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Pepperdine University

Graduate School of Education and Psychology

A Comparison of Pull-Out and Co-Teaching Models on the Reading Performance of Third through Fifth Grade Elementary Students with a Diagnosed Specific Learning Disability in Reading

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Educational Leadership, Administration, and Policy

by

Louis Laffitte, Jr.

September, 2012

Linda Purrington, Ed.D. – Dissertation Chairperson

This dissertation, written by

Louis Laffitte, Jr.

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

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DEDICATION

This work is dedicated to:

My wife Andrea

My boys Jelani, Jaleel and Jaden

My parents Louis and Gloria

My brother Thaddeus

My nephew Thaddeus II

My Mother-in-Law Pinkie

My Father-in-Law Phillip (R.I.P. April 13, 2012)

Those who didn't believe I could do this; you motivated me to start.

Those who believed I could do it; you motivated me to finish.

ACKNOWLEDGMENTS

I would like to thank everyone that played a role in my completion of this journey. Dr. Purrington for encouraging, guiding and helping me move through this. Drs. Barner and Jackson for providing valuable feedback. Dr. Durden for her encouragement and keen eye helping me make sense of this. Mrs. Miele for being a positive resource in my research of this topic. Dr. Boatright for helping code and providing her opinion. And finally, I would like to thank everyone who participated in this study or provided encouragement for me to finish.

VITA

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ABSTRACT

The purpose of this mixed methods study was to investigate the design and implementation of the Pull-Out and the Co-Teaching special education resource models at 2 elementary schools in the Golden Cactus Elementary School District and to compare the student reading performance of 56 3rd through 5th grade students, by grade level, who participated in one of the two models at the selected schools during the 2010-2011 school year, to determine which model was associated with higher levels of student success and under what circumstances.

The following two research questions guided this study:

1. How does the 2010-2011 reading performance of 3rd through 5th grade elementary students with a diagnosed specific learning disability in reading, as measured by the Galileo criterion-referenced assessment, compare by Program service models at 2 selected elementary schools in the Golden Cactus Elementary School District?
2. What type of professional development, resources, and support, if any, do the Golden Cactus Elementary School District elementary school principals, resource teachers and co-teaching general education teachers at two selected elementary school sites believe are needed to best implement the Pull-Out and Co-Teaching special education Resource Model delivery options at their sites?

Overall, the study revealed no significance between the Co-Teaching and Pull-Out instructional models on the student reading achievement of 3rd, 4th and 5th grade students identified with a specific learning disability in reading. Because the findings revealed little difference overall in compared performance, and because these findings are

counter to literature findings, further research will need to be conducted in order to truly make conclusions about the effectiveness of the 2 programs.

The results of this study suggest that proper training was needed to create a foundation for expected instruction. It also suggests that there was a range of understanding which impacts student achievement. This study was the first step in examining the impact of both Pull-Out and Co-Teaching instructional practices on students identified with a specific learning disability. It is important that instructors be assisted with the specific skills needed to implement the instructional delivery models critical for higher levels of student success.

Chapter I

Introduction

Addressing the achievement gap that exists between special education and non-special education students has recently come to the forefront of the nation's public education agenda with the Individuals with Disabilities Education Act (IDEA) and No Child Left Behind (NCLB) legislation bringing accountability into focus. This purported disparity was even more alarming when held next to the data from Swanson (2008), showing a gap of 31% between disabled and non-disabled 12th-grade students scoring at or above proficient on the National Assessment of Educational Progress (NAEP).

To combat the identified disparities in student academic achievement, the Federal Government implemented NCLB in 2001, making accountability unavoidable. NCLB was an act of the 107th Congress to close the achievement gap with accountability, flexibility, and choice, so that no child would be left behind (U.S. Congress, 2002). According to the California Department of Education, 2008), "The purpose of NCLB is to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments" (p. 1). IDEA 2004 requires states to establish performance goals for children with disabilities that are the same as the states' definition of adequate yearly progress under NCLB. IDEA also notes that the education of children with disabilities can be made more effective by having high expectations for such children and ensuring their access to the general education curriculum in the regular classroom, to the greatest extent possible.

In response to IDEA and NCLB accountability measures, the focus of education has pointed towards students' ability to meet state academic standards, as measured by state assessments. The articulated purpose of state standards is to improve student academic performance by providing teachers with a common progression of goals to focus instruction.

In Arizona, where this study was focused, the Arizona Department of Education (ADE) defines standards as the foundation for curriculum design, instructional practice, and the development of various assessments to be used at the state and local levels (Arizona Department of Education [ADE], n.d.c.). In 2001, Arizona voters approved Proposition 301, which provided increased teacher pay as well as public accountability for school performance (ADE, 2011). Around the same time, Arizona put in place the Arizona's Instrument to Measure Standards (AIMS), a test to measure whether or not students meet the State Standards. To comply with the requirements of Proposition 301 and the AIMS, the ADE worked with scholars and various school officials creating Arizona (AZ) LEARNS, an accountability system that linked both Proposition 301 and NCLB.

AZ LEARNS is Arizona's education accountability system developed to meet the requirements of the U.S. Department of Education's NCLB. The goal of AZ LEARNS is to measure student achievement using the Arizona Academic Standards as its benchmark. AZ LEARNS consists of four profiles. From top to bottom, these profiles are: Excelling, Highly Performing, Performing, and Underperforming. The ADE uses a process to calculate the achievement profile for each school within the state of Arizona.

Since the creation of AZ LEARNS, numerous Arizona schools have failed to meet its academic standards. According to the ADE, 136 out of 1,098 Arizona schools achieved an AZ LEARNS profile of underperforming for the 2003 school year. Underperforming was determined by a school failing to annually produce acceptable progress in each area. Since 2003, more schools have been identified with AZ LEARNS profiles and Arizona has even added a fifth profile, Performing Plus. The Performing Plus status was given to schools that have enough points to be Highly Performing or excelling, but do not have sufficient students exceeding the standard. In 2010, 89 out of 1,943 schools statewide, including charters, were identified as underperforming. Of these 89 underperforming schools, 2 were in the Golden Cactus School District. In addition, the Golden Cactus School District has failed to make AYP in several special education subgroups over the past several years. While there is a large gap in the achievement of various general education subgroups, the gap between general and special education students is creating a greater discrepancy, lending to school's inability to make AYP. This failure of several special education groups to meet the achievement standards in reading and math has led to district monitoring.

The special education student group in the Golden Cactus School District, which constitutes the focus of this study, consisted of a group of students with diagnosed specific learning disabilities. Nationally, the Data Accountability Center (2010) reported that students between the ages of 6 and 21 served under IDEA with a special education eligibility category of specific learning disabilities, which accounted for 41% of all special education students. The second largest group of students that are served are those identified with a Speech/Language Impairment and who account for 19% of all special

education students. In The Golden Cactus Elementary School District, 1,880 students out of the general student population are special education students, and 43% of special education students are students with a diagnosed specific learning disability.

The Golden Cactus Elementary School District is located in the West Phoenix region of Arizona. It serves approximately 18,000 students ranging from pre-kindergarten through eighth grade. Twelve schools in the district are designated as elementary schools serving students in Kindergarten through fifth grade. Four district schools are grades 6 through 8, three schools serve kindergarten through eighth and one school serves pre-Kindergarten special education through eighth grade. Each elementary school has a population ranging from 700-1,000 students. Sixth through eighth grade schools have student populations ranging from 800 to 1,300 students, and Kindergarten through eighth grade campuses have anywhere from 700 to 1,100 students.

Demographics of the Golden Cactus Elementary School District represent a diverse population. Over 91% of the student population qualifies for the free and reduced lunch program, making Golden Cactus a Title 1 district based on USDOE Guidelines. Also, Golden Cactus has a large Hispanic population, with 88% of the district's student population of Hispanic origin. Four point five percent of the student population is African American, 4.5% of the student population is Caucasian, and 1.5% identify as Native American. Asian American and other ethnic groups in the Golden Cactus District make up the final 1% of the student population.

The elementary school students in the Golden Cactus Elementary School District who have been diagnosed with a specific learning disability and who are eligible for Special Education Resource Teacher services, participate in one of the following four

Resource program delivery models: (a) Pull-Out, (b) Inclusion, (c) Combination of Pull-Out and Inclusion, or (d) Co-teaching. These special education resource services are provided in an effort to address individual student learning needs, to improve students' reading performance, and to close the reading achievement gap between these students and those who have not been diagnosed with learning disabilities. Resource teachers carefully monitored student progress in each of the program delivery options, but there is limited data comparing the performance of students across the instructional models, however the evidence does show a gap existing between the reading performance of students with and without diagnosed learning disabilities.

Problem Statement

In an effort to close the achievement gap, the Golden Cactus Elementary School District provided multiple service models to elementary school students that had been identified with a specific learning disability. Though teachers have been carefully monitoring student progress, little data exists comparing student performance by grade level across the different service models. Because of this, there was a need to study the design and implementation of the multiple service models and to compare student performance by grade level across multiple models to determine which, if any, of these model(s) has provided a greater opportunity for student success.

Purpose of the Study

The purpose of this mixed methods study was to investigate the design and implementation of the Pull-Out and the Co-Teaching special education resource models at two elementary schools in the Golden Cactus Elementary School District and to compare the student reading performance of 56 third through fifth grade students, by

grade level, who participated in one of the two models at the selected schools during the 2010-2011 school year to determine which model was associated with higher levels of student success and under which circumstances this occurred.

Research Questions

1. How does the 2010-2011 reading performance of third through fifth grade elementary students with a diagnosed specific learning disability in reading, as measured by the Galileo criterion-referenced assessment, compare by Program service models at two selected elementary schools in the Golden Cactus Elementary School District?
2. What types of professional development, resources, and support, if any, do the Golden Cactus Elementary School District principals, resource teachers and co-teaching general education teachers, at the two selected elementary school sites, believe are needed to best implement the Pull-Out and Co-Teaching special education Resource Model delivery options at their sites?

Importance of Study

It was anticipated that this study would provide the Golden Cactus Elementary School District with useful information that will help inform the selection, design, and implementation of special education Resource Service delivery models for elementary students that have been diagnosed with reading learning disabilities. This study may provide a model for special education Resource Model service delivery accountability and also add to what is already known about Pull-Out and Co-Teach Resource Model delivery options and related student reading performance. This study may be of interest to other school and district leaders who are interested in closing the reading performance

gap between elementary students who have been diagnosed with a reading learning disability and students who do not have diagnosed learning disabilities. It may also be of interest to anyone who wishes to compare multiple special education Resource Model delivery options.

Delimitations

This study was delimited to the following:

1. Golden Cactus Elementary School District in Phoenix, Arizona,
2. Two K-5 elementary schools within the Golden Cactus School District,
3. Two resource models: Pull-Out and Co-Teaching,
4. Pre-existing data were used from 1 academic year (2010-2011),
5. Galileo data based on Arizona State Standards.

Limitations

There were three main study limitations. The credibility of the qualitative data to be collected in this study will be based on the accurate recall and reporting of the school principals, resource teachers and co-teaching general education teachers with regards to the design and implementation of the special education Resource Service delivery models at their respective school sites and as related to perceived professional development, resource, and support needed to improve the program models. This study was also limited due to the relatively small sample size of two schools and the reading performance scores of 56 third through fifth grade students. Another limitation may have been my role as the Director of Special Services for the district, which may have influenced the questionnaire responses with regards to the number of responses and the content within the responses.

Assumptions

It was assumed that Golden Cactus Elementary School District Special Education Teachers, General Education Teachers, and Administrators are knowledgeable about the Golden Cactus School District Special Education K-8 Resource Program Delivery Models and that they professionally monitor the implementation of instructional models and practices within the special education program at their site as a part of their school improvement process. It was also assumed that the Galileo criterion referenced assessment was a credible and reliable measure of student achievement, forecasting standards mastery on the AIMS Test.

Definition of Terms

Achievement Gap: The difference in academic performance between subgroups (U.S. Department of Education [USDOE], 2011a).

Adequate Yearly Progress (AYP): A measure of year-to-year student achievement on statewide assessments (USDOE, 2011a).

Arizona's Instrument to Measure Standards (AIMS): Standards Based Assessment that measures student proficiency of the Arizona Academic Content Standards in Writing, Reading, Mathematics, and Science and was required by state and federal law (ADE, 2010).

AZ LEARNS: The ADE Accountability system required under NCLB developed with the explicit purpose of identifying schools using a viable classification system based on a set of academic performance indicators (ADE, 2010).

Common Core State Standards: The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers (Common Core State Standards Initiative, n.d.).

Co-Teaching: Co-teaching, which is a form of inclusion, consists of two or more professionals (including one general education and one special education teacher) that co-plan, co-instruct, and co-assess a diverse group of students in the same physical space (Friend, 2008).

Disabled: A physical or mental impairment that substantially limits one or more major life activity of an individual (DLRP, n.d.).

Discrepancy Model: Used to determine eligibility for Specific Learning Disability (SLD) services based on the discrepancy between intellectual ability and academic performance (ADE, 2011).

Galileo K-12 Online: A fully integrated, standards-based Instructional Improvement System, providing comprehensive assessment and instructional tools (Ati-online, n.d.).

Least Restrictive Environment: The maximum extent appropriate to children with disabilities, including children in public or private institutions or other care facilities, who are educated alongside non-disabled children (U.S. Department of Education, 2011b).

No Child Left Behind (NCLB): An Act of the 107th Congress developed to close the achievement gap with accountability, flexibility, and choice, so that no child is left behind (U.S. Congress, 2002).

Pull-Out: Programming where special education students receive their educational services from a teacher in a specified resource room setting, away from the general education classroom (Marston, 1996).

Response to Intervention: A systemic method for evaluating the needs of all students, focusing on positive student outcomes through specific targeted and monitored interventions (ADE, n.d.b.).

Special Education: Specially designed instruction that meets the unique needs of a child with a disability and that is provided without cost to the parents of the child (Arizona Revised Statutes, 2011).

Specific Learning Disability: A disorder in one or more of the basic psychological processes involved in understanding or using spoken or written language, , which may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations (USDOE, 2011b)

State Standards: The foundation for curriculum design, instructional practice, and the development of various assessments used provide a consistent, clear understanding of what students are expected to learn (ADE, 2011).

Underperforming: Classification given to a school if it fails to annually produce acceptable progress in achievement (ADE, 2011).

Organization of Study

This research project follows a five-chapter structure. Chapter I introduces the problem, purpose, and research questions that frame the study. It also presents the importance of the study, delimitations, limitations, assumptions, and defines key terms. Chapter II presents a comprehensive review of the literature relevant to the study.

Chapter III describes the research design and methodology. Chapter IV presents the study findings, and Chapter V discusses study findings, draws and supports conclusions, offers recommendations for policy and practice changes, and, suggests areas for further research.

Chapter II

Review of Relevant Literature

Introduction

Educators and lawmakers at the federal, state and local levels are scrutinizing current practices to find ways to close the achievement gaps between students with and without disabilities. In particular, students with disabilities have been the focus of this attention, as educators seek to improve their academic outcomes. As policymakers review the reauthorization of IDEA and push for increased access to education for students with disabilities, numerous experts and professionals have weighed in on the discussion. As a result, evidence-based practices are increasingly being used in policy decisions designed to improve outcomes for students with disabilities..

The purpose of this mixed methods study was to investigate the design and implementation of the Pull-Out and the Co-Teaching special education resource models at two elementary schools in the Golden Cactus Elementary School District and to compare the student reading performance of 56 third through fifth grade students, by grade level, who participated in one of the two models at the selected schools during the 2010-2011 school year as a way of determining which model was associated with higher levels of student success and under which circumstances.

This chapter is divided into eight sections that will provide a review of the salient research related to special education program models. The first section in the chapter establishes context for the achievement gap that exists between special education and non-special education students, and legislative acts that exist to combat this issue. The second section explores the historical context of special education in the United States,

analyzing the evolution and diagnoses of Specific Learning Disabilities. The third section discusses federal, state and local mandates that impact the delivery of Special Education Resource Services. The fourth, fifth, sixth, and seventh sections provide synopses of the pertinent literature exploring the major program delivery models targeting the various Special Education service models. Finally, the eighth section eight discusses professional development and its role in student achievement.

Achievement Gap

The school achievement gap that exists amongst ethnic and socioeconomic groups was a topic of great interest. Numerous researchers have worked to identify why this gap exists and how to decrease it. In response to provisions of the Civil Rights Act of 1964, the United States Department of Health, Education, and Welfare commissioned a group of researchers to conduct a study to assess the availability of equal educational opportunities to children of different race, color, religion, and national origin. The principle researcher, who has been widely recognized for his work in this field, was James S. Coleman. In his 1966 report, Coleman surmised that low-income students have higher levels of achievement when they attend middle-class schools. This report brought about changes that are evident in the policies and practices of public education today.

Planty et al. (2009), found that African American students scored, on average, 27 points lower when assessed by the National Assessment of Educational Progress (NAEP) eighth grade reading assessment than Whites, whereas Hispanics scored, on average, 25 points lower than Whites. The gap exists to this day, though reading scores for White, Black, and Hispanic eighth-graders were 5 to 7 points higher in 2007 than they were in 1992. A Snapshot of achievement results from the 2006 California Standards Test in

English-Language Arts shows that statewide there was a 31% gap between Black and White students and a 33% gap between Hispanic and White students. This pronounced gap led to the planning of an intensive effort in California to find solutions to this achievement gap (California Department of Education [CDE], 2008).

While no one disagrees that the data show cause for concern, a debate continues as to whether the problem originates with the student or the instruction. Ysseldyke (1983) found that less than 2% of teachers attributed student problems to inadequate instruction. Albinger (1995) believes the desire to find and label deficiencies in students ignores other problems that exist in the classroom, which result in traditional instruction being ineffective. The literature shows that differences across categories may mask specific treatment effectiveness (Tindal, 1985). This was partially due to the differences in opinions of definitions and the problem this creates in assessment.

Seemingly this desire to find and label deficiencies in children led to Zirkel's (2010) identification that students with specific learning disabilities account for a higher proportion of special education enrollment than any other classification of students under IDEA, which accounts for 41% of all students with disabilities. Therefore, recognizing whether it was an instructional or a processing problem becomes, in essence, a judgment call for teachers and administrators. Determining how to classify learning disabilities was a process that started in the mid-1950s. Prior to this time, students with learning disabilities were often denied a substantive education.

Historical Context of Reading Learning Disabilities

On April 6, 1963, a group of parents convened at a conference in Chicago entitled *Exploration into the Problems of the Perceptually Handicapped Child*, in which

professionals from various fields focusing on the needs of the student population, participated. Professionals and parents shared a common concern: the need for services for their children, which at the time did not exist (Learning Disabilities Association of America, n.d.).

The 1963 conference articulated the cornerstones on which the field of Learning Disabilities was based. The assumptions presented provided the frameworks for legislation, theories, diagnostic procedures, educational practices, research, and training models. A consensus was reached on a name for the category, reflecting on the characteristics observed in the children, while differentiating them from others within existing categories. The term *Learning Disabilities* embedded within the title of Dr. Samuel Kirk's conference paper was selected (Learning Disabilities Association of America, n.d.). Kavale, Spaulding, and Beam (2009) found that operational definitions are functional and not necessarily analytic truths, due to the fact that they are subject to empirical confirmation. This logic, therefore, makes it an operational definition that is subject to change.

In 1969, legislation amended the Elementary and Secondary Education Act of 1965 to mandate that the federal government facilitate the development of learning disabilities as a separate field within special education. This was critical, as it gave a platform to the group that represents the largest number of students identified as needing special education support.

In 1975, Congress passed Public Law 94-142 (Education of All Handicapped Children Act). This act contained a definition of children with a specific learning disability, but the law did not include specific criteria for identifying a student. The law

ordered that regulations establish specific criteria, describe diagnostic procedures, and establish monitoring procedures for designating children with specific learning disabilities (USDOE, 2011b).

In IDEA 2004, Statute: TITLE I/A/602/30, a Specific learning disability is defined as a disorder in which one or more of the basic psychological processes involved in understanding or in using language, spoken or written, may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. This includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia (USDOE, 2011b).

Diagnosis. Traditional Intelligence Quotient (IQ) testing has long been the hallmark of learning disability identification, using the discrepancy model as the method for determination. When a severe discrepancy between ability and achievement is found, determined primarily through a combination of cognitive (intellectual) and academic (achievement) testing, eligibility is determined. In recent years, the use of Response to Intervention (RTI) has been seen as a more comprehensive approach because it uses all data available, as well as a structured model for providing interventions and supports for students (ADE, n.d.b).

While RTI has become the model of choice, Johnson, Mellard, and Byrd (2005) contend that the RTI approach attempts to reduce learning disability into a single facet. The problem is this approach cannot discriminate between students with learning disabilities and those with learning problems. In other words, there is no distinction made between underachieving because his or her brain has difficulty understanding

certain types of information and underachieving due to lack of instruction, motivational issues, behavioral concerns, or universally low intellectual ability.

Arizona allows each education agency the option to use either a process based on the student's response to scientific, research based intervention (RTI) or a process documenting a severe discrepancy between intellectual ability and achievement to identify a student eligible with a Specific Learning Disability. These models may also be used in combination to determine eligibility (ADE, 2011).

Historical context: The Evolution of Special Education Resource Services

Federally Mandated Services. With Brown vs. the Board of Education as the backdrop, Congress adopted the Education of All Handicapped Children Act of 1975, Public Law 94-142. The impetus for this landmark decision was seemingly sparked by two successfully challenged cases in 1972: The Pennsylvania Association of Retarded Children (PARC) v. Commonwealth of Pennsylvania and Mills v. Board of Education of District of Columbia (Rains, 1998).

The lawsuit that was brought against the Commonwealth of Pennsylvania, the Secretary of Public Welfare, and the State Board of Education, challenged the legal basis upon which retarded children had been regularly excluded from a public education. In both of these legal conclusions, the court imposed a judgment and decree providing for substantive and procedural rights for handicapped children (Rains, 1998).

It was due to the successes in the PARC and Mills cases that led advocates for disabled children to take their concerns to the United States Congress. Congress responded in 1974 with the enactment of the Education of the Handicapped Amendments of 1974. These amendments were a temporary measure until Congress could more

thoroughly study the subject and enact comprehensive legislation. That study was undertaken, and in 1975, Congress enacted The Education for all Handicapped Children Act of 1975, often referred to as PL 94-142, which provided an opportunity for students with disabilities to have access to all that public education has to offer, emphasizing the placement of eligible students into the Least Restrictive Environment (LRE) available. Jarrett (1999) interpreted the placement of students in the least restrictive environment to mean the general education classroom. Since the enactment of PL 94-142, the number of students identified with a specific learning disability has tripled, growing from 800,000 students in 1976 to 2,500,000 kids in 2009 (Planty et al., 2009).

Arizona state mandated services. Reauthorization of IDEA in 2004 and the IDEA regulations issued in 2006 revised the requirements for identifying students under the category of specific learning disabilities. Each state was required to adopt criteria based on the requirements for determining whether a child has a specific learning disability, and local education agencies must then apply these criteria as adopted by their respective state. This reauthorization was important because it signaled a new requirement that a state must not require the use of a severe discrepancy between intellectual ability and achievement for determining whether a child has a specific learning disability (Ahearn, 2009). In 2007, the United States Department of Education's Office of Special Education and Rehabilitative Services wrote a letter to Dr. Perry A. Zirkel in response to his letter dated March 26, 2007 regarding issues related to identifying children and youth with specific learning disabilities. The letter to Zirkel (Posny, 2007) clarified the use of the discrepancy model by stating that while the state cannot require the use of a discrepancy model, a state may prohibit or make optional the

use of a severe discrepancy model. The regulations also required that a public agency must not use any single measure or assessment as the sole criterion for determining whether a child has a specific learning disability (Ahearn, 2009).

In Arizona, the procedure for determining the existence of a specific learning disability may be determined when using a process based on the child's response to scientific, research-based intervention, or if the child exhibits a pattern of strengths and weaknesses in performance, achievement, or both, relative to age, based upon Arizona Academic standards (ADE, 2011). It may also be determined through a discrepancy between achievement and ability, the child's response to scientific, research-based interventions, or other alternative research-based procedures, using appropriate assessments (ADE, 2011).

Because of this flexibility in policy, schools and districts throughout Arizona use many variations to make determinations. The variations allowed by the ADE are for each public education agency to use a process based on the child's response to scientific, research based intervention or to use a process documenting a severe discrepancy between intellectual ability and achievement. In some districts, including the Golden Cactus School District, both the response to intervention and severe discrepancy models were used (ADE, 2011). Johnson et al. (2005) concluded that these variations raise questions of equity, accuracy, outcomes and consistency.

Local school district. In the Golden Cactus School District, Special Education Resource Teachers provide direct and indirect services to students in every school in the areas of academic, emotional/behavioral, social skills, functional, and adaptive skills as defined in the student's Individualized Education Program (IEP). Schools develop their

own models to meet the individual needs of students. Models range from pull out (small group instruction) to collaborative models, teaming special education staff with general educational staff. Parents and staff develop an IEP for each student, based on his or her learning needs (ADE, 2011)

Teacher qualifications. NCLB dictates that all teachers must be highly qualified in the core academic subjects they teach, thus making them the teacher of record. The teacher of record typically provides core academic instruction and grade assignments for the special education resource students that receive the majority of their instruction in the general curriculum. Special education teachers must meet the state's special education Highly Qualified criteria requirements for the grade level(s) they teach. In most cases, because resource teachers are considered support, they are not identified as the teacher of record.

Inclusion Model

Theory and design. With the looming reauthorization of NCLB, more inclusionary practices are becoming the expectation. In today's environment of data-based decision making, Brown, Kiraly Jr., and McKinnon (1979) proved prophetic by challenging us to consider the idea that there will never be a more opportune time than now to analyze the educational delivery system and to make the needed changes to ensure viability and effectiveness.

IDEA has found that almost 30 years of research and experience has demonstrated that the education of children with disabilities can be made more effective by having high expectations for such children, as well as ensuring their access to the general education

curriculum in the regular classroom to the maximum extent possible (U.S. Congress, 2004).

The inclusion model has led to students receiving the bulk of their instruction from the general education teacher with periodic assistance from a special education teacher (Jarrett, 1999). While including special education students, educators have the responsibility of helping students with learning disabilities meet rigorous content standards while improving their reading skills (Walsh, 2001).

Wang, Haertel, and Wahlberg (1994) outlined a basic principle that public schools should be inclusive and integrated and separations should require a compelling rationale. Taylor (1994) suggests that, "regular education was not only where the responsibility lies, but also where those with learning disabilities deserve to be educated" (p. 580).

Inclusive education, as a concept, offers many meanings (Florian, 2008). Rogers (1993) defined three terms that he believed surmised the varying beliefs used to express the inclusion of special education students in the general education classroom. His first identified term was mainstreaming. This has been used to define selective placement of students in one or more general education classes.

Next is inclusion, which is to educate the student to the maximum extent appropriate in the general education classroom. Finally, full inclusion, which is defined by the notion that everything needed to accommodate the student is readily available in the class. This is characterized by training and support provided to the general education teacher. “Essentially, inclusion means that the student with special education needs is attending the general school program, enrolled in age appropriate classes 100% of the school day” (Idol, 1997, p. 4). So, while inclusion is not mandated, it is written that

students with special needs should be instructed in the least restrictive environment, making inclusionary practices a desirable option for schools and districts. In a review of literature, Salend and Garrick (1999) found that students with a learning disability—in any educational setting from urban to affluent—that are educated in the inclusion program, showed significantly greater gains in reading than their peers who received services in the resource room.

Model description. Vaughn and Schumm (1995) define responsible inclusion as the development of a model that bases placement and services on student needs. While inclusion is the goal, effective procedures and instructional practices need to reflect appropriately for each child. Inclusive classrooms in and of themselves do not support students without careful attention to instructional practices (Baker & Zigmond, 1995). Iovannone, Dunlap, Huber, and Kincaid (2003) summarized that systematic, well-planned instruction is an essential component of all classrooms and it also provides a structured teaching plan for generalization and maintenance of learned skills.

Theoretical base. Beloin and Peterson (2000) surmised that while inclusive education and the implementation of best practices are essential for all schools, they are particularly critical in poor urban schools. This requires truly effective teachers who have the necessary skills, knowledge, values, and attitudes. People who are willing to work in this proactive way must find and support one another throughout the process.

Student preference in service models has also been a subject that researchers have explored. In an ethno-methodological study, Albinger (1995) found that when children were given the choice of coming to the resource room or having the resource teacher come to their room, the most prevalent preference was to have the resource specialist

come to their room. This preference supports the notion that students should have access to the least restrictive environment.

Marston (1996) identified that student need must be determined first to develop IEPs based on effective instructional practices. These needs should be attended to in the least restrictive environment ensuring that a variety of learning opportunities exist for all students. The evidence from Marston's study supports the implementation of a continuum of services based on student need and a shared commitment by both general and special education teachers. While the evidence shows a continuum approach, Marston (1988) also believes that many programs have in fact been successful, but the wrong measurement tools and methodology have been used. Because there is no substantial research on model efficacy, this may explain why Marston (1996) believes the debate over delivery continues. Tindal's (1985) analysis of the current literature on the effectiveness of special education consists of a collection of studies that provide an unknown or unspecified treatment. In Tindal's review of the literature, he did not find one researcher that attended to the relationship between the tests used for documenting outcome effectiveness and the curriculum being evaluated. In Tindal's summary, he identified several problems characterizing the research on the effectiveness of special education. These problems are what he views as "ill-defined treatments being provided to equally ill-defined groups of students" (p. 105). Marston (1988) believes that those concerned with the effectiveness of such programs may want to ask more specific questions about the individual components that contribute to success. These questions need to revolve around the definitions and relationships between those definitions and the assessments used for documenting effectiveness.

Co-Teaching Model

Theory and design. Bauwens, Hourcade, and Friend (1989) identified the notion that special education could be offered in general education settings through partnerships that crossed the traditional boundaries between professionals, leading to the emergence of the concept of co-teaching. Basso and McCoy (2010) defined co-teaching as an educational approach where general and special education teachers work together to deliver instruction to all students in an inclusive classroom.

Co-teaching emerged from team-teaching models that were utilized in general education classrooms during the 1950s. Over the past 10 years, (IDEA Reauthorization and NCLB) federal and state law, and policy raised expectations of academic achievement for students with disabilities, included the mandate that they be taught by teachers highly qualified in the appropriate content areas.

Model description. The difference between co-teaching and team teaching is the expertise of the professionals. In team teaching, the professionals have similar areas of expertise and priorities, including addressing curriculum competencies, pacing, and classroom management. In co-teaching, the general educator holds these critical pieces, but the special educator adds expertise related to the process of learning as well as the highly individualized nature of some students' needs (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). So the role of the special education teacher is not to become the quasi teacher, but to explicitly teach processes that help students with disabilities understand core concepts (Magiera, Smith, Zigmond, & Gerbaner, 2005).

Simonsen et al. (2010) described redefining the role of special educators in a coordinated school-wide model as an interventionist. This would include providing

appropriate intervention for every student. Simonsen et al. believe the special education interventionist plays a pivotal role in the school-wide model across all Response to Intervention tiers while still being legally responsible for assuring that IEPs are developed to meet the procedural requirements of the law, and are implemented with fidelity. This was based on the belief that special educators possess the critical skills needed, such as assessment, curriculum modification, and accommodations.

Collaboration. Collaboration is critical to co-teaching. Idol, Nevin, and Paolucci-Whitcomb (2000) describe collaboration as an interactive process that enables teachers to provide quality services to students with a wide range of needs. It is imperative that the teachers come together with a common commitment. Once these committed individuals are brought together, teachers can move into what Friend et al. (2010) identified as the three topics that are most commonly addressed in co-teaching programs. These are: (a) teachers' roles and relationships; (b) issues related to program logistics; and (c) the impact of co-teaching on student learning, behavior, and perceptions.

When diving into a co-teaching model, it is extremely important that the perceptions of both teachers are understood. Kavale and Forness (2000) found several studies that show general education teachers hold negative views about integration. These negative views can sabotage a healthy co-teaching relationship. When these views are positive, there are achievement benefits for students with a Specific Learning Disability in a co-teaching classroom. These benefits were found through collaboration and compromise. Friend (2008) found that in order for co-teaching to have an impact in improving student outcomes, both teachers must be committed to the process.

DuFour and Eaker (1998) note the challenges facing educators when creating a community of commitment. This shared commitment requires the work of others to actualize a positive and sustainable culture, allowing staff to look at the goals of the organization and make them their collective focus.

Approaches to co-teaching. In the co-teaching model, teachers address the individual goals and objectives of students with disabilities, while at the same time meeting the learning needs of the other students in the classroom. The roles for the special education and general education teacher are fluid, with each taking on any of the responsibilities suggested within six approaches identified by Friend and Cook (2007). These six approaches to co-teaching are:

1. One teach, one observe, in which one teacher leads large-group instruction while the other gathers academic, behavioral, or social data on specific students or the class group;
2. Station teaching, in which instruction is divided into three non-sequential parts and students, likewise divided into three groups, rotate from station to station, being taught by the teachers at two stations and working independently at the third;
3. Parallel teaching, in which the two teachers, each with half the class group, present the same material for the primary purpose of fostering instructional differentiation and increasing student participation;
4. Alternative teaching, in which one teacher works with most students while the other works with a small group for remediation, enrichment, assessment, pre-teaching, or another purpose;

5. Teaming, in which both teachers lead large-group instruction by both lecturing and representing opposing views in a debate, thus illustrating two ways to solve a problem; and
6. One teach, one assist, in which one teacher leads instruction while the other circulates among the students offering individual assistance.

Deno (1973) questioned how many students could learn to perform in the regular classroom if the resource teacher assumed a greater role in the regular classroom. Through the six approaches, the role of the general education and special education teachers shift, creating interchangeability and thus giving each the opportunity to represent the major role.

Berninger, Dunn, Lin, and Shimada (2004) believe it is not acceptable for general education teachers to use special education as a dumping ground for students at the first sign of difficulty. This belief represents the need that schools must evolve and general education and special education teachers must work together to meet the needs of students with learning disabilities.

Co-teaching in Golden Cactus School District. Co-teaching is defined as two or more professionals (consisting of one general education and one special education teacher) that co-plan, co-instruct, and co-assess a diverse group of students in the same physical space. Both teachers strategically plan and deliver lessons together while focusing on accommodations and modifications necessary to meet the needs of all learners and required professional development.

Pull-Out Model

Theory and design. Hammill (1993) found that research by Dunn (1968) led to the resource room and consultation programs. Resource rooms were the fallout from the position that special classes for mildly retarded students should be abolished. This was a shift in the direction of the integration of programs, with students being partially enrolled in general education classes.

Some researchers argue that Pull-Out program support tends to better address the individual needs of students. This is in large part believed to be the result of smaller class sizes, less distractions, and more one-on-one interactions (Marston, 1996). These factors, however, have not shown improved results for students with specific learning disabilities and have even been shown to produce harmful effects with regards to social adjustment. This is because instruction is not aligned with what is going on in the general curriculum (Baker, 1995).

Vaughn and Schumm (1995) noted that although resource rooms, in many cases, have been the sole delivery models for learning disabled students, we know little about their efficacy. While students have IEPs, resource rooms have seemingly turned into modified self-contained classes. They consist of small numbers of students grouped together by their area of disability.

Friend (2007) noted it is crucial to remember that special education was designed to be in addition to, not in lieu of, general education, and that when you begin moving students' core instruction to the resource room, you are removing a crucial component of their general education experience.

Brown et al. (1979) raised the question about the role of the resource teacher along with the inquiry of which children benefit the most, how is the communication with colleagues, and what are the administrative constraints. Brown et al. found that special education teachers in the resource model perceived their role as remedial. While data have been mixed on the level of achievement this model provides, it is evident that collegial discourse in this environment is limited, negating any influence the special education teacher may have on the general education teacher. It seems evident that Pull-Out programs have created a dual system that minimizes the communication between regular and special education teachers (Whitworth, 1999).

Model description. Pull-Out programs involve removing students from the general classroom to specially equipped and staffed classroom in the regular school setting in which a student with a disability spends short sessions/part of his or her day receiving individualized instruction or skills remediation to address his or her individual needs, with the balance of the day spent in a regular classroom. Sessions are usually 30-45 minutes, and instruction may be given either individually or in small groups.

In some cases, a student may require more intensive resource services. Extending the time in the Pull-Out program provides additional instruction for students in need of more support. Students are included as appropriate into general education classes but spend extended time in their special education classroom, based on district policy.

Access to the General Curriculum

Many states have developed standards that are designed to serve the typical general education population excluding both the low and high end of the spectrum. But, as many states move towards *Common Core Standards* this exclusion of special

education is beginning to fade, providing all students with access to the general curriculum. So, what does access to the general curriculum entail? Access seems to find its roots in providing instruction in the least restrictive environment or primarily in inclusion only settings. While these roots seem to stem from IDEA, access should seek to move beyond just inclusion and begin to take a deeper look into the instructional strategies and practices educators employ. Part of this access must include teachers working with a deeper understanding of the curriculum (Abell, Bauder, & Simmons, 2005).

Studies have shown the primary role of the special education teacher has been to remediate student deficiencies (Abell et al., 2005; "Access," 2001). While remediation may have its place, the goal should be for teachers to provide opportunities for students to participate and meet the expectations of the general curriculum. This means identifying each student's strengths and needs, and should include challenging students and providing experiences that allow them to meet their clearly defined goals. Once goals are well developed and the appropriate accommodations and scaffolds are in place, students can began to truly engage in learning (Hitchcock, Meyer, Rose, & Jackson, 2002).

It is important to provide the support needed, in grade level context, moving special education instruction from functional to academic (Ward, 2009). In this way, delivery based on grade level curriculum helps provide the context and supports needed for the skill to be learned and outcome to be met (Dymond, Renzaglia, Gilson, & Slagor, 2007). This provision of context can evolve from a consistent level of understanding of access, giving way for improved instruction and outcomes for special education students.

Combination Model

Theory and design. Pull-Out programs involve removing students from the general classroom to specially equipped and staffed classroom in the regular school setting in which a student with a disability spends short sessions/part of his or her day receiving individualized instruction or skills remediation to address his or her individual needs, with the balance of the day spent in a regular classroom.

Inclusion is providing direct IEP related services in the regular classroom setting provided by a special education teacher. Classroom instruction involves the use of differentiated techniques designed for students whose learning needs cannot be met by a standard school instruction.

Co-teaching, which is a form of inclusion, is when two or more professionals (including one general education and one special education teacher) co-plan, co-instruct, and co-assess a diverse group of students in the same physical space. Both teachers strategically plan and deliver lessons together while focusing on accommodations and modifications necessary to meet the needs of all learners (Friend, 2008).

The integration of Pull-Out and any form of inclusion, including co-teaching, make up a combination program that is designed to meet the needs of the student.

Assumptions. Scruggs and Mastropieri (1996) conducted a synthesis of 28 investigations that surveyed perceptions of general education teachers regarding the inclusion of students with disabilities in the general education class.

While two thirds of general education teachers supported the concept of integration nearly one third of general education teachers expressed the belief that their classrooms would not be the optimal placement, nor would they produce greater benefits

than other placements. This was due in part to the belief that they were not currently prepared to teach students with disabilities. Maybe this lack of preparedness begins at the pre-service level. While it has been noted that there is a lack of training for general and special education teachers, these same differences can be seen in programs to prepare educators to be successful. This is why Welch (1996) believes that programs must reconceptualize and redesign pre-service preparation.

Other major factors influencing these perceptions were the disability of the student and the required obligation of the teacher. These two factors appeared to be associated with the teacher's belief that including students with disabilities would have a negative impact on the general education classroom.

In order for inclusion to work, teachers must buy into the idea that students with disabilities would not adversely affect a general education classroom (Kavale & Forness, 2000). Lazar, Stodden, and Sullivan (1976) found that administrators were viewed as playing a significant role in the success or failure of mainstreaming and, according to Bain and Dolbel (1991), often perceived little chance of success in general education.

Professional Development

In responsible inclusion classes, on-going professional development is key to program effectiveness (Vaughn & Schumm, 1995). This can look many different ways including, job-embedded, school-based workshops, continuing education classes, mentoring, etc. Regardless of the method, these experiences need to be ongoing in order to meet teacher needs.

In a study by the Public Education Network & The Finance Project (2005), quality teachers were the single greatest determinant of student achievement. In their

research, Public Education Network & The Finance Project found that 40-90% of the difference in student test scores could be attributed to teacher quality. They concluded that knowing the subject matter, understanding how students learn, and practicing effective teaching methods equate to greater student achievement. This makes it important that teachers are well prepared when they begin teaching and that they continue to improve their knowledge and skills throughout their careers.

In a review of literature by the American Federation of Teachers (2007) describing the benefits of professional development, there were a variety of key variables that were identified as critical to the success of a professional development program. These strategies included the beliefs that,

> (a) Professional development should deepen and broaden knowledge of content; (b) Professional development should provide a strong foundation in the pedagogy of particular disciplines; (c) Professional development should provide knowledge about the teaching and learning processes; (d) Professional development should be rooted in and reflect the best available research; (e) Professional development should contribute to measurable improvement in student achievement; (f) Professional development should provide sufficient time, support, and resources to enable teachers to master new content and pedagogy and to integrate this knowledge and skill into their practice; (g) Professional development should be designed by teachers in cooperation with experts in the field; (h) Professional development should take a variety of forms, including some we have not typically considered. (p. 5)

Based on the study by American Federation of Teachers (2007), professional development should ensure depth of content knowledge. This article describes the above set of guidelines that was developed to assist in the development of effective professional development. This development is seen as a continuous process that empowers educators.

The results of a study by Ragland (2003) support the hypothesis that professional development should raise student achievement and engagement by improving teachers' knowledge, understanding and teaching strategies. The study outlines a collaborative professional development program between higher education institutions and public schools in Lake County, Illinois.

The body of research, including work by Thomas (2003), identified the importance of identifying goals and objectives. Hirsh (2005) also views selecting staff development that aligns most clearly with the assumptions and beliefs of its staff members as highly critical in accelerating behavioral change. To accelerate this change, educators need to engage in a process to ensure a thorough understanding of the assumptions and beliefs underlying staff development programs. The author believes that tapping teacher expertise inside and outside of the site places the focus on teacher beliefs and capacities increasing teachers' and schools' understanding on how to close existing achievement gaps.

Monahan (1993) presents findings of a study that examined the extent to which professional development techniques for teachers existed within a sample of elementary and secondary schools. Data were acquired from a survey of a random sample of classroom teachers and principals. The survey was used to gather information such as the

definition of professional development for teachers, the best ways for teachers to develop professionally, and obstacles to participating in professional development activities.

Instructional Strategies

Because of the level of accountability and expectations, quality instruction of all students is at the forefront. Instructional strategies, which can be defined as teaching methods (Weston & Cranton, 1986), provide teachers approaches that can help to effectively meet student needs (DeBettencourt, 1999). It is important that educators recognize effective strategies and provide a consistent educational experience for their students (Shyyan, Thurlow, & Liu, 2008).

While a variety of strategies and approaches to instruction exist, it is important that instruction be based on research (Kutash, Lynn, & Duchnowski, 2009). Evidence or research based instructional practice should strive to increase learning outcomes and decrease the gap that exists between research and practice.

Technology

The use of technology to support students with identified special education eligibility has been steadily increasing since the 1990s. Within the context of technology, according to IDEA, the term "assistive technology device" means "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of a child with a disability." (U.S. Congress, 1997, Part A, Sec. 602 (1))

Hauser and Malouf (1996) asked, "Does technology teach students with learning disabilities better than other approaches" (p. 504). Research is being conducted to argue definitively that the use of technology is better. A study by Hauser and Malouf has shown

that technology has benefits for children with disabilities; the challenge lies within the use of technology to support learning. According to Gardner, Wissick, Schweder, and Canter (2003), the purpose should be to find where technology effectively supports student learning. In order to find where technology effectively supports student learning, deliberate planning of technology integration must occur to achieve targeted outcomes.

To reach this outcome, educators must identify which types of technology-based activities appear to have significant benefits for students with disabilities (Hasselbring & Glaser, 2000). These activities can include web sites, web-based curriculum, media, software, communication-based, etc. (Hasselbring & Glaser, 2000; Hauser & Malouf, 1996; Ray & Atwill, 2004).

Training is critical in providing the skills necessary to understand and identify which technology would best benefit students identified with a specific learning disability in reading. Hasselbring and Glaser (2000) stated, "Lack of appropriate technology training is the most common cited barrier with use of technology in the classroom" (p. 104). So, in order to meet the needs of students with a specific learning disability who receive instruction in the general classroom setting, teachers need training on how technology can be used, and the technical skills needed to carry out an effective plan of action (Hasselbring & Glaser, 2000).

The research of Hasselbring and Glaser (2000) indicates that the use of technology can enhance a student's acquisition of skills and content knowledge when the plan to integrate technology is intentional.

Summary

Since the enforcement of NCLB, education in the U.S. has taken a dramatic turn (USDOE, 2011a). Education has moved from the days of limited government involvement to stern mandates. NCLB has increased the levels of accountability in education ensuring that all children attain a high quality education. To hold states and schools accountable, standardized testing was used to measure student levels of achievement.

IDEA ensures services to children with disabilities throughout the nation. IDEA governs how states and public agencies provide support to children in the least restrictive environment capable of meeting the student's needs.

After IDEA was reauthorized in 2004, the final regulations were published in 2006, moving towards the alignment of IDEA and NCLB. This alignment was geared towards the understanding that if high expectations, opportunities and supports are in place, then all students can learn and be successful.

With this push, co-teaching has become a lightening rod for implementation, but has it been implemented with consistency and efficacy? Special education is at a crossroads and it is easy for us to choose the wrong road. Research has shown there is more to learn with regards to which delivery system has the most positive impact on achievement for our children.

Part of this delivery includes training teachers. Ultimately schools and districts need reliable information on the types of professional development that works, in order to get a good return on their investment (Public Education Network & the Finance Project, 2004). Monahan (1993) states that professional development strategies are designed to

facilitate teacher growth through professional dialogue with colleagues, curriculum development, peer supervision, peer coaching, and action research. As good quality professional development emerges, teachers will get all of the tools they need to approach classroom challenges with confidence (Public Education Network & The Finance Project, 2004).

Self-examination is difficult, but careful analysis of ongoing practices that affect learning by students with disabilities is necessary in order to improve services and outcomes for students with special needs. The challenge now is to make the goals defined in PL 94-142 real (Keogh, 2007). This includes preparing teachers with comprehensive and collaborative strategies that encourage and promote diverse inclusive classes.

The job of practitioners is to create optimum learning environments for students. Quick fixes are generally not systems-oriented and they often do not address the cause(s) of the problem. DuFour and Eaker (1998) talk about national reforms in past decades that have failed for these very reasons. Keogh (1990) suggested that one major responsibility of the research community is to study the implementation of change deriving from empirical findings rather than politics.

Zigmond (2001) asserts that since the passage of the Education of All Handicapped Children Act, children with disabilities are an accepted part of public schools and we should be elated at the progress. While even those with the most profound disabilities are expected to be a part of our schools, our obligations to students with disabilities demand monitoring, adjusting and even changing instructional direction.

Maslow (1962) asserted that individuals must feel they are valued and belong in order to reach their full potential. The methods for instructing Learning Disabled students often focus on the weaknesses that students possess. Baum (1990) wondered how valued a student can feel if the curriculum is continually modified, or assignments are watered down, to enable success.

Many special education delivery models lack solid evidence of effectiveness, mostly relying on beliefs and advocacy rather than documentation of effects. Such ideological, rather than evidence, based educational practices are common and can potentially hinder progress to students with special needs (Keogh, 2007).

Chapter III

Methodology

Purpose of the Study

The purpose of this mixed methods study was to investigate the design and implementation of the Pull-Out and Co-Teaching special education resource models at two elementary schools in the Golden Cactus Elementary School District and to compare the student reading performance of 56 third through fifth grade students, by grade level, who participated in one of the two models at the selected schools during the 2010-2011 school year to determine which model was associated with higher levels of student success and under which circumstances.

Research Questions

The following research questions guided this study:

1. How does the 2010-2011 reading performance of third through fifth grade elementary students with a diagnosed specific learning disabilities in reading, as measured by the Galileo criterion-referenced assessment, compare by Program service models at two selected elementary schools in the Golden Cactus Elementary School District?
2. What type of professional development, resources, and support, if any, do the Golden Cactus Elementary School District elementary school principals, resource teachers and co-teaching general education teachers at two selected elementary school sites believe are needed to best implement the Pull-Out and Co-Teaching special education Resource Model delivery options at their sites?

Methodology

This study used a mixed methods approach that involved collecting and analyzing both quantitative and qualitative data. Creswell (2003) identified the mixed methods approach as a pragmatic collection of both quantitative and qualitative data, which allows the researcher to converge findings from different data sources concurrently. A Simple Ex Post Facto design was used to compare the reading performance of 56 third through fifth grade elementary students with a diagnosed specific learning disability in reading, by grade level, across Pull-Out and Co-Teaching Resource Model programs at two elementary schools in the Golden Cactus School District in Arizona. Simple ex post facto will be used to show the potential effects of an event that has already taken place. Leedy and Ormrod (2005) define ex post facto research as an approach where the researcher looks at conditions that have already occurred, then collects data to investigate the possible relationship between the conditions.

The qualitative portion provided a questionnaire because it could be used with a large group and would allow participants to respond with anonymity, thus increasing the likelihood that the responses would be more truthful (Leedy & Ormrod, 2005). By utilizing a questionnaire with open-ended questions, the researcher began to understand staff perceptions regarding implementation of each of the two models and how they impacted student achievement. An extensive review of the literature on special education resource programs indicated four themes necessary for sustained achievement growth. These themes include: (a) professional development, (b) staff perceptions, (c) program structures, and (d) results (Hirsh, 2005; Ragland, 2003; Vaughn & Schumm, 1995). The questionnaire was administered to five special education teachers, six general education

teachers, and four administrators who work with students with diagnosed learning disabilities in Pull-Out and Co-Teaching Resource Program Delivery Models to investigate their professional recommendations regarding the type of professional development, resources, and support that they perceive was needed in order to best-implement Pull-Out and Co-Teaching Models.

Setting

The Golden Cactus Elementary School District is an urban district located in the West Phoenix region of Arizona. During this study the district served approximately 18,000 students in pre-Kindergarten through eighth grade. Twelve schools in the district are designated as elementary schools serving students in Kindergarten through fifth grade. Four district schools are grades 6 through 8, three schools serve kindergarten through eighth and one school serves pre-Kindergarten special education through eighth grade. Each elementary school'spopulation range from 700-1,000 students. The populations of the sixth through eighth grade schools range from 800 to 1,300 students, and the populations for the Kindergarten through eighth grade campuses range from 700 to 1,100 students.

Demographics of the Golden Cactus Elementary School District represent a diverse population. Over 91% of the student population qualifies for the free and reduced lunch program, making Golden Cactus a Title 1 district based on U.S. Department of Education Guidelines. Also, Golden Cactus has a large Hispanic population. 88% of the District student population is of Hispanic origin. Four point five percent of the student population is African American, 4.5% of the student population is Caucasian, while 1.5%

identify as Native American. Asian American and other ethnic groups in the Golden Cactus District make up the final 1% of the student population.

The special education student group in the Golden Cactus School District, which constitutes the focus of this study, consisted of a group of students with diagnosed specific learning disabilities. Over 20% of the students were identified as English Language Learners (ELL). Due to the high number of ELL students, it was important to have a structured process in place to account for language. This process included the use of assessments that measured student achievement in both English and the native language as needed. These ensured that normal language and literacy acquisition were taking place, thus ruling out the impact of language on the suspected disability. While there is a large gap in the achievement of various general education subgroups at schools A and B, the gap between general and special education students is creating an even greater discrepancy in student achievement.

School A is located centrally within the district. It has a total enrollment of 875 students, of which 94% receive free or reduced lunch. Their demographics are a mirror of the distrtict, with 88% of the student population of Hispanic origin. School A is slightly higher than the District average with African American students constituting 6% of the population, and slightly lower with Caucasian students constituting 4% of the population. School A implements the Pull-Out model at their site, and has two resource teachers to support their campus. These teachers provide support by coordinating their schedules to Pull-Out students grouped together based on needs. Special education students were clustered together as best possible in order to provide ease of scheduling.

Due to this clustering, three general education teachers were identified as teacher of record for the third, fourth and fifth grade students on campus.

School B is one of the southernmost schools in the district. Approximately 88% of the student population is of Hispanic origin. African American students make up 5% of the population while Caucasian students are at approximately 5%. School B implemented the Co-Teaching model during the 2010-2011 school year. Their student enrollment was slightly higher than School A with 934 students. School B had three special education resource teachers that supported their campus during the Co-Teching model throughout the 2010-2011 school year. One resource teacher was assigned to one general education teacher per grade to provide structured Co-Teaching support.

Each school has two administrators, as well as one principal and one assistant principal. The schools all follow the same district guidelines with regards to teacher qualifications, core curriculum, and special education evaluation guidelines. This consistency makes these schools prime candidates for carrying out this study.

Study Population

In order to address the study constraints, the sample will consist of selected elementary schools in the Golden Cactus School District that implement one of the two models researched in this study: School A implements the Pull-Out model at their site and School B implements the Co-Teaching model. The achievement data for each school available in the Golden Cactus School District Galileo Assessment database provided the achievement growth data for the two schools and was used to identify data trends for the 2010 academic year. The identified schools were examined for overall growth on Galileo Reading Assessment. Because the researcher accessed and analyzed existing Galileo

reading data of students with any specific learning disability in reading, no student subjects were directly involved in the study. However, because question two used a questionnaire, a total of 11 general and special education teachers, and four school administrators were involved in the study.

Both School A and School B have two administrators, including one principal and one assistant principal per school. School A has two resource teachers who implement and support the Pull-Out model at their site. These teachers provided support by coordinating their schedules for Pull-Out students who were grouped together based on needs. Special education students were clustered together, as best possible, to provide ease of scheduling (see Table 1). Due to this clustering, three general education teachers were identified as the teachers of record for the third, fourth and fifth grade students on campus. School B had three special education resource teachers that supported the Co-Teching model on their campus during the 2010-2011 school year (see Table 1). One resource teacher was assigned to one general education teacher classroom per grade to provide structured Co-Teaching support.

Table 1

Subjects Participating in the Qualitative Study

Participant type	# of Participants: School A	# of Participants: School B
Administrators	2	2
General Education Teacher(s)	3	3
Special Education Teacher(s) (Resource)	2	3

Human Subjects Considerations

The researcher in this study followed Pepperdine University's IRB process guidelines. As part of the IRB process, the researcher completed the Human Participants Protection Education for Researchers online course, sponsored by the National Institute of Health.

The school district superintendent of the identified schools was contacted for permission to conduct the study in Golden Cactus Elementary School District at Schools A and B. Once approval was received from the school district superintendent, the participants (six general education teachers, five special education teachers, and four administrators) at schools A and B were contacted via Golden Cactus School District email by the researcher with a message that introduced the study and described subject participation. Next, a follow-up email message was sent within three days to the same email addresses to invite subject participation. The follow-up email provided subjects with informed consent information (Appendix A) and sought subjects' review and acceptance of informed consent procedures. Each subject read informed consent at the heading of the questionnaire through which they were told that their participation was optional. Subjects who consented indicated their consent online by completing the questionnaire. The responses from the completed questionnaires were completed on-line with no identifiers and therefore the researcher was not able to associate responses with individuals. Then, a timeline of one week was given for the completion of the questionnaire.

The quantitative aspect of this study was based on existing School A and School B's Galileo student reading achievement data for students in grades three through five,

who had a designated learning disability in reading. This data were available from the Golden Cactus School District assessment database. Therefore, no human subjects were directly involved in the quantitative aspect of this study.

The qualitative aspect of this study did involve human subjects. These subjects included: six general teachers, five special education teachers, and four school administrators.

The researcher submitted an IRB application for claim of exemption. An application for claim of exemption was submitted based on the guidelines described in the Investigator's Manual. The proposed study was conducted in an established educational setting, which involved research on general and special education instructional strategies comparing instructional techniques. Also, the research involved the study of existing data that were recorded by the investigator in a way that subjects could not be identified.

The involvement of the human subjects was through response to an online questionnaire. There was less than minimal risk to the subjects, as the questionnaire did not cause participants any physical or mental discomfort, harm, or danger, other than those usually experienced in daily life. The possible minimum risks could have included boredom or constraints due to time available to complete the questionnaire. The researcher reduced these possible minimum risks by allowing online participation to allow participants to complete at their leisure. To further reduce boredom and fatigue, the length of the survey was relatively short and only took approximately 15-20 minutes to complete. Informed consent from all subjects was secured prior to participation in the questionnaire.

The data were confidential and individual privacy was respected. The researcher provided informed consent to participate in the questionnaire. Data were directly fed into a spreadsheet assuring anonymity. All data were kept on a password secured hard drive to which only the researcher had access. Data will be deleted 3 years from the end of the study.

Instrumentation

The quantitative instrument in this study was the pre-existing Golden Cactus School District Galileo achievement data. The simple ex-post facto design in this study was used to compare the reading achievement of 31 third through fifth grade students—with a designated disability in reading who participated in the Pull-Out program at School A in The Golden Cactus Elementary School District—with the reading achievement of 25 third through fifth grade students with like disabilities in reading and who participate in the Co-Teaching model at School B, also in The Golden Cactus Elementary School District. The Galileo Assessment (Assessment Technology, Incorporated) is a district-customized assessment designed to measure the achievement of standards. Galileo K-12 Online, a standards-based Instructional Improvement System, provided comprehensive assessment for use as an instructional tool. State standards were built in to the assessment for use. Galileo K-12 Online management tools assisted educators in establishing instructional goals reflecting the district's curriculum, assessing goal attainment, forecasting standards mastery on statewide tests, and using assessment information to guide classroom instruction, enrichment, and re-teaching interventions.

A study by Bergen et al. (2008) determined that a reliability coefficient of .90 or higher provides an acceptable level of internal consistency for Instructional Effectiveness

Assessments. ATI research indicates that tests of 70 items or more are likely to yield reliability coefficients in the .90s, giving it a high level of reliability.

The instrumentation used for the qualitative portion of the study was an open-ended questionnaire. The high possibility of anonymity and the ease of dissemination made this means of data collection a good fit for the purposes of this study. The questionnaire consisted of three open-ended questions. The use of an open-ended questionnaire was proposed to collect data on the perceptions of what type of professional development, resources, and support staff believe are needed to best implement the Pull-Out and Co-Teaching special education Resource Model delivery options at the sites that contributed to sustained student achievement growth. The questionnaire (Appendices B & C) was generated from a thorough review of the literature on program models, professional development, teacher perceptions, and sustainability found in Chapter II.

Ahearn (2009) found that successful implementation of the integration of special education and general education must rely on more extensive training of teachers and administration. Simonsen et al. (2010) identified that special educators need to be formally prepared to meet their role. A big part of this was to research what was needed to determine which professional development was necessary for the special educators' role in the school-wide system. Successful professional development must meet teachers where they are (Ragland, 2003). As these factors help support the basis, it was important that a cohesive model of professional development be continued over a long period of time. Table 2 presents the correlation between the Pull-Out Delivery Model

Questionnaire and Literature Review. Table 3 represents the correlation between the Co-Teaching Delivery Model Questionnaire and Literature Review

Table 2

School A, Pull-Out Delivery Model: Correlations between Questionnaire and Literature Review

Questionnaire Questions	Cited Research
1. What type of professional development do you believe is needed to best implement the Pull-Out special education delivery model at your site?	• Ahearn, 2009 • Berry, 2005 • Ragland, 2003 • Simonsen et al., 2010
2. What resources are needed to best implement the Pull-Out special education delivery model at your site?	• Ahearn, 2009 • Simonsen et al., 2010
3. What support is needed to better design and implement the Pull-Out special education delivery model at your site?	• Ahearn, 2009 • Simonsen et al., 2010

Table 3

School B, Co-Teaching Delivery Model: Correlations between Questionnaire and Literature Review

Questionnaire Questions	Cited Research
1. What type of professional development do you believe is needed to best implement the Co-Teaching special education delivery model at your site?	• Ahearn, 2009 • Simonsen et al., 2010 • Vaughn & Schumm, 1995
2. What resources are needed to best implement the Co-Teaching special education delivery model at your site?	• Ahearn, 2009 • Simonsen et al., 2010 • Vaughn & Schumm, 1995
3. What support is needed to better design and implement the Co-Teaching special education delivery model at your site?	• Ahearn, 2009 • Simonsen et al., 2010 • Vaughn & Schumm, 1995

The questionnaire was followed up by email communication via the Golden Cactus Elementary School District email system thanking participants for their participation and explaining that once completed, the researcher would send a copy of the results upon request.

Instrument Validity and Reliability

Galileo validity and reliability. The quantitative instrument used in this study was the Galileo Assessment. The validity of the instrumentation in this study came from a review of the literature on special education programs, models and student achievement. The quantitative aspect of this study relied on data from the Golden Cactus School District database. Because Galileo was developed by ATI-Online, a nationally recognized assessment company, the researcher assumed that content validity had already been established. Additionally, ATI-Online has published several private and independent studies as identified in the Technical Manual (Bergan et al., 2008). Their manual outlines the process of developing Benchmark assessments for use in the Galileo EMS and the psychometric analyses conducted to evaluate their utility for guiding instruction to promote standards mastery.

Questionnaire validity. The qualitative instrument used in this study was an open-ended questionnaire made accessible to staff at the identified school that implements the variations of programs studied. Once the interview protocol was developed, the researcher identified and contacted two experts for feedback on the questionnaire. Expert A has a Doctor of Philosophy Degree in Special Education and currently serves as the Lead School Psychologist in a large urban elementary school district in the Phoenix area. Expert B serves as the Assistant Director of Special

Education in a large urban elementary school district and has specialized training in a variety of special education instructional models, including the Pull-Out and Co-Teaching models presented in this study. Experts were asked to respond to the alignment between the research study questions and the questionnaire questions, the clarity of the questionnaire language, and to comment regarding the projected time anticipated for subjects to complete the questionnaire with meaningful responses. Expert A concluded that the questionnaire was fine, as it was straight forward aligning to the research question number two. Expert B asked about the possibility of adding an entry to the questionnaire in which participants list the type of professional development they have already received. This was considered, but ultimately excluded, as the researcher sought to identify what professional development was needed to implement the Pull-Out and Co-Teaching special education Resource Model delivery options at their sites as opposed to what has already been received.

Data Collection and Management Procedures

For the quantitative aspect of this study, Golden Cactus School District Galileo assessment data from the 2010-2011 academic year was examined to determine the reading achievement of students identified with a specific learning disability. First, a quantitative methodology was used to compare the student reading performance of 56 third through fifth grade reading learning disabled special education students in two Golden Cactus School District schools' Galileo Assessments. Data were accessible through the Golden Cactus School District database and were retrieved from the Golden Cactus School District. Data regarding AYP and AZ LEARNS for Reading were collected for all 20 Golden Cactus School District schools between 2009 and 2010. First,

all middle and K-8 schools were eliminated from the study's analysis. Next, any school that did not make AYP during the 2009-2010 school year was removed.

Then, a list of the remaining schools was analyzed for achievement growth trends and student enrollment to identify similarly configured schools, including student count. The data provided in the study were then limited to schools that provided the variations in special education programs.

Galileo assessment data were analyzed and summarized for trends and overall achievement. SPSS software was used to calculate an ANOVA to determine if school trends were statistically significant. The study used a $p < .05$ confidence level to determine statistical significance.

1. Data regarding AYP and AZ LEARNS for Reading were collected for all 20 Golden Cactus School District schools between 2009 and 2010.
2. All middle and K-8 schools were eliminated from the study's analysis.
3. Any school that did not make AYP during the 2009-2010 school year was removed.
4. The remaining schools were analyzed for achievement growth trends and student enrollment to identify similarly configured schools, including student count. The data provided in the study were then limited to schools that provided the variations in special education programs.
5. Data were accessed from the Golden Cactus Elementary School District ATI-Online, Galileo Database for performance information on the August and May 2010-2011 Galileo Benchmark Assessments.
6. All data were exported to an xls file for use in an excel spreadsheet.

7. Data were calculated for Reading achievement and displayed in tables.
8. Galileo data were analyzed and summarized for data trends with all schools identified for the study. SPSS software was used to calculate an ANOVA to whether or not any differences were statistically significant. The study used a $p < .05$ confidence level to determine statistical significance.

The qualitative portion of the study used an open-ended questionnaire with general education teachers, special education teachers, and administrators at the elementary schools that would participate in the study. This questionnaire was used to collect data on the perceptions of which type of professional development, resources and support staff are needed to best implement the Pull-Out and Co-Teaching special education Resource Model delivery options at their sites in order to contribute to sustained student achievement growth. The school district superintendent of the identified schools was contacted for permission to distribute the questionnaire to the school staff (Appendix D). The researcher completed the district's application process. Once approval was granted from the school district, each of the identified school's staff was contacted via email by the researcher to invite them to participate in the study. Next, an email message followed (Appendix A) to determine their willingness to participate. This email oriented and explained the purpose of the study to all potential participants. During the follow-up email message, the participants' informed consent (Appendix A) was reviewed and participants were asked to agree to the consent before completing the questionnaire. Finally, a timeline was given for the completion of the questionnaire.

An open-ended questionnaire was used. Participants were asked questions based on the instructional model present at their school site (Appendices B & C). Once the

questionnaire was made available, the researcher reviewed the purpose of the questionnaire, the reason their school was selected, as well as the questions and confidentiality, before finally answering any participant questions.

A follow up thank you email was sent to participants following the questionnaire in order to allow participants the opportunity to identify outcomes of the questionnaire. The following procedures were used to conduct the qualitative study:

1. The identified schools were invited to complete an online questionnaire.
2. Letter of permission (Appendix D) was sent to the Superintendent of the school district where the selected schools are located for district approval of participation in the survey. Once district approval was received, designated staff would be contacted in person and an email would follow.
3. Once permission to participate had been provided, each staff member would be sent an email, which provided the purpose of the study and a link to the questionnaire (Appendix A).
4. An open-ended questionnaire was conducted (Appendices B & C).
5. The researcher sent the questionnaire to all perspective participants via email.
6. The potential candidates read the initial email, which stated the purpose of the study, questionnaire instructions, estimated time commitment, less than minimal risk explanation with potential benefits from participation, and a statement of informed consent.
7. Once the informed consent was read, a small number of candidates responded and submitted the questionnaire when completed.

8. Data were password secured. The survey did not ask for any information that would identify participants. No identifiers were used to link participants' identification to the data. Questionnaires were completed on-line for anonymity. All data were kept on a password secured hard drive that only the researcher has access to.
9. Results were coded and analyzed.

Data Analysis

This was a mixed methods study in which the qualitative portion of this study was phenomenological. The nature of this study required the researcher to be very organized and diligent with the collection, organization, and analysis of the data. To begin, the data from the district database were collected, entered in an excel spreadsheet and analyzed. The data from the questionnaires (Appendices B & C) were collected and the responses from the questionnaires were analyzed. The data collected from the open-ended questionnaires were analyzed using a qualitative approach. To support this phenomenological study (Leedy & Ormrod, 2005), data analysis followed the following format:

1. The responses were read to identify statements that related to the topic
2. The statements were grouped into categories that reflected meaning of the questionnaire
3. Different perspectives were considered
4. The responses were analyzed

The researcher read the data identifying key terms and common themes determining specific codes generated from the data. The researcher directed the coding

process with identified coders who are educators. The codes generated by the coders were formed into categories. These categories provided a framework to study data for additional meaning. Once categories were determined, patterns were organized and further analyzed for accuracy and validity.

Inter-rater reliability was established by comparing individual coding to the researcher's coding. Coders shared their findings with the researcher, who then identified major themes and patterns. The researcher and the coders conferred to discuss findings, assuring the coders' analysis and outcomes were appropriated interpreted. The inter-rater reliability process eliminated researcher-bias. Coders utilized their own system to target and extrapolate the various themes, including highlighting key terms and linking them to the derived themes. Because the researcher and coders used different processes the key ideas and themes were analyzed and synthesized to determine outcomes. The outcomes of the coders yielded similar ideas to the researcher with very few variations. One coder built a three-column spreadsheet highlighting key terms and identifying themes in the third column related to their highlighted main idea(s). Another coder used the questionnaire response sheet and listed proposed themes. The researcher used columns to frame defined headings. These headings helped to lay out the key understanding and themes identified. These data were then reviewed to develop a cohesive coded system.

Data Preparation

After a preliminary review of the data set was provided, the data were prepared by deleting unnecessary data, including all math and quarterly reading data, retaining only the pre and post (reading) test data for both schools. The researcher then consolidated pre and post (reading) data from six columns to two columns that were labeled *pre test* and

post test. The researcher then coded special education students as a *1* and general education students as a *2*. Next, the researcher coded school A as a *1* and school B as a *2*. The data were then disaggregated by program category, meaning special education. The researcher's next step was to run the remaining data set through SPSS in an attempt to identify the mean variance between grade level groupings between schools A and B.

Summary

Chapter III included a description of the research design and methodology used to determine which program type, Pull-Out or Co-Teaching, had the greatest English Language Arts performance of 56 third through fifth grade students with a Specific Learning Disability. Information was gathered from district Galileo reports. The analysis of district data was used to answer the research questions. Analysis and presentation of all data gathered was presented in this chapter.

Also included in this chapter was an outline of the population that was studied, the data collection procedures, instruments for the study, human subjects' protection, study procedures, and the analytical techniques.

Chapter IV

Findings and Results

Introduction

The purpose of this study was to investigate the design and implementation of the Pull-Out and the Co-Teaching special education resource models at two elementary schools in the Golden Cactus Elementary School District and to compare the student reading performance of 56 third through fifth grade special education students, by grade level, who participated in one of the two models at the selected schools during the 2010-2011 school year to determine which model was associated with higher levels of student success and under which circumstances.

The following questions guided this study:

1. How does the 2010-2011 reading performance of third through fifth grade elementary students with a diagnosed specific learning disability in reading, as measured by the Galileo criterion-referenced assessment, compare by Program service models at two selected elementary schools in the Golden Cactus Elementary School District?
2. What type of professional development, resources, and support, if any, do the Golden Cactus Elementary School District elementary school principals, resource teachers, and co-teaching general education teachers at two selected elementary school sites believe are needed to best implement the Pull-Out and Co-Teaching special education Resource Model delivery options at their sites?

Chapter IV presents the results of the analysis of the data derived from two schools, students and staff representing grades 3, 4, and 5. This chapter will also discuss the challenges encountered and the needed changes to complete this study.

Research Question 1

The initial part of the study focused on research question one. Two schools were targeted focusing on the Pull-Out and Co-Teaching delivery models. Fifty-six students identified with a specific learning disability in reading were targeted in the sample. This analysis focused solely on the mean growth of 2010-2011 pre and post test Galileo assessment data.

The study examined existing data looking at indicators to measure student special education achievement, to compare and ascertain if any disparity was evident between Pull-Out and Co-Teaching instructional models for students in grades three through five with any specific learning disability in reading.

After a preliminary review of the data set provided, the data were prepared by deleting unnecessary data, including all math and quarterly reading data, retaining only the pre and post (reading) test data for both schools. The researcher then consolidated pre and post (reading) data from six to two columns labeled pre and post test. School A was coded as a *1* and School B as a *2*. The data were then disaggregated by special education program category. The remaining data set was then run through SPSS in an attempt to identify the mean variance between special education grade level groupings at between Schools A and B.

The data set included 615 students who had taken both the pre and post tests. This was narrowed down from the original 741. Of the 615, 56 were special education students identified with a specific learning disability in reading. To compare the groups, several variables were analyzed. The sample of participants included 56 special education students, including 31 students from school A and 25 students from school B (see Table 4). One-Way Analysis of Variance (ANOVA) was used to compare mean data. From the cleaned up data school, program type, gender and grade level data was used. The ANOVA failed to find a significant difference in student (reading) performance between the Pull-Out and Co-Teaching models in the third grade (sig = .43; see Table 5).

Table 4

Number of Special Education Students Included in the Data Set

School	Program Type	Third Grade	Fourth Grade	Fifth Grade
A	Pull-Out	12	12	7
B	Co-Teaching	6	9	10

Table 5

Summary of Third Grade Data on Student Growth by Delivery Model

School	Program Type	N	Mean	sd	df	Significance
A	Pull-Out	12	14.93	18.56	1	.43
B	Co-Teaching	6	8.5	8.88		

The data analysis also failed to find a significant difference between the models in the fourth grade (sig = .12; see Table 6).

Table 6

Summary of Fourth Grade Data on Student Growth by Delivery Model

School	Program Type	N	Mean	sd	df	Significance
A	Pull-Out	12	.25	16.85	1	.12
B	Co-Teaching	9	10.03	16.16		

The data revealed that the mean between the Pull-Out and Co-Teaching models at the fifth grade were significantly different (sig = .05; see Table 7).

Table 7

Summary of Fifth Grade Data on Student Growth by Delivery Model

School	Program Type	N	Mean	sd	df	Significance
A	Pull-Out	7	2.81	10.37	1	.05
B	Co-Teaching	10	17.45	16.07		

The growth mean was the dependent variable. The subjects were selected based on their school, grade, and special education eligibility, meeting the assumption of independence. No statistically significant difference was found between the Pull-Out and Co-Teaching models for students identified with a specific learning disability in reading. Even though there was no significance, there was a mean growth of 9.78 in the fourth grade and an average mean growth of 17.99 between grades 3, 4, and 5.

Research Question 2

The second research question looked at the perceptions of principals, resource teachers, and co-teaching general education teachers in regards to which type of professional development, resources, and support staff were needed to best implement the Pull-Out and Co-Teaching special education Resource Model delivery options at their sites in order to promote and sustain student achievement growth. The questionnaire was

directed to seven staff members from School A and eight staff members from School B. Of these staff, three responses were received from School A and two responses were received from School B. Several steps were taken to garner high levels of participation. These steps included scheduling the questionnaire after Spring Break and prior to Arizona's Instrument to Measure Standards (AIMS) administration to avoid any potential conflicts. Also, the researcher consistently included assurances of participant anonymity in the initial and subsequent reminder emails. Three reminder emails were sent out to participants seeking their input and participation in this study.

The questionnaire responses were examined for themes that the data suggested (Leedy & Ormrod, 2005). Thirteen participants were invited to provide responses to the questionnaire. Once the questionnaire response window was closed, the data were read and specific codes were generated from the data. The researcher directed the coding process with identified coders who are educators with advanced degrees, one of which has an earned doctorate degree. The codes generated by the coders were formed into categories. Once categories were determined, patterns were further analyzed for accuracy and validity. Inter-rater reliability was established by comparing individual coding to the researcher's initial coding. Coders shared their findings, and identified major themes and patterns. The coders did not identify themes different from those the researcher found; therefore their findings were consolidated with the researchers. The work of the coders shared similar language with the researcher making consolidation seamless. This similarity was verified when the researcher and the coders conferred to discuss findings.

Pull-Out Questionnaire

The following questions are from this study's questionnaire. Question one asked, "What type of professional development do you believe is needed to best implement the Pull-Out special education delivery model at your site?" The two themes that emerged were instructional strategies/materials and to clarify teacher roles/responsibilities (see Table 8). One respondent provided a suggestion on professional development needs with, "How the standards/ performance objective's [sic] can be taught in context and still at a rigorous level without compromising the IEP." Another respondent stated, "I believe that our staff needs to have a clearer understanding that the use of any kind of SPED program requires a cooperative partnership between the classroom teacher and the resource teacher."

Table 8

Questionnaire Theme and Frequency: Pull-Out Question 1

Theme	Frequency
Instructional strategies / materials	2
Clarify teacher roles/responsibilities	1

Question two asked, "What resources are needed to best implement the Pull-Out special education delivery model at your site?" The top answers that emerged were instructional strategies/materials and technology (see Table 9). Respondent one believes"[t]echnology with training" is needed, while respondent two went more in-depth, articulating that, "We need SMART boards or ACTIVE boards and much of the latest technology to help motivate our SPED students." Instructionally, respondent three felt, "[a] reading intervention series that supports academic content standards-at an instructional level" was necessary.

Question three asked, “What support is needed to better design and implement the Pull-Out special education delivery model at your site?” The top theme that emerged was a need for more staff to support the models (see Table 10). One respondent added, “Mentors or special education mentors that ensure equal access to content” were needed.

Table 9

Questionnaire Theme and Frequency: Pull-Out Question 2

Theme	Frequency
Technology	3
Instructional strategies/materials	1
Staff	1
Training on implementation	1
Teacher traits	1

Table 10

Questionnaire Theme and Frequency: Pull-Out Question 3

Theme	Frequency
Staff	2
Training on implementation	1
Technology	1

Co-Teaching Questionnaire

Question one asked, “What type of professional development do you believe is needed to best implement the Co-Teaching special education delivery model at your site?” The themes that emerged were planning time and instructional strategies (see Table 11). One respondent believed, “Our biggest issue was not having enough time to plan lessons together with our co-teacher.” Another respondent added, “Teachers would need

professional development on how a co-teaching classroom works, [as well as] the best practices and co-teacher responsibilities."

Table 11

Questionnaire Theme and Frequency: Co-Teaching Question 1

Theme	Frequency
Instructional strategies	1
Planning time	1

Question two asked, "What resources are needed to best implement the Co-Teaching special education delivery model at your site?" The prominent theme that emerged was technology, access to general education curriculum, and collaboration/planning time (see Table 12). The first respondent stated, "It is highly important for the special education teacher to have access to the regular education curriculum plans, text, ideas, etc., so he or she can help the special education students gain access to grade level curriculum." This was confirmed by the second respondent adding, "Teachers would need access to additional teacher guides from the curriculum in order to plan collaboratively."

Table 12

Questionnaire Theme and Frequency: Co-Teaching Question 2

Theme	Frequency
Access to the general curriculum	2
Technology	1
Collaboration/planning time	1

Question three asked, "What support is needed to better design and implement the Co-Teaching special education delivery model at your site?" The themes that emerged were class size and collaboration/planning time (see Table 13). Respondent one felt, "Co-

teaching needs to be done in smaller classrooms where the noise level is lower and there is extra room," while respondent two believed, "Teachers, curriculum specialists and leadership would need time to collaborate and plan in order to implement the co-teaching model."

Table 13

Questionnaire Theme and Frequency: Co-Teaching Question 3

Theme	Frequency
Class size	1
Collaboration/planning time	1

Table 14

Questionnaire Theme and Frequency: Comparison

Topic	Themes	School A: Pull-Out Model	School B: Co-Teaching Model
Professional Development	Instructional Strategies	X	X
	Clarify Teacher Roles/Responsibilities	X	
	Planning Time		X
Resources	Technology	X	X
	Instructional Strategies	X	
	Staff	X	
	Access to General Curriculum		X
	Collaboration/Planning Time		X
	Training on Implementation	X	
	Teacher Traits	X	
Support	Staff	X	
	Training on Implementation	X	
	Technology	X	
	Class Size		X
	Collaboration/Planning Time		X

Research Question Results

Two research questions guided this study. Research question one asked, "How does the 2010-2011 reading performance of third through fifth grade elementary students with a diagnosed specific learning disability in reading, as measured by the Galileo criterion-referenced assessment, compare by Program service models at two selected elementary schools in the Golden Cactus Elementary School District?"

While no significant difference was detected for the third grade, the results so far show that there are significant differences between the groups as a whole. Significant differences were seen in the fifth grade Pull-Out vs. Co-Teaching models ($p = 0.05$). However, there was no difference between the third (significance = 0.43) and fourth (significance = 0.12) grades. The statistically significant difference between groups was determined by one-way ANOVA.

Question two examined the type of professional development, resources, and support, if any, that Golden Cactus Elementary School District elementary school principals, resource teachers, and co-teaching general education teachers at the two selected elementary school sites believe are needed to best implement the Pull-Out and Co-Teaching special education Resource Model delivery options at their sites.

In order to prevent researcher bias and increase research credibility, questionnaire responses were coded and analyzed for themes within each question by the researcher and two professional colleagues with expertise in special education. The researcher then reviewed questionnaire response data and themes comparing the results of the identified coders. Several thematic patterns began to emerge from the coders' analyses. These patterns were consolidated into prominent themes, reflected in the final report of findings.

The themes that surfaced across the questionnaires, pertaining to the both programs, were instructional strategies, materials, technology use, and training on implementation.

Summary

This chapter presented the results of a one-way ANOVA on achievement for 56 third, fourth, and fifth grade students with an identified specific learning disability in reading. The analysis was intended to identify if service delivery model type impacted student outcomes. Students in the Co-Teaching delivery model did show greater overall mean growth between Galileo pre and post test data when compared to students in the Pull-Out delivery model. While third and fourth graders showed no statistical difference, a statistical difference was evident in the fifth grade.

The questionnaires were characterized by several themes, which were highlighted by Instructional Strategies, Technology, Collaboration, and Access to the General Curriculum. While the results from this study suggest that students in the Co-Teaching model will have greater growth than those in the Pull-Out model, the difference was not significant. Even though two different program delivery models were presented, principals, resource teachers, and co-teaching general education teachers shared the same principal beliefs with regards to the professional development, resources, and support needed to best implement the Pull-Out and Co-Teaching special education delivery models.

Chapter V

Conclusion

The purpose of this mixed methods study was to investigate the design and implementation of the Pull-Out and Co-Teaching special education resource models at two elementary schools in the Golden Cactus Elementary School District and to compare student reading performance of 56 third through fifth grade students, by grade level, who participated in one of the two models at the selected schools during the 2010-2011 school year in order to determine which model was associated with higher levels of student success and under which circumstances.

The following questions guided this study:

1. How does the 2010-2011 reading performance of third through fifth grade elementary students with a diagnosed specific learning disability in reading, as measured by the Galileo criterion-referenced assessment, compare by Program service models at two selected elementary schools in the Golden Cactus Elementary School District?
2. What type of professional development, resources, and support, if any, do the Golden Cactus Elementary School District elementary school principals, resource teachers, and co-teaching general education teachers at two selected elementary school sites believe are needed to best implement the Pull-Out and Co-Teaching special education Resource Model delivery options at their sites?

This study used a mixed methods approach. A Simple Ex Post Facto design was used to compare the reading performance of 56 third through fifth grade elementary students with a diagnosed specific learning disability in reading, by grade level, across

Pull-Out and Co-Teaching Resource Model programs at two elementary schools in the Golden Cactus School District in Arizona. School A implements the Pull-Out model at their site and School B implements the Co-Teaching model. The achievement data for each school, available in the Golden Cactus School District Galileo Assessment database, provided the achievement growth data for the two schools and was used to identify data trends for the 2010-2011 academic year.

The qualitative component of the study consisted of a three question questionnaire that was administered to five special education teachers, six general education teachers, and four administrators who work with students with diagnosed learning disabilities in Pull-Out and Co-Teaching Resource Program Delivery Models at School A and School B to investigate their professional recommendations regarding the type of professional development, resources, and support that they perceived was needed in order to best-implement Pull-Out and Co-Teaching Models.

Discussion of Findings for Research Question One

The quantitative portion of the study revealed overall no significance between the Co-Teaching and Pull-Out instructional models on the student reading achievement of third and fourth grade students identified with a specific learning disability in reading. Analysis of the Galileo reading achievement data showed that fifth grade Co-Teaching students had a significantly greater mean increase in student achievement in reading than fifth grade students in a Pull-Out instruction model. Third and fourth grade, however, did not show a significant difference in mean reading academic achievement growth. This finding indicates that the Co-Teaching model did help increase mean growth in fifth grade, but not third or fourth. An analysis of the study revealed there was little

significance in mean growth between program models. This study also showed there were some inconsistencies in the models showing significance in the third grade, but not in grades 4 and 5. Due to the small sample size ($N = 56$) it was difficult to determine why the inconsistencies existed, making it difficult to gather results that could be generalized to other populations. Even with a small sample size, this study failed to show a consistent difference. This was contrary to previous research, identified in the review of literature, which has shown that students with a specific learning disability serviced in Co-Taught or inclusive classrooms have shown increased achievement over comparable students served in Pull-Out settings (Friend & Cook, 2003). Extensive research shows that teacher training and efficacy was a key factor in student achievement (Public Education Network & The Finance Project, 2004). The lack of consistent training and training in areas relevant to teacher and student need could have had an impact on the achievement score difference seen in fifth grade reading achievement, though this difference was not prevalent in grades 3 and 4. It is possible that targeted training and consistent monitoring of the instructional practices could have provided a more consistent outcome (Vaughn & Schumm, 1995).

Discussion of Findings for Research Question Two

An analysis of the responses to the qualitative questionnaire resulted in four prominent themes: (a) Instructional Strategies, (b) Technology, (c) Collaboration, and (d) Access to the General Curriculum.

Instructional Strategies

Respondents in the Pull-Out model identified instructional strategies as the type of professional development needed to best implement their special education delivery

model. Because Co-Teachers felt they participated in enough professional development for teaching the Co-Teaching model, this may have been a factor contributing to a greater mean growth for fifth grade students with a specific learning disability in reading instructed in the Co-Teaching model. In addition, specific training in English language arts programs being used at the school, phonemic awareness, phonics, fluency, vocabulary, comprehension decoding strategies, and progress monitoring may have helped decrease the significance found in fifth grade mean growth between the Pull-Out and Co-Teaching models (National Institute of Child Health and Human Development, 2000). Professional development should raise student achievement and engagement by improving teachers' knowledge, understanding, and teaching strategies (Ragland, 2003). The literature suggests that building knowledgeable, competent, and confident teachers plays a role in student level achievement.

Technology

The respondents from both schools identified technology that offers differentiated reading passages based on student instructional level and that motivates students as a need to increase student reading achievement for students identified with a specific learning disability in reading. While each school identified a different motive, they both focused on integrating technology into their current practice. Kim, Woodruff, Klein, and Vaughn (2006) found that technology could facilitate instruction, assisting teachers to overcome the obstacles that impede student success. While studies should take place to identify the effects of computer-based support, it is viable to integrate technology into instruction to see if increases in student reading achievement are possible.

Collaboration

Co-Teaching respondents focused on time for collaboration. One issue these educators faced was not having enough time to plan lessons together with their co-teacher. A provision of time can lead to a better cooperative partnership, helping to increase student achievement. Collaboration is critical to Co-Teaching. In order for Co-Teaching to have an impact in improving student outcomes, both teachers must be committed to the process (Friend, 2008). Because Co-Teaching is a collaborative process, the literature indicates teacher commitment is necessary in order to impact learning in a positive manner. Several researchers, including Sindelar (1995) and Walther-Thomas (1997), intimated lack of planning and organization as barriers to Co-Teaching. This suggests that providing enough time for co-teachers to plan lessons together is critical to providing a successful instructional program.

Access to the General Curriculum

It is critical that teaching performance objectives be contextualized at a rigorous level without compromising IEP. It is important to provide student instruction that both meet the goals of the IEP and the responsibility of grade level standards. Friend (2007) noted it is crucial to remember special education was designed to be in addition to, not in lieu of, general education, and when you take students and begin replacing their core instruction in the resource room you are substituting their instruction. It is this idea that highlights the need to align instruction with what is going on in the general curriculum (Baker, 1995). The literature suggests that maintaining core instruction is a critical part of instruction for special education students. It is important to stress that access to the general curriculum is vital for student achievement.

Conclusions

Four conclusions resulted from the data analysis in this study. First, the study revealed overall no significance between the Co-Teaching and Pull-Out instructional models on the student reading achievement of third and fourth grade students identified with a specific learning disability in reading. Because the findings revealed little difference overall in compared performance, and these findings are counter to literature findings, further research would need to be conducted in order to truly make conclusions about the effectiveness of the two programs. The ideal plan to compare the programs would include observation of teacher practice with students, in-depth interviews with individuals that would probe the fidelity with which programs are being implemented, as well as participant self-reports regarding their practices, and finally, leadership perspectives of implementation.

Secondly, due to the small number of responses in this study, any conclusions would be limited and not necessarily able to be generalized. The results of this study suggest that proper training is needed to create a foundation for expected instruction. It also suggests there is a range of understanding that impacts student achievement. The district and schools need to consider how professional development could be structured and monitored to improve teacher knowledge.

Next, student achievement is dependent upon quality teacher instruction. The Public Education Network & The Finance Project (2004) identified quality teachers as the single greatest determinant of student achievement, validating Vaughn and Schumm's (1995) recognition that on-going professional development is crucial for program effectiveness. This study indicates that those involved in the delivery of instruction need

the appropriate professional development, resources, and support to provide what is needed to increase achievement of those students identified with a specific learning disability in reading. This was supported by the body of research, including work by Thomas (2003), which identified the importance of identifying goals and objectives. Hirsh (2005) also views selecting staff development that aligns most clearly with the assumptions and beliefs of its staff members as highly critical in accelerating behavioral change. Clearly training was a critical factor, which must be considered to begin to realize any substantive change that can be sustained over an extended period of time. Ultimately schools and districts need reliable information on the types of professional development that works, in order to get a good return on their investment (Public Education Network & The Finance Project, 2004).

Lastly, it is important that instructors be assisted with the specific skills needed to implement the instructional delivery models. This is critical to facilitate higher levels of student success. The results of a study by Ragland (2003) supported the hypothesis that professional development should raise student achievement and engagement by improving teachers' knowledge, understanding, and teaching strategies.

The findings within this research begin the conversation, with the principals, resource teachers, and co-teaching general education teachers involved in this study, to make the best decision for students with a specific learning disability in reading, so they can have the same expectations for success as their non-disabled peers. Professional development strategies are designed to facilitate teacher growth through professional dialogue with colleagues, curriculum development, peer supervision, peer coaching, and action research (Monahan, 1993). As good quality professional development emerges,

teachers will get all of the tools they need to approach classroom challenges with confidence (Public Education Network & The Finance Project, 2004).

Recommendations for Policy and Practice

This study was initiated to investigate the implementation of the Pull-Out and Co-Teaching special education resource models at two elementary schools in the Golden Cactus Elementary School District and to compare the student reading performance of 56 third through fifth grade students to determine which model was associated with higher levels of student success and under which circumstances. Findings and conclusions from the study support the following recommendations:

1. Ragland (2003) supported the hypothesis that professional development should raise student achievement and engagement by improving teachers' knowledge, understanding, and teaching strategies. The results of this study suggest that professional development should be provided, thus developing common understanding. Training on instructional strategies should also be a central part of professional development and training. This is important because of its potential to raise student achievement.
2. Use of technology should be investigated to determine its value in achievement among students identified with a specific learning disability in reading. Because Brown et al. (1979) believe now is the most opportune time to analyze the educational delivery system and make the needed changes to ensure viability and effectiveness, the investigation of alternative supports and methods can become a solid part of the action research process.

3. Monitor instruction and student learning over an extended period of time to determine what variables are necessary for increased student achievement. Varying degrees of mean achievement growth intimates that monitoring and support is critical to program success. Keogh (1990) suggested that one major responsibility of the research community is to study the implementation. This can help support evidence based educational practices derived from the identified variables.

Recommendations for Further Research

This study was the first step in examining the impact of both Pull-Out and Co-Teaching instructional practices on students identified with a specific learning disability in the Golden Cactus School District. These recommendations offer potential areas for consideration for further meaningful study.

1. To study the amount of time allocated for planning and collaboration to staff of each instructional model. This was important as it may show the relationship of targeted planning time to student achievement. This can be done through staff survey, indicating the amount of time allocated for planning, as well as opportunities for collaboration.
2. To survey professional development provided to determine impact on instructional models. This can provide a background on what training has been attended and what learning has occurred. A questionnaire can produce the desired information.
3. A study of disciplinary actions to determine if student time in/out of class may have contributed to level of student growth. This can also include a look at

classroom management to identify that processes are in-place to ensure disruptive behaviors are minimized and learning is maximized. Data can be gathered from district discipline data identifying out of school suspensions. Information can also be collected through observation and walkthroughs.

4. A study to determine the amount of time students are pulled out of the classroom for instruction. Identifying the possible time away from instruction in the core curriculum can be important in student achievement. This could be initially gathered through student IEP data.
5. A study of student growth at the Co-Teaching school to identify growth prior to Co-Teaching when the school only provides the Pull-Out delivery model. By gathering and analyzing existing data it can provide an understanding of the impact of programmatic changes on student achievement, which gives further information for analysis.

Closing Thoughts

Addressing the achievement gap that exists between special education and non special education students has quickly come to the forefront of the nation's public education agenda with IDEA and NCLB legislation bringing accountability into focus. There was a need to decrease the gap that exists by identifying instructional models that help improve special education student achievement. Pull-Out and Co-Teaching models are promoted to offer a range of services to best meet student needs. As teachers come into the profession, it was assumed they have the requisite skills needed to positively impact student achievement. Because these are two distinctly different models, an

opportunity presented itself to study the implementation of these models in order to examine the impact of the models as perceived by those who practice them.

The improvement of student achievement was extremely important and the implementation of the most effective instructional method(s) needs to be presented to help students reach the desired levels of success. When identifying the most effective model to implement, it is important to consider the structures that are in place. A targeted and systematic approach to professional development, collaboration, technology, and access to the general curriculum is critical to closing the achievement gap. With these structures in place, long-term benefits can be realized.

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APPENDIX A:

Informed Consent for Participation

Email Body

Dear Participant:

You have been invited to participate in a study entitled, *A Comparison of Pull-Out and Co-Teaching Models on the Reading Performance of 3rd through 5th Grade Elementary Students with a Diagnosed Specific Learning Disability in Reading*. Thank you in advance for considering taking part in this study by reviewing the informed consent and completing the online questionnaire.

The subsequent link will cover the following information:

- Overview of the study and the nature of your voluntary participation and protection as a subject in this study

Link

Informed Consent
The following consent form contains legal language that is required by all research granting institutions. Please understand that your participation in this study is strictly voluntary. The following is a description of what your study participation entails, the terms for participating in the study, and a discussion of your rights as a study participant.

Please read this information carefully before deciding whether or not you wish to participate. After you have read and understood your rights and protection as a human subject in this study, given consent, and have agreed to participate, you will be contacted by the researcher for a telephone interview.

- I agree to participate in the research study under the direction of Louis Laffitte.

- The overall purpose of this research is to identify staff perceptions of what type of professional development, resources, and support staff believe are needed best implement the Pull-Out or Co-Teaching special education Resource Model delivery options at their sites that contribute to sustained student achievement growth.

- My participation in this study will involve me completing three open-ended questions related to staff perceptions of what type of professional development, resources, and support staff believe are needed best implement the Pull-Out or Co-Teaching special education Resource Model delivery options at their sites that contribute to sustained student achievement growth.

- My participation in this study will take approximately 20 minutes, the time it takes to read and respond to the questionnaire questions. If I consent to participate in the study, I will complete the succeeding questionnaire. If, within one week all participants have not responded, I will receive a reminder email. I understand the timeframe for the study will be from April 2, 2012 through April 6, 2012 and that the actual data will be collected between April 2, 2012 through April 6, 2012

- I understand that although I may not benefit directly from participating in this study, I will make a major contribution to the information known about special education instructional models. In the future, others may benefit because we will learn what structures and supports are needed to support the pull-out and co-teaching models.

- I understand that there are certain risks and discomforts that might be associated with this research. Potential risks and/or discomforts might include; feeling social pressure to participate in the study, fatigue, and/or a sense of having been inconvenienced in terms of time demands.

- I understand that I may choose not to participate in this research.

- I understand that my participation is voluntary and that I may refuse to participate and/or withdraw my consent and discontinue participation in the questionnaire at any time without penalty or loss to benefits to which I am otherwise entitled.

- I understand that the investigator will take all reasonable measures to protect the confidentiality of my records and my identity will not be revealed in any publication that may result from this project. The confidentiality of my records will be maintained in accordance with applicable state and federal laws.

- I understand that the investigator is willing to answer any inquiries I may have concerning the research herein described. I understand that I may contact Louis Laffitte, investigator, about the proposed research, at 623-428-9350 or Dr. Linda Purrington, dissertation Chairperson, at lpurring@pepperdine.edu or 949-223-2568 if I have other questions or concerns about this research. If I have questions about my rights as a research participant, I understand that I can contact Dr. Yuying Tsong, Chairperson of the GSEP IRB Committee, Pepperdine University, at yuying.tsong@pepperdine.edu or 310-568-5768.

- I understand to my satisfaction the information regarding participation in the research project. All my questions have been answered to my satisfaction. I have read and understand this informed consent form. I hereby consent to participate in the research described above.

- I understand that by clicking “accept” that I agree to willingly participate in this study.

Please click “Accept” or “Decline”
___ I Accept - I understand the above statements and give my consent to participate in this study.
___ I Decline - I do not want to participate in this study

APPENDIX B:

Pull-Out Delivery Model Questionnaire

School A, Pull-Out Delivery Model Questionnaire Questions

1. What type of professional development do you believe is needed to best implement the Pull-Out special education delivery model at your site?
2. What resources are needed to best implement the Pull-Out special education delivery model at your site?
3. What support is needed to better design and implement the Pull-Out special education delivery model at your site?

APPENDIX C:

Co-Teaching Delivery Model Questionnaire

School B, Co-Teaching Delivery Model Questionnaire Questions

1. What type of professional development do you believe is needed to best implement the Co-Teaching special education delivery model at your site?
2. What resources are needed to best implement the Co-Teaching special education delivery model at your site?
3. What support is needed to better design and implement the Co-Teaching special education delivery model at your site?

APPENDIX D:

Superintendent Permission to Conduct Study

TO: _____

FROM: Louis Laffitte, Jr.

DATE: December 22, 2011

SUBJECT: Superintendent or Designee Permission to Conduct Study

I am seeking your permission to conduct a research study at _____ and _____ Elementary Schools as part of my doctoral dissertation at Pepperdine University. I am researching a comparison of pull-out and co-teaching models on the reading achievement of elementary school learning disabled students.

The purpose of this mixed methods study is to investigate the design and implementation of the Pull-Out and the Co-Teaching special education resource models at two elementary schools in the Golden Cactus Elementary School District and to compare the student reading performance of 3rd through 5th grade students, by grade level, who participated in one of the two models at the selected schools during the 2010-2011 school year to determine which model was associated with higher levels of student success and under what circumstances.

I selected _____ and _____ Elementary School as a possible sites for this study because they are similarly configured schools, including student count and variations in special education programs. If the schools principals agree to participate, the general education teachers, special education teachers and principals will be asked to participate in a questionnaire regarding their perceptions of what type of professional development, resources, and support staff believe are needed best implement the Pull-Out and Co-Teaching special education Resource Model delivery options at their sites that contribute to sustained student achievement growth.

The questionnaire will take place on line at the convenience of the participants. I will use Google Docs to manage and collect data. Participant responses will remain confidential and not be shared with others. The questionnaire responses will be examined and used to identify staff perceptions of supports that contribute to sustained student achievement growth.

Participation in this study is voluntary. Participants who decide to participate are free to withdraw their consent or discontinue participation at any time. A copy of the informed consent and the interview protocol are attached for your information.

Please sign and return your approval by February 1, 2012 to:

Louis Laffitte, Jr.
xxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxx.

You may also email the signed form to xxxxxxxxx@xxxxxxxxx.
If you have any questions regarding this study please feel free to contact me at xxx-xxx-xxxx.

Your signature indicates that you have read and understood the information provided above, that you willingly agree for me to invite your district and staff to participate in this study, and that you have received a copy of this form.

Respectfully,

Louis Laffitte, Jr.

Attachments:
Copy of Superintendent or Designee Permission to Conduct Study;
Informed Consent for Participation in Research Activities;
Questionnaire

I hereby consent to my school district's participation in the research described above.

Golden Cactus School District

Superintendent or Designee Signature

Please Print Superintendent or Designee's Name

Date