so many

determinants involved in selecting the best option. This research allowed the comparison of the two models currently used and honestly exposed their strengths and weaknesses.

Progress in any field is strongly determined by exhaustive research and the evaluation of current practices (Holloway, 2001). Opinions have differed when determining the right educational environment for students with learning disabilities (Hallahan, 2009). By comparing the two current models of placement, the academic benefits of each were assessed based on the evaluation of both MAP data and special education directors' responses.

In Chapter Two, a review of literature enabled insight into special education placement and issues that directly impact placement. 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 on education and placement. The methodology utilized in the study was presented in Chapter Three. An analysis of data, summary of findings, and recommendations were discussed in Chapter Four and Chapter Five.

Chapter Two: Literature Review

Background

As long as there have been special education services in schools, there have been opinions as to which educational environment is best for students with learning disabilities (Mauro, 2010). Much of this debate is a result of the laws that dictate special education procedures in public schools (Mauro, 2010). The Individuals with Disabilities Act [IDEA] does not include any stipulations that dictate placement in a self-contained class; however, this legislation underscores 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 a "continuum of placements available" (Wisconsin Education Association Council [WEAC], 2007, p. 2). This continuum encompasses inclusive classroom placement to residential placement to accommodate the individual needs of children with disabilities (WEAC, 2007). According to the IDEA (2004), the general guidelines for student program placement require:

> To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and that special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (p. 30)

The LRE has been a point of contention since its inception (Douvanis & Hulsey, 2008; Yell, 2004) and has been the catalyst and focus for frequent and numerous law suits (Douvanis & Hulsey, 2008). Legal provisions make two stipulations. First, disabled students must be mainstreamed into environments containing non-disabled peers as much as is deemed appropriate (USDE, 2004). Second, disabled students cannot be taken out of inclusive classes unless it is decided their education cannot be satisfactorily achieved within the regular classroom placement (USDE, 2004; Yell, 2004). The LRE has been defined by one researcher as "a gauge of the degree of opportunity a person has for proximity to and communication with, the ordinary flow of persons in our society" (Yell, 2004, p. 30).

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 being a student basically earns the right to mainstreaming through academic success (WEAC, 2007). Depending on the disability and the effect it has on student achievement academically, the IEP committee will then decide on the amount of mainstreaming per case (Smith, 2001). The more academically capable students will be mainstreamed for a greater length of time than those performing at a lower level (WEAC, 2007).

The review of literature focused on a comparison between inclusive and self-contained classroom environments. The main topics explored were 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

People with disabilities have been misunderstood by mainstream society for generations (Winzer, 1993). For years, the disabled were viewed as strange or damaged to the point that a normal life within the confines of society was not thought feasible (Mock, Jakubecy, & Kauffmann, 2009). Most severe disabilities were considered incurable, and some were even viewed as evil by those trusted to provide diagnosis and placement for those affected (Mock et al., 2009; Winzer, 1993). People often believed that disabilities were the result of a spiritual defect (Martin, Martin, & Terman, 1996). Treatment of the severely disabled was frequently cruel and inhumane and often involved placement in jails and other ill-suited environments separated from society (Martin et al., 1996; Winzer, 1993).

It was not until the 1800s that concerns were raised over the deplorable conditions faced by the disabled (Winzer, 1993). As science became more prevalent in the diagnosis of disabilities, disabling conditions were finally attributed to physical and mental conditions and not spiritual ones (Martin et al., 1996; Mock et al., 2009; Rothstein, 2010). As a result, state mental institutions were created to provide a more humane environment for the disabled (Martin et al., 1996; Winzer, 1993). Unfortunately, these institutions were often as bad as or worse than the jails and other facilities used previously (Mock et al., 2009). Even as recently as the beginning of the twentieth century, people with disabilities were often housed in residential facilities away from mainstream society (Winzer, 1993).

In the area of public education, students with physical or mental disabilities were generally segregated from general education classes and were often placed in

self-contained classrooms (Mock et al., 2009; USDE, 2007). 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). Prior to the passage of PL 94-142, in 1975, mainstreaming was not really considered a goal or an option for this population (Mock et al., 2009). Even after this legislation, care was exercised in mainstreaming decisions involving severe disabilities (USDE, 2007).

Learning disabilities were often more misunderstood than other disabling conditions due to the inconsistent nature of the symptoms (DuPlessis & Strydom, 2000). The history of learning disability identification and placement dates back over a century (LD Online, 2006). The German neurologist, Adolf Kussamaul, coined the term, *word blindness*, in 1877, to describe visual learning deficits in people with otherwise intact senses (DuPlessis & Strydom, 2000). The term, *brain damaged*, was used to describe students with learning disabilities for many years giving way to the term, *minimal brain dysfunction*, in the 1950s (LD Online, 2006). Many children with learning disabilities were often referred to as dumb or slow (Winzer, 1993). In some cases, students with learning disabilities were misdiagnosed as mentally retarded (DuPlessis & Strydom, 2000; Martin et al., 1996; Winzer, 1993).

Samuel Kirk first introduced the term, learning disability, at a conference in Chicago, in 1963, thus legitimizing the idea that a condition existed separate from retardation and other disabling handicaps (LD Online, 2006). As a direct result of Kirk's work in the field, a group of parents started the Association for Children with Learning Disabilities in 1964 (Hwang, 2008). In 1969, the federal government addressed public pressure for the proper identification of learning disabilities with the Children with

Specific Learning Disabilities Act, or PL 91-23, which mandated support services for students with learning disabilities (LD Online, 2006). The passage of PL 94-142, in 1975, further defined the identification and placement of this population (USDE, 2007).

Still, the placement of students with learning disabilities presented quandaries (Waldron & McLeskey, 1998). Until the mid 1970s, school districts around the nation were allowed to refuse enrollment to students they considered uneducable, and many of these students were learning disabled (Martin et al., 1996). From the early days of student special education identification, self-contained class placement appeared to be the best and most effective way of providing special services (Pardini, 2002). Special education had been inherently different from regular education (Mock et al., 2009). Identified students had a variety of special needs that regular education students did not (Culp, 2008). Typically, special education teachers received specific training to better qualify them for educating special needs students; whereas, regular education teachers did not (United States Department of Labor [USDL], 2010). Special education teachers were considered resident specialists in dealing with special needs children (USDL, 2010).

Present Day Practices

The debate over the LRE begins when contemplating the placement of students with learning disabilities (Pardini, 2002). The intent of both federal legislation and special education teachers has been to educate a student within an environment where learning and remediation can be maximized (Roberts, 2008). Typically, students are mainstreamed in areas outside of their specific deficit (New World Encyclopedia, 2008), such as elective classes and physical education (Roberts, 2008). The question is: Are

students with learning disabilities achieving more or less when placed in self-contained class settings?

The obvious arguments for inclusive placement have centered on the need for all students to be truly integrated in the school environment (Holloway, 2001; WEAC, 2007). Proponents have charged that any segregation, even based on disabilities or performance, can have only profoundly negative results (Salzman, 2009; Wrightslaw, 2009). The need for assimilation, coupled with the fear and anxiety associated with self-contained class placement can predispose students to a less than positive educational experience (Fore et al., 2008). Proponents have declared that segregated placement is a contradiction of the idea of individualized education (Kauffmann et al., 2004; Schwartz, 2007). Schwartz (2007) asserted that students with disabilities are a heterogeneous group and not all require the same educational approach. Other supporters of inclusion have argued that self-contained, segregated classrooms are immoral (Fuchs & Fuchs, 1998). These supporters have often cited the presence of civil rights issues in segregated classrooms regardless of the educational purpose or intent (Overton, 2004; WEAC, 2007). Many believe that "placing all special needs students in regular classes is the right thing to do; it is a proper response to a moral imperative" (Fuchs & Fuchs, 1998, p. 5).

Conceptual Framework

There are theorists who believe that the nation's biggest special education blunder is simply not applying a standards-based instruction model within special education classroom settings (Hardman & Dawson, 2008). Many believe the education of special education students is sub-par when compared to the education of regular education students regardless of the type of educational setting (Hardman & Dawson, 2008;

WEAC, 2007). These educators theorized the real problem lies in the disparity of educational approaches used between the two student populations (Hardman & Dawson, 2008). Therefore, the social development theory proposed by Vygotsky (1978) provided the appropriate underpinnings for support of inclusive environments. The work of Kauffmann et al. (2004) was utilized as a framework to view self-contained classrooms as a viable placement.

According to Hardman and Dawson (2008):

> The hallmark of special education is individualization−developing and implementing instruction that is based on the unique needs of each student. Historically, the fundamental differences that characterize the ways in which special educators approach instruction distinguish them from their general education colleagues. (p. 4)

It is this individualization that is the primary cause of the educational dilemma regardless of placement (WEAC, 2007). Such attention to individual needs may corrupt the ability to keep pace with the educational progress being made in the regular classrooms where attention to individualized instruction is not an issue or goal (WEAC, 2007).

As argued by Hardman and Dawson (2008), the only real way to ensure that special education students are performing academically as well as their non-disabled peers is to require the successful merging of the following present and future educational challenges: special education teachers and regular education teachers should be sure that the content and performance standards in their schools are in line with the individual and diverse needs of students with disabilities; ensure all academic assessments include students with disabilities who require accommodations as well as regular education

students; be sure that assessment results are used to improve student learning; and allow assessment results to dictate changes in instructional practice. When educators consider special education placement options, care must be exercised to ensure that students with learning disabilities are receiving instruction in an environment that is conducive to growth both academically and socially.

Inclusive Classroom Environments

Proponents of inclusion have asserted that self-contained classrooms accentuate social differences through the absence of regular social interaction. Those who subscribe to Vygotsky's (1978) theory of social development believe that children with disabilities should have opportunities to interact with their peers (Kinney, 2007). These interactions within the inclusive learning environment allow for enhanced learning. Vygotsky (1978) avowed:

> 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)

Though a disability might reduce the attainment of certain social skills and learning, a lack of social interaction might "severely limit the course of development and lead to the delays or differences that are characteristic of many people with disabilities" (Dixon & Verenikina, 2007, p. 10).

Vygotsky (1978) believed these deficits become additional disabilities and impede remediation. Social interaction with peers may optimally occur in an inclusive

setting. Dixon and Verenikina (2007) proclaimed, “Inclusive schools try to provide a complete education to all students who are enrolled. An inclusive school has been described as one that caters for the needs of all learners where all learners are valued and respected” (p. 4).

Proponents of inclusion maintain there are not two types of students in the classroom: disabled and non-disabled (Dixon & Verenikina, 2007; WEAC, 2007). All students deserve to have their educational needs met (Hooks, 2010). By addressing students in two different settings, schools are promoting social labeling and the Pygmalion effect, a self fulfilling prophecy that can limit a child’s progress by setting achievement goals too low (Machaalani, 2005). These imposed limitations prompt “inappropriate attitudes and beliefs in society” (Dixon & Verenikina, 2007, p. 5) regarding student achievement levels.

Those in favor of inclusion believe schools attempting to have two different educational settings are inefficient due to the duplication of services (Hooks, 2010) and are promoting segregation and discrimination (Decatur, 2007).Therefore, schools with one focus are less likely to compromise services (Dixon & Verenikina, 2007; Hooks, 2010). As a financial consideration, many school districts are already over-taxed without further stretching important resources (Hooks, 2010). Dixon and Verenikina (2007) declared, “Inclusion is premised on the right of all children to be full members of regular classes of neighborhood schools” (p. 5).

Self-Contained Classroom Environments

There are those who feel the move toward inclusion is one fraught with problems (Fore et al., 2008; Kauffmann et al., 2004). The belief is schools are following a trend

rather than following what is best for students with disabilities (Holloway, 2001; Kauffmann et al., 2004). Many inclusion advocates would like all students with disabilities served in inclusive classrooms regardless of the services and accommodations required (Chew, 2007; Kauffmann et al., 2004; WEAC, 2007). Kauffmann et al. (2004) argued that this placement philosophy can create "a cloak, a pretense, a cover, which actually fools no one rather than actual competence" (p. 614). Kauffman et al. (2004) espoused:

> Once, special education's purpose was to bring the performance of students with disabilities closer to that of their nondisabled peers in regular classrooms, to move as many students as possible into the mainstream with appropriate support. For students not in regular education, the goal was to move them toward a more typical setting in a cascade of placement options. But as any good thing can be overdone and ruined by the pursuit of extremes, we see special education suffering from the extremes of inclusion and accommodation. (p. 613)

Opponents of inclusion for all students with disabilities have argued though the inclusion movement has provided some good, it has also had a harmful effect on this population (Hehir, 2004). Full inclusion has become an expectation for placement (WEAC, 2007). Many feel that inclusion is "the only place where fair and equitable treatment is possible and where the opportunity to learn is extended to all equally" (Kauffmann et al., 2004, p. 616). As a result, special education has become dangerously associated with general education (Hehir, 2004; Kauffmann et al., 2004; Zigmond, 2003). Such an association allows for the assumption that all students' needs are being competently accommodated regardless of their ability or disability (Holloway, 2001;

Kauffmann et al., 2004), and "that special education is good only as long as it is invisible" (Kauffmann et al., 2004, p. 616).

This movement toward inclusion gives the perception that "special education is something to be avoided altogether or attenuated to the greatest extent possible, regardless of a student's inability to perform in a general setting" (Kauffmann et al., 2004, p. 616). Unfortunately, this philosophy has rendered special education as a "second-class and discriminatory system that does more harm than good" (Kauffmann et al., 2004, p. 616). These beliefs may be denying those students in need their only opportunity for remediation (Kauffmann et al., 2004; Zigmond, 2003). Kauffmann et al. (2004) argued:

> Placing all students regardless of their abilities, in regular classes has exacerbated the tendency to see disability as something existing only in people's minds. It fosters the impression that students are fitting in when they are not able to perform at anywhere near the normal level. It perpetuates disabilities; it does not compensate for them. (p. 617)

Kauffmann et al. (2004) 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" (p. 617). The belief that "special education is defective in concept and structure" (Kauffmann, Bantz, & McCullough, 2002, p. 149) gives fuel to the inclusion movement. The fear that placement in special education self-contained classes stigmatizes children is what drives placement in regular education (Holloway, 2001; Zigmond, 2003). 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 and segregating them from their peers without disabilities. It is defective in structure because it is a separate system" (Kauffmann et al., 2002, p. 150).

Kauffmann et al. (2002) recognized the need for special education to be reexamined as a "service, not a place, and as an integral part of a flexible, supple, responsive part of general education" (p. 150). Every student has different needs and those needs have to be addressed in the most efficient way possible (Holloway, 2001; Kauffmann et al., 2002). Educators need to explore both self-contained and inclusion for their benefits not their current trend status (Holloway, 2001). According to Kauffmann et al. (2002):

> The success of special education in providing appropriate schooling for students with disabilities is not as dependent on the collaboration of general and special educators as it is on incremental improvement of the quality of academic and social instruction provided by the special educators. At the heart of the current controversy about special education is the observation and interpretation of human differences, and special educators must understand the meanings and appropriate responses to these differences. (p. 151)

Some students will require self-contained placement to better serve their individual needs (Holloway, 2001; Zigmond, 2003). These self-contained classrooms can be "superior to inclusive placements" (Kauffmann et al., 2002, p. 151) depending on those needs.

The purpose of special education is to provide individualized instruction for students with special needs, and, according to Kauffmann et al. (2002):

> The idea that separate education is inherently unequal is used to justify wrongly the conclusion that grouping children for instruction based on their performance is inherently unequal, particularly when children differing in performance are instructed in different classrooms. The placement of students with special needs into different educational learning environments should be based on the individualization and appropriateness of the decision. (p. 156)

Proponents of self-contained classroom placement fear that as the move toward inclusion becomes more prominent, the individuality of special education may be forgotten (Hardman & Dawson, 2008). Educators must be careful to allow special education to retain its own identity and remain equitable for all involved (Hardman & Dawson, 2008).

Litigation and Challenges

Over the years, lawsuits involving differing opinions on what constitutes the LRE have challenged school districts, teachers, and the federal law (WEAC, 2007). Though these court cases involved specific disabling conditions, the outcomes continue to be relevant to special education placement decisions. One such case, *Sacramento City Unified School District v. Rachel H.* (1994), involved a mentally retarded youth. The Ninth Circuit Court (1994) added the queries:

> What are the educational benefits of the general education classroom, with supplementary aids and services, as compared to the educational benefits of the special education classroom? What are the non-academic benefits from interaction with peers? What are the possible negative effects of student's presence in the general education classroom? What are the associated costs? (para. 19)

The Ninth Circuit Court presented a list of four factors for determining if a school district was complying with the guidelines set-forth by IDEA. These factors were: determining the educational benefits of placing the child in a full-time regular education program; determining the non-academic benefits of such a placement; determining the effect the child would have on the teacher and students within a regular class setting; and the associated cost of regular education placement (WEAC, 2007).

In *Roncker v.Walter* (1983), the members of the Sixth Circuit Court posed, "Can the educational services that make a segregated placement superior be feasibly provided in an integrated setting? If so, the placement in the segregated setting is inappropriate" (para. 22). In *Oberti v. Board of Education of the Borough of Clementon School District* (1999) involving a student with Down's Syndrome, the members of the Third Circuit Court argued, "inclusive programming offers substantial benefits for all students and the community. Inclusion is a right, not a privilege for a selected few. Success in separate settings does not negate success in integrated settings" (para. 66).

Court decisions that supported more restrictive environments include *Poolaw v. Parker Unified School District* (1995) where members of the district court decided in favor of a more restrictive setting for a special education student as opposed to an inclusive setting chosen by the parents. The Ninth Circuit Court stated, "IDEA does not necessarily require a school district actually to implement supplemental services before choosing an alternative to mainstreaming" (Poolaw v. Parker Unified School District, 1995, para. 2). One of the most noteworthy cases involved an autistic student in *Hartmann v. Loudoun County* (1997). The court in this case decided that "inclusion is not necessary if a student with disabilities would not receive benefit from such placement.

Any marginal benefits that could feasibly be obtained in a separate setting…. and if the student's presence is a disruptive force" (Hartmann v. Loudoun County, 1997, para. 3).

In the *School District of Wisconsin Dells v. Z. S.* (2002), it was decided the local school district was not in violation of IDEA by placing a student into a home-bound educational placement. The court's validation for their decision was "federal courts must defer to the judgment of educational experts who craft and review a child's IEP so long as the child receives some educational benefit and is educated alongside his non-disabled classmates to the maximum extent possible" (School District of Wisconsin Dells v. Z. S. 2002, para. 12). Some people firmly believe the LRE is always going to be the inclusion model (Sharpe, 2007), while others are adamant self-contained classroom placement is the most appropriate environment for special education services (WEAC, 2007).

Studies by Idol and Fore et al.

Two prominent studies that compared and contrasted the effectiveness of inclusive classrooms versus self-contained classes were performed in 2006 and 2008 (Fore et al, 2008; Idol, 2006). The 2006 study was conducted by Idol, a professor of literacy education, at Concordia University, in Austin, Texas. The 2008 research was conducted by Fore, associate professor of special education, at the University of Georgia; Hagan-Burke, associate professor of educational psychology at Texas A & M University; Burke, associate professor of psychology at Texas A & M University; Boon, associate professor at the University of Georgia; and Smith.

The Idol (2006) study of inclusive programs was featured in *Remedial and Special Education* and involved 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 how much effect, if any, the inclusion of students with disabilities was having on the eight schools involved in the study (Idol, 2006). In addition, Idol (2006) hoped to better understand how each school provided for students with disabilities in the LRE, as mandated in the Education for All Handicapped Children Act of 1975 and the reauthorization of IDEA in 2004. Idol (2006) determined, "essentially, inclusion means that a student with special education needs is attending the general school program, enrolled in age-appropriate classes 100% of the school day" (p. 78).

The study by Fore et al. (2008), featured in the periodical, *Education and Treatment of Children*, compared inclusion with self-contained classroom environments by studying 57 high school students identified as having learning disabilities. Researchers were concerned that given the current trend toward inclusion, little research had been performed to adequately determine if inclusive placement had advantages over self-contained placement (Fore et al., 2008). Fore et al. (2008) declared, "Previous research suggested that students with specific learning disabilities in elementary schools achieve more in inclusive programs versus non-inclusive programs" (p. 56). Research on middle school students with learning disabilities suggested that inclusion is the preferable placement, and students in inclusive programs "achieved higher or comparable scores on standardized tests, earned higher grades, attended more days of school" (Fore et al., 2008, p. 58) than those in self-contained or pull-out special education programs. Conversely, other studies have shown the advantages of self-contained placement; therefore, Fore et al. (2008) declared, "researchers have drawn vastly different conclusions [and] the only certainty regarding the effects of class placement is that there is no consensus" (p. 56).

The rationale for both studies was to adequately evaluate "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" (Idol, 2006, p. 78). In both studies, indicators of success were identified: the different disabilities present in the schools; the time special education students spent in the inclusive classrooms; the type and number of personnel made available to support these students; total number of special education testing referrals; the general attitudes of staff members regarding inclusion and students with special needs; perceptions of staff regarding their own skills in providing instruction modifications, discipline and overall classroom management; and staff attitudes in regard to the effect of inclusion on the regular education student population (Fore et al., 2008; Idol, 2006).

Sample and selection.

The schools involved in Idol's (2006) study were chosen by the executive director of special education programs at the school district involved. Idol (2006) reported, "The criteria for selection were that each school had a well-developed special education program and that the staff felt that their approach to the education of students with disabilities was appropriate" (p. 79). In addition, the staff at all participating schools felt "they offered strong and supportive programs for students with special education needs" (Idol, 2006, p. 79).

The two schools involved in the Fore et al. (2008) research were suburban and were 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 (Fore et al., 2008). Of the group studied, 20%

were identified as having math deficits, and 80% were identified as having reading deficits (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.

Though both studies involved the evaluation of special education placement options, different methods were used to measure placement effectiveness. Idol (2006) and Fore et al. (2008) used quantitative and qualitative data for the measure of program effectiveness (Fore et al., 2008; Idol, 2006). In the Idol (2006) research, quantitative data were derived from state wide test results for all students involved in the study and qualitative data were gathered through interviews with staff at the participating campuses.

Fore et al. (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). The MAST was administered to the subject group by university graduate students according to test protocols to measure student academic levels (Fore et al., 2008). To test the reliability of the MAST, teachers administered the assessment to 366 students ranging from third grade to eighth grade (Fore et al., 2008). After correlating the test results, researchers concluded the MAST was a reliable assessment for the study (Fore et al, 2008). The MAST results and student behavioral data were analyzed, then comparisons were made between students with learning disabilities placed in inclusive classroom

settings and students with learning disabilities placed in self-contained classroom settings (Fore et al., 2008).

In Idol's (2006) study, the educators at the schools were instructed to incorporate several different education delivery models to enable staff to work together more effectively (Idol, 2006). Idol (2006) proposed, "Collaboration leads to a reconceptualization of how special support programs can best be offered by both general and special education" (p. 78). In the Fore et al. (2008) study, researchers utilized the educational placements of the learning disabled students as the independent variables and the academic achievement and affective results, or outcomes, as the dependant variables (Fore et al., 2008). These outcomes factored in both behaviors and general school attendance (Fore et al., 2008). Educators were not instructed to change their academic delivery in any way (Fore et al., 2008).

Idol (2006) used several teaching models to evaluate the educational delivery systems in the inclusive classroom settings. One such model, the Consulting Teacher Model, was designed to utilize a special education teacher functioning as an educational consultant for the regular education classroom teacher (Idol, 2006). This indirect approach allowed the regular education teacher to be the only provider of instruction while still maintaining a service connection with a special education professional (Idol, 2006). Idol (2006) believed that students benefited from the expertise of both teachers while receiving instruction from one.

The 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). In this model, both teachers work together to arrive at teaching strategies that

allow each to provide instruction in creative ways (Idol, 2006). According to Idol, Nevin, and Paolucci-Whitcomb (1986), "Cooperative teaching has been described as being a direct and complementary outgrowth of the collaborative consultation model" (p. 1).

Another delivery model used instructional assistants, or paraprofessionals, in the inclusive setting to assist special education students with their education (Idol, 2006). Typically such assistants were assigned to individual students and stayed with those students throughout the day for education assistance (Idol, 2006).The educators involved in Idol's (2006) study also used a resource classroom described as "any setting in the school to which students come to receive specific instruction on a regularly scheduled basis, while receiving the majority of their education elsewhere usually in a general school program" (p. 78). Idol (2006) clarified:

> Resource rooms are not part-time special education classes where students with handicaps are integrated with peers only for lunch, gym, or art. They also are not consultative programs where students remain full-time in a general classroom setting and where modifications are made in instruction. Neither are they study halls, discipline or detention centers, or crisis rooms. (p. 78)

The main purpose of resource programs was to allow general education teachers and special education teachers to work together in collaboration to better construct scaffolding in the resource room that helps support the learning in the inclusive, or general education classroom setting (Idol, 2006).

Fore et al. (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 (Fore et al., 2008). No regular education students were placed in these self-contained classes (Fore et al., 2008).

Research findings.

Idol (2006) concluded students with learning disabilities can benefit from inclusive placement. In the study, Idol (2006) found state test data showed marked academic improvement for students with learning disabilities placed in inclusive environments. Idol (2006) also concluded behavioral incidents among students with learning disabilities placed in inclusive classrooms were reduced when compared to 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).

Fore et al. (2008) determined inclusive environments had no direct advantage over self-contained environments for students with learning disabilities. Researchers found "no significant differences between the two educational settings" (Fore et al., 2008, p. 65). Students in the inclusive classes showed improvement rates commensurate with those in the segregated environments (Fore et al., 2008). Fore et al. (2008) stated, "class placement for students with disabilities did not correlate with academic achievement" (p. 67). Fore et al. (2006) expected to find that students with learning disabilities who were in inclusive settings for longer periods of time would score higher than those in self-contained classes for the majority of their day due to their higher level of functioning and the exposure to the regular education curriculum, but the "only statistically

significant difference we found were those students who were placed in a general education literature class" (p. 67). Even these results were reported to be fairly insignificant given the expectations of this study (Fore et al., 2008).

Though Idol's (2006) study supported inclusive placement for students with learning disabilities who were capable of functioning within the regular classroom and regular education curriculum, Idol (2006) stressed placement options cannot follow trends, "like general education, special education must countenance neither the pretense of learning nor the avoidance of reasonable demands [and schools must not] sell students with disabilities short when we pretend that they are no different from typical students" (Idol, 2006, p. 93). 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).

Studies by McDonnell et al. and John Hopkins University

Two additional studies on the effect of inclusive placement versus self-contained placement on student achievement were conducted by McDonnell et al. (2003) and researchers at John Hopkins University (WEAC, 2007). In the study by McDonnell et al. (2003), researchers examined the achievement levels of two specific groups. One, consisted of regular education students who were placed in inclusive classes with students with developmental disabilities, and the other consisted of regular education students who were placed in classes without students with developmental disabilities (McDonnell et al., 2003). The purpose of this study was to examine and assess the effects an inclusive educational environment had on the two respective populations (McDonnell

et al., 2003). Researchers at John Hopkins University utilized a school-wide restructuring program, *Success for All,* that involved family support teams, professional development for teachers, and remedial academic programs over an eight week period (WEAC, 2007).

The primary difference between the two studies was the general approach to the same issues. The John Hopkins University study included the evaluation of both special education students as well as their regular education counterparts (WEAC, 2007). The McDonnell et al. (2003) study involved the assessment of first through third grade special education students. These students were placed in a regular classroom setting for the duration of this study (McDonnell et al., 2003).

Conclusions of the studies.

McDonnell et al. (2003) allowed their subjects to be placed in their respective educational settings for a period of a year before assessing their progress. The assessment indicated that there was significant improvement in the adaptive behavior of all 14 of the developmentally disabled students placed within the inclusive environment (Mc Donnell et al., 2003). The researchers also found when they compared 324 regular education students enrolled in inclusive classroom settings housing developmentally disabled students, with 221 regular education students who were not placed in such classroom environments, the results indicated that no advantage was gained by either educational placement for the regular education students (Mc Donnell et al., 2003).

The Success for All program essentially created new educational support services for the disabled and non-disabled alike (WEAC, 2007). Researchers used several factors and assessment tools in order to accurately rate the academic progress of those involved (WEAC, 2007). These factors and assessments were the Woodcock-Johnson Proficiency

Battery, the Durrell Analysis of Reading Difficulty, and student retention and daily school attendance (WEAC, 2007). The assessment results showed improvement for all students in the area of reading, but the largest area of improvement was with the lowest achievers whose individual scores showed marked improvement across the board (WEAC, 2007). Therefore, with strong, focused early and continuing education opportunities, all children can be more successful regardless of placement (WEAC, 2007).

Both studies evaluated inclusion as an effective placement for students with disabilities (McDonnell et al., 2003; WEAC, 2007). In the John Hopkins University study, researchers examined the effects of early intervention practices coupled with proper support services and teacher training (WEAC, 2007). McDonnell et al. (2003) focused on the effects of inclusive placement on both the general student population and the special education students involved. Researchers concluded that when special education students and regular education students are educated in the same classroom, everyone benefits (McDonnell et al., 2003; WEAC, 2007). Inclusive classrooms reduce or eliminate the need for separate placement for identified students (McDonnell et al., 2003; WEAC, 2007). The benefits observed in these studies were a reduced fear of human differences when around others and significant growth in social cognition (McDonnell et al., 2003; WEAC, 2007). In addition, the development of personal principles and ability to assume an advocacy role toward peers and friends with disabilities were also observed (McDonnell et al., 2003; WEAC, 2007).

Studies by Kauffmann et al. and Signor et al.

In two studies aimed at assessing the benefits of either self-contained or inclusive special education placement, researchers measured both qualitative and quantitative data to weigh the two educational placement settings (Kauffmann et al., 2002; Signor et al., 2002). Kauffmann et al. (2002) examined a self-contained program for students with behavioral and emotional disorders to underscore the viability of self-contained special education classes. The subjects studied were fifth and sixth grade special education students in a public upper elementary school (Kauffmann et al., 2002). The school was medium-sized and located in the southeastern part of the United States (Kauffmann et al., 2002). Signor et al. (2003) studied the records of fourth graders with learning disabilities who attended an urban school district in New York. The students studied had been placed in either an inclusive classroom or a self-contained classroom (Signor et al., 2003).

The Kauffmann et al. (2002) study was conducted during the second year in which two special education teachers had combined their classes to utilize a team teaching approach. This combined self-contained classroom consisted of 12 students, two special education teachers, and two special education paraprofessionals (Kauffmann et al., 2002). The special education teachers felt this team teaching approach would enable a sense of community and "cohesiveness" (p. 157) between the two classes as well as better utilize the facilities and the school resources (Kauffmann et al., 2002). Both teachers felt:

> The keys to success of the management systems used in the classroom were (a) the abundance of positive interactions and opportunities that far outweighed the need for reprimands or punishment, (b) the catch-it-early approach that facilitated

> the prevention of problem behaviors before they escalated, and (c) the teacher's efforts to address not only inappropriate behavior but also the context and culture that serves to maintain it. (Kauffmann et al., 2002, p. 159)

The two teachers strove to provide positive reinforcement for academics as well as appropriate behavioral choices (Kauffmann et al., 2002). Care was given to employ classroom activities that made the time together enjoyable, non-confrontational, and stress free (Kauffmann et al., 2002). The main thrust of the classroom management was to remain consistently positive and engage in "activities that precluded the need for escape, avoidance, and acting-out behaviors" (Kauffmann et al., 2002, p. 159).

Assessments.

Signor et al. (2003) compiled district records that included IEPs, free and reduced price meal status, behavioral records, and academic records. In addition, IQ tests and state assessment scores were collected on each student studied (Signor et al., 2003). The WISC III assessment was used along with the English Language Arts (ELA) assessment to measure the academic level of each student involved in the research (Signor et al., 2003). Both assessments were selected due to their common usage within the district studied (Signor et al., 2003).

In Kauffmann et al. (2002), the teachers collected data for the period of one school year that included: attendance, daily points from classroom activities, overall advancement in a token economy, and frequency of serious behavioral problems. Researchers reported the teachers involved felt "overwhelmed" (p. 163) by the task of record keeping both academic and behavioral data in this self-contained environment (Kauffmann et al., 2002).

In the area of daily attendance, students involved in this study "maintained school attendance at either at a high level or a significantly improved level" (Kauffmann et al., 2002, p. 163). It was determined that the reason for this improvement was the students' enjoyment and commitment to the program (Kauffmann et al., 2002). No discipline referrals or administrative actions were used to reinforce student attendance (Kauffmann et al., 2002).

Conclusions of the studies.

During the research, behavioral issues began to actually "decrease with time" (Kauffmann et al., 2002, p. 164). Students learned to resolve issues early so they were able "to interrupt their acting-out behavior before it escalated to the level of a serious offense" (Kauffmann et al., 2002, p. 164). The token economy in the classroom seemed to also reinforce these more positive behavioral choices (Kauffmann et al., 2002). This classroom economy enabled students to acquire more classroom benefits and freedoms the longer they kept poor behaviors in check (Kauffmann et al., 2002).

Kauffmann et al. (2002) declared:

> The special class …bolsters the argument for preservation of the continuum of alternative placements available to students with disabilities, including separate classes and special schools. If our goal as a society is to provide equal access to an appropriate education, then some students with disabilities may truly need something that is unequal to the general education classroom-a more supportive, ore individualized and more carefully monitored classroom environment. (p. 166)

In Signor et al. (2003), researchers found that when all data were considered, the students in the inclusive class setting performed slightly better on the ELA, but no better

on the WISC III math section. Signor et al. (2003) declared, "Results of this study and previous inclusion studies appear to indicate that students who are educated in inclusive settings achieve at a rate that is comparable to, if not better than those in self-contained settings" (p. 29).

Contrasting Conclusions

Other studies have arrived at different conclusions (Holloway, 2001). Manset and Semmel (1997) compared eight inclusion programs for elementary students with learning disabilities. Their research concluded that students with learning disabilities placed in inclusive classrooms received no significant benefits from their placement (Manset & Semmel, 1997).

Elbaum (2002) conducted research involving several placement settings for students with learning disabilities. This study was focused on student self-concept in inclusive classroom placement compared to student self-concept in self-contained classroom settings (Elbaum, 2002). The results indicated that there was no relationship between student self-concept in inclusive setting when compared to self-contained classroom settings (Elbaum, 2002; Swanson et al., 2003). Holloway (2001) declared:

> The research suggests that any criteria for judging the effectiveness of inclusion programs must include the entire scope and quality of services available to students with LDs. What the field of special education needs is not a narrow view of services for students with disabilities, but rather a commitment to the thoughtful use of the complete array of educational opportunities. A shared commitment by regular and special education teachers will ensure that all students receive a variety of learning opportunities in all educational settings. (p. 2)

Placement Factors

In addition to the studies of special education environments, a review of literature dealing with other factors that influence student achievement was necessary to understand student learning regardless of educational environments (WEAC, 2007). The most influential factors included financial, teacher perceptions, and societal influences. It is the impact of these factors that precipitate learning (Chew, 2007; Kauffmann et al., 2004; Overton, 2004).

Due to the financial and fiscal overtones, many feel as if the federal government and the local school boards are making irresponsible placement choices in order to stay solvent in these difficult times (WEAC, 2007). Kauffmann et al. (2004) viewed the move toward inclusion in schools as a way for school districts to save money, not help children. According to the Special Education Expenditures Program (2004), during the 1999-2000 school year, per pupil spending for students with disabilities was $12,474 in the United States (Chambers, Parrish, & Harr, 2004). This amount does not include Title I special education funding (Chambers et al., 2004). The total cost to educate a student with disabilities is 1.9 times the expense of educating a regular education student without disabilities (Chambers et al., 2004). Hechinger (2007) reported that in recent years, special education per student costs have risen more slowly than regular education per pupil costs. One main reason has been the increased number of students with disabilities placed in inclusive classrooms (Hechinger, 2007).

One blog author recently surveyed 41 parents who had children identified as autistic and placed in inclusive classroom settings (Chew, 2007). Almost universally, parents spoke vehemently against the inclusion model for their children (Chew, 2007).

Bloggers contended the move toward inclusion is based heavily on the monetary needs of school districts, and not on the specific needs of students with disabilities (Chew, 2007). Most felt inclusion is stressed more in placement decisions based on the fact that it costs less than self-contained placement (Chew, 2007). Many have argued that school districts' attempts to integrate students have actually had adverse affects on their children's education (Chew, 2007). One parent's disgust with the inclusion placement of her daughter during the previous school year stated, "She did not learn anything that year: she regressed" (Chew, 2007, p. 1). Others cited dissatisfaction over both the lack of adherence to the IEP and the lack of grade-level appropriate lessons and materials (Chew, 2007). One parent declared:

> I think a lot of teachers and administrators don't understand, or care to learn, the difference between inclusion and mainstreaming. And I also think that a lot of parents fight hard to change the system and get an education that their disabled children are entitled to. My child is more important than the greater political battle. I think the schools know that, too. (Chew, 2007, p. 1)

Another blogger stated, "Dumping, to put it colloquially, is putting a student on an IEP in the regular classroom with no, or insufficient supports, accommodations or modifications, [which] is neither inclusion nor mainstreaming, nor a free and appropriate education as defined in IDEA" (Chew, 2007, p. 6).

Teacher perceptions.

In a study involving low achievers who were referred for special education services and low achievers who were not referred, researchers found that "referrals to special education increased when students were in a classroom setting where a specific

teacher had a propensity to refer students" (Overton, 2004, p. 148). Over the years, many have tried to resolve these issues through a more stringent application of pre-referral procedures (United States Commission on Civil Rights, 2005). Unfortunately, many of these safety nets have merely become a "formality rather than an effective practice" (Overton, 2004, p. 148).

Special education referrals and placement decisions are further complicated when it comes to students who have mild disabling conditions such as LD and emotional and behavioral disturbance (EBD) (Overton, 2004; United States Commission on Civil Rights, 2005). Dr. Reid Lyon, from the National Institutes for Health, estimated "that approximately 70% of children labeled with a specific learning disability could have avoided placement into special education with intensive early remedial reading intervention. In the absence of such intervention, school districts inappropriately place many into special education" (United States Commission on Civil Rights, 2005, p. 45).

Societal factors.

Often, other societal factors play a role in identification, as well as the placement environment (Ladner, 2009; United States Commission on Civil Rights, 2005). According to the United States Commission on Civil Rights (2005), "A wide variety of subtle and not so subtle conditions and factors produce greater risk for disability identification in economically disadvantaged minority children and youth….the major influence is poverty, not minority status as such" (p. 57). This inconsistency of referrals has led to a disproportionate number of minorities being overrepresented in special education classes (Ladner, 2009).

In this country, almost 9% of the nation's public school students are receiving special education services (Overton, 2004). Sixty-six percent of all disabled public school students are male (United States Commission on Civil Rights, 2005), and "subgroups of minorities, such as migrant students, have been found to be eligible at an alarming rate of 17%" (Overton, 2004, p. 147). In Arizona, Hispanic males are identified as having disabilities "at a 64% higher rate in schools where the white population is 75% or more, than in schools where the white population is 25% or less" (Ladner, 2009, p. 1). Labeling and special education placement rates for African American males have increased almost 55 % when predominantly minority schools are compared to predominantly white schools (United States Commission on Civil Rights, 2005). The United States Commission on Civil Rights (2005) reported:

> These schools label more than twice as many Hispanic males as emotionally disturbed as do predominantly minority schools. Predominantly white districts classify 80% more Hispanic males as mentally retarded on a percentage basis, and the increase in the Specific Learning Disability Label category is more than 42%. (p. 46)

In Norwalk, Connecticut, researchers found that African American students comprised more than 36% of the special education population in a district where only 25% of the total student population was African American (Salzman, 2009). In Hartford, Connecticut, "Blacks and Hispanics were 18% more likely than whites to land in special education" (Salzman, 2009, p. 3). From that same study, African American students were identified as emotionally disturbed or intellectually disabled more than twice as often as their white counterparts (Salzman, 2009).

Learning Styles

The teacher's ability to adjust the method of teaching to the learning style of the student is of upmost importance (Cassidy, 2004). It has been known for many years that everyone has certain styles of learning that dictate how well they will learn with certain modes of data delivery (Sternberg & Zhang, 2001). Regardless of special education or regular placement, these learning styles are a variable that cannot be ignored when assessing an academic environment (Cassidy, 2004).

Research on this topic has been prevalent for more than fifty years (Sternberg & Zhang, 2001). Opinions have varied greatly over both the definition and importance of cognitive learning styles and their direct effects on learning (Cassidy, 2004). Many theorists have attempted to offer a definition that fully explains these styles and their encompassing qualities, but these definitions have changed dramatically over the years of research (Evans, 2006).

Early researchers viewed each specific learning style as independent and isolated from other styles (Sternberg & Zhang, 2001). As time progressed, it was found that learning styles have a certain adaptability over a range of tasks, including academic tasks (Evans, 2006; Sternberg & Zhang, 2001). Researchers have tried to directly measure the effect of specific learning styles on overall student achievement (Evans, 2006).

Learning Styles Research by Lopus and Miller

An important factor in self-contained and inclusive classroom placement is the specific learning styles and the effects these leaning styles can have on student learning (Miller, 2005). Student learning styles dictate the effectiveness of every educational

environment (Lopus, 2009; Miller 2005). If teacher presentation is not in touch with student learning styles, problems in student achievement will arise (Lopus, 2009).

Two studies involving the role of learning styles and academic success were performed by Lopus (2009) and Miller (2005). In the study by Miller (2005), researchers examined the impact of teaching styles on student learning at the Switzerland School District, in Ohio. In 2009, Lopus conducted a study in California involving 39 high school economics teachers and 1,290 students. The purpose of the study was to determine if a correlation could be established between teaching styles and the effects these styles had on student learning styles (Lopus, 2009).

Miller (2005) studied nine female teachers and one male teacher; seven teachers had taught for at least 20 years, and the remaining three had taught for two to five years. Four of the sample group reported their teaching styles to be traditional, which included lectures with tests and quizzes as the primary assessment tools (Miller, 2005). Six teachers reported that their teaching styles were a combination of traditional and progressive (Miller, 2005). Progressive teaching was defined as an approach that encompassed collaborative learning, group discussion, and activities (Miller, 2005).

The data for the Miller (2005) study were collected using a survey distributed to ten members of the English faculty at the high school, along with grading records for the previous nine week period. The survey was used to identify the individual teaching styles of the educators involved (Miller, 2005). The survey responses factored with the grading information were expected to yield a positive correlation between teaching styles and student learning (Miller, 2005). In the Lopus (2009) study, students and teachers were given a questionnaire based on the Test of Economic Literacy, a norm-referenced

assessment tool. The focus of the questionnaire was on the importance of individual styles of presentation in the classroom by allowing the test subjects to prioritize methods and styles by perceived effectiveness (Lopus, 2009).

Conclusions.

In the study by Miller (2005), the data were analyzed and a positive correlation was established between teaching style and student learning. It was determined that teachers employing progressive teaching techniques in their classrooms were more likely to assign more A's than teachers employing traditional techniques (Miller, 2005). In addition, traditional teachers were more likely to give failing grades than their more progressive counterparts (Miller, 2005).

Lopus (2009) found a marked difference between teacher perceptions and student perceptions. Teachers were far more likely to perceive traditional teaching methods and materials as being successful and beneficial than their students (Lopus, 2009). Students were much more likely to prefer less traditional sources of learning such as the Internet and video presentations (Lopus, 2009). These findings are important to teachers in self-contained classes as well as those in inclusive classes. If the teaching methods employed do not match the students' learning styles, learning will be compromised (Lopus, 2009; Miller, 2005).

Learning Styles Research World-Wide

Researchers in Columbia strove to better clarify the gravity of teacher-student differences in classroom education (Juris & Castaneda, 2009), and in India, research was performed to investigate the relationship between learning styles and student academic performance (Bahar, 2009). The Columbian study involved both private and public high

schools and universities on the north coast of Columbia (Juris & Castaneda, 2009). The participants consisted of 133 males, and 121 females from grades seven through nine, as well as students from a private college ranging in age from 12 to 19 (Juris & Castaneda, 2009). The participants in Bahar's (2009) study consisted of 38 male and 42 female high school students in Blou, Turkey. These students were 14 years-old at the time of the study (Bahar, 2009).

In the study by Juris and Castaneda (2009), students were separated into four groups dictated by their socio-economic class. The first two groups were deemed to be in a lower socio-economic class, whereas the remaining two groups were categorized as being in the average socio-economic class. From these groupings, a focus group of 50 students and their teachers was selected to "investigate the major, minor, and negligible learning styles as well as the teacher's teaching styles and the match between them" (Juris & Castaneda, 2009, p. 4).

Twenty-eight students and four of their teachers were selected from public high schools, and 27 students were chosen from private schools along with five of their teachers (Juris & Castaneda, 2009). The teacher subject group consisted of four males and five females between 28 and 52 years of age (Juris & Castaneda, 2009). All instructors possessed undergraduate degrees in English (Juris & Castaneda, 2009). Of the student groups, 55 students declared they disliked studying English as a subject (Juris & Castaneda, 2009).

In Bahar's (2009) study, the assessment tool used to identify specific learning styles was the Learning Style Scale developed by Grasha and Riechmann and modified for the Turkish setting by Uzuntiryaki, Bilgin, and Geban. The assessment categorized

the learning styles of the students into categories of Competitive, Avoidant, Participant, Dependent, and Independent (Bahar, 2009).

In the Juris and Castaneda (2009) study, the methods used for analysis were both quantitative and qualitative in nature. Learning style data were collected through the use of the Reid Perceptual Learning Style Preference Questionnaire and field notes from classroom observations (Juris & Castaneda, 2009). In addition, recorded interviews regarding learning styles and a written survey completed by the participants were used (Juris & Castaneda, 2009).

Conclusions.

The most prevalent student learning choices were kinesthetic and tactile respectively, in order of preference (Juris & Castaneda, 2009). Most student participants found that activities involving rehearsing role play, physical touching and feeling, and other movement related activities were the most interesting, thus the most effective (Juris & Castaneda, 2009). Of the remaining participants, the third most preferred learning style was auditory. About half of the participants preferred visual teaching approaches (Juris & Castaneda, 2009).

In contrast to the student participants, the teachers' preferred learning style was tactile (Juris & Castaneda, 2009). After that, kinesthetic and visual styles followed respectively, in order of preference (Juris & Castaneda, 2009). Teachers preferred the visual learning style as their third preference, unlike students who stated that auditory presentations were best (Juris & Castaneda, 2009).

In the Bahar (2009) study, researchers discovered a relationship between the different learning styles and the success on the mini tests. Those labeled as Independent

learners scored far different from those termed Avoidant, Collaborative, and Dependent (Bahar, 2009). The mean scores of students categorized as Competitive and Participant were different from those identified as Avoidant, Collaborative, or Dependent (Bahar, 2009). There was no significant difference found between those termed Independent and those in the Competitive or Participant categories (Bahar, 2009). There was no perceptible difference found to exist between those termed Avoidant and those labeled Collaborative and Dependent.

In the Juris and Castaneda (2009) study, researchers concluded the least preferred student learning styles were individual, group, and visual. Students expressed difficulty when working with these learning styles. The teachers' least preferred learning styles were found to be visual, group, and individual (Juris & Castaneda, 2009). Teachers expressed no difficulty with kinesthetic, tactile, or auditory styles. Thus, both groups shared the same least preferred learning styles (Juris & Castaneda, 2009).

Teachers were found to rarely employ kinesthetic and tactile activities when presenting lessons to their students (Juris & Castaneda, 2009). Only three of 15 classroom activities observed utilized these methods (Juris & Castaneda, 2009). Most of the classroom teaching observed displayed a predominantly auditory based presentation (Juris & Castaneda, 2009). In addition, most activities ignored group participation by students, which totally contradicts the preferences in learning styles selected by the student participants in this study (Juris & Castaneda, 2009). Juris and Castaneda (2009) stated:

> It was noted that most teachers chosen for this research study did not pay attention to the type of activities they developed in class. Even more, they did not take into

> account students' learning styles and they may have selected an activity without considering the students' learning styles. (p. 16)

In summary, Bahar (2009) stated the following:

> Overall, the analysis of all pair wise comparisons indicates that the pupils who are in the groups of Independent, Competitive, and Participant significantly outperformed the pupils who are in the groups of Avoidant, Collaborative and Dependent in the score of mini projects. (p. 40)

Overall, researchers concluded that differences in learning styles can have effects on academic performance (Bahar, 2009). In addition, researchers stated, "one particular style may lead to more positive or negative outcomes" (Bahar, 2009, p. 42). These findings underscore the implications for teachers and students alike in both mainstream and segregated classroom settings (Bahar, 2009).

Bahar (2009) questioned if students really enjoy the work as it is currently being presented and if current methods yield effectiveness in learning outcomes. Additionally, Bahar (2009) posed, "Is it really equally attractive for all pupils who have different psychological characteristics?" (p. 49). Bahar (2009) offered these directions for educators: teachers need to readily understand that students have different learning styles and that lessons must factor in these styles; curriculums should be written with tasks that address all learning styles; and, cooperative learning strategies should be stressed to help bridge the gap between learners with heterogeneous learning styles (Bahar, 2009).

Juris and Castaneda (2009) noted that teachers need to heed the following pedagogical implications: properly identify teaching and learning styles; be sure to adapt teaching styles and classroom activities to better address students' learning styles;

"induce students to adopt a deep approach to learning" (p. 17); present a variety of tasks to establish and address academic goals; promote different tasks and challenge students to be creative in the way they learn; and, remain immersed in data that is derived in this area of learning and its implications for learning in the future.

Academic Self-Concept

Another important consideration when deciding on an educational placement environment is the student's perception of his or her position within the confines of that setting (Marsh, 2006). A student's choice of learning styles and approaches depends greatly on two factors: academic self-concept and the student's outcome expectations (Marsh, 2006; Rodriguez, 2009). The strengthening of academic self-concept and expectations leads to the overall success of both in a positive learning environment (Marsh, 2006; Rodriguez, 2009).

Academic self-concept represents the student's appraisal and perceptions of his or her personal strengths within a learning environment (Marsh, 2006). Self-concept precipitates academic success in the fact that it predisposes the student to his or her own sense of total abilities and imposes ceiling limits (Valle et al., 2003). Students who display strong levels of academic self-concept tend to perform better and achieve more than students who possess lesser levels (Rodriguez, 2009). It is the achievement of higher level self-concept that allows students to select the proper modes, or learning styles, that facilitate higher learning (Valle et al., 2003). This improved self-concept also determines the level of concrete learning that is taking place, as opposed to superficial learning and lesser applications of the content presented (Rodriguez, 2009; Valle et al., 2003).

Rodriguez (2009) suggested that students who display high levels of academic self-concept show an important level of motivation to participate in higher education. Specifically, "students need to perceive content as relevant to their personal identities to engage in intrinsically motivated learning. Therefore, educators should make learners aware of their conceptions of learning and the personal engagement required by the learning material" (Rodriguez, 2009, p. 2). Academic self-concept appears to be the determinant for students when they choose a learning style or strategy and how successfully they acquire the knowledge presented in the classroom setting (Marsh, 2006; Rodriguez, 2009).

According to Rodriguez (2009), students in any given learning environment will select one of three learning approaches: deep, surface, or strategic. The deep method employs a genuine intent to adequately process the material presented (Rodriguez, 2009). This style of learning promotes concrete absorption through the integration of new ideas with those skills and ideas previously acquired (Valle et al., 2003). Students choosing this style of learning are approaching the subject matter with genuine interest and desire to learn (Rodriguez, 2009; Valle et al., 2003).

The surface approach consists of rote techniques (Marsh, 2006; Rodriguez, 2009). Students choosing this method are doing so out of a base fear of doing poorly, not of a genuine desire to learn the material presented (Rodriguez, 2009). Success utilizing this approach is generally temporary and superficial in nature (Marsh, 2006; Rodriguez, 2009). Most students engaged in this learning practice are spending little time studying and "display fragmented learning and become frustrated with the experience, thus minimizing subsequent effort" (Rodriguez, 2009, p. 3).

The strategic method of learning is one that allows for success through a desire to succeed in adaptability to classroom and assessment requirements (Rodriguez, 2009; Valle et al., 2003). Strategic learners display strong time management skills coupled with solid, efficient study approaches that enable successful learning (Marsh, 2006; Rodriguez, 2009). This style is motivated by the student's own sense of academic competition as well as the "students' overall assessment of their abilities to do well in academic subjects" (Rodriguez, 2009, p. 4).

If one can determine how and why students seek appropriate learning strategies, one can better control learning outcomes within any given learning environment (Marsh, 2006; Rodriguez, 2009; Valle et al., 2003). Rodriguez (2009) believed "these cognitive and meta-cognitive strategies include motivational processes that activate students' goals, expectancies and values, which guide the design of the learning approach" (p. 2). Learning environments are the key to this motivation (Marsh, 2006; Rodriguez, 2009; Valle et al, 2003). Educators must remain vigilant in the creation and maintenance of students' self-concept within their classrooms (Marsh, 2006). Such vigilance will help ensure that students make the appropriate cognitive choices when approaching educational situations (Rodriguez, 2009).

Outcome expectations are the other dependant component in student learning within the confines of an academic setting (Rodriquez, 2009). This component is defined as "…individuals' beliefs that particular courses of action lead to specific outcomes" (Rodriguez, 2009, p. 4). It is the combination of these expectations combined with academic self-concept that either ensure success in learning or prevent such learning from taking place at all (Rodriguez, 2009; Valle et al., 2003). If students anticipate that certain

learning strategies will provide a desired academic outcome, they will likely make their choices accordingly, in a positive or a negative fashion (Marsh, 2006; Rodriguez, 2009; Valle et al., 2003).

Summary

The review of literature in this chapter 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.

In the study by Fore et al. (2008), researchers evaluated self-contained classrooms and inclusive classrooms. Fore et al. (2008) determined that there was no difference academically between the two special education placements. The findings indicated inclusive classes held no distinguishable advantage over self-contained classrooms for students with learning disabilities (Fore et al., 2008). Other studies have arrived at similar conclusions (Elbaum, 2002; Manset & Semmel, 1997). Manset and Semmel (1997) arrived at the same conclusion after evaluating the academic records from eight inclusive classrooms containing students with learning disabilities. Elbaum (2002) evaluated student self-concept in inclusive classrooms versus self-contained and found no advantage to inclusive placement. Student self-concept did not change regardless of placement in inclusive or self-contained classrooms (Elbaum, 2002).

Idol (2006) researched inclusive placement through the use of teaching models and then measured success. Idol's (2006) study concluded inclusive classroom placement could be effective for students with learning disabilities depending on the student's

individual needs. Though Idol (2006) supported inclusion for some students, the study underscored the need and validity of self-contained classrooms for those students requiring an "altered curriculum" (p. 93).

McDonnell et al. (2003) and John Hopkins University (WEAC, 2007) concluded that inclusive classrooms can be beneficial to students with disabilities. Both studies evaluated the effects placement of students with disabilities had on the disabled and their non-disabled peers (McDonnell, 2003; WEAC, 2007). Researchers concluded everyone involved could benefit from inclusive classroom placement provided proper support and teacher training were provided (McDonnell, 2003; WEAC, 2007).

Kauffmann et al. (2002) and Signor et al. (2003) assessed both self-contained and inclusive classrooms for students with learning disabilities and had different conclusions. Both measured academic data and behavioral data to assess the success of inclusion versus self-contained classrooms (Kauffmann et al., 2002; Signor et al., 2003). Signor et al. (2003) concluded inclusion had distinct advantages over self-contained classroom placement, whereas Kauffmann et al. (2002) found self-contained classes to be preferable for students with learning disabilities.

Financial considerations were examined for inclusive classroom placement. Due to the expense incurred through self-contained classroom placement, some have believed schools have placed students unfairly into inclusive classes (Chew, 2007; Hechinger, 2007; Kauffmann et al., 2004). Some have warned of the harm improper placement could have on a student with disabilities (Chew, 2007).

Teacher perceptions and learning style research were examined to better understand the many variables involved in education. Overton (2004) concluded special

education referrals increased when students were placed in a classroom where the teacher had a history of making similar referrals. Lopus (2009) and Miller (2005) evaluated teaching styles and the effect they had on student learning. Researchers in both studies determined teaching styles and teacher perceptions were often out-of-line with student learning styles (Lopus, 2009; Miller, 2005).

Societal factors were also reviewed through recent research. A disproportionate amount of minority students have been referred and placed in special education programs (Ladner, 2009; United States Commission on Civil Rights, 2005). Salzmann (2009) found in Hartford, Connecticut, Black and Hispanic students were 18% more likely to be placed in special education programs than White students.

Research on academic self-concept was evaluated to understand the effect it can have on student learning. Marsh (2006) and Valle et al. (2003) discovered self-concept actually determined the amount of success students had in an academic situation. Students who displayed high levels of self-concept performed at a higher academic level and achieved more than students with lower levels of self-concept (Marsh, 2006; Valle et al., 2003).

The world-wide research performed by Bahar (2009) and Juris and Castaneda (2009), underscored the relationship between learning styles and teaching styles. Researchers determined teaching techniques often perceived as effective by educators, could be ineffective depending on the specific learning styles of the students in the classroom (Bahar, 2009; Juris & Castaneda, 2009). Researchers cautioned that a teaching communication gap could exist if presentation styles ignored learning styles (Bahar, 2009; Juris & Castaneda, 2009).

In Chapter Three, the methodology utilized in this study was explained. Chapter Four was devoted to analyses of the MAP scores and the responses from the special education directors' questionnaires. In Chapter Five, the results of the research data were discussed along with recommendations for future placement practices and research.

Chapter Three: Methodology

The intent of this research was to attain insight into the most beneficial academic setting for middle school aged students with learning disabilities. This study included data from the Missouri Assessment Program (MAP), as well as questionnaires (see Appendix A) completed by select special education directors in Missouri. 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. This research was initiated to broaden the scope of analysis involving special education placement. One way to assure placement decisions are appropriate is to utilize current academic data and determine which approach is reaping the best results.

Research Questions

The following research questions guided this study:

1. What is the relationship between a self-contained placement for a student with learning disabilities and the student's performance on the MAP?

2. What is the relationship between an inclusive placement for a student with learning disabilities and the student's performance on the MAP?

3. Based on the opinions of special education directors, what modes of instruction, or best practices, are most effective for students with learning disabilities?

Research Perspective

The research data utilized for analysis were derived from the MAP, as well as a special education directors' questionnaire. As a result, the data used in this research were quantitative in nature. Creswell (2009) stated, "Quantitative research is a means for testing objective theories by examining the relationship among variables" (p. 4).

Comparisons were made between the MAP scores of middle school students with learning disabilities involved in varying degrees of classroom settings. Currently, the MAP scores are disaggregated by time spent in regular education classrooms (MODESE, 2010a). The MODESE has defined these placement categories as: "Percent of children with IEPs inside regular class at least 80% of the day…; percent of children with IEPs inside regular class less than 40% of the day…; and percent of children with IEPs served in separate settings…" (p. 1). The classification for students placed in regular education classes for 40-79% and >79% of the school day is inclusion. Those students placed in regular classes for <40% of the school day are considered to be in self-contained environments. 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, special education directors completed a questionnaire regarding student progress in both classroom environments. Directors were asked to share personal commentaries on inclusion and self-contained environments. Directors expressed their opinions on the respective benefits and deficits of each which enhanced the analysis of the data.

Instrumentation

The methods used in this study allowed for an unbiased assessment of both special education settings by measuring student progress through the currently accepted standard for assessing academic achievement in Missouri schools, the MAP test, coupled

with the special education directors' questionnaire. The MAP provided academic achievement and special education placement information. The questionnaire provided perceptual data of self-contained and inclusive placements.

Missouri Assessment Program (MAP)

In Missouri, the MAP test has been required for Mathematics assessment since 1998 and required for Communication Arts assessment since 1999 (Muenks, 2005). The MAP was the result of the Missouri *Outstanding Schools Act* of 1993 and the Missouri *Show Me Standards* of 1996 (Muenks, 2005). Missouri lawmakers mandated the MODESE (1998) "identify the knowledge, skills and competencies that Missouri students should acquire by the time they complete high school and to assess student progress toward these academic standards" (p. 2).

In testimony of the accuracy and reliability of the MAP, the MODESE (n.d.) declared:

> First and foremost, we ensure the meaningfulness or validity of MAP scores as indices of proficiency relative to the Show-Me Standards by using methodical and rigorous test-development procedures. CTB [California Testing Bureau] and DESE have developed MAP assessment in accordance with accepted procedures and criteria intentionally aligning MAP assessments to the specific Show-Me Standards being measured at that grade and subject area. (p. 3)

In another testimony of validity, the MODESE (n.d.) reported:

> In an assessment program like the MAP, which includes constructed-response items and performance events that must be scored by knowledgeable scorers (as contrasted to selected-response items that can be score by a machine using a key),

> developers also go to great lengths to ensure that the scoring process yields consistent information. CTB and DESE have put stringent procedures in place to ensure reliable scoring of MAP items. (p. 4)

Another key point in testing validity is teacher response to a specific assessment. McMillan (2000) stated, "The first principle is that professional judgment is the foundation for assessment and, as such, is needed to properly understand and use all aspects of assessment" (p. 1).

In 1999, the Center for Learning, Evaluation, and Assessment Research, at the University of Missouri, evaluated the consequential validity of the MAP (MODESE, n.d.). The findings indicated, "teachers are becoming more convinced of the work of authentic learning activities and assessment methods" (MODESE, n.d., p. 3) due to MAP testing. The study also concluded, "teachers are revising their grading practices as a result of the MAP, using more performance-based methods to determine grades than in the past" (MODESE, n.d., p. 3). Researchers confirmed, "we have very firm evidence that the MAP assessments yield scores that are valid, given the stated purpose of the program" (MODESE, n.d., p. 4).

Questionnaire

The special education directors' questionnaire was selected to add another dimension to the MAP 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 further support of questionnaires as a valid form of assessment, Walonick (1993) declared:

> Questionnaires are familiar to most people. Nearly everyone has had some experience completing questionnaires and they generally do not make people apprehensive. They are less intrusive than telephone or face-to-face surveys. When respondents receive a questionnaire in the mail, they are free to complete it on their own time-table. (p. 1)

In this study, special education directors were 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 directors. This questionnaire was field-tested on special education teachers, Lindenwood doctoral students, and Lindenwood doctoral professors to ensure reliability. Then, once changes were made to ensure clarity and understanding, the questionnaire was distributed via SurveyMonkey to 110 special education directors and was available for completion 24 hours a day, seven days per week, for a period of 21 days. Before accessing the questionnaire, special education directors 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 in a locked secure location for a period of five years from the date of completion and then destroyed (see Appendix C).

Population and Sample

Disaggregated MAP scores from the Communication Arts and Mathematics subtests were collected for 2008 and 2009 for students with learning disabilities in grades six, seven, and eight in Missouri public schools. In 2008, 12,133 students with learning disabilities, in the selected grades, participated in the Communication Arts and Mathematics MAP testing. In 2009, 11,500 students with learning disabilities, in the selected grades, participated in the Communication Arts and Mathematics MAP testing.

Along with the academic data, a special education directors' questionnaire was used to provide additional insight into the study. A list of directors was obtained from the MODESE. Special education directors' e-mail addresses were obtained from the MODESE school directory, and then ten special education directors were selected from each of the eleven ($N = 110$) Missouri Regional Professional Development Centers through random sampling. The random sampling was performed using the number generator function on Microsoft Excel. According to Stat Trek (2010), "The main benefit of simple random sampling is that it guarantees that the sample chosen is representative of the population" (p. 1).

Data Analysis

The MAP data were collected in the areas of Communication Arts and Mathematics for 2008 and 2009 for students with learning disabilities in grades six through eight. Then, the MAP scores of students with learning disabilities placed in regular classrooms for various lengths of time were grouped into three placement categories: >79%, 40-79%, and <40%. As per the MODESE (2010b) placement guidelines, students inside the regular classroom from 40-79% and >79%, receive special

education services via a resource room. Placement in regular classes <40% is considered self-contained special education placement (MODESE, 2010b). Scores were measured by the number of students with learning disabilities scoring Below Basic, Basic, Proficient, and Advanced from each of the three categories. For the purpose of this study, Below Basic and Basic scores were combined, and Proficient and Advanced scores were combined to allow for a comprehensive comparison.

The Communication Arts and Mathematics MAP data were disaggregated by placement categories then into percentages. Special education placement information was based on December core data files obtained from the MODESE. Learning disability designations were determined as indicated in student IEPs.

The results of the special education directors' questionnaires were recorded, then analyzed and graphed. The responses on the special education directors' questionnaire were evaluated to determine prevailing opinions about best practices for this student population. Special education directors were selected as the target group due to their expertise in the field of special education and their expertise in administration.

Ethical Considerations

This research project was approved by the Institutional Review Board at Lindenwood University (see Appendix D). No actual student involvement was needed or solicited. The data were derived from the MODESE public website. Due to the fact that MAP data were secondary, names of students involved in testing were omitted by the MODESE. Special education directors' questionnaires did not include any student information. The names of special education directors were not published or retained assuring anonymity.

Summary

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

The sample in this study included every middle school student with learning disabilities who took the MAP test in 2008 and 2009, which provided substantial data for evaluation. The disaggregated MAP scores, in the areas of Communication Arts and Mathematics, as well as the special education placement information, allowed for a direct comparison of student achievement.

The special education directors' questionnaire was used to factor in professional perspectives. The questionnaire was made available to 110 special directors throughout Missouri via SurveyMonkey. 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 Missouri middle schools. 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: Data Analysis

The research in this study included two years of MAP 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 results of the data more clearly. The results were divided into two categories: Below Basic/Basic, and Proficient/Advanced.

The special education directors' questionnaires were collected from 55 of the special education directors from the eleven Professional Development Centers around the state of Missouri. Originally, 110 directors were randomly selected. These directors were sent an e-mail containing the questionnaire for this study. A total of 55, or 50%, of the questionnaires were collected from the 110 sent and then analyzed, representing 9.8% of the special education directors in Missouri. A second e-mail was sent to the special education directors in an effort to secure more responses. Additionally, phone calls were attempted to encourage higher participation.

Before examining the data collected for this research, several issues were considered. First, the MAP data were examined. The disaggregated MAP data used in this study displayed academic achievement for the MAP Communication Arts and Mathematics test in 2008 and 2009. The data were inclusive of Missouri middle 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 2008 Communication Arts MAP testing was 12,133, and the same number of students, 12,133, took the 2008 Mathematics MAP. The number of learning disabled students taking the 2009 Communication Arts

section of MAP testing was 11,514, and the total number of learning disabled students who took the 2009 Mathematics MAP test was 11,500.

Research Questions

The research questions that guided this study were:

1. What is the relationship between a self-contained placement for a student with learning disabilities and the student's performance on the MAP?

2. What is the relationship between an inclusive placement for a student with learning disabilities and the student's performance on the MAP?

3. Based on the opinions of special education directors, what modes of instruction, or best practices, are most effective for students with learning disabilities?

MAP Data Analysis

The data were categorized into two groups; Below Basic/Basic and Proficient/Advanced. Of the middle school students with learning disabilities who took the Communication Arts MAP test in 2009 (see Figure 1 and Figure 2), the differences in scores between student placement categories was significant. For the students placed in inclusive classrooms for more than 79% of the school day, 86.3% scored Below Basic/Basic. Among the group placed 40-79% of the school day, 97.0% scored Below Basic/Basic. Of the students placed in inclusive settings for less than 40% of their day, 97.7% scored Below Basic/Basic in the area of Communication Arts (see Figure 1).

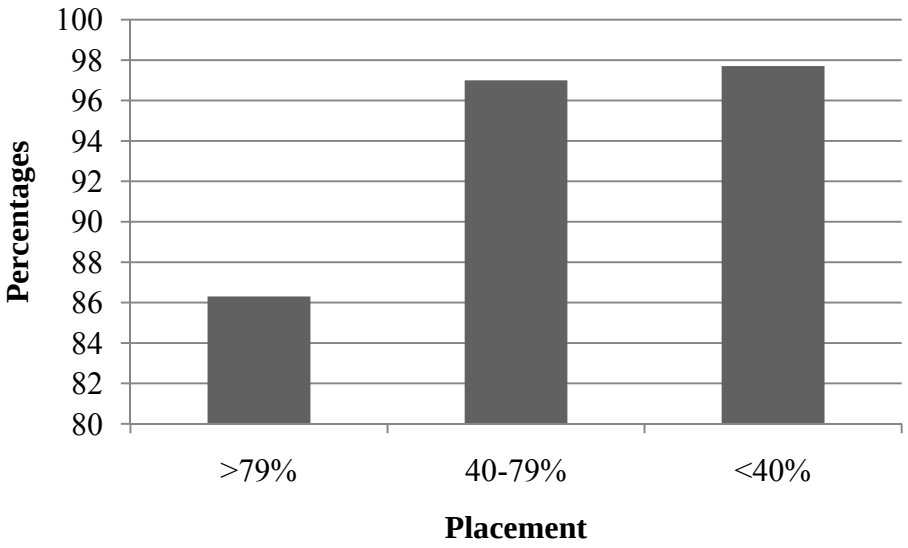

Figure 1. Comparison of the Communication Arts MAP scores of middle school students with learning disabilities for the achievement levels of Basic/Below Basic, in 2009. As per the MODESE (2010b) placement guidelines, students inside the regular classroom from >79% and 40-79% receive special education services via a resource room. Placement in regular classes <40% is considered self-contained special education placement (MODESE, 2010b).

Amid the middle school students with learning disabilities who were placed more than 79% of their day in inclusive classes, 13.6% scored Proficient/Advanced (see Figure 2). Of the students placed in inclusive classes 40-79% of their day, 3.1% scored Proficient/Advanced. Among the students placed in inclusive classes less than 40% of their day, 2.2% scored Proficient/Advanced.

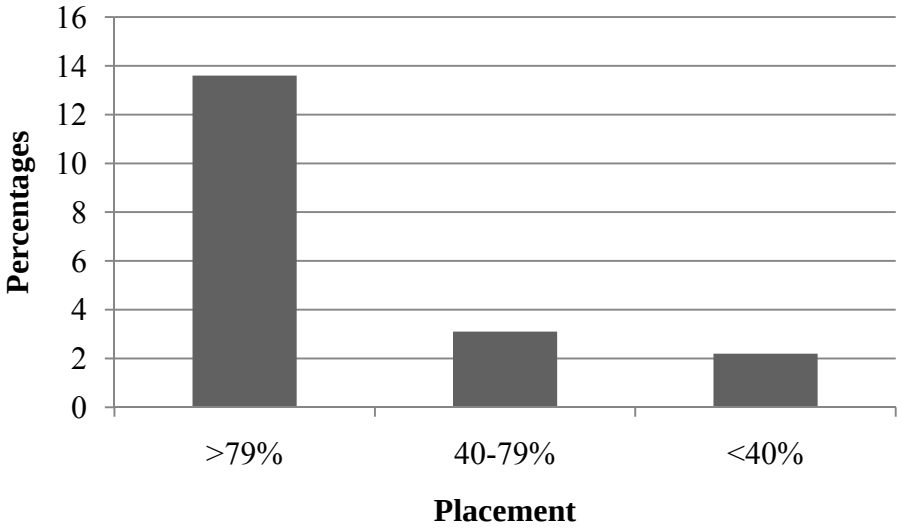

Figure 2. Comparison of Communication Arts MAP scores of middle school students with learning disabilities for the achievement levels of Proficient/Advanced, for 2009. Students inside the regular classroom from >79% and 40-79% receive special education services via a resource room, and placement in regular classes <40% is considered self-contained special education placement (MODESE, 2010b).

The 2008 Communication Arts results were (see Figure 3) similar to those of the 2009 Communication Arts results. Of the students placed in inclusive settings for more than 79% of the school day, 87.1% scored Below Basic/Basic, while of those placed in inclusive settings for 40-79% of the school day, 97.1% scored Below Basic/Basic. Among the students placed less than 40% of the school day, 98.0% scored Below Basic/Basic.

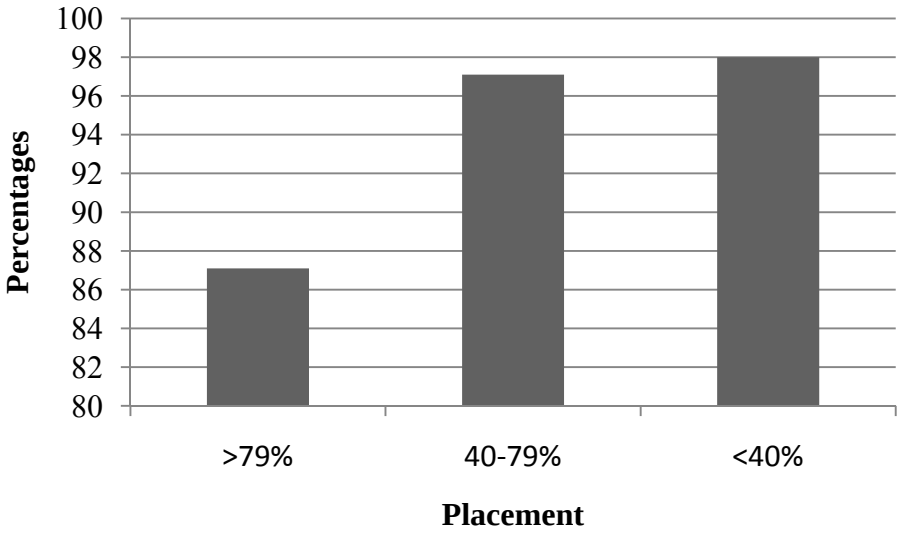

Figure 3. Comparison of Communication Arts MAP scores of middle school students with learning disabilities for the achievement levels Below Basic/Basic, for 2008. Students inside the regular classroom from >79% and 40-79% receive special education services via a resource room, as per the MODESE (2010b) guidelines. Placement in regular classes <40% is considered self-contained special education placement (MODESE, 2010b).

When measuring the 2008 scores of students with learning disabilities placed in inclusive classes more than 79% of their day, 13.0% scored Proficient/Advanced on the Communication Arts section of the MAP (see Figure 4). Whereas, of the students placed 40-79% of the day in inclusive classes, 2.9% scored Proficient/Advanced. Amid the students placed less than 40% of the day in inclusive classes, 2.0% scored Proficient/Advanced.

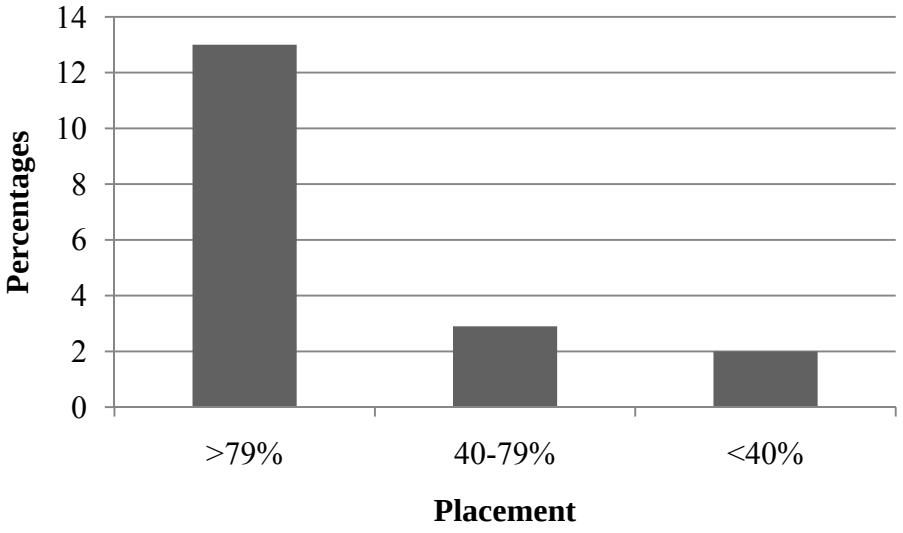

Figure 4. Comparison of the Communication Arts MAP scores of middle school students with learning disabilities for the achievement levels of Proficient/Advanced, in 2008. As per the MODESE (2010b) placement guidelines, students inside the regular classroom from >79% and 40-79% receive special education services via a resource room. Placement in regular classes <40% is considered self-contained special education placement (MODESE, 2010b).

The 2009 Mathematic scores followed a similar pattern (see Figure 5 and Figure 6). Of the middle school students with learning disabilities placed in inclusive classrooms for more than 79% of the school day, 79.4% scored Below Basic/Basic. Among the group placed 40-79% of the day, 92.1% scored Below Basic/Basic, while of the group placed less than 40%, 97.2% scored Below Basic/Basic.

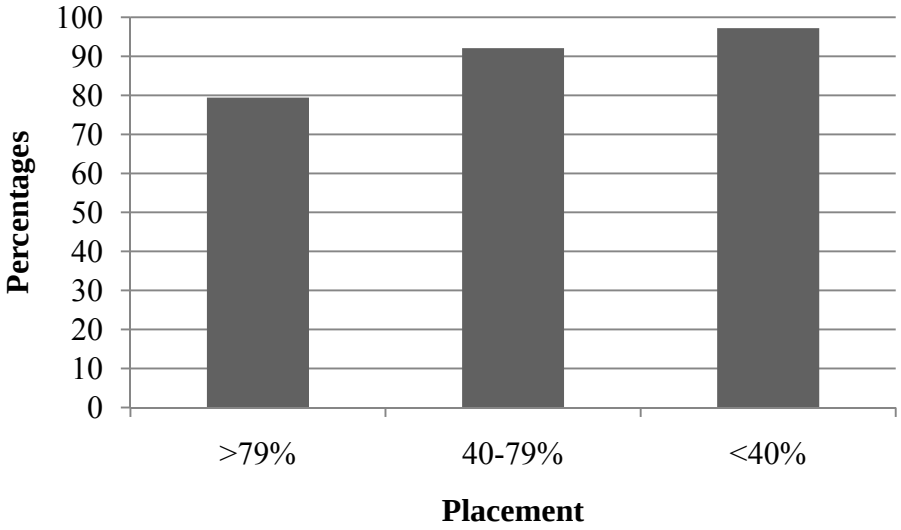

Figure 5. Comparison of Mathematics MAP scores of middle school students with learning disabilities for the achievement levels of Below Basic/Basic, for 2009. Students inside the regular classroom from >79% and 40-79% receive special education services via a resource room, and placement in regular classes <40% is considered self-contained special education placement (MODESE, 2010b).

Of the students placed in inclusive classes more than 79% of the day, 20.5% scored Proficient/Advanced on the Mathematics subtest. Among those placed 40-79% of the day in inclusive classes, 7.8% scored Proficient/Advanced, and of the students placed less than 40% of the day in inclusive classes, 2.8% scored Proficient/Advanced.

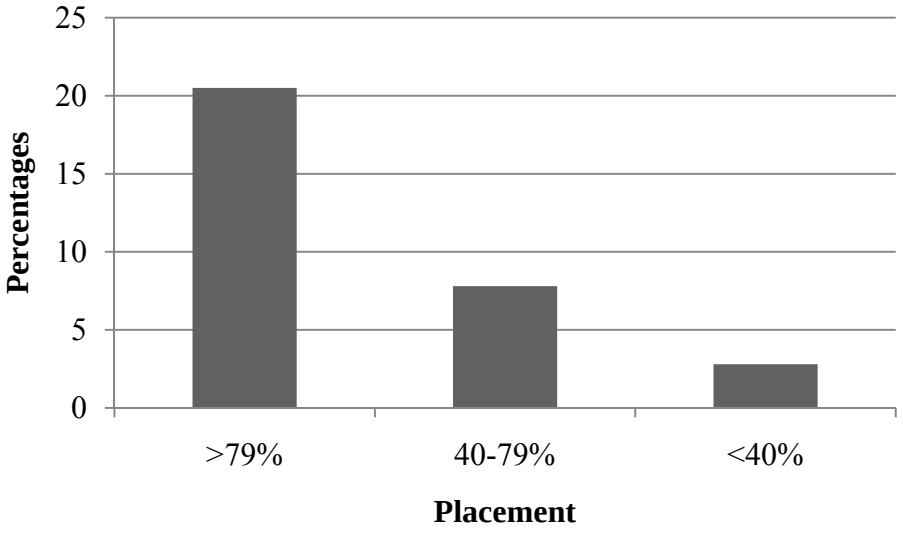

Figure 6. Comparison of Mathematics MAP scores of middle school students with learning disabilities for the achievement levels of Proficient/Advanced, for 2009. The students with learning disabilities inside the regular classroom from >79% and 40-79% receive special education services via a resource room, and placement in regular classes <40% is considered self-contained special education placement (MODESE, 2010b).

The 2008 Mathematic scores were similar to those in 2009. Among the students placed more than 79% of the day in inclusive classrooms, 80.7% scored Below Basic/Basic (see Figure 7). Amid the group placed 40-79% of the day in inclusive classes, 93.6% scored Below Basic/Basic, and of the group placed less than 40% of the day in inclusive classes, 97.8% scored Below Basic/Basic

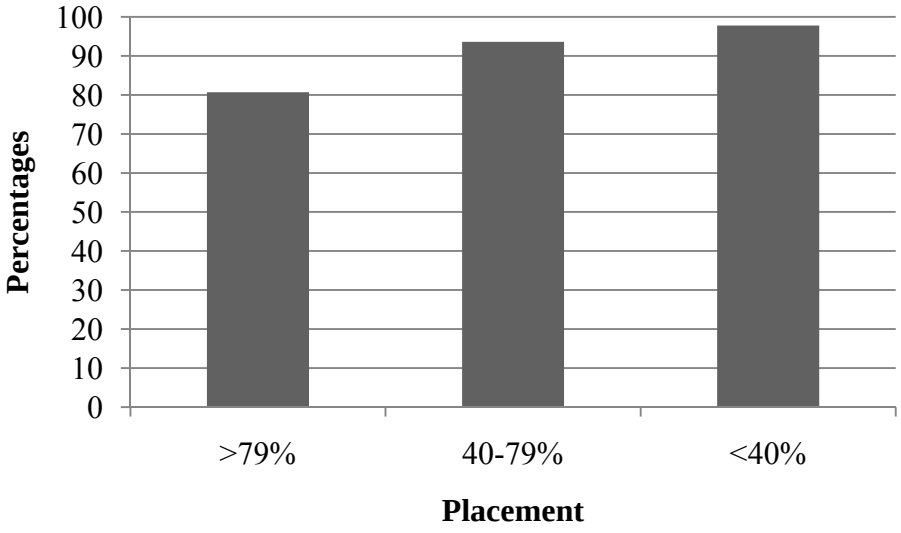

Figure 7. Comparison of Mathematics MAP scores of middle school students with learning disabilities for the achievement levels of Below Basic/Basic, for 2008. As per the MODESE (2010b) placement guidelines, students inside the regular classroom from >79% and 40-79% receive special education services via a resource room. Placement in regular classes <40% is considered self-contained special education placement (MODESE, 2010b).

Of the students placed more than 70% of their day in inclusive classes, 19.3% scored Proficient/Advanced on the Mathematics subtest (see Figure 8); whereas, of the students placed 40-79% of the day in inclusive classes, 6.4% scored Proficient/Advanced. Among the students placed in inclusive classes less than 40% of their day, 2.2% scored Proficient/Advanced.

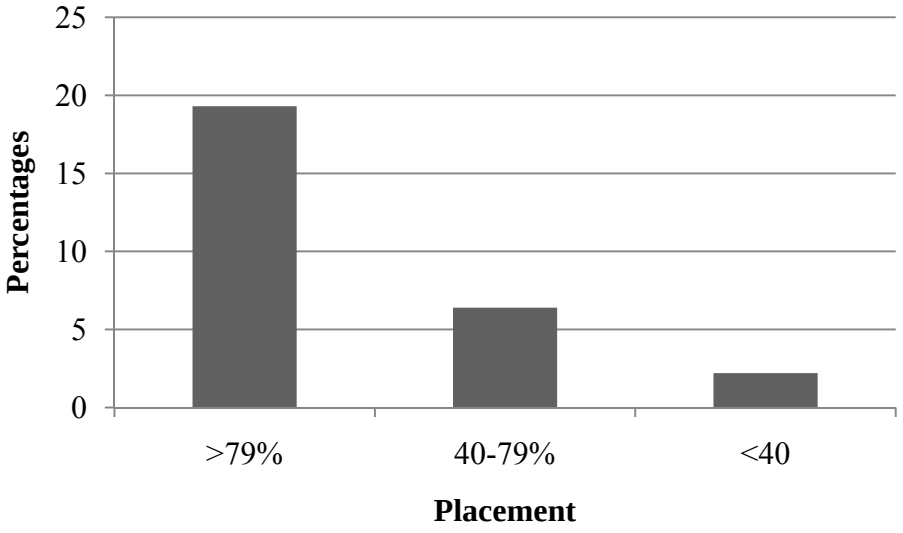

Figure 8. Comparison of Mathematics MAP scores of middle school students with learning disabilities for the achievement levels of Proficient and Advanced for 2008. As per the MODESE (2010b) placement guidelines, students inside the regular classroom from >79% and 40-79% receive special education services via a resource room. Placement in regular classes <40% is considered self-contained special education placement (MODESE, 2010b).

Results of the Special Education Directors' Questionnaire

Special education directors who participated in the questionnaire responded inclusion was the best choice for students with learning disabilities. Most supported inclusion on the bases of social and academic interaction. The special education directors 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 MAP test when compared to students with learning disabilities who are placed in inclusive classes?

Of those responding, 54.5% percent believed that there is 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. Conversely, 45.5% 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 environments?

Given the differences in placement to consider, the majority of special education directors declared the biggest difference between self-contained classroom placement and

inclusive classroom placement was in the delivery of special education services. Of those responding, 45.4% 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, 16.4% felt self-contained classroom environments promoted positive peer interactions, while 10.9% indicated self-contained classroom environments allowed for negative peer interaction for students with learning disabilities.

Of the special education directors responding, 30.0% believed inclusive classroom environments allowed for better delivery of special education services. Countering those who favored self-contained placement, 50.9% of the special education directors surveyed specified that inclusive classroom environments promoted positive peer interaction, while 41.8% 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 50.9% who responded that inclusive classrooms promoted positive peer interactions, and 41.8% 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 centered 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 avowed that special education teachers in self-contained classroom settings can promote student learning at the right pace for students with learning disabilities.

Many directors responded self-contained classes are smaller and more focused than inclusive classes. These directors 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 directors expressed self-contained placement was superior to inclusive placement due to the more specialized training of the special education teachers. These directors 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 directors 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 directors felt inclusion is a right, not an option, for these students. Directors affirmed that self-contained classes are too far removed from the mainstream, both in instruction and in contact with the regular education population. One director believed self-contained classes are merely a way of isolating students for the benefit of the school, not the student. This director 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. 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 declared, "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."

Several directors declared that inclusive settings are better academically because of the availability of grade level appropriate books, materials, and activities. These respondents explained self-contained classes often lack the books and materials that are readily available in inclusive classrooms. These directors believed that self-contained class materials are often inferior to those in the mainstream. Directors 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. Many directors avowed that these segregated classrooms serve a valuable purpose but must be utilized in very small doses. A constant theme among directors was the importance of social learning through immersion in inclusive classes. One director felt students with learning disabilities become stronger academically when challenged by the regular education students. The same director expressed that inclusive environments raise the level of learning in a way that self-contained classes cannot.

Another opinion expressed by the special education directors was teachers in inclusive settings are better in touch with the grade level expectations which are covered on the MAP test. One director responded that students placed in self-contained classrooms sometimes receive less exposure to grade level expectations by the nature of these environments. This director expressed concern that such expectations can be missed in lieu of meeting the specific goals set forth in students' IEPs.

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

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

Another director felt inclusive environments allow students with learning disabilities an opportunity to see that even regular education students can have difficulty academically. This director also shared that self-contained classrooms can “stifle and reduce the effectiveness of instruction.” This respondent later declared, “learning with and from peers is a powerful tool.” One director commented:

> I feel that when special education students are included in regular classes, they feel as if they are a part of that class. It seems to give the special education student a sense of belonging and confidence that wasn’t always there.

One consistent comment was self-contained classes were better suited for students with severe disabilities and not students with learning disabilities. Many directors 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. Some directors expressed concern the self-contained classes created more of a handicap than the learning disability. 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, 68.5%, believed parents of students with learning disabilities would most likely endorse inclusive classroom placement for their child as opposed to self-contained placement. Only 31.5% 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 (see Figure 9). Many of the directors, 45.1%, felt academic instruction was the primary area of concern in self-contained classroom environments. A few of the directors, 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.

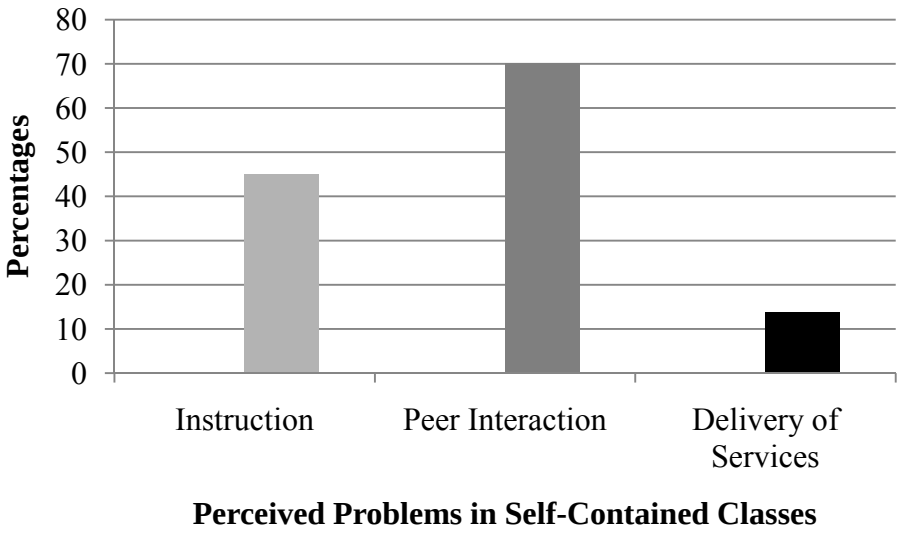

Figure 9. Special education directors' perceptions of the academic problems associated with self-contained classroom placement.

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, 75.6% of the directors felt the delivery of special educational services was the most critical problem for students with learning disabilities placed in inclusive classroom settings, and 32.7% declared instruction was the main problem in inclusive classroom environments. Only 14.3% of the directors 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.

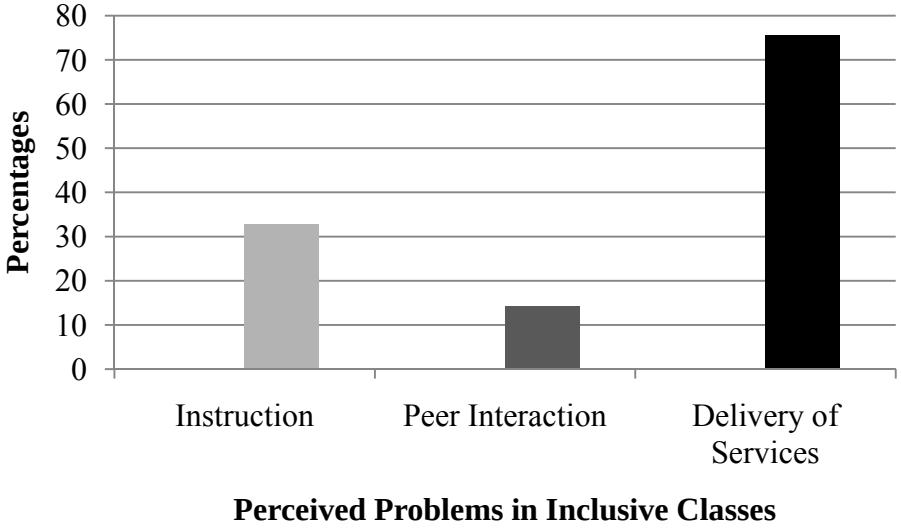

Figure 10. Special education directors' perceptions of the academic problems associated with inclusive classroom placement.

Summary

The data indicated middle school students with learning disabilities who are placed in inclusive classroom environments more than 79% of the day score higher on the MAP test in the areas of Communication Arts and Mathematics. The responses to the questionnaire were divided between directors preferring self-contained classes and those preferring inclusive classes. Directors identified their opinions on the strengths and weaknesses of both placement environments.

Of those responding, 50.9% of the directors believed inclusive classrooms provided the best interaction with non-disabled peers. Some directors stated that inclusive classes enhanced learning through the exposure to materials and curricular demands not always present in self-contained classes. A few directors 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 directors (45.4%) felt self-contained classes offered the best availability of special education services. In addition, some directors believed self-contained classes offered better instruction due to the small class size and specially trained instructors. Some directors stated that self-contained classes are superior for students with learning disabilities due to the ability of special education teachers to provide differentiated instruction which would not always be available in larger, inclusive classes.

Though directors' personal opinions varied, their projection of parental preferences was clear. More than half of the directors (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 middle 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 have been addressed for each.

Proponents of self-contained classrooms and of inclusive classrooms have provided strong arguments for their positions. These arguments have ranged from the purely academic to the overall social development of the students involved. Many view self-contained classrooms as discriminatory (Decatur, 2007). Others view inclusion as an environment that can allow for limited delivery of valuable special education 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; however, further study should increase the understanding of the two special education placements: self-contained and inclusive.

The instruments used in this study were the MAP and the special education directors' questionnaires. The MAP provided accurate academic and placement data allowing for an unbiased assessment of student achievement in the areas of Mathematics and Communication Arts. The special education directors' questionnaire provided expert opinions on the preferred educational setting for students with learning disabilities. Together, these tools allowed for insight into special education placement and student academic success.

In Chapter Three and Chapter Four, the reliability and virtues of the MAP test as a trustworthy indicator of student achievement in Missouri were discussed. This trusted tool has been relied upon for Mathematics assessment since 1998 and for Communication Arts since 1999. Given the exhaustive research and the years of reliable application, this assessment was the best choice for academic data for this research.

The special education directors' questionnaire was field-tested by special education teachers, Lindenwood doctoral students, as well as Lindenwood doctoral professors to ensure validity and reliability. The data derived from this research tool was analyzed to obtain professional opinions for this research. Special education directors from across state of Missouri 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 MAP data, allowed a well-rounded assessment of placement and achievement.

Summary of the Findings

The data from the MAP test and the special education directors' questionnaires were analyzed for a comparison of self-contained classroom environments with inclusive classroom environments. Findings were viewed through the lens of Vygotsky's (1978) theory of social development, which clearly states that social interaction is paramount in the development of cognitive functioning, and the conceptual framework of Kauffmann et al. (2004), which acknowledges the trend toward inclusion is actually detrimental to the development of cognition due to the poor delivery of essential special education services in inclusive classroom settings.

The MAP data collected were disaggregated according to the time students with learning disabilities spent in inclusive and self-contained classroom environments and the corresponding academic scores. The data were graphed to easily track the academic differences between those placed in inclusive classrooms for greater than 79% of the school day, 40-79% of the school day, or less than 40% of the school day. Academic achievement was determined by the MAP designations of Below Basic, Basic, Proficient, and Advanced.

Special education directors' questionnaires were examined and graphed to show the attitudes, perceptions, and preferences in special education placement from those with expertise. Special education directors were selected for this study because of their extensive background in the field of special education. These 110 special education directors were randomly selected from eleven Professional Development Centers located in Missouri, which allowed for a broad sampling population and the validity that such a population produces (Lenth, 2001). Of the 110 special education directors selected, 55 responded to the questionnaire.

Research Question 1. What is the relationship between a self-contained placement for a student with learning disabilities and the student's performance on the MAP?

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 by the lowering of skills and expectations (WEAC, 2007). The MAP data showed a relationship between low scores and those placed in self-contained classes for extended periods of time. The WEAC (2007) found similar academic results. When academic assessments were compared between students in self-contained classrooms and inclusive classrooms, the students in the inclusive settings scored higher (WEAC, 2007).

Research Question 2. What is the relationship between an inclusive placement for a student with learning disabilities and the student's performance on the MAP?

The data for this study indicated a relationship in academic skills, as well as an increase in social skills for those students with learning disabilities who can perform within the regular education curriculum more than 79%, 40-79%, and less than 40% of the school day. McDonnell et al. (2003) found that inclusive environments promote social cognition and help students with learning disabilities develop personal abilities. Researchers in the *Success for All* study concluded everyone benefits when students with disabilities are placed in inclusive classrooms (WEAC, 2007). The MAP 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 MAP test than those placed in self-contained classroom

environments. Some special education directors 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 MAP test. Also, respondents indicated inclusive placement also promotes interaction with regular education peers that enables social learning.

Research Question 3. Based on the opinions of special education directors, what modes of instruction, or best practices, are most effective for students with learning disabilities?

The data analyzed from the special education directors' questionnaire indicated 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.

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 middle 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

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 student.

The MAP data indicated a high level of academic achievement in the group of students placed in inclusive classrooms for the majority of the school day; however, care must be taken when applying this information. Most higher functioning students with learning disabilities are often placed in inclusive classrooms for longer periods of time 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 MAP data to more clearly establish special education environment benefits and deficits. Most of the directors 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 most effective placement for students with learning disabilities has been debated since the Education for all Handicapped Children Act (1975). Chapter Two included a review of current trends and research on both self-contained and inclusive environments for this student population. 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.

Summary

This study was conducted to identify which special education environment provided the best academic education. 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 Al Lohman, doctoral student at Lindenwood University, St. Charles, MO. 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 middle 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,

Al Lohman

Doctoral Student

(417)332-7863

Appendix C

Lindenwood University

School of Education
209 S. Kingshighway
St. Charles, Missouri 63301

Informed Consent for Participation in Research Activities

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

Principal Investigator __Al Lohman_____
Telephone: 417-332-7863 E-mail: ael575@lindenwood.edu

Participant _____ Contact info _____

1. You are invited to participate in a research study conducted by Al Lohman and Dr. Terry Reid. 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 SurveyMonkey.com.

   b) The amount of time involved in your participation will be minimal; simply the time it takes to respond to the questionnaire. Approximately 110 subjects will be involved in this research.

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 the Investigator, Al Lohman, @ 417-332-7863 or his Faculty Advisor, Dr. Terry Reid, @ 417-881-0009. You may also ask questions of or state concerns regarding your participation to the Lindenwood Institutional Review Board (IRB) through contacting Dr. Jann Weitzel, Vice President for Academic Affairs at 636-949-4846.

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

Appendix D

10-89
IRB Project Number

LINDENWOOD UNIVERSITY
Institutional Review Board Disposition Report

To: Al Lohman
CC: Dr. Reid, Dr. DeVore

The IRB has reviewed your application for research. Your proposal has been approved without reservation.

Ricardo Delgado 6/18/10
Institutional Review Board Acting Chair Date

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

Bahar, M. (2009, Winter). The relationships between pupil's learning styles and their performance in mini science projects. *Kuram ve Uygulamada Egitim Billmleri. Istanbul*, *9*(1), 31-53.

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

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

Chambers, J. G., Parrish, T. B., & Harr, J. J. (2004). *What are we spending on special education services in the United States, 1999-2000* (Report No. 1). American Institutes for Research, DC.

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

De Bettencourt, L. U. (2002). *Understanding the differences between IDEA and section 504.* Retrieved from http://www.pirc.peatc.org/resources/Key%20Differences%20Between%20IDEA%20and%20504.pdf

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

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

Du Plessis, S., & Strydom, J. (2000). *The right to read: Beating Dyslexia and other learning disabilities.* Retrieved from http://www.audiblox2000.com/book2.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

Encyclopedia.com. (2001). *The 1960's: Education overview.* Retrieved from http://www.encyclopedia.com/doc/1G2-3468302236.html

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.

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

Hwang, J. (2008). *History of advocacy of specific learning disabilities.* Retrieved from http://www.xomba.com/history_of_advocacy_of_specific_learning_disabilities

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.

John F. Kennedy Library and Museum (n.d.). *JFK in history: Mental retardation.* Retrieved from http://www.jfklibrary.org/Historical+Resources/JFK+in+History/Mental+Retardation.htm

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

Kids Together, Inc. (2010). *Rights to regular ed.* Retrieved from http://www.kidstogether.org/right-ed.htm

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

LD Hope. (2008). Retrieved from http://www.ldhope.com/statistics.html

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

Lenth, R. V. (2001). *Some practical guidelines for effective sample-size determination.* Retrieved from http://www.stat.uiowa.edu/techrep/tr303.pdf

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

Lopus, J. H. (2009). *Is there a disconnect between teaching styles and learning styles in high school economics classes?* Retrieved from http://www.thefreelibrary.com/Is+there+a+disconnect+between+teaching+styles+and+learning+styles+in...-a0199464297

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.

Marsh, H. W. (2006). Reciprocal effect of self-concept and performance from a multidimensional perspective: Beyond seductive pleasure and unidimensional perspectives. *Perspectives on Psychological Science, 1*(2), 133-163. doi: 10.1111/j.1745-6916.2006.00010.x

Martin, M. W., Martin, R., & Terman, D. L. (1996). *Future of children, (6)1,* 25-39.

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.

McLaughlin, M. (1997). Special education in an era of school reform: An overview. D.C., Federal Resource Center.

McMillan, J. H. (2000). Fundamental assessment principals for teachers and school administrators. *Practical Assessment, Research & Evaluation, 7*(8), 1.

Miller, B. M. (2005). *The impact of individual teaching styles* (Master's thesis). Retrieved from http://etd.ohiolink.edu/send-pdf.cgi/Miller%20Brandi%20M.pdf?acc_num=marietta1154992170

Missouri Department of Elementary and Secondary Education. (n.d.). *The Missouri assessment program: Score use, meaningfulness, and dependability.* Retrieved from http://dese.mo.gov/divimprove/fedprog/discretionarygrants/ReadingFirst/DMAP.pdf

Missouri Department of Elementary and Secondary Education. (1998). *Assessment standards for Missouri public schools.* Retrieved from http://dese.mo.gov/divimprove/assess/assessmentstandards.pdf

Missouri Department of Elementary and Secondary Education. (2002). *Identification and evaluation.* Retrieved from http://www.dese.mo.gov/divspeced/stateplan/FY2005/Reg_III.pdf

Missouri Department of Elementary and Secondary Education. (2009). *Annual report of school data.* Retrieved from http://dese.mo.gov/planning/profile/DD000000.html

Missouri Department of Elementary and Secondary Education. (2010a). *School statistics.* Retrieved from http://dese.mo.gov/schooldata/school_data.html

Missouri Department of Elementary and Secondary Education. (2010b). *Special education placement category codes.* Retrieved from http://dese.mo.gov/divimprove/coredata/documents/exhibits_2011.pdf

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

New World Encyclopedia. (2008). *Special education.* Retrieved from http://www.newworldencyclopedia.org/entry/Special_education

Oberti v. Board of Education of the Borough of Clementon School District, 995 F.2d 1204 (3rd Cir.1996).

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

Poolaw v. Parker Unified School District, 67 F.3d 830 (9th Cir. 2001).

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.

Sacramento City Unified School District v. Rachel H., 14 F. 1398 (E.D. Ca. 1994).

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.

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

Stat Trek. (2010). *Statistics tutorial: Simple random sampling.* Retrieved from http://stattrek.com/Lesson3/SamplingTheory.aspx

State University. (2009). *Special education−Current trends*. Retrieved from http://education.stateuniversity.com/pages/2435/Special-Education-CURRENT-TRENDS.html

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 Commission on Civil Rights. (2005). *Minorities in special education.* Retrieved from http://www.usccr.gov/pubs/MinoritiesinSpecialEducation.pdf#xml=http://www.dmssearch.gpoaccess.gov/PdfHighlighter.aspx?DocId=171&Index=D%3a%5cWebsites%5cUseIndex%5cUSCCR&HitCount=9&hits=4a1f+4a20+4a21+4a22+4a23+4a24+4a25+4a26+4a27+

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

United States Department of Education. (2007). *Twenty-five years of progress in educating children with disablilities through IDEA*. Retrieved from http://www2.ed.gov/policy/speced/leg/idea/history. html

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.

Walonick, D. S. (1993). *Everything you wanted to know about questionnaires but were afraid to ask.* Retrieved from http://www.statpac.com/research-papers/questionnaires.htm

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

Wisconsin Educational Association Council. (2007). Retrieved from http://www.weac.org/Issues_Advocacy/Resource_Pages_On_Issues_One/Special Education/special_education_inclusion.aspx

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.

Vita

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His educational accomplishments include ten years teaching special education in inner-city schools in Los Angeles, California, nine years teaching at the alternative school in Branson, Missouri, as well as nine years teaching the jazz curriculum as an adjunct professor at the College of the Ozarks in Point Lookout, Missouri.