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# Partial Inclusion Effects on Students with Special Needs in English

Jayna Michelle Jensen  
*Walden University*

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Jayna Jensen

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Walden University  
2014

Abstract

Partial Inclusion Effects on Students with Special Needs in English

by

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MA, California State University San Marcos, 2007

BS, California State University San Marcos, 2003

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

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## Abstract

A special education population failed to meet the state target in English. This occurrence drove educational leaders to review their program options to address the problem. Their decision to offer a partial inclusion English program setting is important because it supports using data to provide students a Free and Appropriate Education (FAPE) in the Least Restrictive Environment (LRE). The purpose of this study was to examine if the new setting was supported by an increase in student academic achievement scores. The theoretical framework included the social relationship model by Reindal and Gürgür and Uzuner's successful inclusion practices theory. The guiding research question addressed the influence of a self-contained setting for English, replacing the general education class offered for special education students on California Modified Assessment (CMA) English scores. A comparative quantitative pre- and posttest design study was conducted using a before-and-after sequence of events (partial-inclusion implementation) and included a sample size of 8 participants. A Friedman Test was followed up with the Wilcoxon Signed Ranks Test to complete the data analysis. Findings showed noteworthy differences between 2 or more of the mean scores, and scores in 2013 were higher than scores in 2012. The resulting project is a training session on the implemented intervention Read Naturally, which was supported in the data analysis. Recommendations include providing technical support and time management strategies for staff. Implications for positive social change support provision of settings and supportive reading strategies to meet the needs of individual special education students. This support will ensure students' placement into the least restrictive environment.

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## Section 1: The Problem

### **Introduction**

For this study, I employed a comparative quantitative pre- and posttest design to analyze the effectiveness of a partial inclusion setting for students receiving special designed instruction in English. Because there has been no definition for partial inclusion, for this study I used a standard of partial inclusion defined as a special education teacher, as the primary instructor, placing a student a separate classroom for direct instruction (O’Gorman & Drudy, 2010). A comparative analysis of data from the California Modified Assessment (CMA) for the 2011, 2012, and 2013 school years was conducted to decide growth in academic scores in the subcategory of English. The quantitative study data were CMA scores from sixth and seventh grade students requiring individualized education programs, who had been identified to receive intense designated instruction in reading and writing and placed in the partial inclusion setting, deemed by the local school’s Individualized Academic Program team as the students’ least restrictive environment (LRE) to receive specially designed instruction.

### **Definition of the Problem**

In 2011, 129 of the 131 special education students at the local Southern California urban district site took the CMA, which equaled a participatory rate of 98% (California Department of Education, 2011). Individualized Academic Program teams decide which California state test each student requiring an Individualized Academic Program will take by examining the data from previous state testing results. If the student performs far below or below basic for 2 years or more in a row on the California State Test (CST), the

student is then eligible to take the CMA in that subject. In English, the projected target in 2011 for proficiency was 67.6% (California Department of Education, 2011); however, of the 117 valid scores collected from the special education population, only 35.9% of students scored at or above the level of proficiency at the local site (California Department of Education, 2011). To best meet the individual needs of each special education student, various setting choices such as partial inclusion, full inclusion, and self-contained need to be available to provide all students the opportunity of an LRE. Even though researchers have favored full inclusion for many students (Cooper-Duffy, Szedia, & Hyer, 2010; Garcia & Tyler, 2010), others did not agree to it for all special education students (Maggin, Wehby, Moore Partin, Robertson, & Oliver, 2011; Mattison & Schneider, 2009; Mckenzie, 2009). Because of the local site's special education population failing to meet the state target in English, educational leaders at the local district office felt the need to consider offering several program settings.

Among the program settings they considered was a partial inclusion English setting for the struggling special education students in hopes it would improve English scores on the CMA in the LRE. Even though the local district adopted the partial inclusion English class as a setting option not previously offered at the local site, the Individualized Academic Program team, according to the Individuals with Disabilities Educational Act (IDEA) of 2004, must review Individualized Academic Programs annually to make decisions regarding a student's LRE. The LREs are decided for not only academic needs, but social and emotional as well. This study did not examine the social and emotional dimensions, which I therefore considered a limitation. This study

was meant solely to analyze academic performance in English. Special education students are affected by their educational environment and social interactions in (Douglas, Avres, Langone, Bell, & Meade, 2009; McPhillips & Shevlin, 2009). Consequentially, the emotional and social influence the learning environment has on special education students is an imperative consideration when determining LRE.

In a larger context, district-wide and statewide, the problem of failing to meet the educational progress required from the special education population has resulted in missing the targeted growth expectations, which has affected the state and local schools because of its effect on funding (California Department of Education, 2011). When funding is reduced because of inadequate progress, it has an adverse effect on schools by cutting into the availability of new textbook adoptions and the hiring of more teachers to reduce classroom size (California Department of Education, 2011). The principal goal of districts is to meet each student's individual needs; if an increase in target growth is accomplished, the district benefits twofold.

Because 2011 was the first year of implementation for the partial inclusion English class at the local site in replacement of the general education English class, a cumulative quantitative study decided the effectiveness of providing a partial inclusion English setting. Cumulative data collection through a quantitative study determined academic growth in the partial inclusion English class by using a quantitative pre- and post comparison of the CMA scores (Creswell, 2012). Previous state scores at the local site included special education students placed in the full inclusion setting. The local site evaluated in this study had a successful history of full inclusion practice and was known

statewide as a leadership site for full inclusion and collaboration (National Dissemination Center for Children with Disabilities [NICHCY], 2012). As the local site established a partial inclusion class for English, new data were available for review to improve its setting choices. This local problem was indicative of an overall national and global problem of inclusion practices, and this study provided additional information of which type of English placement would provide the LRE for special education students identified as functioning at least four grade levels below average (Center for Studies on Inclusive Education [CSIE], 2008).

### **Evidence of the Problem at the Local Level**

At an Individualized Academic Program meeting, when the team decides on a student with an Individualized Academic Program placement, the team must consider many elements such as the student's social, emotional, and academic needs. Having considered all these things, the team designs a free and appropriate education in the LRE. The placement of these students is a decision that takes much thought. When full inclusion placement is offered as a service setting at a site, consideration must be given to the requirements of the Individualized Academic Program and other placement settings such as partial inclusion or self-contained. Research was necessary to compare data of academic achievement in English for special education students after moving them from a full inclusion to a partial inclusion setting to support whether the population's academic achievement increased.

The selected school was an inclusion site, offering services for special education students with *mild*, *moderate*, and *severe* disabilities. The site previously offered only a

partial inclusion setting for mathematics. Inclusion services have increased because of program reforms on the placement of special education students, such as the IDEA and the No Child Left Behind Act (NCLB; CSIE, 2008). According to these laws, Individualized Academic Program teams must annually examine the LRE to receive specially designed instruction. In evaluating the effectiveness of this inclusion setting, the local Individualized Academic Program team felt the LRE should include an English partial inclusion setting as an alternative to what was being provided. To provide students the LRE to accomplish higher academic success in an environment that supports their social, emotional, and academic needs is a legal responsibility (Douglas et al., 2009; McPhillips & Shevlin, 2009). A comparison of students' academic scores before and after placement in English partial inclusion provided evidence of students' academic growth and whether the placement provided the best individual LRE for English growth.

The effect of partial inclusion instruction on student achievement and the lack of comparative data before the implementation of the partial inclusion setting was the driving reason for this study. The choice of topic resulted from the overall support of the full inclusion setting offered at this site and the concern that the partial inclusion setting would have adverse results. Accomplishing a partial inclusion English class would have been a "step backward" for full inclusion supporters at the local site because of their overwhelming support of full inclusion and the history and notoriety of the site's full inclusion setting. The study helped determine whether the partial inclusion English setting provided the skills, ability, or supports to increase achievement scores for special education students. The Individualized Academic Program team and other educators at



the local site can use the results of the study to support student placement, and educational leaders can use results to decide necessary supports for successful student settings, besides those professional development strategies already used to increase CMA scores.

### **Evidence of the Problem from the Professional Literature**

The conceptual framework for this study was built on the belief that special education students with an Individualized Academic Program benefit from various inclusion settings, which in turn raises academic scores. IDEA (2004) stated that special education students have the right to the LRE. Best practices for special education students in inclusion settings are still under exploration; however, available evidence supported the premise that inclusion settings work. Bissell and Lemons (2006a) built their educational theory by investigating ways to promote higher order thinking in college students. By using Bloom's taxonomy, Bissell and Lemons constructed a program to promote crucial thinking in all educational settings, partial or not. Crucial thinking is required when learning new information and curriculum, such as English. Reindal (2008) claimed that, in the inclusion setting, the social relational model of disability is a better fit. In this theory, Reindal explored how social relationships were built and affected children in various settings and concluded social relationships and their effect on special education students placed in an inclusion setting are positive. Reindal also explored whether disability is a social or medical construct. This evidence supported the local problem because concepts of disability influence one's concept of students' capabilities and in turn the choices about their inclusion placement.

According to Gürgür and Uzuner (2010), provision of special education support to students and teachers is necessary to accomplish successful inclusion practices. Gürgür and Uzuner argued that the number of students in the class, the academic success, social skill levels, the attitude, and experience of the classroom teacher, and the special education support services are the underlying crucial elements to successful inclusion. This theory contributes to an understanding of the local problem because it provides parameters for a successful partial inclusion setting. This theory was used to establish concrete propositions or relationships during the research process by making correlations between placement settings and academic achievement, focusing on the partial inclusion placement.

Cooper-Duffy et al. (2010), and Garcia and Tyler (2010) examined their theories of inclusion, English delivery, and the amount and type of supports needed. According to their theories, special education students will be academically successful in an inclusion model if the general education and special education teachers collaborate to modify and deliver the English instruction. Maggin et al. (2011) examined students with behavioral challenges in a partial inclusion setting and decided that the partial inclusion setting provided them with the focused academic and behavioral support they needed to be successful. Mattison and Schneider (2009) conducted a study of the effectiveness of the partial inclusion setting on students diagnosed with emotional disturbance. After a year's research, the data supported the overall academic effectiveness of the setting.

Reading achievement for students with particular learning disabilities was the focus of a study by Melekoglu (2011), who described how students with learning

disabilities show higher levels of deficiencies in reading compared with peers of the same age. The study found that 80% of students with a particular learning disability experienced reading difficulties as a primary manifestation of their disability, and the gap in achievement contributed to poor reading performance in the population. Melekoglu described how the typical reading level of a student with a particular learning disability was an average of 3.4 grade levels behind that of their nondisabled peers. Correia and Martins (2007) explained that specific learning disabilities (SLDs) can affect reading and writing in addition to problem-solving abilities and memory. According to Correia and Martins, SLDs are of neurobiological origin with a lifelong status, meaning they do not depreciate with age and require specialized instruction of strategies to bridge the learning gap.

Thus, students with SLDs have lower academic achievement in reading and writing compared with their nondisabled peers. Some studies supported self-contained settings for English and the benefit obtained by a small population of special education students (those with deafness/blindness/emotionally disturbed and intense behavioral disabilities) because of the specialization, needs of the disability, and the way English is developed in particular populations. In contrast, most research supported the full inclusion model for English. Most special education students benefit from inclusion settings, not only academically but also socially.

Evidence of the problem locally has been documented in the local school's report card, in which the failure to meet adequate progress on English benchmarks was noted (California Department of Education, 2011). Of the 129 special education students at the

school who took the CMA, a participatory rate of 98%, the targeted proficiency of 67.6% was not met (California Department of Education, 2011). Only 35.9% scored at the level of proficiency in the English subtest (California Department of Education, 2011).

### **Definitions**

Various settings available to special education students are *full inclusion*, *partial inclusion*, and *self-contained*. Inclusion provides a structural setting in a school that provides special-needs students with placement in a general education classroom among their peers with supports and changes provided by a special education teacher in accordance with each individual student's Individualized Education Program (O'Gorman & Drudy, 2010). Full inclusion is the placement of a student into the general education setting for the entire day (O'Gorman & Drudy, 2010). Partial inclusion is specialized academic instruction for only a part of a daily schedule. Students are included in the general education classroom except for one subject to various subjects for particular content areas such as mathematics or English, taught only by a special education teacher in a special education classroom, which is decided by individual needs as stated in the Individualized Academic Program (O'Gorman & Drudy, 2010). Self-contained placement is when the special education student requires a separate class with specialized instruction provided only by a special education teacher for their entire daily schedule (O'Gorman & Drudy, 2010). In a self-contained setting curriculum is modified to meet the individual needs of each student, per federal law. Changes are made to content delivery and the products produced are graded differently based on the Individualized Academic Program s, resulting in a modified grade, just as it does in the inclusion settings. In a self-

contained setting, special education students may still join their general education peers at lunch, physical education, or explore classes depending on the site, needs, ability, and the Individualized Academic Program, decided by state law (O’Gorman & Drudy, 2010).

*Special education students* are those with special educational needs, who have restraints in their ability to participate in and benefit from general education because of a physical, sensory, social-emotional, mental health, or learning disability defined by their Individualized Academic Programs (California Department of Education, 2011).

*Individualized education programs* are legal documents created by a team of members including a district representative, teachers, parents, service providers, and the student, to ensure the student’s educational needs and rights are met (California Department of Education, 2011; Lohmeier, 2009). *Core curriculum* means those compulsory school subjects that all students must study at school, such as mathematics, English, and social studies (Lohmeier, 2009). The core curriculum for English requires that reading and writing are explicitly taught (Lohmeier, 2009).

*The Individuals with Disabilities Act (IDEA) of 2004* is legislation supporting the rights of all students, including special education students, to learn. This legislation pushed teachers to continue to provide a Free and Appropriate Education to all students while requesting rigor in teaching to improve state scores in the LRE (CSIE, 2008). The *least restrictive environment (LRE)* was defined by IDEA as the most beneficial educational setting for students with special needs. This determination is made by the Individualized Academic Program team members and includes consideration of many elements, such as behavior, ability levels, and educational and social-emotional needs.

State testing is used to evaluate the progress of the site in meeting the requirements of No Child Left Behind (NCLB) legislation (California Department of Education, 2011). The *California Modified Assessment (CMA)* is the approved testing protocol used at the site to evaluate grade level proficiency in the core areas of mathematics and English (California Department of Education, 2011). The scores collected by the protocol are used to drive student placement in the site's program choices per grade level and provide reliability and validity data (ETS Educational Testing Service, 2012). Validity for the CMA is defined as a process that includes gathering evidence of content being accurately measured (ETS Educational Testing Service, 2012). The evidence is gathered by subject experts (ETS Educational Testing Service, 2012). On the CMA, content validity and criterion validity are examined by correlating the relationship between various scores that measure the same content (ETS Educational Testing Service, 2012). These data are then compared to decide whether a positive relationship exists (ETS Educational Testing Service, 2012). Reliability indicates consistency across various cores and/or administrations, determining whether the scores, not the test, are reliable (ETS Educational Testing Service, 2012). Reliability is also used to describe the CMA measurement errors evident in all tests (ETS Educational Testing Service, 2012). These errors are decided by repeatedly administering the same test (or a parallel) to the same student (ETS Educational Testing Service, 2012).

Several categories of disability constituted the sample of this study, including *autism, specific learning disabilities (SLDs), and speech and language impairment (SLI)*. Autism is just one of a series of disabilities under the area called autism spectrum

disorders. Autism is categorized as affecting a child's ability to communicate and interact with others (Mayo Clinic, 2012). Autism spectrum ranges in severity from being entirely nonverbal, requiring much assistance, to Asperger's syndrome, which typically involves social delays (Mayo Clinic, 2012). A SLD is a disorder in one or more of the basic psychological processes, which may include auditory processing (processing information heard), association (creating a relationship among items learned), and expression (the process of expressing what is learned; Evers, 2011). Evers (2011) described SLI as having a hearing or language disability. Disabilities are categorized as either nonsevere to severe, with severe disabilities being those having severe to profound cognitive impairments (Evers, 2011). Placement of special education students depends on the severity of their disability and educational needs (O'Gorman & Drudy, 2010).

### **Significance**

Analysis of student achievement in the partial inclusion English setting needed to be conducted to provide examples of how students demonstrated academic achievement when provided with this setting. My intention with this study was to provide valuable data to consider for future setting accomplishment, which would benefit future and present students by striving to support academic needs in English. When students are appropriately placed in the LRE and receive FAPE, they are given the best opportunity to benefit socially, emotionally, and academically (Douglas et al., 2009; McPhillips & Shevlin, 2009).

This research contributes to the understanding of the local problem and benefits the district; the intention was to provide the data necessary to support whether the English

partial inclusion setting established by the local district site provided the LRE academically in English, through the evidence of increased state scores, meeting the growth expectation target for proficiency of 67.6%. The significance of this data demonstrated the effectiveness of the English self-contained setting on special education students and will be used to guide program choices and placements decisions by the Individualized Academic Program teams and local district in the future.

### **Guiding/Research Question**

Studies comparing the movement of special education students' placement from full inclusion to partial inclusion were scarce in current literature. Previously, students at the local school had to move to a different site in the district that offered the partial inclusion setting for English. The data supported this shift, academically, by showing increased CMA English scores for these students at the study site, the local district will benefit from this knowledge, enabling them to support future decisions about educational setting considerations for special education students at every school site per IDEA and NCLB (CSIE, 2008; 2011). The local problem with the push to meet state and federal standards on state testing in English started the consideration and review of individual cases of struggling special education students to expand program settings available.

After a new educational setting was established at a site, a quantitative study was useful to determine the effectiveness of the new service setting (Creswell, 2012). For this study, a quantitative study provided data for the guiding research question: How will the establishment of a partial inclusion setting for English, replacing the general education class offered at the local setting for special education students' schedules, influence CMA



English scores? This question helped drive the project of the study, a professional development on strategies to raise CMA scores for special education students in English.

### **Review of the Literature**

The failure to meet state benchmarks has resulted in a reevaluation of program choices available to meet the diverse needs of special education students in the LRE demanded by law. State law and the IDEA (2004) have required school districts to provide a free and appropriate education to all students, despite diversity, including students with special needs (CSIE, 2008). Inclusion is a growing practice in the public school settings, and researchers have continually conducted studies to assess what settings and practices might suit the needs of special education students in the LRE while still meeting federal expectations in NCLB (2002). The push for inclusion strengthened in 1994 because of the Salamanca Statement, which stressed access to the core curriculum in the general education environment for all children, young people, and adults, especially special education children (Roa, 2009). The Salamanca Statement called for the international community to support inclusion and was created in June of 1994 when 92 governments and 25 international organizations formed the World Conference on Special Needs Education and agreed to the statement to endorse and support inclusion (CSIE, 2008). IDEA made inclusion placement of special education students government supported and strengthened its accomplishment. This legislation urged districts to continue to provide FAPE in the LRE to all students while requesting consistency and thoroughness in teaching to improve state scores. The federal NCLB's primary purpose was to hold districts, schools, and states accountable for academic

improvement. This academic accountability includes the 14% of public school students that receive special education support (Chudowsky, Chudowsky, & Center on Education Policy, 2009). According to NCLB, by 2014, 100% of students must score at the proficient level on the state tests (Chudowsky et al., 2009). NCLB required schools and districts to close the achievement gap between students with disabilities and those without to the utmost extent possible while providing a FAPE in the LRE (Chudowsky et al., 2009).

Research studies supported inclusive and partial inclusion settings (Roa, 2009; Smith, 2009). Special education students require consideration of their particular needs to promote achievement and decide the LRE. The popularity of the inclusion model at the local school created a push to place special education students into full inclusion. Administrators and educational leaders at the site in the study, after reviewing their data, decided its special education population was not meeting state expectations in the full inclusion model and reevaluated cases on an individual bases to decide the appropriate LRE (California Department of Education, 2011). Individualized Academic Program team members discussed LRE choices including a partial inclusion setting for English in the hope of meeting the individualized needs of each student, which in turn would result in raising state scores and meeting the federal expectations set forth by NCLB. In the partial inclusion setting, special education students receive remedial instruction in certain subject areas by a specialized academic instructor separate from the general education environment.

In addition, the success of partial inclusion settings on special education students in elementary schools led to a movement of partial inclusion settings at the middle school level (Kozik, Cooney, Vinciguerra, Gradel, & Black, 2009). Officials at the local site established a partial inclusion setting to provide an LRE to meet the particular needs of special education students with Individualized Academic Programs who were failing to meet state growth requirements in the subcategory of English. A review of literature was conducted to explore various LRE settings, including full inclusion, partial inclusion, and self-contained, as well as best practices for English development for special education students.

### **Inclusion Success through Collaboration**

Collaboration between general and special educators is crucial in easing effective inclusion services to special education students. With collaboration, general education teachers and special educators can experience shared ownership of the students' educational curriculum delivery. Students also assume joint responsibility for outcomes. Despite the collaborative structure (for example, one-on-one interactions, co-teaching, collaborative consultation), successful collaboration requires planning time, effort, and administrative support, especially as the amount of administrative support has a direct influence on the success of collaboration (Carter, Prater, Jackson, & Marchant, 2009). Santangelo (2009a) conducted a study over a 2-year span to examine accomplishment and sustainability of collaborative problem solving and the elements that influenced them. Partnerships were necessary to create collaborate problem solving programs, again

highlighting the power of effective communication and collaboration for academic success (Santangelo, 2009a).

Collaboration at the middle school level is crucial because of the number of transitions, teachers, and courses the students have. Collaboration between the general education teachers and special education teachers is crucial to making inclusion in middle school successful by opening the communication between the general education and special education teachers, allowing them the opportunity to collaborate with curriculum planning (Kozik et al., 2009). Kozik et al. (2009) stated that full inclusion of special education students in the middle school setting has been hindered by particular concerns that had not been a problem at the elementary level, after selecting 35 participants from a variety of fields in education, the authors examined what elements participants said were imperative for success in the inclusion setting. Among the imperative elements were communication and listening skills for preliminary grades, adolescent development, and researched-based practices for the middle school level (Kozik et al., 2009).

Educators at the research site also considered collaboration an important aspect of inclusion success. They used a collaboration flowchart to ensure the broadcast of information throughout the staff. Monthly meetings were scheduled for department chairs and team leaders to disseminate information from the leadership team, although interdisciplinary teams met weekly to collaborate with continuous daily collaboration between the general education teacher and the special education teacher.

## Personal Needs and Learning Styles

When looking at student placement in an individualized academic program, consideration of the personal needs and learning styles of the student is important. Over time, researchers of intelligence have developed theories, beginning with the theory of various intelligences and, in particular, Gardner's research toward child development (Moran, Kornhaber, & Gardner, 2006). This research has been important to the field of education because it helps to develop teaching styles. Gardner (as cited in Moran et al., 2006) categorized various intelligences as *existential* (thinking outside the box of data), *naturalistic* (dealing with nature), *intrapersonal* (self-thought), *interpersonal* (works well with others), *bodily kinesthetic* (movement with the body), *spatial* (3D manipulation), *linguistic* (spoken and written word), *musical* (musical concepts), and *logical-mathematical* (numerical operations and symbols).

Coleman (2008) introduced the theory of emotional intelligence as a proverbial bridge to connect emotionally with students ignored in classrooms across America. The theory of emotional intelligences asks that students and teachers focus on the emotional fabric of a child's life; according to Coleman, there are four domains of emotional intelligence: relationship management, self-management, self-behavior, and social awareness. However, unlike other theorists, Coleman (2008) suggested that emotional intelligences are learned abilities, not innate, because emotional intelligence matures with age and is best fostered through proper guidance. Accomplishing new programs in the school setting focused on teaching students how to understand their own emotions and the emotions of others better will create a better learning environment and higher

achievement scores (Coleman, 2008). There is a need to help all students through social-emotional learning (Coleman, 2008). Promoting social and emotional learning improves positive behavior, classroom discipline, attitudes toward school in general, and attendance rates, which in turn will raise academic scores on state testing to meet the expectations of NCLB. Educators at the local site strove throughout the years to promote and address all learning styles through their inclusion model. Special programs put into place at the school are Advancement Via Individual Determination (AVID), Peer Leaders, and Peer Helpers, and they offered a way to explore classes to promote social unity.

Student populations are increasingly diverse, so there is a need to educate and give students the opportunity to explore and discuss these differences to ensure academic success on state testing. Roa (2009) and Smith (2009) discussed the approaches to teaching students from diverse backgrounds, with Roa (2009) exploring the best practices of inclusion, while Smith (2009) explored best practices of multicultural education. However, each argues that inclusion and heterogeneous grouping for their populations have provided wonderful results, but they caution in the delivery and sensitivity to each population. Students must also be made aware of best practice in social equity for the entire success of all students. A collaborative effort from all stakeholders is necessary for inclusion practices to become the norm (Timmons, 2006). A shared philosophy is crucial. At the study site, inclusion is the shared philosophy of the school.

Effects of inclusion on special education students are important in providing an academic learning environment. Special education students performed the same as non-

identified students despite the number of special education students in the class (Ruijs, Van der Veen, & Peetsma, 2010). The biggest factor influencing achievement for special education students in the inclusion setting was background variables such as socioeconomic status and parental education (Ruijs et al., 2010). Special education students mainstreamed performed similarly to general education students on language arts testing in growth rate (Christ, Silberglitt, Yeo, & Cormier, 2010). This information is useful in this study because it shows that the inclusion setting has no adverse academic effect on special education students.

### **Training and Support for Special Education Program Success**

Administrative support helps to build teacher perspectives on inclusion practices. These perspectives on special education inclusion practices have a strong influence on the success of the setting. Through interviewing and observing teachers in the inclusion setting, it was determined that teachers thought the expectations placed on the general education teacher were unreasonable and followed the lack of formal training on mainstreaming (Fuchs & Southern Illinois, 2010). The teachers also thought their administration did not provide enough support and in-service opportunities to make the setting effective, while other contributors such as class-size, collaboration and planning time, and sharing duties between the special education and general education teachers were also lacking (Fuchs & Southern Illinois, 2010).

Particular elements are important to successful inclusion practices such as teacher's attitudes (Hwang & Evans, 2011). Even if a teacher's view of inclusion is positive, the accomplishment and accommodations needed for special education students

to be successful is still a burden for them (Hwang & Evans, 2011). Teacher attitude, preparedness, class-size, and support in accomplishment had also been linked as deciding elements for a successful inclusion setting (Kilanowski-Press, Foote, & Rinaldo, 2010a).

Providing support and training in the new emergence of inclusion in English settings is important (Griffiths, 2009). Although pedagogical approaches broke down some barriers of inclusion, such as lack of training on collaborative and co teaching strategies, noteworthy changes still needed to be accomplished to support the transition (Griffiths, 2009). Breaking down inclusion barriers and misconceptions based on fears by providing adequate training and collaboration time is important in creating a successful and supported school system.

Training and education to increase support and understanding from parents is important. Federal law behind the Individualized Academic Program process includes parent involvement and concurrence, therefore, discussion on parent perspectives on inclusion was examined (Leyser & Kirk, 2011). Parents supported the philosophical and legal principals of inclusion, but were worried that the general education teachers were not adequately prepared to meet the needs of their children, and were concerned about services and communication difficulties (Leyser & Kirk, 2011). As the students themselves continue to experience a transition when moving from a partial inclusion separate classroom to an inclusion setting, preparation is important (Odluyurt & Batu, 2010). Prompting was an effective method of preparation (Odluyurt & Batu, 2010).

The principal barriers to inclusion success are conceptual unpreparedness toward inclusion versus integration, knowledge, and false conceptualizations of special



educational needs and difficulties associated with differentiation and time limitations (Paliokosta & Blandford, 2010). These barriers were linked to attitude and teacher resistance to the inclusion practice (Paliokosta & Blandford, 2010). The school team must be effective to promote academic success to raise scores. The study site has a strong parent outreach program, and offers parents the opportunity to become involved in their children's education by attending informational presentations and coming on campus to share a meal with their students once a month.

Collaboration is important in supporting the inclusion setting and implementing teaching strategies. Through a collaborative blended strategy approach to curriculum delivery, success in literacy has been accomplished (Cooper-Duffy et al., 2010). The complications in teaching literacy to various levels in the partial inclusion classroom adversely affect literacy achievement, and successful inclusive literacy results by blending teaching strategies between the special education and general education teacher (Cooper-Duffy et al., 2010). Collaboration and co-teaching can be a bridge for the literacy gap for students with learning disabilities (Fenty, McDuffie-Landrom, & Fisher, 2012). Research supports the collaborative approach of curriculum delivery driven by constant engagement and discussions between the special and general education teachers (Fenty et al., 2012). Throughout the years, the study site remains a model site for inclusion and the blending of special education and general education collaboration.

Supportive instructional leadership is important in providing a successful partial inclusion setting. Principals' accountability for higher achievement results has driven a change in instructional design in self-contained settings to promote literacy for special

education students (Sanzo, Sherman, & Clayton, 2011). Through administrative support and planning, teachers are provided the necessary tools (planning and access to best practices) to provide their self-contained students an enriched and successful literacy development opportunities (Sanzo et al., 2011).

### **Special Education and English Achievement**

Literacy is an educational goal for all students despite their disability and is a large component on the state testing requirements. Various strategies have been studied to find the most effective literacy programs and tools, such as presentational, illustrative, and technological. Accomplishment of these strategies in partial inclusion and full inclusion settings is noteworthy. The National Center for Education Evaluation and Regional Assistance (2010) described the results of various studies examining literacy development in students with and without disabilities. This study provides the background for various other studies because of its extensive examination of literacy learning needs in a longitudinal 10-year study.

Presentational, instructional, illustrative, translational, and succinct supports on listening and reading comprehension effect students with intellectual disabilities (Douglas et al., 2009). The effects were evaluated using a series of single-subject experiments. The program the researcher's accomplished was e-text, a computer-based program, which incorporates a variety of supports such as text to speech, graphic organizers, text highlighting, digitized voice, video summaries, and text-linked photographs (Douglas et al., 2009). The two supports found to make the biggest influence on students with intellectual disabilities were the voice to text feature and the graphic

organizers. The results of the research supported the accomplishment of the program in any educational setting that has the technological support to run the program (Douglas et al., 2009).

Other researchers of special education have also examined E-text's benefits. One studied the benefits of e-text on literacy rates of special education students (Izzo, Yurick, & McArrell, 2009). E-text is a bridge to access general education curriculum for high school special education students and also scaffolds literacy for students with disabilities (Anderson-Inman, 2009; Izzo et al, 2009). The effects of the supported electronic text (e-Text) on literacy rates for special education students were the focus of a study and included the results of four studies conducted by the National Center for Supported e-Text (NCSeT) which proved effective for special education students in all four studies reviewed (Anderson-Inman, 2009). Students with disabilities use a variety of assistive and Internet-based technologies to increase their literacy rates (Wollack & Koppenharver, 2011).

Augmentative communication is a form of technology and change provided to special education students to help them in literacy development. Appropriate skills and settings for literacy development for special education students are required for augmentative communication (Ruppar, Dymond, & Gaffney, 2011a). Teachers tended to change their general education literacy delivery when students requiring technology were present (Ruppar et al., 2011a). Additionally, teachers were underprepared and struggled with understanding how to adapt literacy content for equal access, therefore, the teachers changed their content (Ruppar et al., 2011a).

A balanced literacy approach, is needed to teach literacy effectively (Carnahan, Williamson, Hollingshead, & Israel, 2012). In their study, they discussed the value of incorporating technology into instruction is a valuable scaffold to reach the crucial instructional opportunities needed such as, daily reading, writing, and word study (Carnahan et al, 2012). By using technology, the instruction became more meaningful to the students, and the students in response were more engaged in their learning (Carnahan et al, 2012). Similarly, assistive technology (AT) effects literacy rates of students with disabilities (Puckett, Judge, & Brozo, 2009). Teacher development opportunities for assistive technology were provided to teachers and the results supported literacy development helped by AT (Puckett et al., 2009). The study site is using technology to enhance its English program. iPods and computer laptops are amalgamated in the curriculum weekly and a technology-based intervention program is accomplished in the partial inclusion setting.

Using developing technology benefits and assists emergent literacy, important in language and literacy development. Early interventions by the speech pathologist focusing on alphabet knowledge, sound awareness, and contextualization helped build emergent literacy skills (Girolametto, Weitzman, & Greenberg, 2012). In the early childhood settings, children experiencing the interventive speech therapy had a notably higher rate of utterances and print/sound connections (Girolametto et al., 2012). Likewise, early childhood special educators have been promoting early literacy for more than 25 years (Goldstein, 2011). The challenge is looking toward the next 25 years and effectively developing an early literacy program for students with intellectual and other

developmental disabilities (Goldstein, 2011). By promoting literacy skills focused on spoken language development (vocabulary, grammar, and word knowledge); early literacy interventions were beneficial for students with disabilities (Goldstein, 2011).

Formative and cumulative assessments are useful tools for guiding literacy instruction and commonly used in the classroom. Ferreri (2009) used assessment-guided differentiation as a literacy-development guide for a student with several disabilities in an inclusion setting. Formative assessment not only guides instruction but also aids in making decisions on adaptations to the programs and materials (Ferreri, 2009). Using the assessments, instructional practices proved effective for reading and writing achievement (Ferreri, 2009).

Increasing literacy rates of bilingual special education students is important due to the attention that this focus group has gained because of new school reforms (Orelus & Hills, 2010). There were three determining elements in bilingual literacy improvement, teaching practices, self-motivation, and family support (Orelus & Hills, 2010). Being culturally responsive to culturally and linguistically diverse learners with disabilities are crucial in their literacy development. A culturally responsive practice is required by general and special education teachers to ensure literacy development for culturally and linguistically diverse students with learning disabilities (Utley, Obiakor, & Jeffrey, 2011). Culturally sound techniques proved to maximize literacy learning for the participants involved (Utley et al., 2011).

Many elements are involved in literacy development, such as reading comprehension, spoken expression, listening comprehension, and written expression.

Age-normed tests were administered to students in grades one, three, five, and seven to decide language skills needed for literacy development and supported theoretical implications for comprehension and expression in literacy by hand, eye, mouth, and ear despite the individual differences for gifted, general and special education students (Berninger & Abbott, 2010). Word study, fluency, vocabulary, comprehension and motivation have a relationship to literacy (Roberts, Torgesen, Boardman, & Scammacca, 2008). These elements are crucial for reading improvement of struggling readers. With evidence-based instruction, these crucial elements can effectively be taught to special education students (Roberts et al., 2008). Shared story reading is an approach to access grade level curriculum by reader student interaction. Shared reading promotes literacy of students with extensive support needs through engagement (Hudson & Test, 2011). The shared reading experience involving the student listening as the instructor reads text aloud proved an effective scaffold to literacy development according to the study (Hudson & Test, 2011).

Poetry emotion is one method among a variety of literacy practices explored to promote literacy for special education students. Poetry could be used successfully to enhance a student's ability to read and understand text (Westgate Pesola, 2008)The previous confines of classifying ability for students with disabilities, such as IQ, need to be thrown away in the wake of a new era and outlook on disabilities for literacy education (Westgate Pesola, 2008). Verbalized reading rates are also one of the signs for literacy, and by studying second-grade verbalized reading rates that, despite school characteristics being noteworthy predictors of student's first verbalized reading status,

boys and girls in second-grade growth rates in reading showed no noteworthy difference in students without disabilities (Wang, Algozzine, Ma, & Porfeli, 2011). On the contrast, students with learning disabilities showed a notably lower rate of increase in reading fluency rate and verbalized reading, supporting the need for differentiated and explicit instruction for special education students (Wang et al., 2011). Using dialogic reading incorporating interactive picture book reading can be used to bridge the literacy gap of elementary students and the strategy supports expressive language development, key in early language development (Flynn, 2011). Using vocabulary enrichment, comprehension expansion, and relating text to self, the study proved successful for literacy growth (Flynn, 2011).

Response to intervention (RTI) is used throughout the country to bridge the achievement gap in literacy for students with and without special needs. Including RTI is an important intervention used to address literacy needs for all student populations. Tier I and Tier II instruction is used to promote literacy in struggling special education sixth graders identified as English-language learners (Graves, Duesbery, Brandon, McIntosh, & Pyle, 2011). Using intense instruction in comprehension, vocabulary, word analysis, and fluency building, noteworthy growth was documented (Graves et al., 2011)., RTI was also examined in the middle school setting for literacy growth with Content Literacy Curriculum (CLC) (Ehren, Deshler, & Graner, 2010). To promote success, special care, and monitoring was necessary to help the function and decision making of the educational teams and cohesion and discussion among levels in needed to make literacy growth achievable (Ehren et al., 2010). RTI in middle school was also the focus of a

follow-up study by (Graves et al., 2011). RTI's has effects on literacy for students with learning disabilities scoring *far below* or *below* basic level in literacy on state testing (Graves et al., 2011). The student population consisted mostly of low socioeconomic families in an inner-city urban school (Graves et al., 2011). The study supported the intervention program, showing better improvement scores for those students receiving the intervention (Graves et al., 2011).

Studies on English accomplishment settings in Ireland where students with Dyslexia were the focus also provided useful data to support this study. The three settings examined were reading schools, reading units, and mainstream support (McPhillips & Shevlin, 2009). Parents, teachers, and the tutors supporting students with dyslexia were surveyed with questionnaires about the effectiveness of three models of special education placement (McPhillips & Shevlin, 2009). The conclusions of the study reported that there were similarities in teaching practices in the mainstream and partial inclusion settings, yet despite the partial inclusion placement did not guarantee the students will 'catch up' academically to their peers (McPhillips & Shevlin, 2009). Having special education students in the inclusion classroom can benefit the literacy needs of all students involved. At the study site, inclusion, partial and full, provides the students the opportunity to benefit academically.

### **Partial Inclusion Settings and the Benefits on Literacy**

Partial inclusion settings proved effective for particular student populations. Literacy supports in various settings also focused on the literacy rate of students with deaf-blindness, visual, and several impairments (Mckenzie, 2009). Using emergent



literacy supports such as a print-rich environment, language-rich strategies and activities, and classroom environment enrich literacy (Mckenzie, 2009). Unlike the previous studies mentioned (Douglas et al., 2010; McPhillips & Shevlin, 2009), Mckenzie (2009) found that her research supported partial inclusion settings for literacy development of students with deafness and blindness despite the benefits for the general education students.

Autism is a disability that effects literacy development, and when coupled with a second-language learner, literacy is even more difficult to reach. English-language learners with learning disabilities' academic success in the general education environment were examined and the study found that while particular strategies were followed to support students' cognitive and academic development, the inclusion setting could be successful (Garcia & Tyler, 2010). For these strategies to be accomplished, communication and collaboration between the general education teacher and the special education teachers must be explicit in addition to support from the school districts and administrators (Garcia & Tyler, 2010).

Not only do students with autism bring distinctive gifts and interests to the inclusion classroom, the way they respond to teaching situations might reflect flaws in the pedagogy (Chandler-Olcott & Kluth, 2009). Students with autism benefit from the inclusion setting by making the general education teachers become more reflective and explicit in their teaching (Chandler-Olcott & Kluth, 2009). Because of the particular needs of autistic students, the teaching environment is altered to meet those needs, adding literacy components to enrich the environment (Chandler-Olcott & Kluth, 2009). Inclusion supports social norms for students with Autism (Chandler-Olcott & Kluth,

2009). There was noted successes in regulating social behavior by using peer interaction in the inclusion setting (Chandler-Olcott & Kluth, 2009). These added elements benefit all students in the classroom, providing them the opportunity for academic success and improved scores (Chandler-Olcott & Kluth, 2009).

Various literacy programs can be accomplished in self-contained and full inclusion settings with successful results. Implementing a readers' theater in a partial inclusion classroom resulted in an increase in literacy rates for the special education students involved (Garrett & O'Connor, 2010). Students seem thriving in the small group environment (Garrett & O'Connor, 2010). Another strategy explored in literacy development for special education students is called piggybacking (Paxton-Buursma & Walker, 2008). Piggybacking, is a process of using questioning strategies and writing to enrich reading and literacy development (Paxton-Buursma & Walker, 2008). The students are placed in small groups, led by an instructor, and taught how to incorporate the components of the book club to enrich the experience through discussion (Paxton-Buursma & Walker, 2008). This process is beneficial for students with special needs in all settings.

Special education students need to be prepared for their future the same as general education students and job preparedness begins with literacy skills, yet for those students performing far below grade level, the push to be prepared is even stronger. Reading comprehension in adolescents with learning disabilities is examined to provide the appropriate instruction in less time with the goal of bridging the gap (Faggella-Luby & Deshler 2008). Conclusions supported targeted instruction, focused cognitive strategies

and explicit instruction to special education students, which can be provided in a partial inclusion setting (Faggella-Luby & Deshler, 2008).

### **Self-Contained Setting Benefits on Literacy Development**

Reading fluency is an important component of literacy development. Instruction in reading fluency is linked to reading achievement and is most commonly taught through guided repeated verbalized reading instruction (Raninski, Samuels, Heibert, Petscher, and Feller, 2011). A computer program is used to ease reading fluency instruction with positive results (Raninski et al., 2011). A computer program is accessible in a self-contained setting because it requires no large group instruction and the conclusions were positive for special education students besides regular education students (Raninski et al. 2011).

Student needs do not disappear when they join the juvenile justice system small group environment. Although the setting differs from public choices available, it means a self-contained small group setting. In a similar study on literacy, the small group environment has proved effective in a juvenile justice setting for special education students (Houchins, Jolivette, Shippen, & Lambert, 2010). Literacy is a substantial need in the juvenile system despite having a disability (Houchins et al., 2010). By adding a learning disability to the equation, the task becomes even more important and difficult (Houchins et al., 2010). This drives the purpose of this study because it supports the need for literacy development that can reach multiple populations.

Hard of hearing or deaf children also struggle with literacy development and spend time in a self-contained classroom receiving literacy instruction. There were

particular correlations between the learning environment and the amount of knowledge attained in literacy development (Easterbrooks, Lederberg, & Conner, 2010). The self-contained setting was successful for the hard of hearing population because of its focus on emergent literacy skills acquisition required for the population, not typically promoted in the general education classroom (Easterbrooks et al., 2010).

Self-contained classrooms are based on ability grouping because of the low academic levels of the students. Ability grouping and placement was examined to explore how placement decisions are made and the elements involved in the decision making (Muijs & Dunne, 2010). Special education students were identified as ability grouped into an over-represented low set group (Muijs & Dunne, 2010). Ability grouping is exactly the foundation of a self-contained classroom.

Self-contained settings are frequently used for placement of students with severe behavioral disorders. The academic achievement of students with severe emotional and behavioral disorders in a self-contained setting was studied and determined that the students performed far below (functioning three to four grade levels below) that of age typical peers in reading, mathematics, and written expression (Lane, Barton-Arwood, Nelson, & Wehby, 2008). The students involved in the study scored well below the twenty-fifth percentile (Lane et al., 2008). . Students with behavior challenges in a self-contained setting had been placed in the self-contained setting to provide them with focused academic and behavioral supports (Maggin et al., 2011). Teachers could provide more focused instruction to smaller groups of students when provided the self-contained setting (Maggin et al., 2011). Despite the opportunity for more focused small group

instruction, the study found that instructional strategies and practices did not differ from that of an inclusion setting (Maggin et al., 2011).

Demystifying the secret world of the self-contained classroom and how instruction differs is the focus of a study that examined social studies instruction in the self-contained classroom and how the instruction differs from that of a general education classroom (Lintner & Schweder, 2008). Self-contained special education teachers ranked social studies instruction fourth in importance of delivery (Lintner & Schweder, 2008). Although the special education teachers had allotted the same time and timing for the instruction, the relevance of social studies was poor compared with other core subjects (Lintner & Schweder, 2008). Despite the setting differences of the self-contained class, this study also found that instructional strategies were similar on differentiation, collaboration, and opportunities for hands-on learning (Lintner & Schweder, 2008).

Similarly, researchers found that out of the national 49.9% of students' receiving special education services, 23% of them receive their services in a self-contained setting (Causton-Theoharis, Theoharis, Orsati, & Cosier, 2011). Self-contained classrooms are successful if they provide a sense of community, distraction-free environments, behavioral support, and specialized instruction (Causton-Theoharis et al., 2011). On the other hand, the self-contained classroom students' perceptions declared that students placed in the self-contained classroom reported higher levels of dependence and lowered levels of self-determination (Jones & Hensley, 2012). There is a need to improve student relationships and motivation in self-contained settings (Jones & Hensley, 2012).

Students with specific disabilities benefit more from self-contained settings according to literature. The effectiveness of a newly accomplished self-contained setting for students with emotional disturbances is the focus of a study examined such variables as attendance, academic achievement, and disciplinary records (Mattison & Schneider, 2009). The setting was implemented because of a need in the district to provide adequate services to the special education students, similar to the setting being reviewed at the study site (Mattison & Schneider, 2009). After a year, the data supported the overall effectiveness of the setting academically, yet levels of absenteeism and discipline referrals remained the same (Mattison & Schneider, 2009). In this study, self-contained setting selection proved effective for a particular population.

### **Conclusion of Literature Review**

Many elements weigh on the success of inclusion settings such as teacher preparedness, attitude, perceptions, training and support, class-size, collaboration, blended instruction, technology, various needs and learning styles, and transitional preparation. Creating a school setting where teachers and administration are all using collaborative strategies to promote inclusion success is integral (Fenty et al., 2012; Sanzo et al. 2011). By preparing teachers, attitudes and perceptions of inclusion are improved (Ruppar, Dymond, & Gaffney 2011b). By controlling class size and providing instructional opportunities that include technology and blended instruction positive results were found (Cooper-Duffy et al. 2010; Douglas et al., 2009; Wollack & Koppenharver 2011). Consideration of learning styles is successfully accomplished

through differentiated instruction (Ferreri, 2009; Hudson & Test, 2011; Orelus & Hills 2010),

In addition, English inclusion settings have been shown to support literacy (Douglas et al. 2009; McPhillips & Shevlin, 2009), and self-contained literacy programs can be effective for particular areas of need such as deafness and blindness (Mckenzie, 2009), behavioral disabilities (Lintner & Schweder, 2008), and emotional disturbance (Mattison & Schneider, 2009). According to research, various inclusion settings advantages far outweigh the disadvantages, as inclusion settings benefit the social and academic growth of special education students. For inclusion settings to be successful, consideration must be made in preparing the environment, involving the teachers and students, as feeling supported in and out of the classroom is important to teachers, and affects their attitudes toward inclusion settings. Inclusion is not a setting to be constructed thoughtlessly, and it takes careful and constant attention. If particular needs are met, then students have the equal opportunity for academic success and increased state scores to meet the expectations laid down by the federal government in NCLB for bridging the academic achievement gap.

For this study several search terms included *inclusion, partial inclusion, self-contained, literacy, English development, state testing, AYP, and special education student success in English*. Key words were studied through an electronic library website provided by the University. Once the key terms were searched using the provided search engine, relevant articles were carefully screened for relevance to the study. Relevant articles were then read and grouped according to subject for use in the literature review

with the intent of supporting the purpose of this study. The broader problem of successful academic placement of special education students is associated with the local problem of failure to meet state expectations in the sub category of English on the CMA. According to the local site's report card, the school scored only 35.9% proficiency despite the goal of 67.6% (California Department of Education, 2011).

### **Implications**

The studies by Cooper-Duffy et al. (2010), Garcia and Tyler (2010), Douglas et al. (2009), and McPhillips and Shevlin (2009) supported students with a variety of educational needs benefiting from a variety of inclusion settings, which includes partial inclusion. However, Mckenzie (2009), Lintner & Schweder (2008), and Mattison & Schneider, (2009) suggest that students benefit from self-contained settings, especially students with behavioral conditions, emotional disturbance, and students with deafness and blindness. By law, special education students must have been taught by highly capable instructors, therefore, it comes down to how much training/ support and collaboration/ team-teaching, and the intensity of the student's needs. If the level of need impedes on their education (they are not getting the services they need) or of others (namely, social, academic, or emotional needs so intense that it disrupts the learning or safety of their peers), self-contained and partial inclusion settings have been proved successful by past research (NICHCY, 2012) Because of this, it justifies the need to carry out this study.

This study provided valuable general data for future setting accomplishments and student placement considerations. The influence on students was shown in academic



growth by providing the appropriate LRE. This data affects future setting accomplishment and was used to drive program improvements and future formative and cumulative assessment of the setting. Student placement considerations are also affected based on the data collected because the data can be used to decide whether placement into the partial inclusion English class is suitable for particular academic needs of special education students. This data was used in decision making by the Individualized Academic Program team for future program placement considerations. In addition, the district has the assurance they are providing for the needs of their student population by providing several inclusion program setting choices based on the outcome of the study because the results will show whether there was an academic gain in the new partial inclusion setting. This white paper model was used to transmit the results of the evaluation to the school district by communicating the results through a formal meeting at the district. The district will work closely with the various sites to use the information from the study to improve the various sites. The district can discuss the results of the study with fellow districts to help them make informative decisions about how their special education programs are accomplished. This study supports steps toward addressing adequate yearly progress (AYP) by providing evidence to support the growth of state scores for special education students in English and by adhering to the law of identifying the LRE for each individualized student. The evidence of this study, guiding student placement to encourage academic performance growth, increasing the AYP, is informative toward student placement decisions.

## Summary

Meeting each student's individual needs is the focus of school districts. Special education students, with Individualized Academic Program's are reviewed annually to decide progress and best program placement (LRE). Special-needs students at the local site reviewed were not meeting the academic expectations set forth by the government, reflected in missing the AYP in the subcategory of English. In reaction, the district reevaluated available program settings at the study site and decided to provide a partial inclusion setting in English not previously available. The purpose of this study was to provide evidence of how to better serve the special education population.

Research theories support inclusion models for students with several disabilities. Self-contained placement is supported by research, proving beneficial for students with low-incident disabilities such as deafness, blindness, emotional and behavioral disabilities. Despite the overwhelming amount of research theories and current literature supporting a full inclusion setting for special education students, the district in this study, because of low English scores, reevaluated students through the Individualized Academic Program process to decide whether the students performing at least four grade levels below in English required a self-contained class for English. Partial inclusion setting research supports students with disabilities academic growth through focused remedial instruction.

The remaining section is the results of a quantitative study using comparative data analysis was used to compare the English CMA scores from the 2011 year, without the setting in place, with the scores from the 2012 and 2013 years. The data includes scores

from self-contained English students placed into the partial inclusion setting at the site in the study. All data was labeled to ensure anonymity. The collected data was analyzed using a pre- and posttest comparative data analysis (Wilcoxon Signed Ranks Test). The local district was presented with a white paper model describing the data analysis conclusions. The data can be used by the district to guide decision making for future English program settings promoting social change.

## Section 2: The Methodology

### **Research Design**

A comparative quantitative design was the best for this pre- and posttest study. I collected and analyzed data from before and after the local site's establishment of a partial inclusion setting for English. Comparative data analysis worked best for this pre- and posttest quantitative study because a pre- and posttest design would require data to be analyzed before and after implementation of the new setting (Creswell, 2012). The data set included a complete class set over a three-year time frame. By using the pre- and posttest comparative quantitative design, the data were compared longitudinally. Data collected determined whether the partial inclusion setting for English was successful and allowed for analytical review. Elevated scores would have shown growth after the comparative data analysis of reading and writing scores from the previous year on the CMA in the subcategory of English. The CMA scores were used as performance outcomes and measures to be used as signs within the study. The CMA scores were analyzed using comparative data analysis depending on which test each student took. The students take the CMA based on the Individualized Academic Program team decision on which test is academically suitable for each student. The decision of which test is academically appropriate is based on previous state scores on record. The overall quantitative study's goal was to determine the effectiveness of a specific LRE (the partial inclusion English setting) in meeting the diverse needs of students by analyzing the special education students' CMA scores before and after implementation. This goal was addressed by answering the research question: How will the establishment of a partial

inclusion setting for English, replacing the general education class offered at the local setting for special education students' schedules, influence CMA English scores?

### **Setting and Sample**

For this study, the middle school selected was in California, north of Los Angeles, and serviced Grades 6, 7, and 8. Student populations and staff were diverse in culture and socioeconomic class. Out of 1,267 students, the makeup consisted of 4.4% Asian, 3.2% Filipino, 56% Hispanic or Latino, 3.8% African American, and 32% White/non-Hispanic. At the time of this study, the research site had 110 special education students and accomplished full inclusion and partial inclusion of mathematics and English for students with nonsevere needs (processing disorders, autism, attention disorders). The site also housed two self-contained classrooms for students with moderate to severe needs (cerebral palsy, orthopedic impairment, medical fragility) and two intensive behavior intervention (IBI) classes (for students with emotional disturbances, anxiety, and social disorders). The data consisted of CMA scores from a small population of sixth and seventh grade special education students with nonsevere needs at one local middle school.

The convenience sample included data from special education students with nonsevere needs in a partial inclusion English classroom: two seventh graders (referred to from this point as Students 7a and 7b) and six sixth graders (Students 6a, 6b, 6c, 6d, 6e, and 6f), totaling eight. A convenience sample was chosen as the best sample because it was readily available and constituted the entire data set of the population (Creswell, 2012). The teacher-to-student ratio as the local school was 1:8. The special education

population in this class qualified for services under the following primary disabilities: one participant with autism with a secondary qualification of a SLI, one student with a SLD of expression with a secondary qualification of an SLI, one student with an SLD of expression without a secondary qualification, two students identified with an SLD of auditory processing and association, two students identified with autism without a secondary qualification, and one student with an SLD of auditory processing without a secondary qualification. The ethnicities represented in the sample were Hispanic or Latino, White/non-Hispanic, Hispanic or Latino/White, and Hispanic or Latino/American Indian or Alaskan Native. Native languages for the sample were Spanish and English, and four of the students were English-language learners. The sample included students who had been receiving special education services for between 2 and 10 years in the same district.

This sample size was selected because it constituted the entire data set of students in the new partial inclusion English classroom based on the qualification of performing at least four grade levels below their peers. The local site's leaders decided to use the same English curriculum for all the inclusion English settings. The English text curriculum, *Prentice Hall Literature: Timeless Voices, Timeless Themes* (Prentice Hall, Inc., 2002), taught in the self-contained classroom, was identical to that taught in the full inclusion setting, although the curriculum delivery differed markedly, as it focused on primary ideas and concepts. The program *Read Naturally* (Read Naturally, Inc., 2001), a district-approved, supplementary English curriculum, provided supplementary material in the partial inclusion setting to enhance skills necessary for the content area. The program

involved using a paper version for the first year and an electronic, computer-assisted version the second year. The procedure for gaining access to the data involved asking the local site to release the required academic data for the study. The data were not public because they pertained to particular students; therefore, a data use agreement (see Appendix B) and letter of cooperation (see Appendix C) were required.

Methods of establishing a researcher-participant working relationship were not required because only archived academic data were used in the study. The sample was a convenience sample taken from the special education population from the chosen site. A convenience sample is a sample taken from a population readily available (Creswell, 2012). Research supported a larger sample size to aid in validity (Creswell, 2012). Because of the small sample, validity was difficult to prove because the data set only constituted a small sample of students in a particular situation. Although the data set did represent the entire data set available, the results cannot be generalized because of the small sample size. I intended these data to provide the particular research site's district with additional information on how to better serve its own student population in this location. No measures were taken for protection of participants because there were no participants in the study used, only archived data per IRB approval # 11-22-13-0169319.

To avoid moral treatment concerns (Creswell, 2012), the data were coded to provide confidentiality. The codes used correlated with the grade level of each student and the number of students at that grade level. For this study, there were data from two seventh grade students and six sixth grade students; therefore, the coding was as follows: Students 7a, 7b, 6a, 6b, 6c, 6d, 6e, and 6f. Informed consent was not needed in this study

because of using archived data. Raw data were not available because of the process of collection. The testing protocol for the CMA strictly prohibits tampering with raw data (ETS Educational Testing Service, 2012).

### **Instruments and Materials**

The instruments used in this study were state testing materials. The CMA was a valid and reliable pre-existing instrument (Creswell, 2012) for data collection; it has been approved and required by the State of California for use by all school districts, private and public (ETS Educational Testing Service, 2012). The CMA measures students' academic achievement in a variety of subgroups such as mathematics, science, and English. The scores were calculated based on questions answered correctly or incorrectly. These scores were grade normed, which means they were comparative to same grade peers. Data were collected using the school's data system and by looking at the school's report card showing the AYP growth and state testing results.

The CMA is a reliable instrument because it provided stable and consistent scores (Creswell, 2012). Validity and reliability were important when considering an assessment because they offered results useful for sites other than those taking them (Creswell, 2012). Validity for the CMA was strong because of the degree of simplicity in interpreting the scores for the proposed purpose of the test (Creswell, 2012), which for the CMA was to measure the academic proficiency of the students who take it. The validity evidence of the CMA was based on the test's content (ETS Educational Testing Service, 2012).



## **Data Collection**

The sample included quantitative pre- and posttest data of academic achievement scores in English from the CMA from consecutive years. CMA academic data from the 2011 testing year, the 2012 testing year, and data from the 2013 testing year were reviewed and compared.

Permission to obtain data was requested from the district of the site in the study from the special education superintendent. Once approved by the special education superintendent, the request was brought to the school cabinet of the site in the study for endorsement. Support was given by a majority vote of the cabinet members. After endorsement by the cabinet, a data use agreement form (see Appendix B) and a letter of cooperation (see Appendix C) were signed. For this study, data collection did not hinder or disturb the daily schedule or routine of the site in the study or the population because the data is available online. Data were collected by contacting the site in the study and requesting the CMA scores from the past and present year for the eight students involved. Once collected, the data were stored in a private location (computer) for analysis. Moral considerations during the reporting process address consideration of honest use of the data and the provision of a preliminary copy before the publication of the study to the district.

My role as the researcher remained the same before and after data collection and analysis, that of a specialized academic instructor servicing the sixth grade at the site in the study in the full inclusion model. I had little contact with the students, overseeing the participating sixth graders in a science general education classroom daily, keeping track

of assignments and progress in that general education setting. Data collection was not affected by this past relationship because the data being collected were obtained from English scores, with which I had no involvement. My bias and experiences of the students and data were irrelevant to this study because data collection was administered by a nonpartisan party and not by me.

### **Data Analysis**

Comparative data analysis was used to analyze the data (Creswell, 2012).

Comparative data analysis is the process of generating and connecting categories of data (Creswell, 2012). The data compared for this research study were the 2011 testing year's state scores, the 2012 testing year, and the 2013 testing year's scores for each individual. A comparison of English achievement scores using the CMA scores was analyzed. The goal was to evaluate the academic scores of each student placed in the newly implemented English setting to decide whether the scores from the 2011 testing year increased. Analysis of the data helped decide the impact (improvement) of the additional class.

Analysis was conducted by a simple comparison of the cumulative data gathered from the CMA scores, analyzing the data for numerical growth using a means test (Creswell, 2012). A means test was suitable for this study because the data analyzed is composed of the average of the CMA scores. The assumption minimum was not met because of the small sample size of eight. The individual scores provide data about the subcategory in English for each individual special education student and analysis of each student's numerical growth was analyzed. Maturation is equivalent for every student

taking the test so it was not considered a problem in evaluation of individual scores. The data collected and analyzed appears in tables and figures for analysis. The independent variable was the partial inclusion English curriculum the partial inclusion special education students received and the dependent variable was the CMA scores (Creswell, 2012). Evidence of high-quality and procedures for best possible accuracy and credibility of conclusions was met by conducting an external audit (Creswell, 2012). The process for assessment of reliability and validity of the instrument used in this study (CMA) was conducted by the State of California under the strict guidelines of the state. California *Education Code (EC)* Section 60604.5 requires the State Superintendent of Public Instruction (SSPI) to work with stakeholder groups specifically chosen, to develop and reauthorize the statewide pupil assessment system (CMA) in alignment with the core standards. The recommendations are sent as a report to the Governor and Legislature which begins a collaborative process of designing future assessments.

### **Assumptions and Limitations**

Several limitations and assumptions restricted this comparative quantitative study.

- One limitation of this study was the lack of data resulting in a small sample size (Creswell, 2012). A small sample size restricts the data from being generalized. Data that cannot be generalized lacks value to other sources because it does not represent their particular sequence of events.
- Another limitation of this study was the curriculum itself. Was the curriculum designed in a fashion that meets the diverse learning styles of the population involved in the study?

- The teaching style and curriculum delivery were also a limitation. Teaching styles and delivery vary among instructors, because of this variant; it needs to be considered a limitation.
- Student dropout rate was also a limitation to consider in this study. Student populations change because of families moving to different school zones. Unless a school of choice form has been completed and approved, the student has to attend the school of residence, therefore, dropping out from their previous school. Dropout rate would not influence results, but the population size being studied. Along with student dropout rate, was student attendance rate. How often a student was at school affected their academic achievement rate.
- Another important limitation to consider was the variety of additional and primary disabilities each participant has and how that influenced their individual learning. Students received a variety of services, which required a variety of time throughout each school day depending on the individual needs of each student.
- Academic support or lack of out of school was a limitation to consider in this study. Each student came to school each day and received an equitable education, controlled by the educational setting. When a student goes home, their educational support or lack of varied depending on endless reasons such as: family at home, living situation, parent workload, and language barriers.

- Last, inconsistent environment and stress elements during testing were considered limitations during this study. Testing environments were strictly controlled by the school sites, providing teachers protocols for creating a testing environment. Despite these efforts teachers have no control over how a student reacted internally to a testing sequence of events.
- The assumptions of this study were that the CMA measures growth of the students adequately and that the students participated in using the instrument (CMA) to the best of their ability.
- The scope of this study covered a small sample of special education students, who had Individualized Academic Programs and had been identified as performing “far below grade level” on the CMA in reading and writing, in a newly implemented partial inclusion setting. This led to a potential limitation of the study compared with evaluating a setting not in a novice phase of implementation.

The hypothesis said there is a positive correlation between special education student placement into a self-contained classroom for English and academic achievement on the CMA. The null hypothesis said there is no correlation between placement of special education students in a self-contained classroom setting for English and academic achievement on the CMA.

## Results

### Description of Data

The data for this study consisted of CMA English achievement scores obtained from six non-severe special education students in the sixth grade. Both students in the seventh grade were excluded because of incomplete and invalid data. Student 7a, a 14-year-old male youth, qualified for special education services in 2002 with a primary disability of a SLD in expression and a secondary disability of a SLI. Student 7a was reading 34 correct words per minute at a seventh grade level, could write 5 word simple sentences containing single syllabic words. Student 7a qualified to take the CMA for the ELA portion with testing accommodations (supervised breaks, test questions and answers read aloud) and received 90 min/daily of separate class, self-contained instruction for ELA. Student 7b, a 13-year-old male youth, qualified for special education services in 2002 with a primary disability of autism and a secondary disability of a SLI. Student 7b was reading 70 correct words per minute at grade level with 50% accuracy and writing was at 50% accuracy as well. Student 7b qualified to take the CMA for the ELA portion without testing accommodations and received 90 min/daily of separate class, self-contained instruction for ELA.

Student 6a, a 12-year-old male youth, qualified for special education services in 2008 with a qualifying disability around an SLD in expression. Student 6a's comprehension and writing accuracy was 40% at sixth grade level. He could spell 22/50 irregular words. Student 6a qualified to take the CMA for the ELA portion with testing accommodations (supervised breaks) and received 90 min/daily of self-contained ELA

support. Student 6b, a 13-year-old male youth, qualified for special education support in 2009 with a qualifying disability around an SLD in auditory processing and association. Student 6b's reading level was 2.5 with 60 correct words per minute. He could construct a simple paragraph composed of simple sentences, but struggled with vocabulary comprehension (0% accuracy). Student 6b qualified to take the CMA for the ELA portion with testing accommodations (supervised breaks, test questions and answers read aloud) and received 90 min/daily of separate class, self-contained instruction for ELA. Student 6c, a 13-year-old female youth, qualified for special education services in 2009 with a qualifying disability of an SLD in the areas of expression and auditory processing. Student 6c had accuracy of 40% in recall and making connections with text and read 21 correct words per minute at a sixth grade level. Student 6c qualified to take the CMA without testing accommodations for the ELA portion and receives 90 min/daily of separate class, self-contained instruction for ELA. Student 6d, a 12-year-old male youth, qualified for special education services in 2007 with the primary disability of autism. Student 6d had an accuracy level of 60% in comprehension and organization and an accuracy of 0% around plot prediction. Student 6d qualified to take the CMA with testing accommodations (supervised breaks) for the ELA portion and received 90 min/daily of separate class self-contained instruction for ELA. Student 6e, a 13-year-old male youth, qualified for special education services in 2010 because of an SLD around auditory processing. Student 6e was reading at a 3.0 reading level and could construct simple sentences containing a noun and verb. Student 6e qualified to take the CMA without testing accommodations for the ELA portion and received 90 min/daily of separate class,

self-contained instruction for ELA. Student 6f, a 12-year-old female youth, qualified for special education services in 2007 with the primary disability of autism. Student 6f struggled with organization of thought when writing and comprehension. Student 6f qualified to take the CMA for the ELA portion without testing accommodations and received 90 min/daily of separate class, self-contained instruction for ELA.

Scores were obtained from 2011, before implementation of the new partial inclusion setting for English, in 2012, after one academic year in the new partial inclusion setting, and in 2013 two years after implementation of the partial inclusion setting. The CMA English scores for the six students are provided in Table 1.



Table 1

*CMA English Scores for the Students in the Sample 2011-2013*

<i>Student Code</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>
<i>6A</i>	<i>239</i>	<i>220</i>	<i>284</i>
<i>6B</i>	<i>255</i>	<i>179</i>	<i>236</i>
<i>6C</i>	<i>255</i>	<i>190</i>	<i>236</i>
<i>6D</i>	<i>318</i>	<i>316</i>	<i>344</i>
<i>6E</i>	<i>255</i>	<i>230</i>	<i>335</i>
<i>6F</i>	<i>255</i>	<i>336</i>	<i>N/A</i>
<i>7A</i>	<i>N/A</i>	<i>152</i>	<i>197</i>
<i>Mean</i>	<i>262.83</i>	<i>231.86</i>	<i>272.00</i>
<i>SD</i>	<i>27.77</i>	<i>69.51</i>	<i>59.18</i>
<i>Median</i>	<i>255</i>	<i>220</i>	<i>260</i>

*Note.* N/A = Not available.

The average score of the six students in 2011 was 262.83 (SD = 27.77). In 2012, the average CMA score was 231.86 (SD = 69.51), although this average contained an additional one student in seventh grade than the 2011 average (data for the seventh grade student was not available in 2011). In 2013, the average of the 6 available scores (one sixth grade student missing) was 272.00 (SD = 59.18). The median scores were 255, 220, and 260 for the years 2011, 2012, and 2013 respectively.

### **Statistical Methodology**

Because of the small sample size in this study, comparison of means using a paired t-test or repeated- measures Analysis of Variance (ANOVA) was inappropriate. The assumption of these parametric tests is that the differences between scores are normally distributed, although this assumption is relaxed when there are many pairs (for example,  $\geq 30$ ) because of the central limit theorem (Johnson & Bhattacharyya, 2010). This was not so with this data set. Only six pairs of data were available at any time point, and the distribution of differences was not normally distributed (as seen in Figure 1).

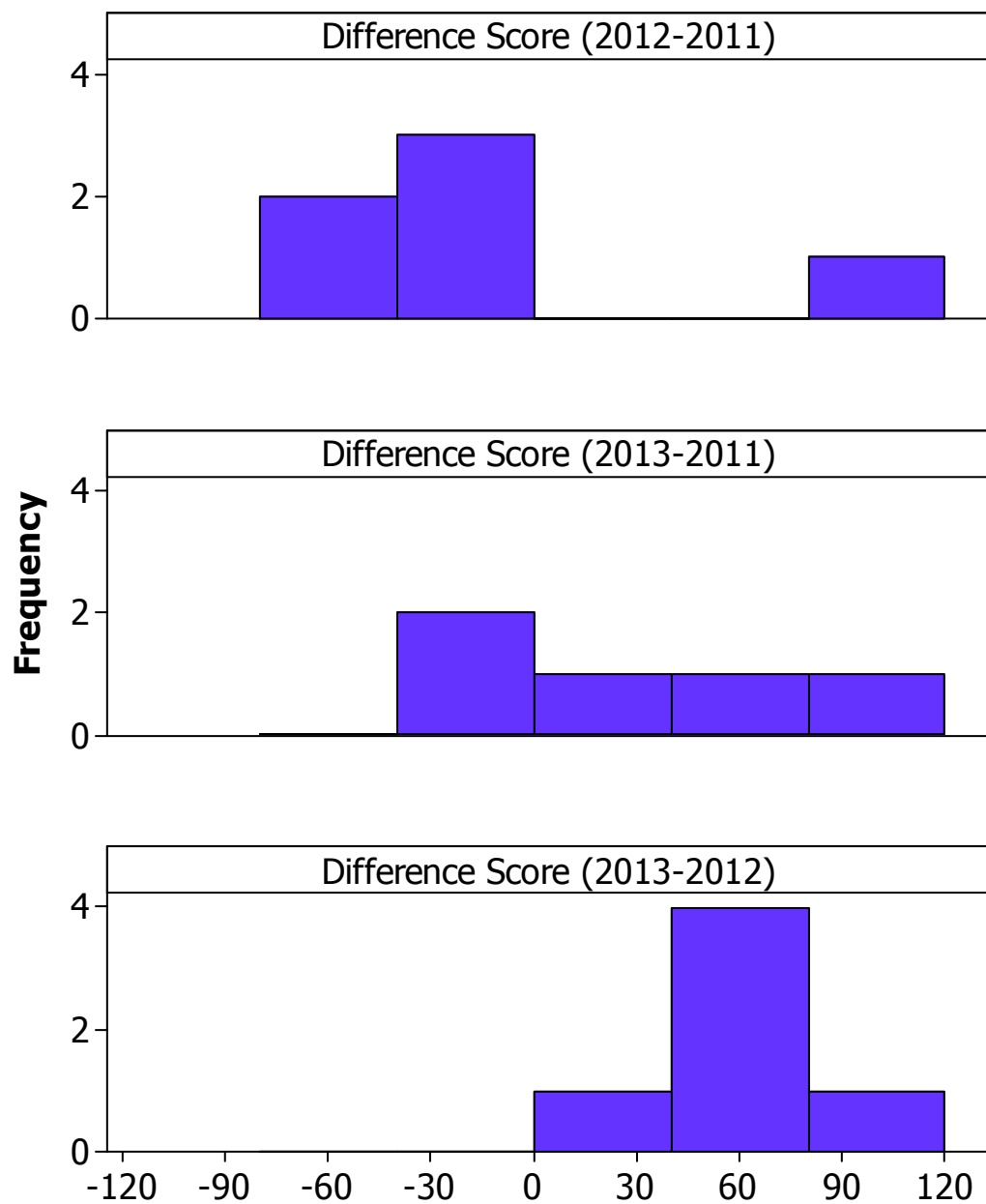


Figure 1. Histograms of CMA difference scores calculated between the three time points.

Therefore, data at the three time points was first compared using the Friedman Test, the non-parametric analogue of the repeated-measures ANOVA. This test was performed as a preliminary assessment of whether the scores at any three time points differed. To decide where differences occurred, the Friedman Test was followed up with the Wilcoxon Signed Ranks Test, the non-parametric analogue of the paired t-test. This approach had the advantage of use of all available data in each pair of time points. In these tests, the absolute values of the differences between observations are first ranked (from smallest to largest). The sums of the ranks corresponding to positive and adverse differences are calculated, then transformed into a Z statistic (IBM Corporation, 2011). Because of the small sample size, exact significance levels of the test were computed rather than relying on asymptotic methods ((IBM Corporation, 2011). An alpha level of .05 was used as the decision point for statistical significance.

Statistical analysis was conducted with IBM SPSS v.20 (IBM Corporation, 2011). Graphs were created with Minitab v.16.1.1. (Minitab Inc, 2010).

## **Results**

A Friedman test on the scores of the five students with data available at each time point indicated a noteworthy difference between two or more of the means,  $\chi^2 (2) = 7.60$ ,  $p = .02$  (exact). Therefore, Wilcoxon Signed Rank Tests were conducted between each set of data pairs to decide where differences occurred.

The results of the Wilcoxon Signed Rank Test between scores in 2012 and 2011 are presented in Table 2. The distribution of difference scores is also represented in Figure 1. There were five adverse differences, wherein posttest scores in 2012 were lower

than pretest scores in 2011. For one participant, posttest scores were higher than pretest scores (participant 6F). Statistical analysis showed there were no statistically noteworthy differences in CMA English scores between 2011 and 2012 ( $Z = -.94, p = .44$ , exact two-tailed).

Table 2

*Wilcoxon Signed Rank Test Summary – 2011 and 2012 Comparison*

	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
<i>Negative Ranks (2012 &lt; 2011)</i>	5	3.0	15
<i>Positive Ranks (2012 &gt; 2011)</i>	1	6.0	6
<i>Ties (2012 = 2011)</i>	0		

*Note.*  $Z = -.94, p = .44$ , exact two-tailed.

Table 3 provides a comparison of scores in 2013 to scores in 2011. There were five cases, and two of these had adverse ranks (2013 score lower than 2011) while three had positive ranks (2013 scores higher than 2011). The statistical analysis showed scores in 2011 and 2013 did not differ ( $Z = -1.22, p = .31$ , exact two-tailed).

Table 3

*Wilcoxon Signed Rank Test Summary – 2011 and 2013 Comparison*

	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
<i>Negative Ranks (2013 &lt; 2011)</i>	2	1.5	3
<i>Positive Ranks (2013 &gt; 2011)</i>	3	4.0	12
<i>Ties (2013 = 2011)</i>	0		

*Note.*  $Z = -1.22$ ,  $p = .31$ , exact two-tailed.

Finally, Table 4 provides a comparison of scores in 2013 to scores in 2012. In all six cases, scores in 2013 were higher than scores in 2012. This represented a statistically noteworthy difference ( $Z = -2.20$ ,  $p = .03$ , exact two-tailed).

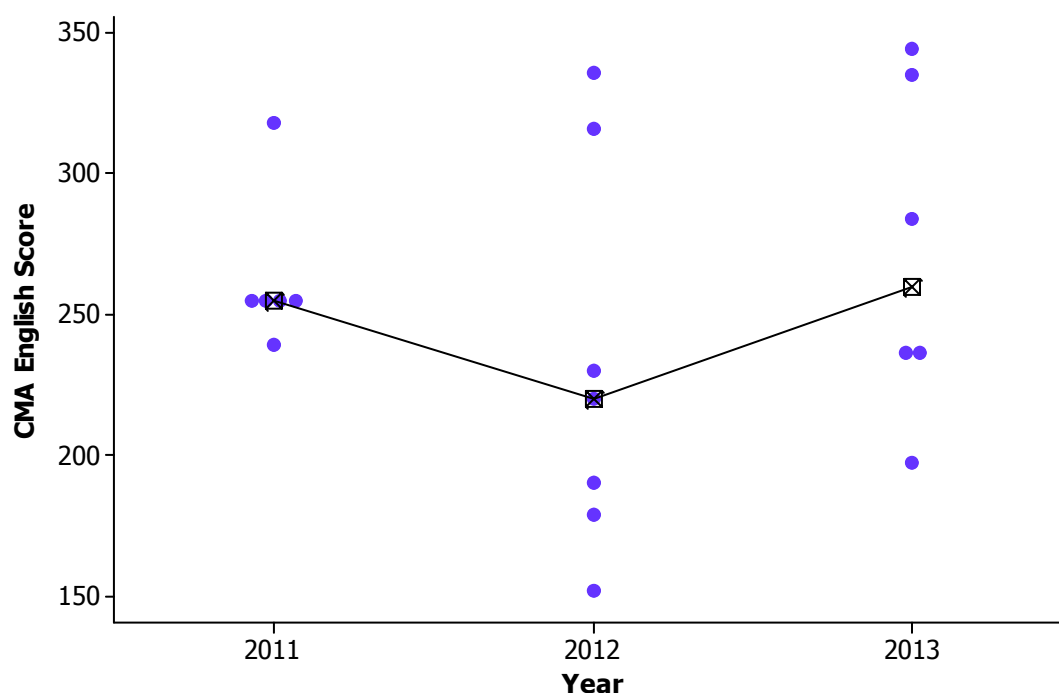
The individual values are plotted in Figure 2. A larger variation can be observed in scores in 2012 and 2013 than in 2011. The median score was lower in 2012 than in 2011 (although this was not a statistically noteworthy difference), then showed a rebound to approximate baseline levels in 2013.

Table 4

*Wilcoxon Signed Rank Test Summary – 2012 and 2013 Comparison*

	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
<i>Negative Ranks (2013 &lt; 2012)</i>	0	0	0
<i>Positive Ranks (2013 &gt; 2012)</i>	6	3.5	21
<i>Ties (2013 = 2012)</i>	0		

*Note.*  $Z = -2.20$ ,  $p = .03$ , exact two-tailed.



*Figure 2.* Individual value plot of CMA English scores in 2011, 2012, and 2013. Medians (square markers) are connected.

### Summary

In short, statistical analysis revealed no noteworthy differences in the students' CMA English scores in 2011 before accomplishment of the partial inclusion setting, compared with test results obtained in 2012. The average and median scores in 2012 were lower than those obtained in 2011, but the difference was not statistically noteworthy. However, scores obtained in 2013, were notably higher than the scores obtained in 2012. The 2013 scores did not differ notably from the baseline scores obtained in 2011.

## **Conclusion**

Quantitative studies are useful tools for evaluating settings to decide their strengths and weaknesses. For this study, a comparative quantitative study was the best choice. The guiding research question about the effectiveness of a partial inclusion setting on academic achievement scores provided reasons for a quantitative study. The reviewer performed the collection of data on state results. The data consisted of pre-setting accomplishment scores and post accomplishment CMA scores from a convenience sample of sixth and seventh grade special education students. A comparative data analysis (means test) was used to analyze the data including graphs and charts, and the results were presented to the district for their consideration. An external audit was conducted by an outside statistician whom was paid for her services on completion. The outcome can be used by the district to decide the progress of the partial inclusion setting and help them make future decisions about setting choices. In the next section, the project study is described, including a description of the goals, the reasons, and a review of literature, project accomplishment, project evaluation, and implications including social change.



### Section 3: The Project

#### **Introduction**

Academic strategies for providing a high-quality education in English are crucial for all students in middle school. Providing these learning opportunities for students with special needs poses a particular challenge. In the last section, reasons for data collection in a partial inclusion setting were provided, leading to a data analysis of state testing scores in English for students with special needs. The data from the second year of the partial inclusion setting in English supported the partial inclusion setting. In analysis of the second year, technology implementation was found the only change in curriculum delivery. The intervention program Read Naturally was implemented using a computerized version during the second year, versus the paper version used during the first year (Read Naturally, Inc., 2001).

Based on the analysis, the proposed project is to present reasons to the local site, based on the conclusions of the study, that support providing the computerized intervention program Read Naturally to the entire site through the purchase of a site license (Read Naturally, Inc., 2001). As a result of providing each classroom the opportunity to utilize the intervention program, students with special needs can access the program from the partial inclusion class in their general education classes throughout the day. Providing the intervention program to each student globally would also help every student, whether or not he or she had an Individualized Academic Program, to progress in English.

### **Description and Goals**

The project for the study is staff training on Read Naturally (see Appendix A). The training will describe how the data analysis supported the implementation of the computerized version of Read Naturally to the student population (Read Naturally, Inc., 2001). In Section 1, the problem of providing special education students with a learning environment to promote English achievement was identified. Through the study, the data analysis supported using technology in the second year of implementation as it corresponded to elevated scores for the students involved in the partial inclusion setting.

The goal of the project is to expand on the conclusions supported in the study by providing an equal opportunity to the entire student population to increase their English/ELA scores. This goal will be accomplished by purchasing a site license for the program Read Naturally (Read Naturally, Inc., 2001). The site license would allow the program to be accessible from any computer on campus. Teachers would be able to provide students the opportunity to use the program in their classes, in the computer labs, on the roving computer carts, and in the library. During structured reading time, teachers could rotate struggling readers on the computers to access the intervention program without disrupting the school routine.

### **Reasons**

This project was chosen because it would address the problem of providing an appropriate educational experience for all learners. This project fits the results of the data analysis presented in Section 2 because it promotes the intervention program accomplished in the second year of the program that produced elevated scores on the

state testing. The project genre chosen is suitable for the study because it provides the local site evidence to support the purchase of a site license of the computerized Read Naturally program and the training for educators to implement it successfully (Read Naturally Inc., 2001). The content of the project addresses the problem by providing equal opportunity to all students for supported intervention in English achievement. Providing equal opportunity to all students at the local site will raise English scores and provide an opportunity for intervention for those students struggling in English (Bers, 2010; Cawthon, Beretvas, Kaye, & Lockhart, 2012; Cheung, 2013; Denton, Fletcher, Anthony, & Francis, 2006; Fenlon, McNabb, & Pidlypchak, 2010; Gibson, Cartledge, Keyes, & Yawn, 2014; Labbo, 2005).

### **Review of the Literature**

The project genre for which I conducted this review of literature was computer supported education and academic achievement in English. This genre is appropriate to the problem and was supported by the data analysis discussed in Section 2. The criteria used to support the selection of the genre of technology infused education were the results of the second year implementation that included the computerized intervention Read Naturally (Read Naturally, Inc., 2001). The theories inform the content of the study by providing the reasons to support the implementation of a site-wide computer-based English intervention. These theories were the foundation of the following literature review and include, but are not limited to: Computer-assisted instruction and literacy through various settings (Cheung, 2013; Cartledge, Gibson, Keyes, & Yawn, 2014; Fenlon, McNabb, & Pidlypchak, 2010; Massaro, 2012; Pacino & Nofle, 2011; Shapley,

Sheehan, Maloney, & Caranikas-Walker, 2011; Watt, 2010; Wolfe & Flewitt, 2010) and computer-based interventions lead to positive results (Bers, 2010; Beretvas, Cawthon, Kaye, & Lockhart, 2012; Anthony, Denton, Fletcher, & Francis, 2006; Labbo, 2005; Kyle, Kujala, Richardson, Lyytinen, & Goswami, 2013; Means, 2010; Mei-Ju, 2012; Rabiner, Murray, Skinner, & Malone, 2010; Sternberg, Kaplan, & Borck, 2007). The results of the data analysis supported the implementation of the computerized reading intervention program Read Naturally by demonstrating elevated scores on the state testing during the second year of implementation (Read Naturally, Inc., 2001). The following literature review was also used to inform the project by providing support for computer-aided instruction and technology-infused instruction, including the Read Naturally program (Read Naturally, Inc., 2001).

### **Computer-Assisted Instruction and Literacy in Various Settings**

Schools have been incorporating technology in daily instruction as a response to the ever-changing state expectations and movement to the core standards. Many studies have proved technology to aid in academic achievement. Studies built on the founding principles of John Dewey and the need for hands-on learning indicated how, through positive technological development (PTD), children growing up in the digital age can be successful in the technology-rich environment (Bers, 2010). Students are using computers daily in their lives to communicate with friends and family, play games, shop, among other things. Children are naturally in tune to computers and the transition to using computers in the classroom to help in learning is a natural process for them (Bers, 2010). Children's use of technology has changed the ways that they learn language and literacy

skills (Watt, 2010). Studies have shown that there are mainly beneficial effects on literacy skills when educators assist students to access developmentally appropriate content and language, even to the point of encouraging the development of new media literacy skills (Watt, 2010).

Kansas is on the cutting edge of bilingual education for deaf and hard of hearing education with the assistance of technology. At the Kansas State School for the Deaf, a bilingual mix of American Sign Language and English is used with the enhancement of technology to provide a blended educational approach to language acquisition (Horn-Marsh & Horn-Marsh, 2009). Through the use of a bilingual multimedia room, students are able to enhance their skills through the use of video journals, writing projects, and videotaped oral presentations (Horn-Marsh & Horn-Marsh, 2009). With the program Read Naturally, students are able to create writing and build on their vocabulary also (Read Naturally, Inc., 2001).

Providing the students the opportunity to learn using technology is important in today's classroom (Beretvas, Cawthon, Kaye, & Lockhart, 2012). When students receive a balance of intensity and high-quality education, they are provided the best opportunity to learn (Cawthon et al., 2012). Access to technology is a factor in creating an environment that supports students with and without disabilities (Cawthon et al., 2012). Literacy is a development of gestures, words, and actions to assist living in a society and practice cultural norms (Wolfe & Flewitt, 2010). Children use various communication modes, including the latest technology, introducing children to new dimensions of learning and increasing their ability to learn (Wolfe & Flewitt, 2010). Students with

special needs are often multimodal learners. By providing them the opportunity to learn in various modes, higher achievement can be reached. Literacy inclusion of students with severe special needs requires critical components of technology to be in place. Often students with severe needs require assistive technology to communicate and function within a classroom (Alquraini, & Gut, 2012). Technology integration can help students with severe needs to access the curriculum and can be considered either an accommodation or a modification (Alquraini, & Gut, 2012). Technology can encompass alternative keyboards, touch screens, and complete computer programs for aided instruction (Alquraini, & Gut, 2012). Technology integration helps to bridge the gap for learners with severe disabilities by offering multimodal support, just like the program Read Naturally (Read Naturally, Inc., 2001).

Collaborative writing can be enriched by adding a technology component to its delivery. Peer feedback through the use of wiki has proven to aid in writing development for students across the nations (Chu, Li, & Woo, 2013). Students located in Hong Kong collaborated with English students using wiki to post edits and comments on students' group writings and conducted student and teacher interviews (Woo et al., 2013). The study found that the wiki environment enriched the level of writing because of the ability to provide a collaborative writing experience and peer feedback (Chu, Li, & Woo, 2013). Technology also helps compositional writing for students with learning and academic disabilities (Peterson-Karlan, 2011). Technology was used to support each step of the writing process, such as planning, transcription, editing and revising (Peterson-Karlan,

2011). The revision step showed the most benefit from the technology integration as well as the support of digital writing tools (Peterson-Karlan, 2011).

Online learning can also promote community for special education learners. The sense of community online can be attributed to student success within the programs (West, Jones, & Semon, 2012). Through online learning students experiences learner-centered activities, convenience and satisfaction of a sense of community which was attributed to communication, supportive instructors, safe environment and networking opportunities (West et al., 2012). Students with visual impairments benefit by using the computer and internet to aid in their education (Zhou et al., 2012). Secondary school students with visual impairments increased their standardized tests scores by using the computer to assist them with homework, synonyms and antonyms, science, and social studies (Zhou et al., 2012). Passage comprehension scores increased as well as calculation and science scores (Zhou et al., 2012).

Early learning programs are also exploring technology integration into their daily curriculum. The use of robotics are used as a tool to aid in the development of emergent literacy and numeracy, digital access, and basic engineering skills in disadvantaged early years learners (McDonald & Howell, 2012). Through the use of modeling, exploring and evaluating, teachers at the school in Australia were able to incorporate hands-on, fine-motor development with 21<sup>st</sup> century learning (McDonald & Howell, 2012).

Educational technology is useful for all students, not just those with special needs. Exploration of the effects of educational technology on disadvantaged students' achievement throughout the past forty years found that the comprehensive models were

most effective when used with a combination of computer assisted and non-computer assisted instruction (Cheung, 2013). Students with severe disabilities also benefit from technology because it gives them access to books through using technology, providing students with physical disabilities have access to curriculum and books they would not be able to manipulate manually (Fenlon, McNabb, & Pidlypchak, 2010). By providing these students this technology they can level the playing field, allowing the students to listen to books and participate equally (Fenlon et al., 2010). In a student's daily schedule, quiet individual reading time is provided. With the purchase of the site license, students can chose to spend that time using the computer-assisted program.

Secondary and post-secondary education also has benefited from technology education. Through using professional training, lifelong learning has enabled teachers to incorporate technology in their classrooms (Loveland, 2012). The need for technology rich lessons, in the classroom, because of new content goals/standards, has led to this professional training (Loveland, 2012). Teachers must be prepared to deliver curriculum in a technology rich classroom. If the proposal is accepted, the teachers at the site will need to be properly trained to accomplish the program. A review of various teaching pedagogies in technology rich environments has supported technology enriched lessons to keep up with the blossoming of a technological rich world (Williams, Mackness, & Gumtau, 2012). Technology can support emergent learning in students by allowing them to interact frequently and openly, with degrees of freedom and specific restraints, providing the opportunity to work together to see the whole picture and co-evolve (Williams, et al., 2012). By adapting curriculum design and learning to provide



opportunities for emergent learning through the integration of technology, students are able to meet the growing demands of the world (Williams, et al., 2012).

Providing an environment where students can acquire literacy skills is the goal for English teachers. Technology is empowering students to learn how to Read Naturally (Read Naturally, Inc., 2001) without the need for direct instruction and through using technology, children can hear and see language (Massaro, 2012). Technology, such as computers and the Internet also provide students the opportunity to access a variety of texts, increasing literacy besides promoting increased motor and visual capabilities (Massaro, 2012). New technologies have led to a reexamination of literacy and reading comprehension. These reexaminations support providing students with technology rich lessons, which, with the implementation of the computer-aided literacy programs, would provide this opportunity at the local site.

Technology opportunities are also helping to change learners into becoming autonomous in their learning process. Modern education and technology enables learners to master skills, study easier, and enjoy learning (Guemide, & Benachaiba, 2012). Technology has provided students the opportunity to prepare for the work force, remove possible barriers and raise standards (Guemide, & Benachaiba, 2012). The world is knowledge based and depends greatly on the rapid exchange of information, meaning that the countries that are highly advanced in technology are the major players in today's education arena. Students who have access to technology and are taught how to use it to advance their education, communication and knowledge base have a better chance of excelling in the work force (Guemide & Benachaiba, 2012).

Learners can now receive various formats of print and non-print media (Pacino & Nofhle, 2011). Digital learning is fueling the skills of 21<sup>st</sup> century learners, creating a global democracy and these skills are refined through opportunities to evaluate validity in sources and information presented besides making moral decisions about the information (Pacino & Nofhle, 2011). In the technology immersion model, students are immersed into a school environment rich in technology (Shapley et al., 2011). This technology rich environment produced positive results on students' technology proficiency and showed a decline in disciplinary action (Shapley, Sheehan, Maloney, & Caranikas-Walker, 2011). With the accomplishment of a technology rich environment at the local site, positive results can be expected.

Teacher planning and co-planning is important when incorporating technology successfully into daily curriculum. Special education students excelled in the writing process benefitted when effective co-teaching was in place that incorporated technology (Bryant Davis, Dieker, Pearl, & Kirkpatrick, 2012). Over a three year period and 155 lesson plans later, lessons that incorporated technology proved to have more benefit on the writing process than those that did not (Bryant Davis, et al., 2012). The lessons proved to engage the students more which led to higher retention levels of information (Bryant Davis, et al., 2012). At the local site students are co-taught throughout the day and in the partial inclusion classroom, technology rich lessons are part of the daily curriculum.

## **Computer-Assisted Reading Interventions**

Intervention programs are a common practice used to help low performing students in bridging the achievement gap. Computerized interventions are rising. The intervention Read Naturally was implemented in a first grade classroom and results indicated improvement in both comprehension and verbalized reading fluency (Gibson et al., 2014; Read Naturally, Inc., 2001). The reading intervention program for 27 students with persistent reading difficulties, Read Naturally, showed noteworthy growth when compared with students who had not had the intervention (Denton, Fletcher, Anthony, & Francis, 2006). Computer assisted intervention programs are being used in other countries to improve literacy development. The United Kingdom to evaluated a computer-assisted reading intervention used for twelve weeks on six and seven year-old students resulting in positive and supported gains in phonological skills, reading and spelling and were maintained at the four-month follow-up (Kyle Kujala, Richardson, Lyytinen, & Goswami, 2013). Providing a computer assisted intervention in the general education classrooms daily allows the students daily opportunities to improve literacy skills at the local site.

Computer interventions also help engage learners if the programs are appropriately designed, they support literacy development (Labbo, 2005). Many features engage learners in computerized learning such as text to speech, animation, and sound effects (Labbo, 2005). Computer-based interventions help improve attention and academic performance in students with attention difficulties (Rabiner et al., 2010). Students demonstrated higher levels of controlled attention during instruction and gains

in reading fluency (Rabiner et al., 2010). Technology implementation in the areas of reading and mathematics concluded that accomplishing software is successful when accomplished in a controlled environment and also promoted using computer-aided software to help teachers in classroom management and in generating student performance data (Means, 2010). Computer-assisted instructions is important for its ability to promote flexible Computer-assisted instruction, such as those found in the interventional E-books; promote understanding and connecting knowledge through repeated practice (Mei-Ju, 2012). Read Naturally is equally capable of providing opportunities to promote understanding and connecting knowledge through its built in repetition (Read Naturally, Inc., 2001).

Computerized interventions can also be accomplished in the medium of online courses. Struggling students can take additional courses on-line to help them bridge the learning gap (Sternberg et al., 2007). Students ranging from grades 4 to 12 took online courses and the results were positive, raising reading scores and computer literacy skills (Sternberg et al., 2007). Read Naturally has an online component available for additional purchase if the local site is interested (Read Naturally, Inc., 2001).

Technology also is used to assist teachers in teaching how to speak the English language. Multimedia English learning (MEL) systems are used to enhance English phonemic awareness and pronunciation because of its ability to analyze phonetic structures to effectively help students practice pronunciation of English words and sentences (Lai, Tsai, & Yu, 2009). The MEL system helps to identify errors in pronunciation, intonation, volume and rhythm, helping students to gain mastery of the

English language (Lai, et al., 2009). When compared against a control group, after a twelve week trial, the experimental group performed significantly better on Phonemic Awareness and English Achievement tests (Lai, et al., 2009).

Technology can also assist teachers in teaching and assessing oral reading fluency. Skill development is not the only purpose for technology. Technology also has the potential to provide high-quality learning experiences within the classroom and authentic practice outside. When compared to in-class practice, peers who also used the web-based audio and video practice demonstrated higher confidence levels when tested (Newman-Thomas, Smith, Zhao, Kethley, Rieth, Swanson, & Heo, 2012). Read Naturally has an audio component to aid in oral reading fluency as well (Read Naturally, Inc., 2001).

Interactive whiteboards are becoming more and more typical within the new digital age classrooms. Interactive whiteboards have been used to assist learning in students with disabilities to allow simultaneous participation by all students in the class (Allsopp, Colucci, Doone, Perez, Bryant, & Holhfeld, 2012). By using the interactive boards, teachers are able to enhance their lessons by immediately bringing in pictures, text, videos, diagrams and on-line resources aiding in reaching multi-modal learners (Allsopp, et al., 2012). Teachers are also able to save and reuse materials to reinforce lessons at a later time (Allsopp, et al., 2012). The whiteboards also increased student motivation, perception and interaction (Allsopp, et al., 2012). Simultaneous prompting with computer-assisted instruction proved to be successful in teaching story writing to students with Autism (Pennington, Ault, Schuster, & Sanders, 2011). In the study pre-

and post-test measures were used to gauge the achievement gains of generalized acquired skills of untrained story topics (Pennington, et al., 2011). Results supported the majority of the participants demonstrating maintenance and generalization of the trained responses (Pennington, et al., 2011).

Videos can also be used in other ways to aid in curriculum delivery. Video self-reflection enhanced elementary special education reading instruction in a study done in California (Osipova, Prichard, Boardman, Kiely, & Carroll, 2011). In this study, teacher used videos to monitor their teaching strategies and impact in reading (Osipova, 2011). Throughout the timeframe of one year, teachers used the videos to rate their instruction, noting what worked and what didn't, and make suggestions for future lessons (Osipova, 2011). The practice allowed the teachers to become more critical in self-examination and had a positive effect on their students reading scores (Osipova, 2011). Read Naturally has a component that allows the students to analyze their output allowing them to also become more critical of their own work (Read Naturally, Inc., 2001).

There are several devices available for technology integration. When it comes to vocabulary recognition and remembering their definitions, iTouches were the preferred medium for students with significant cognitive delays (Jameson, Thompson, Manuele, Smith, Egan, & Moore, 2012). The level of tolerance to repetition increased, allowing the teacher to continue with words that were difficult to retain (Jameson, et al., 2012). The use of the I Touches also allowed students to work individually at their own differentiated level on a set of words selected specifically for them based on their needs and current levels (Jameson, et al., 2012).

Literacy is promoted by embedding it into science, technology, engineering, and mathematics (STEM) instruction for students with special needs. Researchers found that the STEM process was an easy gateway for literacy because it often focuses on abstract concepts and uses difficult vocabulary within complex expository texts (Israel, Maynard, & Williamson, 2013). STEM is often out of reach for students with disabilities because of the intense rigor it requires to be successful, only 5% succeed (Israel, et al., 2013). STEM instruction has a history of relying on didactic instruction and STEM text, which are quite complex in their verbiage (Israel, et al., 2013). Abstract concepts get lost by the wayside for struggling learners, inquiry is no longer an engagement exercise backed by explicit instruction (Israel, et al., 2013). Therefore, with the integration of technology students are able to experience facilitated language growth which results in enhanced understanding (Israel, et al., 2013). Literacy blended with STEM allows students with disabilities and struggling students the opportunity to make authentic sense of the world by promoting meaningful engagement in real-world applications that engage all learners (Israel, et al., 2013).

Subtitles are often used during foreign films to help nonnative speakers to interpret the meaning of the movie. Subtitles are also useful to aid in same language literacy. A school in Kaneohe, Hawaii is using the karaoke-style intervention to raise reading comprehension skills in their middle school students with special needs (What Works Clearinghouse, 2013). During the 12-week study, 51 students participated in the intervention that provided same language subtitling during reading instruction students (What Works Clearinghouse, 2013). The intervention students scored significantly higher

than students in the compare group on the reading post-test students (What Works Clearinghouse, 2013). The reading intervention program Read Naturally provides same language subtitling throughout its program (Read Naturally, Inc., 2001).

Intermediate school teachers have ever increasing challenges as they teach subject matter and developmental reading skills (Palumbo, & Loiacono, 2009). Vocabulary demands have increased and domain demands for informational text is difficult when students have not yet mastered basic reading skills, such as those with learning disabilities (Palumbo, & Loiacono, 2009). Integrating technology has allowed these teachers to gain instructional strategies for fostering reading skills, developing vocabulary, and teaching subject matter comprehension (Palumbo, & Loiacono, 2009). Both special educators and general educators are using technology to use cloze strategies to enhance reading ability and subject matter knowledge (Palumbo, & Loiacono, 2009).

Digital storytelling is another way to integrate technology into literacy development. All teachers need a large repertoire of stories and communicating experiences and exploring ideas is powerful through the use of storytelling (Skouge, & Rao, 2009). Teachers are able to take their students on journeys of discovery by using stories and introduce them to new styles and views of living (Skouge, & Rao, 2009). Digital storytelling allows teachers to teach core values, honoring cultural diversity and empowering students to want to share their own experiences (Skouge, & Rao, 2009). Digital storytelling also empowers disabled students and students with learning needs by leveling the playing field and allowing all students the opportunity to provide authentic accounts of their lives and communities (Skouge, & Rao, 2009).



The development of reading skills in partially sighted learners is important to understand in order to facilitate educational setting and needs. After strict analysis of visually impaired students at a middle school in England, reading speed was noted as an area of need when compared to sighted peers (Tobin, & Hill, 2012). It was agreed that technology would be used to aid in bridging the fluency gap (Tobin, & Hill, 2012). Through the use of a formal, regular cycle of consistent monitoring, gaps in visual efficiency, phonemic awareness, and vocabulary knowledge shrunk after integrating technology (Tobin, & Hill, 2012). The types of technology that helped make a difference were changes in type size, stroke width and spacing (Tobin, & Hill, 2012). In the program Read Naturally text is able to be manipulated to increase the size to aid with visual representation of the text (Read Naturally, Inc., 2001).

Teachers are always searching for the best educational fit for their students. Technology is the gateway for all students to find how they fit in education. A second grade student both gifted and having learning disabilities used technology to level the playing field for him in reading and writing (Gould, Staff, & Theiss, 2012). After being placed in both the gifted program and the special education program with support, his teachers provided him with technology to facilitate his writing needs (Gould, et al., 2012). By offering these technological adaptations, the student was successful and maintained achievement (Gould, et al. 2012). Read Naturally offers many levels in each literacy area specific to each students' needs (Read Naturally, Inc., 2001).

### **Accomplishment**

On completion of the project, teachers will be trained on how to implement the Read Naturally program in their classes (Read Naturally, Inc., 2001; see Appendix A). To train the teachers on the program, the principal would have to arrange staff training. The teachers previously trained with the program, through their partial inclusion implementation, would be the presenters for the training. They could demonstrate the program and how to accomplish it successfully.

### **Potential Resources and Existing Supports**

The potential resources and existing supports are the teachers at the local site who have previous experience with the program and the computer network provided at the site. The previous teachers have three years of experience accomplishing the program in their partial inclusion classes. They have attended training by the program creators, and have the resources and literature to support training for the staff. The computer network at the school is also an existing support. Teachers have computers available in each of their classrooms, in the library, on two portable carts, and in two computer labs that can be used to access the program.

### **Potential Barriers**

Potential barriers for the accomplishment of the literacy program, Read Naturally, include time in the daily schedule to accomplish the program with the students, teacher reluctance to the new program, lack of support from the administration to purchase the site license, and computer infrastructure (Read Naturally, Inc., 2001). Teachers are expected to cover a particular amount of curriculum each day. Providing time to

accomplish the literacy intervention may be a potential barrier. In language arts classes, time is given daily for students to read in class, this time would potentially be the time that teachers could use to accomplish the intervention for struggling readers. With any change comes adversity. Another potential barrier is the reluctance of the teachers to accomplish the program in their classrooms. Not receiving support from the administration is a possible barrier also. If the funding is not available for purchasing then the site license, the administration has no choice but to deny the request. Also if the purchase does not seem rational for the site, the administrator can also decide not to purchase the intervention. Last, the computer infrastructure poses to be a potential barrier. The local site's infrastructure is outdated and in need of updating. If the infrastructure fails on any given day, the computerized intervention could not be accessed.

### **Proposal for Accomplishment and Timetable**

Presentation to the local site of the finding of the data can be accomplished on completion of this report. The presentation will take an hour. If the administration agrees to purchase the intervention program for the site, staff training will be organized according to the sites calendar. The staff training will take about 2 hours to accomplish. Accomplishment of the intervention can begin promptly after the purchase of the site license. From start to finish, the timeline would be about one month, to allow for time to schedule the presentation and initial training. Additional follow-up training could be scheduled individually as needed. If the site license is not approved, teachers can

continue to use the existing program at the local site. Access could be provided to the programmed computers before or after school.

### **Roles and Responsibilities of Student and Others**

My role is to present the data analysis to the local site with the proposal for the purchase of the site license within a week by the local site administration. The role of the site principal is to approve the proposal and release the funding for the license and purchase the license. On endorsement of the expenditure, my role will be to organize the staff training. The role of a few of my colleagues and me will be to accomplish the training, preparing the staff for the intervention. The responsibility of the local site's computer technician will be to keep the computers on-line and troubleshoot any problems with the infrastructure. Last, the responsibility of the local site's teachers will be to accomplish the intervention.

### **Project Evaluation**

The evaluation of this project is the consent of the site administration to purchase the proposed intervention program. This project was successful if endorsement is given. After completion of the project, next steps will be decided based on the endorsement or rejection of the purchase of the intervention program. If the proposal is accepted and the site license is purchased, then the next steps would be training for the staff. If the proposal is not accepted, then the next steps would be to continue to use the intervention in the way being accomplished and continue to evaluate the progress of the intervention.

## **Implications Including Social Change**

### **Local Community**

This project, if approved, addresses the needs of the learners in the local community by providing the students performing below average in reading an intervention program to help them bridge the learning gap. If not approved, it provides the local site valuable information to maintain the intervention in the special education partial inclusion setting. This project's importance to the students, families, instructors, administrators and community partners is that it provides the rationale and supports the currently accomplished intervention program through its positive effects on special education students in a partial inclusion setting (Kyle et al., 2013; Labbo, 2005; Rabiner et al., 2010; Mei-Ju, 2012; Sternberg et al., 2007). It will reassure the accomplishment of the partial inclusion setting at the local site as a successful program and support its continuation.

### **Far-Reaching**

My work is important in a larger context because it provides reasons for accomplishment and continuation of the supported intervention. Because of the small sample size generalization is not possible. But the results can be considered by other sites as an option for their partial inclusion English settings, not only in the area but in other states or countries.

## **Conclusion**

Thus, the project for this study included providing, through a presentation to the local site administration, the reasons for purchasing a site license for the English

intervention program supported from the conclusions in section 2. The intervention supported in section 2 was a computerized intervention, which drove the reasons for the literature review by focusing on literacy and computer-assisted education. The project, a presentation of data and proposal for purchase of a site license, leads to future steps based on the acceptance or decline of the proposal. If the proposal is accepted and the license is purchased, the next steps include teacher training and technological support to accomplish the intervention. If the proposal is declined, the next steps are to use the supportive data from section 2 to continue the intervention in the partial inclusion setting while continuing to monitor the progress of the students. Implications for social change involve providing supportive data for the computerized English intervention Read Naturally for the local site and investors, besides other sites nationwide for consideration to promote English achievement (Read Naturally, Inc., 2001).

## Section 4: Reflections and Conclusions

### **Introduction**

The following section provides a summary and reflection of various aspects of the project, including the project's strengths and limitations, my reflections on scholarship, the project development and evaluation, and leadership and change. This section also focuses on various analyses including that of myself as a scholar, practitioner, and project developer. Last, in this section I discuss the project's potential influence on social change, implications, applications, and directions for future research.

### **Project Strengths**

The project's strengths in addressing the problem were the compelling evidence supported by the data analysis and results of the literature review, enough available computers at the site to support the program implementation, and the eagerness of the teachers and administration to provide every opportunity for their struggling readers to succeed.

The data analysis in Section 2 supported growth in literacy for students with special needs when the intervention was computer-assisted. Based on the results, the subsequent literature review exploring the benefits of computer-assisted literacy interventions was developed. By presenting the analysis results to the local site administration, it provides reasons for the funding of the intervention.

Administrative and teacher support is crucial in implementing a new program at a site. The support from the site administration and teachers is strong when providing struggling students with interventions. The proposed intervention would be accomplished

in the classroom without disturbing the existing schedule and routines. Training on the intervention can occur during a regularly scheduled staff meeting.

### **Recommendations for Remediation of Limitations**

The project's limitations in addressing the problem are varied. The first limitation is accepting the proposal to purchase the program. If the program proposal is not accepted by the local site, the general education classrooms containing the inclusion students would not have access to the program on a daily basis. A recommendation for remedying this limitation would be a rotating schedule before or after school for the inclusion students, to allow them access. This would be reliant on the availability of a trained special education teacher to supervise the students.

A second limitation in addressing the problem would be the willingness of the staff to participate and support using the program. To remedy this limitation, the staff would need to be motivated to produce results. This could be accomplished by offering class incentives and reminding the staff of the conclusions supporting the development of literacy through using the program. Furthermore, the limitation of a weak infrastructure needs to be addressed. The district has been updating the local site's infrastructure to meet the needs of the new common core assessment, which is computer-based. With this update, the computer-based program should be adequately supported.

Last, the limitation of time and scheduling is a concern in addressing the problem. Teachers' time is precious and every minute counts in the classroom. This philosophy can be used to remedy this limitation. Implementation of the computer-based intervention would save time and free time for the teacher to work with other students during



regularly scheduled reading time. Particular students can be rotated through the program weekly or monthly, allowing the teacher to work directly with the remaining students, ultimately reaching twice as many students in the same time.

Alternate ways to address this problem to consider would be to provide alternative opportunities to provide computer-aided literacy, such as rotation through the computer lab or using the classroom computer cart. If these choices were used then the entire class could access a literacy intervention simultaneously. The teacher would assist and monitor the students, providing them direct feedback as they were working.

### **Scholarship**

Scholarship is defined as learning of a higher level. Throughout this experience, I have been practicing scholarship and achieving scholarship at a level deeper than I ever imagined at the beginning of this journey. The extensive course studies prepared me to embark on the project study. I was able to gather knowledge of the learning process and how to apply my newly gained knowledge to my current position to contribute to social change.

Scholarship is a constant. Scholarship is accomplished when sought and valued. Scholarship takes courage and hard work. It takes persistence and hope. Scholarship is also taking what you have learned and sharing it with others, knowing when and how to help and educate people in one's world. Last, scholarship is a hope to be a part of the change in the world, to leave a mark on society.

### **Project Development and Evaluation**

Project development requires critical thinking skills and planning. The first step in project development is to be observant of the surrounding world. These observations lead to realization of a concern or an area of need. Once the need is discovered, the second step of project development begins: planning. Planning incorporates many facets: setting, duration, participants, and procedures, to name a few. Consideration needs to be taken to ensure that the procedures support the wanted outcomes.

Once a project is developed, evaluation is necessary to decide effectiveness. Evaluation allows adjustments. Evaluation also allows project development by providing valuable feedback. Evaluation needs to fit the project. Evaluation type should be carefully considered to ensure it evaluates that which it was intended to.

### **Leadership and Change**

Leadership and change come hand in hand. With good leadership comes good change. With bad leadership comes bad change. They are reliant on each other. Leadership has important responsibilities to promote positive change. If a leader is strong and knowledgeable, not only about his or her duties but people, vast change is inevitable. Leaders need to consider the change they want to create and then use their knowledge and resources to help them to create the change they seek.

### **Analysis of Self as Scholar**

I as a scholar am devoted, hardworking, and dedicated. Through this experience, I have discovered that I am more than a devoted learner, I am a multitasker, a dependable leader in my community, at home, at work, and as a scholar. I am good at time

management and realistic about my personal expectations. I seek knowledge and have urgency to apply what I learn in a meaningful way. I love to learn, and I love to share what I have learned with others. I firmly believe I am a lifelong learner and will never stop seeking to become a stronger scholar.

### **Analysis of Self as Practitioner**

As a practitioner, I am skilled and reliable. When I accept a task, I do so knowing that I can successfully complete the task. I do not blindly jump into responsibilities. Consequently, I also seek ways to improve myself as a practitioner. I am dedicated to success, and when I encounter a bump in the road, I reflect on my path and take the opportunity as a learning experience. I rarely make the same mistake twice.

### **Analysis of Self as Project Developer**

As a project developer, I realized how much I did not know. I have always been a part of a team when developing projects. Through this process, I realized how the project develops, how through the analysis of data, a project comes together. As the facilitator, my responsibility is to take the steps necessary to bring it into fruition. I also realized that I was unaware of how difficult a job as a project developer is. Many facets need consideration, such as audience, medium, timing, among others. A project developer is a difficult yet rewarding responsibility.

### **The Project's Potential Influence on Social Change**

On reflection of the importance of the work accomplished and what I learned, I have to say I am amazed. The importance of this project is large. Not only did I accomplish creating a meaningful, and useful project for the local site, I proved to myself

that I am capable of taking on the scholarly leadership role and becoming a project manager. The importance is two-fold, I have proved to the local site that I am a valuable asset to bring about social change and promote literacy, and I have proved to myself that with determination, all things are possible with time. This project's potential influence not only reaches to the local site involved in the study but to the community. This project can be shared globally as an example of how to promote social change beginning locally. Leadership comes from within; an inner drive that calls on scholars of all ages to figure out how to make the world a better place. It starts with a small spark, a feeling in the gut, that things can be better, and the work is worth it.

### **Implications, Applications, and Directions for Future Research**

Learning how to accomplish change is the most important thing learned. Anyone can take a class and learn about a subject, but the importance of learning how to help others is valuable. Daily, in life, leaders encounter situations in which they see a need for change. Easing this change is a skill I learned through this project. I now have the tools to help my society at not only a local, but a global level. The implications for future research are in partial inclusion, literacy development and computer-assisted interventions. This project focused on a small population at a particular site, future research is needed to generalize the conclusions and support them in a global aspect. Technology is growing and quickly becoming the new medium of schools in the United States and throughout the world. Because of the dynamics of technology, constant research to find best practices is necessary.

Applications that can be made to the educational field are to support the growing use of technology in today's schools and how it can aid in literacy for students with special needs. The information in this study can help guide future and further research about technology and meeting the literacy needs of students with special needs. The information in this study can also help drive research about what teaching practices are best for students with special needs in various learning environments such as full and partial inclusion settings.

Future research is needed to help generalize the conclusions in this study. Yes, the analysis did support using a computer-assisted literacy program in the partial inclusion setting, but the sample size was constrained and small because of the population provided the intervention. How would a larger population with more diverse needs react to the intervention? Is the intervention only successful with the non-severe students with special needs or would a larger demographic also benefit? Future research could also explore other literacy applications that are computer-assisted. Last, future research could explore the data in the study longitudinally. How did the data set perform in future years? Was there still progress? If so what did it look like?

### **Conclusion**

Thus, the project had strengths in addressing the problem and limitations. The project's successes weigh heavily on accepting the project by the local site. If the project is not accepted, there are several ways to allow students access to the literacy intervention, such as circulating through the computer lab or using the class sets of computers on a monthly schedule without disrupting the teaching day.

Analysis of learning described the growth of the self as a scholar, practitioner and project developer, substantial growth was noted. A final discussion of the overall reflection of the importance of the work and what was learned showed an understanding of the importance of the leadership role and promoting social change. Last, this section was concluded with a discussion of the implications, applications, and directions of future research, which included a need to continue research to allow for generalization of the data.

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## Appendix A: Program Implementation Framework

*(Adapted from <http://implementation.fpg.unc.edu>)*

There are five frameworks involved in implementing a new program. The following is outlined for this program:

- Usable Interventions
- Implementation Stages
- Implementation Drivers
- Implementation Teams
- Improvement Cycles

### **Framework 1: Usable Interventions**

Before you can implement a program there needs to be a clear understanding of the program and its suitability for your site. The following can be found in the attached training.

- Clear description of the program
  - Clear philosophy, values and principles
  - Clear inclusion and exclusion criteria for the student placement in the program
- Clear essential functions
- Operational definitions
- Practical performance assessment
  - Assessment relates to philosophy, values and principles
  - Assessment is practical and repeatable
  - Evidence of effectiveness when properly used
  - Highly correlated with intended outcomes

### **Framework 2: Implementing Stages**

Implementation is a process using multiple steps including decision-making, action, corrections, and assessment. Implementation success can take up to 2 to 4 years and contains four stages.

- Exploration- teacher evaluation of students in each English classroom
  - Assessing student needs
  - Identifying the possible programs to meet those needs
  - Assessing fit and feasibility of implementation and sustainability
- Installation- determined by administration with decision to move ahead
  - Developing communication

- Ensuring financial and human resources are sufficient and secure
  - Physical space
  - Purchasing of equipment and technology
  - Developing practitioner competency
  - Initial implementation- first use of new program
    - Attention to coaching
    - Continuous improvement and problem solving
    - Use data to support decision making
  - Full implementation- teachers skillfully provide program with successful outcomes
    - Teachers skillfully employ new practices
    - Infrastructure supports teachers
    - Integration of newly learned skills
- \*\*Sustainability is supported by finances and infrastructure.

### **Framework 3: Implementation Drivers**

Implementation drivers are the core components that secure a new program by providing the support that it needs to be sustainable. A key feature is that drivers are integrated and compensatory. There are three types of drivers:

- Competency drivers- staff activities to develop, sustain and improve practice for the benefit of the student
  - Selection of qualified teachers
  - Training of the staff to implement program
  - Coaching to support implementation
  - Performance assessment of instructional and program quality
- Organization drivers-develop supports and infrastructures needed
  - Decision-Support data systems
  - Facilitative administration
  - System interventions to strategically work with external systems
- Leadership drivers- use technical and adaptive leadership strategies

### **Framework 4: Implementation Teams**

By using implementation teams, implementation can occur more rapidly, efficiently and with higher success rates. Implementation teams also provide an internal support system to help move new programs through the stages, supporting communication and engaging in problem solving. By having a team, a single leader does not get burnt out or leave to a new position leaving the position empty. Teams focus on:

- Increasing buy-in and readiness
- Installing and sustaining the implantation infrastructure

- Assessing and reporting on fidelity and outcomes
- Building linkages with external systems
- Problem solving and promoting sustainability

Core competencies of the team should include:

- Knowledge and understanding of the program including outcomes
- Knowledge of how to implement programs and the science involved for best practices
- Applied experience in data use for program improvement

For this program implementation the team will include: the current special education teachers implementing the program, site administrators and the technology coaches.

### **Framework 5: Improvement Cycles**

Using improvement cycles helps to support purposeful process of change and are based on the Plan, Do, Study, Act (PDSA) cycles. They use these cycles to intentionally identify, problem solve and alleviate barriers to successful implementation. The PDSA cycles consist of four phases:

- Plan
  - Identify barriers/challenges, use data if possible to create a plan to continue movement forward and address monitoring outcomes
- Do
  - Carry out strategies/plan
- Study
  - Use identified strategies to assess and track progress
- Act
  - Make changes to the next iteration of the plan to improve implementation

\*\* Support might be required by administration or other key partners.

### **Implementation schedule**

After initial training, the suggested implementation schedule is three times weekly for 20-30 minute intervals. This program will take the place of the already allotted timeframe within the classroom set aside for sustained silent reading independently. By using this implementation schedule, teachers can continue their regularly scheduled day.

Teachers will already have the data to support placement into the program based off of reading inventories and assessments already completed as mandated by the site currently.

Assessment and monitoring growth will be continuous and provided within the program itself and is a part of the training attached.

### **Read Naturally Staff Training- Duration: 2 Hours**

- ❖ Overview of the Read Naturally SE (Software Edition)
  - Implements three powerful, research backed strategies
    - Teacher modeling
      - Students learn proper pronunciation, expression, and phrasing by listening and reading along with fluent readings
    - Repeated Reading
      - Builds fluency
    - Progress Monitoring
      - SE charts growth visually for students/teachers
- ❖ Additional benefits
  - High interest non-fiction for all ages
  - Independently paced fluency practice at instructional level
  - Features to promote vocabulary and comprehension
  - Site license allows all data collected to be stored on the school server, allowing students, teachers and administration access from any computer connected to the server.
- ❖ Program includes:
  - Leveled stories
    - Guides students through steps, automatically calculating and charting data
  - Tech support

- Free e-mail support, software updates, web supports, and phone support first year
- SE Teacher management & utilities
  - Customize for each student, automatic placement feature, student tracking, and database utilities
- Manuals and online help
  - Set-up quickly and variety of guides to management and features
- ❖ Introduction to Read Naturally
  - Read Naturally Strategy
    - Teacher modeling, repeated reading, progress monitoring
  - Steps of the SE strategy
    - 9 steps
  - Teacher responsibilities
    - Planning and set up
    - Student placement
    - Teach students steps and expectations
    - Set student options
    - Adjust levels and goals
    - Communication with students and parents
- ❖ Introduction to the software
  - Starting
    - Icon will be on desktop for site license
    - Click on icon to begin
    - If using SE version: Insert SE CD and double-click:

- CD drive
  - Program
  - Rnse or rnse.exe
- Logging in
- Create a teacher password of your choice
  - Teacher management screen will open providing access to set-up classes
  - Logging in as a student allows limited access to stories related to the specific level of the student and the 9 steps
- Exiting
- Click **Quit** to return to login page
  - Click **Exit** on login screen
- ❖ Planning and setting up
- Schedule and workplace
- 30 minutes 3 times a week
  - Where can students work?
  - How many and how often are computers available?
  - How many supervising adults are available?
- Required materials
- Compatible computers, headphones, access to stories
- Organizing the computers- Login as teacher to access Teacher Management screen
- Adding classes
    - Click on **Classes** tab
    - Click **Add**

- Click in **Class Name** box, then type name of new class
- Click **Save**
- Enrolling students
  - Click on **Students** tab
  - Click **Add**
  - Enter required info: Name, grade, password
    - ◆ Passwords must be unique, contain letters and numbers, 3-14 characters, case sensitive, easy enough for student to remember
  - In **Class** box, select appropriate class from dropdown
  - Click **Save**
  - Click **No** for story options for now, this is covered later.
- Changing student classes
  - Click **Students** tab
  - Click column heading **Class Name**
  - Click in **Find by Class Name** box, then select current class
  - Click **Find**
  - Click **Show All**
  - Click column heading **Last Name**
  - Locate box at bottom of screen labeled **Find by Last Name** and type in first initial of student's last name
  - Click **Find**
  - Click **Show All**, select student to move
    - ◆ To select multiple students, press and hold the Ctrl key as you click
  - Click **Reassign**



- Choose desired class from drop-down menu
- Click **Save**, then **Yes** to continue
- Deleting students
  - Click **Students** tab
  - Click on desired student/s name/s
  - Click **Delete**, then **Yes**
- Deleting classes- only after all students are reassigned/removed
  - Click **Classes** tab
  - Select desired class
  - Click **Delete**, then **Yes**
  - Click **Quit** to return to login page
- Retrieving student passwords
  - Click **Students** tab
  - Select desired student name
  - Click **Edit**
  - Look in **Password** box
  - Click **Cancel**, then **Quit** to return to login page
- Changing teacher password
  - Click **Teacher** tab
  - Delete current text in **Password** box, then type new password
    - ◆ Should be at least 6 characters, a combo of letters and numbers, upper and lower case, easy to remember but difficult to guess
  - Click **Save**, then **Quit** to return to Login screen

- ❖ Placing students- within Teacher Management screen
  - Click Students tab
  - Click on Student to place
  - Click Place
  - Select placement testing level from list
  - Click **Next**, then **Yes** to begin
  - Have desired student begin the placement test by clicking **Start**
    - Student reads passage aloud until bell rings while teacher counts silently the mistakes made,
    - Click the last word read
  - Enter number of errors made, click **Next**
  - Follow recommendation of program
  - Select **Continue Testing** and click **Next** for another story, repeat previous steps
  - Once the level is determined, in the **Select Level/Curriculum and Goal** list, select desired level
  - Click **Next**
  - On **Students** tab click on placed student then click **Story Options**
    - Make adjustments to boxes as needed to personalize program
    - Click **Save** or **Cancel** to exit screen
    - Click **Quit** to return to the Login screen
- ❖ Working in student stories
  - Common features can be found on the Student Stories screen
    - Audio instructions icon, Start/Stop Icon, Title Bar, Progress Bar, Menus, Scores, Reading Guide Icon, Reading Guide, Quit, Back and Next

- SE steps- progress bar at top of screen allows students to track which step they are on by highlighting the current step
  - Step 1: Select a story
    - 12 options to complete prior to passing the level, click on one to start, Click **Yes** to confirm
  - Step 2: Key words
    - Specific for each story, they are read aloud by the program and when they are clicked on the definition and a sample sentence are also read aloud
  - Step 3: Prediction
    - Students use story title, key vocabulary and pictures to write a brief description of what they think the story is about
    - By clicking on the **Back** button key words can be revisited, click **Next** to return to the prediction page.
    - Click in the box provided to begin typing, click **Next** to move on
  - Step 4: Cold timing
    - Click **Start** to begin timer
    - Click **Finished** when the passage is completed.
    - Repeat process until the program provides a graph of the cold read and the current goal and prompts you click **Next**
  - Step 5: Read along- typically 3 times unless you reprogram
    - Click **Start** to begin
    - Student reads along with narrator
    - Click **Stop** when finished
    - Click **Next** button to move on
      - ◆ Teacher can access scores by clicking on the word Scores in the top right of screen.

- Step 6: Practice- typically 3-10 practices
  - Click **Start** to begin timing
  - Click the last word read when the bell sounds
  - When goal is met **Next** button will be enabled
  - Click **Next** to continue
- Step 7: Quiz- questions focus on main idea, facts, vocabulary, and inference
  - Click on the correct answer for each question, last question, #5 is open-ended
  - Click **Done**- Incorrect answers will be prompted again
- Step 8: Retell
  - Click **Review Story** to review before writing a summary
  - Click **Close** when finished
  - Click in text box and write summary
  - Click **Next** to continue
- Step 9: Pass Timing
  - Student passes if: read at goal rate, make 3 or fewer errors, reads with an expression rate of 2 or higher, answers all quiz questions correct
  - Click Start to begin
  - Click Stop at the end of time
  - Click Pass to move on
  - Teacher enters password, then clicks OK
  - Click Start
  - Teacher keeps track of errors
  - Click finished or on last word if bell sounds

- Teacher enters errors and expression rating
    - ◆ 1= reads haltingly, seldom uses phrasing, no expression
    - ◆ 2= reads phrases of 3-4 words, usually pauses for end punctuation
    - ◆ 3= usually correct phrasing, inflection, and attention to punctuation
    - ◆ 4= reads conversationally, consistently correct phrasing, inflection, attention to punctuation
  - Click **Next**
  - Decide if #5 is correct and mark appropriate box (if not student will need to rewrite answer)
  - Click **Next** when ready
  - You can graph the stories from the Congratulations screen as well as, view results
  - Click **New Story** to begin the next story
- Non-passing student options
- Send student back to various steps
  - Retest students without repeating steps
  - Pass student despite not meeting all criteria
- Resetting stories
- Use student login
  - Click **Edit**, then Click **Story Options**
  - Enter teacher password
  - Click **Advanced** tab
  - Choose story to reset
  - Click **Reset**, Click **Yes**, then **Save**

- Phonics stories- additional option
- ❖ Setting story options- all options available through student login, **Edit, Story Options**
  - Turning off steps
  - Requiring a teacher for cold timings
  - Read along options
  - Other options
- ❖ Monitoring student performance- through teacher login- Teacher Management
  - Updating levels and goals
    - Click **Story Options**
    - Adjust **Goal** box
  - Generating reports
    - Click **Reports**
    - Select dates from the **Select Report Period** boxes
    - Select student
    - Click **Create Report**
    - Explore report by clicking on the Graph icons
    - Use **Back** button to print Needs At A Glance Reports and other reports from the dropdown menu
- ❖ Communicating with students and parents- using teacher login in Teacher Management
  - Printing parent letters, individual stories, and super reader awards
    - Click **Students** tab
    - Click **File** menu
    - Click **Print**

- **Select All**
- Click **Print Preview**
- Click **Print This Page** or **Print** from **File** menu
- Select **Super Reader Award** and **OK** to print awards
- Select level and use **File Print**
- Select **Quit** to exit

## Appendix B: Data Use Agreement

This Data Use Agreement (“Agreement”), effective as of 10/28/13 (“Effective Date”), is entered into by and between Jayna M Jensen and (“Data Recipient”) and the XXX Union School District (“Data Provider”). The purpose of this Agreement is to provide Data Recipient with access to a Limited Data Set (“LDS”) for use in research in accord with the HIPAA and FERPA Regulations.

1. Definitions. Unless otherwise specified in this Agreement, all capitalized terms used in this Agreement not otherwise defined have the meaning established for purposes of the “HIPAA Regulations” codified at Title 45 parts 160 through 164 of the United States Code of Federal Regulations, as amended from time to time.
2. Preparation of the LDS. Data Provider shall prepare and furnish to Data Recipient a LDS in accord with any applicable HIPAA or FERPA Regulations
3. Data Fields in the LDS. No direct identifiers such as names may be included in the Limited Data Set (LDS). In preparing the LDS, Data Provider shall include the **data fields specified as follows**, which are the minimum necessary to accomplish the research (list all data to be provided): 2011, 2012, and 2013 CMA ELA scores for the 8 participants in the study.
4. Responsibilities of Data Recipient. Data Recipient agrees to:
  - a. Use or disclose the LDS only as permitted by this Agreement or as required by law;
  - b. Use appropriate safeguards to prevent use or disclosure of the LDS other than as permitted by this Agreement or required by law;
  - c. Report to Data Provider any use or disclosure of the LDS of which it becomes aware that is not permitted by this Agreement or required by law;
  - d. Require any of its subcontractors or agents that receive or have access to the LDS to agree to the same restrictions and conditions on the use and/or disclosure of the LDS that apply to Data Recipient under this Agreement; and
  - e. Not use the information in the LDS to identify or contact the individual data subjects.
5. Permitted Uses and Disclosures of the LDS. Data Recipient may use and/or disclose the LDS for its Research activities only.



## 6. Term and Termination.

- a. Term. The term of this Agreement shall commence as of the Effective Date and shall continue for so long as Data Recipient retains the LDS, unless sooner terminated as set forth in this Agreement.
- b. Termination by Data Recipient. Data Recipient may terminate this agreement at any time by notifying the Data Provider and returning or destroying the LDS.
- c. Termination by Data Provider. Data Provider may terminate this agreement at any time by providing thirty (30) days prior written notice to Data Recipient.
- d. For Breach. Data Provider shall provide written notice to Data Recipient within ten (10) days of any determination that Data Recipient has breached a material term of this Agreement. Data Provider shall afford Data Recipient an opportunity to cure said alleged material breach on mutually agreeable terms. Failure to agree on mutually agreeable terms for cure within thirty (30) days shall be grounds for the immediate termination of this Agreement by Data Provider.
- e. Effect of Termination. Sections 1, 4, 5, 6(e) and 7 of this Agreement shall survive any termination of this Agreement under subsections c or d.

## 7. Miscellaneous.

- a. Change in Law. The parties agree to negotiate in good faith to amend this Agreement to comport with changes in federal law that materially alter either or both parties' obligations under this Agreement. Provided however, that if the parties are unable to agree to mutually acceptable amendment(s) by the compliance date of the change in applicable law or regulations, either Party may terminate this Agreement as provided in section 6.
- b. Construction of Terms. The terms of this Agreement shall be construed to give effect to applicable federal interpretative guidance about the HIPAA Regulations.
- c. No Third Party Beneficiaries. Nothing in this Agreement shall confer on any person other than the parties and their respective successors or assigns, any rights, remedies, obligations, or liabilities whatsoever.

- d. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.
- e. Headings. The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any provisions of this Agreement.

IN WITNESS WHEREOF, each of the undersigned has caused this Agreement to be duly executed in its name and on its behalf.

**DATA PROVIDER****DATA RECIPIENT**

Signed: \_\_\_\_\_

Signed: \_\_\_\_\_

Print Name: \_\_\_\_\_

Print Name: \_\_\_\_\_

Print Title: \_\_\_\_\_

Print Title: \_\_\_\_\_

## Appendix C: Letter of Cooperation from a Community Research Partner

XXX Union School District  
Address • City, CA 00000

October 31, 2013

Dear Ms. Jayna Jensen:

Based on my review of the information you provided me, I give permission for you to conduct the study entitled *Partial Inclusion Effects on Students with Special Needs in English* within the XXX Union School District. As part of this study, I authorize you to collect CMA English data from 2011, 2012, and 2013 and review the student Individualized Academic Programs involved in the study, as needed, to include relevant, yet anonymous information once parent permission is obtained. Individuals' participation will be voluntary and at their own discretion.

I understand that the district's responsibilities include: granting permission to collect the required data, including the CMA data, for the study on the eight participants. The district reserves the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

Sincerely,

*Signature*

## Curriculum Vitae

**Jayna Michelle Jensen, EdD**  
**Curriculum Vitae**  
**Current Appointment: Instructor**  
**Department of Special Education, XXXXX Union School District**  
October, 2014

**Personal Information**

XXXXXX Union School District, Department of Special Education  
0000 XXXX, XXXX, California 00000  
Telephone: 000-000-0000    Fax: 000-000-0000    Email: XXXX.org

0000 XXXX Road  
XXXX, California 00000  
Telephone: 000-000-0000    Fax: 000-000-0000    Email: XXXX.net

**Education**

California State University XXXXX, XXXXX, CA  
Bachelor of Arts, Liberal Studies, 2003  
Masters of Arts, Education, 2007

Walden University, Minneapolis, MN  
Doctorate of Education, Teacher Leadership, 2014

**Current Credentials**

Ryan CLAD Multiple Subject Clear, 2004

Clear Level II Education Specialist, 2007

**Dissertation Topic**

Partial Inclusion Effects on Students with Special Needs in English

**Certification**

Adult, Child, Infant CPR/AED, 2013

Pro-ACT Restraint Certification, 2012

Certificate of Special Competence in: Grant Writing, 2007

Behavior Intervention Crisis Management (BICM), 2006

San Diego County Regional Occupational Program: Printing & Graphic Productions,  
1990

**Professional Experience**

XXXXX Union School District, XXXXX Middle School

XXXXX, CA (12/2003 to present)

**Professional Presentations**

Jensen, J., Special Education Student Success, invited presentations

California League of Middle Schools Annual Conference, Sacramento, CA,  
February, 2010.

California League of Middle Schools Annual Conference, San Diego, CA,  
December, 2011.

California League of Middle Schools Annual Conference, San Diego, CA,  
October, 2012.

California League of Middle Schools Annual Conference, Sacramento, CA,  
March, 2013.

California League of Middle Schools Annual Conference, San Diego, CA,  
October, 2013.

California League of Schools Annual Conference, Monterey, CA, January, 2014.

**Honors**

Phi Theta Kappa Society (2000)

Cum Laude (2003)

**Volunteer and Service Work**

Special Blessings Adults with Special Needs Church Service Worship Leader and Teacher, XXXXX Church, XXXX, CA (2004 to present)

Community Service, Authentic Participation Project, City of XXXXX, CA (2002)

**Professional Organization Memberships**

California Teachers Association National education Association (2007 to present)

XXXXXX Elementary Educators Association (2007 to present)

California League of Middle Schools (2007 to present)