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The School Leader's Role in Co-Teaching and It's Impact on the Academic Achievement for Students with Disabilities

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THE SCHOOL LEADER'S ROLE IN CO-TEACHING AND ITS IMPACT ON THE ACADEMIC ACHIEVEMENT FOR STUDENTS WITH DISABILITIES

by

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ABSTRACT

The purpose of this research study was to analyze the role of school leaders in the implementation of co-teaching as an instructional model on teacher collaboration and academic outcomes for students with disabilities. Federal guidelines and provisions forged the increase of mainstreaming students with disabilities into the full inclusion setting. As a result, school administrators are increasingly implementing co-teaching as an instructional model to provide opportunities to access the general education curriculum while receiving special education supports and services in the full inclusion setting. A mix-method study of semi-structured interviews with school leaders and co-teachers and data analyses of LEAP 2025 scores were evaluated at six middle schools. Results indicated an increase in teacher collaboration and improvements for students with disabilities. The research intent was to contribute to the school administrators' role in the co-teaching process and forge further discussion of co-teaching as a pedagogical model in education reform.

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DEDICATION

I dedicate this dissertation to my daughters, *My Girls*, Camri and Carrington. I know you were always watching, wondering, “Why are you doing this, mom?” I do this to show you no matter how hard the journey gets, keep going! The finish line is coming!

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CHAPTER 1

INTRODUCTION

Statement of the Problem

Inclusion

The modern ideology for students with disabilities is to create support models to help improve overall academic and social progress. In 1997 the Individuals with Disabilities Education Act (IDEA) was re-authorized to ensure students with disabilities the right to a free and appropriate public education (FAPE) and the right to learn in the least restrictive environment (LRE) (Miller & Oh, 2013; Wright & Wright, 2009). Since these guidelines have been put into place, school leaders and special education teams have strived to place students in the appropriate settings that are less restrictive. In addition to the provisions set forth under IDEA, former President George W. Bush signed *No Child Left Behind* (NCLB) into law in 2004. This law has four main components: (a) accountability for results for all students, (b) use of research-based practices in schools, (c) expanding options for parents regarding students' education, and (d) flexible spending of federal funds (Miller & Oh, 2013; U.S. Department of Education, 2001). NCLB was created to ensure *all* students be proficient in core academic subjects.

One of the goals of former President Barak Obama was to increase academic expectations and improve the graduation rate for American students. He believed to achieve this goal, we must begin with our lowest-performing group of students:

students with disabilities (Miller & Oh, 2013). One of the most utilized educational structures to achieve that goal is the inclusion class setting. According to Walther-Thomas, Bryant, and Land (1996), mainstreaming students with disabilities into the inclusion setting requires comprehensive school planning as changes are made to facilitate this initiative. They also assert that mainstreaming students with disabilities into the general education setting provides access to higher academia and proper socialization with peers, facilitating a positive school experience.

Co-Teaching

In addition to mainstreaming students with disabilities into inclusion class settings, co-teaching is employed as a pedagogical approach to provide access to an education aligned with the provisions established by current legislation. This teaching model increased the efforts to support students with disabilities in the inclusion setting with nondisabled peers. Teaching scholars attest that students with disabilities have educational needs that could be in the inclusion setting with supports from special education teachers and other related service providers. Figure 1 shows the descriptions of the types of co-teaching structures, according to Ludlow (2012).

1. One Teach, One Observe- One teacher provides whole group instruction. The other teacher observes students and gathers information about academic and behavioral needs.
2. Parallel Teaching- Co-teachers simultaneously teach the same material to two separate small groups.
3. Station Teaching- Students are divided into two or more small groups and rotate through instructional stations (stations do not build on one another).
4. Alternative Teaching- One teacher teaches the whole group while the other teacher teaches a small group of students. Small groups are obtained according to student needs (re-teaching, remediation, pre-teaching, or enrichment).
5. One Teach, One Assist- One teacher teaches the whole group while the other teacher assists students.
6. Team Teaching- Both teachers simultaneously deliver instruction to the whole group of students.

Figure 1. *Description of Co-Teaching Structures*

According to Friend (2008), co-teaching should contribute to four areas of expertise from the general education teacher: (a) a thorough knowledge of the curriculum, (b) the ability to manage a large group of students, (c) an understanding of student learning patterns, and (d) the ability to pace instruction while maintaining rigor. Special education teachers should offer expertise in these four areas: (a) an in-depth knowledge and skill for providing strategies, modifications, and accommodations, (b) an understanding of students' learning abilities and behaviors, (c) adequate management of paperwork including individual education programs (IEPs), and (d) mastery learning (2008). Instruction in the co-teaching model is delivered primarily in a single classroom. Cook and Friend (1995) attest that co-teachers can relieve each other during instruction

as well as clarify lessons and gauge student needs at any particular moment of instruction (p. 5).

Although lessons are co-planned, groups of students are occasionally separated for instruction. These groups are strategically coordinated according to students' academic needs. A primary rationale for co-teaching is to increase opportunities for students with IEPs to succeed academically through expanding instructional approaches (Cook & Friend, 1995). They also suggest that in co-teaching classes, students with disabilities can receive more instruction and can be more involved in their learning. The co-teaching model provides opportunities for these students to interact with nondisabled peers. Services for students with disabilities are provided in the co-teaching classroom. Therefore, pull out is less frequent, and more time is spent in one instructional environment. This also helps minimize the stigma often associated with leaving the general education setting to receive special education services. Implementing a useful co-teaching model requires long-term supports and consistent evaluation from school leaders.

School Leaders Preparation and Support for Co-Teachers

School leaders are instrumental in implementing a useful co-teaching model. According to Thomas, Bryant, and Land (1996), planning allows school administrators and other school leaders and stakeholders time to gain school and community support, recruit willing and qualified co-teachers, and provide appropriate staff development. It also provides time to conduct the Individualized Education Program (IEP) meetings and make proactive decisions on student placement and curriculum. One of the critical

elements of implementing a useful co-teaching model is recruiting and preparing co-teachers.

Research has highlighted that many general education and special education teachers are placed in co-teaching situations with very little preparation. Teacher scholars claim special education teachers lack of preparation does not allow them to provide appropriate content-area instruction (Leko & Brownell, 2009). Significant changes in institutional structures that govern schooling were required for the most recent model of professional development for teachers. This paradigm change has been supported through professional learning communities (PLCs). The concept of PLCs evolved from the business sector and has been modified for the education world (Vescio, Ross, & Adams, 2007). The concept of a "learning organization" forged into a "learning community" in efforts to create collaborative work cultures for teachers. Traditional professional development models focused on becoming better educators, grounded in the assumption that the purpose of professional development is to provide "knowledge" to teachers to implement into the classroom.

The dialogue within a PLC consists of a collaborative culture that focuses on student learning (Blanton & Perez, 2011). School leaders can also ensure discussions focus on the analysis of data and strategies to improve instruction for both general education and special education students. This sends the message to co-teachers that all parties involved are responsible for the academic performance of every student (2011). Scholars also claim that with general education teacher content knowledge and the special education teacher knowledge of addressing the unique needs of students, the collaboration culture of PLCs will join the two knowledge bases. Also, unique curricular

and instructional constraints can be addressed. Professional learning communities acknowledge teacher expertise and experiences as well as provide opportunities to explore new ideas and evidence of student learning. PLCs utilize processes that respect teachers as experts on what is needed to increase student academic performance as well as improve their professional practice (Vescio, Ross, & Adams, 2007). These learning communities are needed to support co-teachers in making decisions about creating goals to support student needs. In addition to facilitating PLCs, co-teachers are supported through incentives, on-going skill development, achieving balanced classrooms between general education and special education teachers (Walther-Thomas, Bryant, and Land, 1996). Securing resources, monitoring student progress and teacher performance, and maintaining an inclusive setting, increase effective implementation.

Significance of the Problem

School leaders elect to implement the co-teaching model in hopes of cultivating teacher collaboration as well as improving the academic success for all students, but in particular students with disabilities by (a) increasing instructional options, (b) improving rigor and continuity, (c) reducing the stigma of special education services, and (d) increasing support for teachers in the inclusion class setting. There have been critics about the appropriateness of the general class setting for students with disabilities and questions concerning if the co-teaching model leads to academic improvements for those students. The purpose of this study was to analyze how the school leader's role in implementing the co-teaching model fosters teacher collaboration and its impact on academic outcomes for students with disabilities.

Research Questions

(1) How does the school leader roles in implementing a co-teaching model impact teacher collaboration?

(2) How does the school leader role in implementing the co-teaching model impact academic achievement for students with disabilities in reading and mathematics?

Null Hypothesis

$H_{0:}$ The school leader's role in implementing the co-teaching model has no significant impact on academic achievement for students with disabilities in reading and mathematics.

Assumptions and Limitations

Some assumptions have been made when preparing for the study. Given the operational definition for the position of a certified teacher, it is assumed that certified general education teachers and certified special education teachers serve in their position of certified areas. The study is limited to only students with disabilities with an exceptionality of specific learning disabilities. It is also assumed that participating students with an exceptionality operationally defined as specific learning disabilities have no additional medical, behavioral, or psychological diagnosis. Finally, it is assumed that participants provided honest responses to interview questions about their collaboration experience and the process of implementing the co-teaching model.

Unknown secondary exceptionalities, including medical diagnoses of behavior disorders or psychological diagnoses, may cause limitations in the study given such

diagnoses may have on academic achievement. The study may also be limited when both team co-teachers do not fully participate in the process or serve full time in the co-teaching model. Also, participating teachers and administrators who do not consistently or actively participate in professional learning communities may have limited insight on the impact it has on collaboration among co-teachers.

Definition of Key Terms

The following key terms are defined for this study:

1. Student with a Disability: Student who meets the criteria and receive special education services under the Individuals with Disabilities Education Act (IDEA). Criteria for disabilities include Intellectual disabilities, hearing impairments, speech or language impairments, visual impairments, serious emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments, specific learning disabilities; and who by reason thereof, need special education and related services (Bateman & Bateman, 2001, p. 173).
2. Specific Learning Disability: A disorder in one or more of the basic psychological processes involving understanding or using language, spoken or written, which manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations (Bateman & Bateman, 2001, p. 175).
3. Certified (highly qualified) teacher: A teacher who has passed the state licensing exam, holds a license to teach in the state as set forth under the

guidelines and provisions of the State Department of Education (U.S. Department of Education, 2001),

4. Inclusion: Educational placement of students with disabilities in general education classrooms alongside nondisabled peers (Bateman & Bateman, 2001).
5. Mainstreaming- The placement of students with an Individual Education Plan (IEPs) in the general education class setting for instruction (Bateman & Bateman, 2006).
6. Co-teaching- Two or more professionals, typically a general education teacher and a special education teacher or related service provider, delivering instruction to students with disabilities and nondisabled students in a general education classroom setting. The general education teacher and special education teacher co-plan, co-instruct, and co-assess (Murawski & Dieker, 2012). Types of co-teaching models are listed in Appendix A.
7. Related Services: Services in addition to educational services received by students with disabilities. A list of related services is provided in Appendix B.
8. Professional Learning Community: Professionals in a school, typically groups of teachers, who work collaboratively to improve practice and enhance student learning (Blanton & Perez, 2011, p. 6).

CHAPTER 2

LITERATURE REVIEW

Introduction

Under the Individuals with Disabilities Education Act of 2004 and the provisions of the No Child Left Behind Act of 2001 (2004), schools are required to educate children with disabilities with other non-disabled students to the "maximum extent appropriate." According to IDEA (1997, 2014; in Wright & Wright, 2006), "a child may only be removed from the general educational setting if the nature or severity of the disability is such that the child cannot be educated in regular classes, even with the use of supplementary aids and services." During the latter parts of the 20th and early 21st century, the federal government played a significant role in how services were provided to students with disabilities. This increased the national concern involving educating students with disabilities. The co-teaching model is mostly utilized as a mechanism for students with disabilities to receive special education and related services (Jackson, Willis, Giles, Lastrapes, & Mooney, 2017).

This chapter is a review of research related to the school leader's role in implementing effective co-teaching practices and its impact on teacher collaboration and planning, as well as academic outcomes for students with disabilities. While not a new pedagogical concept, co-teaching is a relatively new method of instruction in the

Inclusion class setting. The co-teaching method is generally a combination of a highly qualified general education teacher working directly with a highly qualified special education teacher in a heterogeneous class of general education students and students with disabilities. In most co-teaching settings, the general education teacher is considered an expert in content. In contrast, the special education teacher is considered the authority in individualization and adaptation of the lesson (Jackson et al., 2017). Critics of co-teaching urge caution in incorporating the co-teaching model for all students, particularly students with disabilities (Jackson et al., 2017). Some disadvantages that concern critics include the lack of utilization of skills for the observing teacher, the extensive time for planning required to implement the co-teaching model appropriately, and pairing of cohesive personalities (2017). Also, in many cases, the second teacher, usually the special educator, sometimes is seen as the general educator's assistant, not an equal partner (Jackson et al., 2017). According to Mastropieri and Scruggs (2001), general education teachers should utilize special education teachers as consultants for practical strategies for these students. The special educator must understand how their knowledge and skills facilitate learning in co-teaching (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). Other collaboration skills are also necessary to negotiate roles and responsibilities and provide instructional supports for students with disabilities. Developing common understanding and application are vital elements in a successful co-teaching relationship. School leaders seek to implement "best practices" to ensure success for all students. According to Alber (2015), best practices are described as educational practices backed by research data. There is limited research on the school leader's role and student academic outcomes.

Conceptual Framework

The foundation for the co-teaching model is mostly aligned with the guidelines and laws in compliance with the Individuals with Disabilities Act (IDEA) coupled with the provisions of the No Child Left Behind Act (NCLB, 2004) requiring that nearly all students reach a high standard of academic achievement, including students with disabilities. The conceptual framework for this study is distributed leadership. Distributed leadership is the antidote to the concept of the heroic leader: the charismatic leader that takes over the struggling school by establishing new expectations and goals, transforming the school culture to improve teacher satisfaction and student achievement (Spillane, 2005). The framework for distributed leadership was popularized in education independently by Peter Gronn and James Spillane (Mayrowetz, 2008). Distributed leadership focuses on the idea of viewing leadership as spread throughout an organization. It is often used interchangeably with "shared leadership," "team leadership," and "democratic leadership" (Spillane, 2005). As instructional leaders, school administrators play a critical role in recruiting staff and establishing shared leadership in implementing useful co-teaching model. Many in the field of educational leadership have subscribed to the notion that the activity of leadership is shared through multiple individuals within a school setting (Mayrowetz, 2008). According to Bolden (2011), distributed leadership is not done to others by one individual; but it is an action in which multiple people contribute to an organization through relationships. School leaders implement more effective co-teaching models when leadership is distributed among all stakeholders involved, such as lead teachers, mentor teachers, educational specialists, and other related service providers (Mayrowetz, 2008). Implementing the co-teaching model

requires individuals-administrators, co-teachers, related service providers, and other school leaders to take responsibility for leadership in the process. According to Spillane (2005), distributed leadership practice results from interactions between leaders and followers in which individuals play off one another, creating reciprocal interdependency.

Many school leaders support co-teachers through professional development and collaboration by facilitating professional learning communities. DeMatthews (2014) attest that distributed leadership provides the conceptual framework for PLCs for co-teachers. A distributed framework clarifies roles assumed by the school leaders, teachers, and other staff as well as leadership contributions to the organizations (2014). Distributed leadership is a form of collective leadership in which teachers develop expertise working together and maximizes the human capacity within an organization (Mayrowetz, 2008). PLCs demand school organizations with shared values, collaborations, and collective responsibility. DeMatthews (2014) attest that rooted in these organizational elements is the assumption that stakeholders have a particular knowledge, expertise, and experience to contribute to the PLCs and improve student achievement.

School Leader's Role in Implementing a Co-Teaching Model

School leaders should have a comprehensive knowledge base of the co-teaching model. An analysis of research by Kamens, Susko, and Elliot (2013) revealed that most school leaders had minimal knowledge of the co-teaching process as well as only a basic understanding of laws about special education and the IEP process. Findings in their analysis also suggest training for administrators that involve specific co-teaching models, strategies to encourage teacher collaboration, and evaluation of co-teachers (2013). For school principals and other site administrators to effectively lead staff members through

the fundamental change of co-teaching and integrate it with other school improvement efforts, they must have a thorough understanding of the model logistics (Friend et al., 2010). School leaders have the responsibility of choosing partnering teachers, arranging schedules and planning time, and providing the training necessary to ensure effective program implementation. They are also responsible for explaining the co-teaching model to parents and other community stakeholders and ensuring the sustainability and accountability of the co-teaching program.

Co-teaching is an uncomfortable arrangement for some general and special education teachers (Cook & Friend, 1995). Sharing responsibilities, modifying teaching style, and working closely with another adult can lead to many challenges. Preparation and training that focus on developing communication, collaboration skills, and designing a parameter of co-teaching relationships are essential components of the co-teaching model (1995). A study was conducted by Pancsofar and Petroff (2016), focusing on professional development opportunities regarding co-teaching. A sample of general education and special education teachers was studied to inquire about their confidence, interests, and attitudes toward co-teaching. Results of this study indicate that teachers with more professional development opportunities were more confident in their co-teaching practice, demonstrated more interest in participating in the co-teaching program, and have more positive attitudes about collaborating and sharing leadership with co-teachers.

Miller and Oh (2013) assert that while the co-teaching method shows some promise, teachers lack professional development on how to implement this teaching method effectively. Other critics of the co-teaching model argue that teachers are not

adequately prepared to manage students with behavior issues in the general education setting (Lamport, Graves, & Ward, 2012). They also claim that students with disabilities, particularly behavior disorders, are frequently too disruptive to this particular class setting, therefore to impede negative behavior as much as possible, teachers must be prepared to manage these behaviors (2012). Studies imply that education, training, and cultural diversity should be considered when recruiting teachers in the co-teaching setting (2012). Studies by Blanton and Perez (2011) indicate special education teachers' classroom practices, like those of their general education counterparts, often change in a positive direction as a result of opportunities for professional training and collaboration. School leaders should implement comprehensive, ongoing training to include effective use of planning time as well as providing time for observation and feedback.

The research suggests that one essential element in implementing effective co-teaching practices is administrative support. Friend (2008) found that school leaders were more equipped to support teachers when they were informed about the needs of co-teachers, attended professional training with their co-teachers, and solicited ideas and feedback. Research also suggests co-teachers should observe other pairs in the classroom, and administrators should provide time for follow-up discussions among the teachers (Simmons & Magiera, 2007). Co-teachers can encourage principal support by conveying their successes, sharing academic data, and constructively proposing alternatives for refining programs (Friend, 2008). There are proven benefits of the co-teaching model. However, the critical elements of a successful co-teaching model must be identified and undertaken to produce positive outcomes for teachers and students.

A research study by Bacharach, Heck, & Dahlberg (2008) focused on what makes co-teaching work and highlights the fundamental elements to the success of a co-teaching model. The study included 30 cooperating teachers that school leaders identified as successful co-teachers. Findings in the study indicate that essential elements of the co-teaching include communication and collaboration, time for co-planning to implement best practices, and evaluation. They discovered that communication and collaboration involve school leaders providing opportunities for cooperating teachers to share ideas and communicate issues, which lead to mutual respect and understanding of beliefs and values about teaching. Findings in their study also revealed that providing time for co-teachers to plan together improves effective co-teaching practices. School leaders should facilitate opportunities for co-teachers to plan activities to differentiate instruction, handle potential disruptions or other distracting issues, and plan a small group or one-on-one time for struggling students (Bacharach et al., 2008). According to Murawski and Bernhardt (2016), the best way to ensure co-planning time for teachers is to create common planning periods and ensure special education teachers are allotted common planning time to assist with lesson planning, modification, and differentiation of lessons. Scheduling time for planning is a complex task due to time restrictions and other demands of the participating co-teachers involved (Cook & Friend, 1995). However, scheduled planning time helps reduce frustration and stress for stakeholders.

Administrative assessment of co-teaching programs can help reveal needs for additional professional development, adjustment to scheduling, providing opportunities for teachers to receive feedback, and share ideas or issues related to their co-teaching experiences, as well as assess student progress (Bacharach et al., 2008). Murawski and

Bernhardt (2016) assert both formative and summative evaluations are necessary to develop and implement an effective co-teaching program adequately. They argue that formative evaluation will indicate what modifications are necessary to enhance the co-teaching program. It also guides revisions and clarification of goals and objectives to implement an effective program (2016). They also suggest summative evaluations, to be conducted annually at minimum, to assess the overall progress of the program.

The goal for school leaders is to provide practical strategies to make co-teaching implementation as feasible as possible. Bacharach et al. (2008) suggest school leaders establish a co-teaching committee for program design ideas, planning, and assessment. It is also suggested that school leaders communicate a comprehensive description of the co-teaching model and clarify confusion about goals and expectations. It is a significant disservice for a school administrator to assume its staff understands the co-teaching model or how to implement effective co-teaching practices in their classrooms (Murakski & Bernhardt, 2016). Identifying and resolving issues is beneficial and ensures continued proactive collaboration and planning among cooperating teachers (Cook & Friend, 1995). The review of the literature indicates that communication, planning, and assessment are key factors for effective co-teaching practices. School leaders must have a thorough knowledge of the co-teaching model to plan for training, scheduling, and encouraging collaboration among teachers to ensure student success.

A School Leader's Support for Co-Teachers Through Professional Learning Communities

Collaboration among the general and special education teachers in a co-teaching "marriage" is a critical element to its success. It is reasonable to assume that a classroom

with two qualified teachers will foster more teacher collaboration, which can inevitably lead to an increase in student achievement. Research and anecdotal data suggest that how co-teachers relate to one another influences what they do in the classroom, and whether the collaboration survives (Noonan, McCormick, & Heck, 2003). Collegial work is expected among co-teachers. Mismatched philosophies among teachers can make it challenging to implement effective co-teaching practices (Rivera, MaMahon, & Keys, 2014). Successful working relationships among co-teachers illustrate how blended strengths can have positive outcomes for students and how the stress of teaching can be more manageable for teachers (Friend, 2008). Many school leaders are implementing professional learning communities (PLCs) in place of traditional professional development for co-teachers to improve teacher collaboration and relationships (Blanton and Perez, 2011). Professional learning communities refer to teachers who work collaboratively to improve practice and enhance student learning.

Although the principal is responsible for establishing PLCs, many principals with successful co-teaching models also plan how they will actively participate in these learning communities. When the PLC principal shifts from the facilitator, and authority sources to an individual who participates with the teaching staff, the principal has the opportunity to become a learner as well (Hirsh & Hord, 2008). There are additional benefits to the collaboration efforts when the principal participates in professional learning. The principal is viewed as the "head learner" and gains valued colleagues while discussing instructional issues that focus on students (2008). Staff member isolation, particularly special education teachers, is also reduced, and there is increased support of other educators in solving the problems of challenged learners.

A study by Blanton and Perez (2011) of mathematics and English teachers in two high schools focused on teacher PLCs to understand how interactions among general education and special education teachers promote positive outcomes for students with disabilities. Their research findings reveal that general and special education teachers increased collaboration and improved classroom practices when working in PLCs. These findings implied that through collaboration, general education teachers are acquiring greater knowledge about students who struggle in the classroom and special education teachers are bridging the gap between students with disabilities and the general education curriculum.

School leaders must frequently provide opportunities for special education teachers to work with their general education colleagues as contributing members of collaborating teams. Many and Schmidt (2013) declare that the emerging literature of special education in PLCs highlights two benefits from special education teachers participating in PLCs. They conducted a survey of elementary and secondary teachers in a Texas Independent School District. They found that special educators who participated in PLCs became engaged in routine discussions about standards and essential outcomes. They also found that special educators became more attuned to the pace of instruction and what is related to the standards being taught (Many & Schmidt, 2013). They concluded that special education teachers possess extensive expertise related to differentiation and ways to meet the needs of struggling learners, and general education teachers are more likely to take advantage of that specialized knowledge and skills during collaboration in PLCs (2013). This study implied that when administrators facilitate PLCs with special education and general education teachers, it fosters communication

about student learning, differentiation for struggling learners, and a deeper understanding of the curriculum content. Providing opportunities for co-teachers to collaborate through PLCs helps the general and special education teachers to align teaching priorities as well as improve pedagogy.

Leko and Brownell (2009) developed a pilot study to focus on how school principals incorporated the inclusion of special education teachers in professional development and its impact on collaboration between the general education and special education teacher. The study involved a general education reading teacher at an elementary school and his special education cooperating teacher for upper-level grades. The school principal mostly utilized online professional learning communities and study groups in efforts to promote more collaborative efforts between special education and general education teachers. The results from the study revealed that the PLCs created a system of collegial support and opportunities for collaborative problem-solving (Leko & Brownell, 2009). They also concluded from the study that collaborative discussions between general education teachers and special education teachers help both parties make decisions about using the limited instructional time to incorporate intervention strategies into their teaching practices (2009). The results of the study indicate that school leaders must design professional learning communities that not only focus on student data but also create an environment for co-teachers to effectively communicate ideas to problem-solve and set goals to improve curriculum and student outcomes.

Advocates for incorporating professional learning communities into the co-teaching model assert teachers actively engaged in PLCs will increase their professional knowledge and enhance student learning. Vescio, Ross, and Adams (2008) analyzed

research on PLCs and their relationship with teacher collaboration and student achievement. Findings in their research suggest that school leaders interested in implementing the reform of professional development with PLCs shift their efforts toward communities of practice in which co-teachers collaboratively examine their day-to-day practice (Vescio et al., 2008). Vescio et al. (2008) also discuss three characteristics that school leaders with effective collaborative PLCs implement into their schools. The first characteristic is shared values, and norms are developed concerning the co-teachers' views about children's ability to learn, priorities for the use of time and space, and the proper roles of all stakeholders involved. Another characteristic discussed is the shift from the focus on teaching to the focus on student learning. Professional learning communities foster collaborative relationships that ensure students are not being taught but ensuring that students are learning (Vescio et al., 2008). Lastly, PLCs promote reflective dialogue that leads to extensive and continuing conversations among teachers about curriculum, instruction, and student development (2008). The study indicates that collaborative activities involved in PLCs have also proven to impact student achievement by dramatically increasing student test scores (Vescio et al., 2008). The research proves that PLCs improve communication among cooperating teachers and change the overall co-teaching culture.

The framework for professional learning communities correlates with the theoretical framework of Vygotsky's zone of proximal development by fostering collaborative teaching efforts that provide for individual learning differences and promotes a social learning environment. Research findings by Rentro (2007) reveal that collaboration between school leaders and co-teachers are beneficial to student progress as

well. It is suggested by Rentro (2007) that PLCs for administrators and cooperating teachers include reviewing the results of benchmark assessments, identifying at-risk students, and brainstorming with teachers to establish goals and action steps to achieve those goals. Additionally, subsequent meetings are used to monitor progress, discuss concerns, brainstorm interventions, and celebrate successes (Rentfro, 2007).

Intensive teacher collaboration enables students with disabilities to receive a more challenging curriculum (Rivera et al., 2014). Friend (2008) suggests strategies for school leaders to foster positive relationships among co-teachers to include seeking volunteers for new co-teaching programs, allowing choices in co-teaching, and making staff development meaningful. Friend (2008) attest that volunteers can result in more positive outlooks on co-teaching and more commitment to co-planning and collaboration. School principals can facilitate partners for co-teaching by allowing potential participants to choose partners with whom they would be most comfortable working. Friend (2008) also argues a critical key to effective co-teaching practices is meaningful training and in-services for potential and active co-teachers. Productive professional development can foster working relationships, which can lead to conversations about expectations, teaching styles, assessing student progress, and classroom practices (2008). Research also implies that school leaders who incorporate professional learning communities into their co-teaching program increase teacher collaboration and improve student achievement.

Implementing Co-Teaching and Its Impact on Student Outcomes

A research study conducted by Rivera et al. (2014) also assessed the degree to which schools are implementing co-teaching practices and the relationship between co-teaching and student outcomes. The study included school principals, assistant principals,

teachers, and students with disabilities at a secondary school. Eight criteria were used for analysis: planning time, administrative support, the culture of sharing, training, general educator flexibility, special educator content mastery, teacher quality, and matching philosophies (Rivera et al., 2014). Their research findings revealed that math SAT scores from students with disabilities were closely aligned with general education students. They also found that students with disabilities had more opportunities for interaction with non-disabled peers, which can lead to enhanced self-efficacy for other experiences. These findings support the importance of administrators creating and evaluating co-teaching policies and practices and providing intensive supports for effective implementation.

Another study by Sawka, McCurdy, & Manella (2002) found an effective teacher workforce lead to a decrease in negative behaviors because those teachers were trained to know what specific variables are comparable for students in their particular class. Other research by Rentfo (2007) indicates the impact of PLCs for co-teachers on teaching and learning has been phenomenal. Results from PLCs for co-teachers reveal improvements in mathematics and reading scores (2007).

Miller and Oh (2013) attest that many educators are attempting to co-teach, but are not always successful. They designed a professional development on co-teaching for a large urban middle school of 1000 students in California to study the effects of professional development in a semester of co-teaching on student achievement. Participants in the study were general education students who received “below basic’ on at least one of the standardized tests and students with disabilities. Teachers are participating in professional development received strategies to co-assess, co-plan, and co-instruct. Teachers and students also received pre and post surveys related to their co-

teaching experience. Miller and Oh (2013) hypothesized that teacher collaboration would increase and students with disabilities would benefit in three areas: (a) increased academic achievement, (b) increased time in the inclusive setting, and (c) by experiencing a higher level of personal satisfaction throughout the school day. Results of the study revealed that while co-teaching had minimal effects on students' attitudes toward co-teaching, there was a slight increase in general education teachers' confidence in providing accommodations and skills to students with disabilities and there was some increase in general and special education students' academic success and the end of the semester. The study also found special education teachers had more positive attitudes toward collaborating with general education teachers and felt more included in the teaching process. The research on effective co-teaching supports the argument that when teachers collaborate to plan and assess practical lessons focused on student learning, students make more robust achievement gains, and self-efficacy improves.

Summary

Most research studies on co-teaching address the roles and responsibilities of teachers, the nature of collaboration and compatibility, and lastly, the outcomes for students. The results of these studies have found co-teachers generally believe this method has been beneficial to students, but some believe this method should be voluntary (Friend et al., 2010). According to Blanton and Perez (2011), student learning improves when teachers are part of professional learning opportunities such as PLCs, including students with disabilities who struggle most in classrooms. Professional development should help special education teachers think about how to collaborate and help general education teachers and have teachers come together to solve common issues (Leko &

Brownell, 2009). Administrators should facilitate professional development that promotes a collaborative culture within the school. Professional development that supports open dialogue among co-teachers and focuses on assessing data is an essential component for school improvement that administrators should strive to implement.

As we continue to progress to a more Least Restrictive Environment for students with disabilities, administrators must be more innovative in providing more opportunities for teachers to ensure student success in the inclusive classroom. With more special education students mainstreamed into inclusive classrooms, and the co-teaching model rapidly becoming the new teaching method, school leaders must provide adequate training to teachers and staff to ensure student achievement. As described by Newcomer (2011), the issue of appropriate placements for children with disabilities has become contentious because of the emergence of what is best described as the "full inclusion" movement. Some educators believe that every child's special needs can be met best in a well-run general education classroom (2011). Hewitt (2003) claims that "if we are to prepare our children for living and working together as adults, we must create an environment that teaches them how to live and work together when they are children" (p.39). Research implies that because many school systems have adopted the co-teaching model, students with disabilities must learn to adapt in the inclusion class setting, and more teachers must adjust to the co-teaching model. However, it is a great disservice to those students if the staff has not received appropriate training, information, and personnel necessary to address the needs of these students adequately. Administrators need to provide a supportive and safe environment. To encourage voluntary and development-oriented working relationships among co-teachers, where general and

special education teachers can learn new, innovative classroom practices (Blanton & Perez, 2011). As mentioned by Cook and Friend (1995), both pre-service and in-service education in co-teaching is the necessity for appropriate preparation. Although successful co-teaching programs can begin casually without systematic planning, these are rare (Cook & Friend, 1995). As previous research indicates, planning is not only useful in implementing an effective co-teaching program, but it is essential to clarifying expectations and changes necessary for positive outcomes. The school leaders' approach to organizing adequate co-teaching implementation to include program preparation, teacher collaboration, co-planning, and evaluation is particularly essential in its success.

CHAPTER 3

METHODOLOGY

Legislation required inclusive practices be used to improve academic outcomes for students with disabilities by educating them in the least restrictive environment (LRE). Collaborative co-teaching is a common method used to provide support to general education teachers implementing inclusive practices (Department of Education, 2001). The review of the literature revealed that implementing effective co-teaching strategies help foster collaboration between general education and special education teachers as well as improves academic achievement for students with disabilities. Many research studies on co-teaching focused on student efficacy and teacher perceptions about co-teaching. However, research on student academic outcomes was limited. The purpose of this chapter is to describe the mix-method methodological approach used in this study to analyze the impact implementing co-teaching has on teacher collaboration and student academic achievement.

Research Questions

This researcher attempted to answer to following research questions:

(1) How does the school leader role in implementing a co-teaching model impact teacher collaboration?

(2) How does the school leader role in the implementation of a co-teaching model impact the academic achievement for students with disabilities in reading and mathematics?

Research Design

The researcher conducted a mixed-method research study to analyze the research questions. A qualitative study was conducted via semi-structured interviews to investigate the school leader's role in implementing the co-teaching model and how the school leader's role impacts teacher collaboration and student outcomes. Previous studies by DiCicco-Bloom and Crabtree (2006) utilized semi-structured interviews to gain in-depth knowledge of school administrators' and co-teachers' perception of co-teaching with open-ended questions. This study examined information from school administrators, school leaders (mentor teachers, reading and math specialists, and lead teachers), special education, and general education co-teachers to gain insight into their role and contribution implementing the co-teaching and its impact on teacher collaboration.

In addition to school leaders and co-teacher interviews, a quantitative analysis of student performance on the 2017-2018 Louisiana Educational Assessment Program (LEAP) 2025 was conducted to evaluate the impact implementing a co-teaching model has on students with disabilities performance in reading and mathematics. The LEAP test provides an analysis of the achievement of Louisiana students. In 2010 the Board of Elementary and Secondary Education (BESE) approved the Common Core Standards (CCSS) in English language arts (ELA) and mathematics. After adopting the CCSS, Louisiana became a governing member of The Partnership for Assessment of Readiness for College and Careers (PARCC), a group of states working to develop high-quality

assessments that measure the full range of the CCSS (Louisiana Department of Education, 2017). Collected data were analyzed using descriptive statistics. The researcher analyzed a large amount of numerical data for LEAP standardized test scores to correlate co-teaching implementation to student academic achievement; therefore, a quantitative analysis is most appropriate for this study. A qualitative analysis would not be appropriate to organize this data.

Participants

This study focused on six middle schools in north Louisiana. Middle school participants will include boys and girls, grades six, seven, and eight. Schools included in the study had inclusion class settings with general education and special education students. They utilized a co-teaching model framework with a certified general education and a certified special education teacher in English and mathematics classes. Criteria for a co-teaching model include one of the following: One Teach, One Observe; One Teach, One Assist; Teaming; Alternative Teaching; Station Teaching; or Parallel Teaching. School demographics for the four schools that will be included in the study are listed in Table 1.

Table 1

Demographics of Schools in the Sample

School	2017-2018 Student Enrollment (all students)	2017-2018 Students with Disabilities Enrollment	2017-2018 Student with Exceptionality of Specific Learning Disability	Co-Teaching Model Implemented
School A	468	78	27	Alternative Teaching
School B	497	91	43	Alternative Teaching
School C	703	102	42	One Teach, One Assist
School D	1050	109	41	Alternative Teaching
School E	725	85	36	Parallel Teaching
School F	746	136	76	One Teach, One Observe

School leaders participating in the study included school principals and assistant principals of instruction, reading and math specialists, lead teachers, and mentor teaches at the six middle schools. Co-teachers included certified general math and English teachers in grades six, seven, and eight and certified special education teachers that participate in the co-teaching model in those classes. Student participants in the study included students with disabilities placed in inclusion classes for reading and mathematics and are taught using a co-teaching model. Students with disabilities included in the study were students with an exceptionality of "Specific Learning Disability" and had no psychological or behavioral diagnosis. Students included in the study also did not receive related services that include counseling, social work services, psychological services, or tier III behavioral support, including a behavior intervention plan or behavior crisis plan. These students were delimited to eliminate variables that may affect student

academic performance. Some students with disabilities received speech services, adapted physical education services, or occupational therapy for such related services may not have significant adverse effects on student academic outcomes. Participants in the study were samples of convenience and were selected to participate by school leaders. Co-teachers selected volunteered to participate in the study.

Instrumentation

Semi-Structured Interviews

A qualitative study was conducted with 12 interview questions for school leaders and ten interview questions for co-teachers. The semi-structured interview was adapted from previous studies by Bogdan & Biklen (2006). The research questions focused on the roles and experiences of school leaders and co-teachers who participate in the co-teaching model. The study also assessed school leaders' and co-teachers' perspective of the impact their roles have on academic success for students with disabilities that participated in the co-teaching model. Interviews provided opportunities for researchers to gain in-depth knowledge of the perceptions and experiences of the research participants with open-ended questions (Brendle, Lock, & Piazza, 2017). According to Scruggs, Mastropieri, and McDuffie (2007), qualitative research is appropriate to gain insight into perceptions, interactions, and effectiveness relevant to co-teaching. Qualitative research provided opportunities to find themes and in-depth insights, providing a broad synthesis of the study.

Credibility in quantitative research differs from qualitative in that with qualitative research; the researcher is the "instrument" (Golafshani, 2003). The credibility of qualitative research depends on the effort of the researcher. According to Rubin and

Rubin (2012), credible research includes participants that are informed about what is studied in the research. They also attest that it is critical to ensure interviewees speak about their experiences accurately, and interview questions are phrased to avoid formalistic replies. The dependability of the semi-structured interview was established by previous research by Scruggs, Mastropieri, and McDuffie (2007). They used open-ended questions to determine themes related to the perceptions about the practice and process of co-teaching for school administrators and teachers.

Louisiana Educational Assessment Program

Data for student outcomes were collected using LEA0P 2025 for English and mathematics. The Louisiana Department of Education (LDOE) incrementally revised the LEAP and *i*LEAP and administered transitional tests during the 2012-2013 and 2013-2014 school years. According to the Louisiana Department of Education (2017), content-related validity is demonstrated through consistent adherence to test blueprints through a high-quality test development process that includes a review of the items for accessibility to English Language Learners and students with disabilities, and through alignment studies performed by independent groups. The LEAP 2016 domains are defined as the knowledge and skills that are identified within the 2015-2016 Louisiana Content Standards for ELA and mathematics (Louisiana Department of Education, 2017). This framework is based on the prior consensus the LDOE, Louisiana educators, and experienced subject-matter experts regarding what is essential for teachers to teach and students to learn. The item selection process for forms construction was a content-focused, collaborative process between the LDOE and the Data Recognition Corporation

(DRC) content specialists, followed by a psychometric evaluation of each form selection (2017). These revised standards will guide LEAP test development for future years.

Reliability refers to consistency in test scores if the test is administered repeatedly under similar conditions. Internal consistency was used for the 2016 LEAP to provide an estimate of how consistently examinees perform across items within a test during a single test administration (Louisiana Department of Education, 2017). Test reliability was measured using Cronbach's coefficient alpha and standard error of measurement (SEM) to consider the consistency of performance overall test questions in each form, the results of which will imply how well the questions measure the content domain and could continue to do so over repeated administration. The test reliability coefficients for the 2016 LEAP ranged from 0.86 to 0.91. These results indicate acceptable reliability coefficients for LEAP tests.

Evidence of validity for the LEAP is demonstrated through convergent and divergent validity. Convergent validity is a subtype of construct validity that can be estimated by the extent to which measures of constructs that theoretically should be related to each other are observed as related to each other. Divergent validity is a subtype of construct validity that can be assessed by the extent to which measures of constructs that theoretically should not be related to each other are observed as not related to each other (Louisiana Department of Education, 2017). To ensure evidence of construct-related validity, the following validity studies where utilized:

- Decision Accuracy
- Decision Consistency
- Principal Components Analysis

- Correlations among Claims and Sub-claims
- Reliability of Claims and Sub-claims
- Divergent (Discriminant) Validity

The intended use of the LEAP scores is to evaluate students' overall achievement in the subject matter and informing teachers, school leaders, district administrators, and Louisiana Department of Education (LDOE) on the status of progress meeting the state's academic achievement standards. The cut scores for the ELA and mathematics achievement levels were established by PARCC using the Evidence-Based Standard Setting (EBSS) method for the PARCC Performance Level Setting (PLS) process (Louisiana Department of Education, 2017; Beimers, Way, McClarty, & Miles, 2012). Students' scores are reported in one of five levels of achievement: Unsatisfactory, Approaching Basic, Basic, Mastery, or Advanced. Table 2 describes the levels of achievement.

Table 2

Description of Requirements to Meet Each Level of Achievement

Testing Level	Description
Advanced	The student has exceeded readiness expectations and is well prepared for the next level of studies in this content area
Mastery	A student has met readiness expectations and is well prepared for the next level of studies in this content area
Basic	Student nearly met readiness expectations and may need additional support to be fully prepared for the next level of studies in this content area
Approaching Basic	Student partially met readiness expectations and will need much support to be prepared for the next level of studies in this content area
Unsatisfactory	A student has not met readiness expectations and will need extensive support to be prepared for the next level of studies in this content area

Data Collection

After obtaining approval from Louisiana Tech University's Institutional Review Board, the researcher contacted the school district involved for permission to conduct the research study and obtained permission through the school district to analyze student standardized test data. Lastly, the researcher obtained permission by school principals from the six participating schools to interview school leaders and co-teachers about their experience and perception of the impact of their roles in the co-teaching process.

The first research question addressed the impact implementing co-teaching has on collaboration between general education and special education teachers. The data for this study were collected via face-to-face interviews or emailed interviews from school leaders and participating co-teachers. Face-to-face interviews were conducted with school principals and assistant principals at the co-teaching sites. Other school leaders and co-teacher interviews were conducted via email. School leaders and co-teachers will voluntarily participate in interview questions emailed over two weeks. With permission from participants, follow-up questions were emailed for clarification.

The second research question addressed the impact of implementing a co-teaching model on academic achievement for students with disabilities. The data collected from the LEAP 2025 English and math scores were collected during the fall semester of the 2017-2018 school year. The collection time is due to the testing results reported to school during the fall semester of the following testing school year. Developmental scale scores (DSS) will be statistically analyzed.

Researcher Role

Interview responses were confidential to decrease colleague or administration influence and bias. Student demographic information was delimited by the school district to ensure student confidentiality and adhere to the Health Insurance Portability and Accountability Act (HIPPA) guidelines. Students with Tier III behavior interventions or related services that include psychological services, social work services, or weekly counseling were delimited to eliminate variables that may affect student achievement.

Data Analysis

Interview responses from school leaders and co-teachers were entered into the NVivo qualitative research software, where information will be coded and categorized into general themes. Themes were analyzed and divided into primary and sub codes to gain insight into the perception of school leaders and co-teachers' participation and impact of co-teaching on students with disabilities.

Scale scores for LEAP English and mathematics for students with disabilities that are placed in co-teaching classes were compared to scale scores of that student that are not placed in co-teaching classes for English and mathematics. The student scores were entered into SPSS statistical software, and an ANOVA test was conducted to analyze the data for significant differences between students with disabilities that are co-taught and students with disabilities that are not co-taught in an English and mathematics inclusion class. Previous researchers such as Noonnan, McCormick, and Heck (2003) have used the ANOVA test to compare outcomes for students participating in co-teaching models.

Summary

This chapter described the methodology used to conduct a study to analyze the impact of implementing a co-teaching model has on general education and special education collaboration as well and academic outcomes for students with disabilities. The chapter described the sample selection, a description of the research design, as well as a detailed description of data collection procedures and data analysis. Research results and a summary of findings will proceed in Chapter 4.

CHAPTER 4

ANALYSIS AND PRESENTATION OF DATA

The reauthorization of the Individuals with Disabilities Education Act (IDEA) established a "free and appropriate" public education (FAPE) to students with disabilities (Miller & Oh, 2013; Wright & Wright, 2009). School leaders make provisions for students with disabilities to receive services in the "least restrictive environment" (LRE) according to their Individual Education Plans (IEP). Many school leaders employ co-teaching as a pedagogical approach to adhere to current legislation guidelines. School administrators provide opportunities for co-teachers to engage in professional learning communities (PLCs) to increase collaboration and academic achievement for students with disabilities in the co-teaching class setting. School leaders monitor student progress and secure resources to improve co-teacher performance.

The purpose of the research study was to assess how the school leader's role in implementing the co-teaching model affected teacher collaboration and academic performance for students with disabilities. The researcher conducted a mixed-method study with six middle schools in a north Louisiana school district. Grade levels in the study were sixth, seventh, and eighth grade. School leaders in the study included school principals, master teachers, mentor teachers, and special education lead teachers. Other staff included general education and special education co-teachers. The researcher

Analyzed data from the 2017-2018 school year's Louisiana Educational Assessment Program (LEAP) 2025 reading and mathematics scores for students with an exceptionality of "Specific Learning Disability" to evaluate academic achievement in the co-teaching class setting.

This Chapter is an analysis of how the school leaders' role in implementing the co-teaching model fostered co-teacher collaboration and improved academic achievement for students with disabilities. The chapter includes the results of a mix- method study to analyze the following research questions: (1) How does the school leader's role in implementing a co-teaching model impact teacher collaboration? (2) How does the school leader's role in the implementation of a co-teaching model impact the academic achievement for students with disabilities in reading and mathematics? The researcher conducted a qualitative study via semi-structured interviews to assess the school leader's role in implementing the co-teaching model and gain insight on how their participation in the co-teaching model influenced relationships among co-teachers and impacted student progress. Several themes emerged from the study revealing the school leadership experience and student outcomes of co-teaching. Themes developed through open coding included School Leader Perspective, Co-teacher Preparation, and Teacher Collaboration, School Leader Support, and Student Outcomes. The researcher conducted a quantitative analysis of the students with disabilities' 2017-2018 school year 2025 LEAP scores to evaluate how participation in the co-teaching setting affected the academic achievement for students with disabilities in reading and mathematics.

Response and Participation Rate

Six schools, 43% of middle schools in the District, participated in the research study. Data were collected through semi-structured interviews with school principals, master teachers, mentor teachers, special education lead teachers, and co-teachers. A total of 65 school leaders were contacted for an interview via email. Responses included six school principals, four master teachers, two mentor teachers, four special education lead teachers, and eight participating co-teachers. School principals were interviewed face-to-face, and other school leaders responded to interview questions via email.

The researcher analyzed LEAP 2025 reading and mathematics test data for 265 students with an exceptionality of "Specific Learning Disability," a rate of 69% of students with the exceptionality in the School District.

Participating School District

The participating School District is located in northwest Louisiana. The District located in Shreveport, Louisiana, with a population of 257,093 residents and a student population of 41,239 during the 2017-2018 school year. The District had a special education population of 3,299 (8%) compared to a state average of 10% population of students with a disability. A total of 64 schools with six sub-districts make it one of the largest school districts in the state of Louisiana. State testing results for LEAP 2025 for the 2017-2018 school year indicate a proficiency (basic or above) of 65% in math and 53% in reading.

District Programs

Since his appointment to office in 2013, the Superintendent of the district created a district team to improve academic achievement for *all* students. The Districts Re-Image

Plan for Excellence included the following objectives: (a) provide rigorous instructional programs that accelerate academic opportunities to bridge the achievement gap, (b) leverage community resources to strengthen parental and community involvement, (c) develop and implement a multi-year plan that to increase and improve personnel retention, (d) provide a safe, clean, and efficient environment ensuring an operational experience for all students and staff. The overall goal for the district and the Re-Imagine Plan for Excellence was to improve academics for students.

As of March 21, 2017, the participating School District implemented a Transformation Partnership Agreement for challenged schools. The focus of the agreement was to improve student outcomes by providing additional resources to the lowest-performing schools and ensure equal access to educational opportunities for all students. Low performing schools were defined as schools declared by the State Board of Elementary and Secondary Education (BESE) as "Academically Unacceptable Status" for four or more consecutive years. Two of the six participating middle schools were declared "Academically Unacceptable Status" for the 2017-2018 school year. Components of the Transformation Partnership Agreement include review and support by an appointed advisory council of local leaders, unprecedented decision-making authority for school principals, and teacher compensation for improved student outcomes. Additional financial incentives were provided to school principals and teachers with improved academic outcomes for students with disabilities.

In addition to the Transformation Partnership Agreement, the District also adopted the Teacher Advancement Program (TAP), a research-driven reform model that provides consistent on-site professional development, focused instructional accountability

and performance-based compensation for teachers. The TAP model was grant-funded via the Teacher Incentive Fund (TIF), providing financial incentives to school staff and paid salaries to Master and Mentor teachers. Master teacher responsibilities include planning and facilitating cluster group meetings, field testing, and modeling research-based strategies. Master teachers also implement growth plans, evaluations, individual professional development, and analyzing student data. Mentor teachers collaborated with Master teachers to develop plans to improve student outcomes by peer coaching with paired teachers, providing feedback to Career teachers, demonstrating and co-teaching model lessons with Career teachers, and reviewing student data to implement academic plans to meet individual student needs.

The district implemented the TAP model to evaluate co-teaching implementation and facilitate Professional Learning Communities (PLCs). TAP model strategies were implemented during PLCs to review student data, model and share research-based lesson plan ideas, and implement academic plans according to student needs. School principals or Master teachers planned PLCs according to the mentor and co-teachers' daily schedules. The schoolmaster teacher-facilitated PLC sessions. Mentor teachers and co-teachers collaborated weekly to improve student academic outcomes and assess student progress with school academic goals. The TAP model, in alignment with PLCs, was school-wide embedded, continuous professional development.

Least Restrictive Environment

The participating School District provided special education services for Kindergarten through grade twelve. A full inclusion model was implemented for middle and high school grades six through twelve. The School District had 4068 students

receiving special education services. According to the School District's Data Report, 69% of middle and high school students with disabilities receive services inside the general education class setting, indicating that those students spent a minimum of 80% of their school day with non-disabled peers.

The Individual Education Plan (IEP) team collected and reviewed data for each student receiving special education services. All students with disabilities in grades six through twelve were considered for a full inclusion setting before a resource room, or self-contained setting was considered. Resource room setting placed students that received special education services in the general education class setting between 40% and 79% of the day. A self-contained setting placed students receiving services in the general class setting less than 40% of the school day. Students were recommended for resource room or self-contained class settings only when data indicated that the student's academic needs could not be addressed with supplementary aids and support in the general class setting. Each middle and high school provided a Content Mastery Center (CMC) for pullout services for a small group lesson, test read aloud, and additional supports and interventions for students with disabilities. In addition to CMC, each school in the District was supported by interim related services from Instructional Specialists, School Psychologists, Autism Specialists, Behavior Intervention Specialists, Speech Pathologists, and Adapted Physical Education Specialists. Special education teachers worked closely with general education teachers to maintain IEP goals and ensured appropriate supplemental aids, accommodations, and modifications were provided. Students were receiving a Free Appropriate Public Education (FAPE). Additionally, 463

paraprofessionals were available to assist general education and special education teachers to ensure appropriate services were provided.

District Co-Teaching Model

The participating School District employed co-teaching to increase opportunities for students with disabilities to succeed in a general education class setting. The School District had 31 middle and high school campuses, 19 schools participated in a co-teaching model. Co-teachers in the District included 35 special education teachers and 41 general education teachers. The District provided professional development to special education and general education teachers during summer training and throughout the school year in Professional Learning Communities (PLCs). The TAP model was also implemented in 12 of the middle and high schools, providing additional support through Master teachers and Mentor teachers.

The School District afforded complete autonomy to school principals to implement a co-teaching model. School principals had the liberty to utilize any of the five known co-teaching models: (a) One-teach, one support; (b) Parallel teaching; (c) Station Teaching; (d) Alternative Teaching; or (e) Team Teaching. School principals were responsible for providing opportunities for co-teachers to co-plan, reflect, collaborate, and evaluate each lesson. School principals were also responsible for ensuring teachers had adequate training, resources, and support for positive student outcomes. Other school leaders in the District, including Master Teachers, Mentor Teachers, and Special Education Lead Teachers, provided assistance modeling, monitoring, and evaluating the co-teaching model. School leaders facilitated PLCs and provided additional resources and professional development to improve student outcomes through co-teaching.

Data Analysis

Data for this research study were collected through Semi-structured interviews with participating middle school leaders and co-teachers in the District. School principals were interviewed face-to-face by the researcher. Other school leaders and co-teachers were interviewed via email. Data collected were analyzed using NVivo software to conceptualize and categorize information into the following emerging themes for school leaders: School Leaders Role, School Leader Support, School Leader Evaluation, Administration and Teacher Collaboration, School Leader Experience, And Student Outcomes. Emergent themes from co-teacher interviews included: Co-teaching Experiences, Co-teacher Preparation, and Teacher Collaboration.

School Leader Interviews

School Leader Role in Implementing the Co-Teaching Model

School leaders in the study included principals, master teachers, mentor teachers, special education lead teachers, and co-teachers. School leader roles included scheduling for students and leveling co-teaching classes. School leaders facilitated professional learning communities, researched and modeled lessons, and provided feedback to the co-teachers. School leaders also attended IEP meetings and monitored co-teaching classes to assess the learning environment and ensure services were provided to students with disabilities according to the IEP.

School Leaders Support Co-Teachers

School leaders supported co-teachers by providing resources and providing feedback on lesson plans and activities as well as modeling research-based lessons to

improve student outcomes. Co-teachers met with mentor teachers and master teachers weekly to address concerns and needs to improve the co-teaching setting.

Co-Teacher Pairing and Scheduling for Students with Disabilities

School principals provided surveys to co-teachers about teaching style, beliefs and values about teaching, and unique talents. Principals then met with other school administrators to pair teachers according to personality and content knowledge. Students were scheduled for co-teaching classes according to ability levels or IEPs requirements.

School Leader Participation in IEPs for Students with Disabilities

Special Education Lead teachers scheduled and facilitated IEP meetings. Co-teachers provided information for academic IEP goals and accommodations. School principals attended IEP meetings as the Official Designated Representative (ODR). They signed the IEP as the administrator that would ensure IEPs are implemented in the co-teaching class.

Challenges for School Leaders

Principals were challenged with staffing for certified mathematics and individual education teachers. Adjustments in the structure of the co-teaching model were made according to the individual school demographics and available staff. School leaders were challenged with co-teacher pairing in some schools. Some principals reassigned co-teachers due to planning issues or conflicts in personality.

School Leader Evaluation of the Co-Teaching Model

School leaders evaluated the co-teaching model using the Teacher Advancement Program (TAP) Rubric. The rubric assessed Design and Planning, Learning and Environment, and Teacher Responsibilities. Mentor teachers and master teachers

conducted worksite observations to provide feedback on lessons and the learning in the environment in the co-teaching setting.

Assessment of Academic Outcomes for Students with Disabilities

Master teachers and mentor teachers facilitated weekly professional learning communities to review student data and assess mastery of benchmarks. Data walls were created in some schools to display student progress toward meeting weekly benchmark goals and standards assessments.

School Leader Impact on Academic Outcomes for Students with Disabilities

School leaders attest improvements in academics for students with disabilities. Students with disabilities displayed improvements in benchmark assessments, classwork, and behavior over time after participating in the co-teaching model.

Professional Learning Communities Impact on Co-Teacher Collaboration

School leaders collaborated with co-teachers weekly to share ideas about lesson activities and research-based practices. School leaders and co-teachers discussed needs and concerns with the co-teaching relationships, the model structure, and student progress.

Participating Schools

School A

Located in south Shreveport, Louisiana, School A was initially built for grades seven through nine. Drastic changes led to a change to the middle school serving grades six through eight in 1984. A partnership with colleges and universities to train student teachers established it as a laboratory school. Later, a magnet component was developed for all grade levels. During the 2017-2018 school year, School A had a population of 475

students, 69 receiving special education services. A total of 31 students receiving services were diagnosed with an exceptionality of “Specific Learning Disability.” Each grade level had one team of co-teachers in English and mathematics, with eight 55-minute class periods throughout the school day. All students with disabilities were considered for full inclusion with the co-teaching model. All students with disabilities were placed in the co-teaching classes, along with other general education students. Each co-teaching class averaged 21 to 25 students, with an average of eight to 15 students receiving special education services in those classes. All class periods were co-taught by a special education teacher and a general education teacher with paraprofessionals rotating into the classes providing additional support or pull-out services for IEP students.

The school principal for School A earned a bachelor’s degree in 1988. Her career in education began as a music specialist. She served as a Curriculum and Instructional Coordinator for 17 years before becoming a school administrator. She serves as a school principal and is a certified Reading Specialist and Supervisor of Student Teachers with a certification in Supervision of Principalship. The motto of School A is “Success is the only option.” The goal is to promote academic excellence and encourage robust and positive behavior.

The principal implemented the co-teaching model to provide students receiving special education services to access the general education curriculum. The co-teaching model was utilized in the full inclusion classes for each grade. The Alternative Teaching co-teaching model was implemented. The content teacher (general education teacher) provided whole group lectures and lessons, and the special education teacher taught small group lessons according to student needs. Students selected for small groups varied each

lesson according to academic needs. The school principal and master teachers monitored co-teaching classes, providing feedback on the lesson. Co-teachers were selected by the administration team according to content knowledge and personality. Students were placed according to state testing scores. The school principal, master teacher, and mentor teacher participated in IEP meetings to ensure proper placement. The co-teaching model at School A was evaluated using the Teacher Advancement Program (TAP). Student outcomes were assessed through LEAP 2025 scores and data collected via benchmark assessments.

The principal at school A declared her experience implementing the co-teaching model as "very positive," stating, "It helped to promote effective implementation of the Tier 1 curriculum." Master teachers and mentor teachers facilitated professional learning communities (PLCs) and cluster meetings to review data collected via benchmark assessments. School leaders provided feedback on lesson activities, and student data in the co-teaching classes provided opportunities for teacher collaboration and modeled lessons, interventions, and additional supports for struggling students. Implementation of the co-teaching model increased access to the general curriculum for students with disabilities. Students receiving special education services improved grades in reading quarterly, and behavior concerns decreased. School A principal accredited these improvements to increased self-efficacy among students with disabilities, given the opportunity to learn and interact with non-disabled peers.

School B

With a population of 487 students during the 2017-2018 school year, School B is considered a small middle school in Shreveport. Serving grades six through eight, with a

teacher ratio of 19 to1, School B had struggles with student academic progress. During the 2017-2018 school year, School B had math proficiency at 22% and overall reading proficiency at 42% (basic or above on LEAP 2025). The special education population totaled 98 students, 51 with an exceptionality of "Specific Learning Disability." The education philosophy of School B was, "Every child has been given the gift to learn, although it may be in different ways if allowed to be touched by a teacher who cares." School B had a 98% minority enrollment, serving less than 10% non-minority students.

The principal of school B earned his bachelor's degree in Language and Communications and a master's degree in Education. He began his career in education as a bus driver and later became a substitute teacher. He launched his career as a classroom teacher and later forged into school administration. During his tenure as a school administrator, he chartered several programs for at-risk youth. He also worked as a TAP administrator for several years, where he mentored teachers and modeled best practices. The mission for his school was "To adequately prepare students for an evolving world that will challenge every aspect of their lives." His goal as an administrator is to improve student achievement and teacher quality with high expectations and strong collaboration. Along with his TAP Master teacher and Mentor teachers, he implemented the co-teaching model for only his 6th-grade math and English classes. He chose not to implement all grades to slowly implement the co-teaching model and focus on a particular group of teachers, collect data, and evaluate the model before implementing the model into all grade levels.

The co-teaching model consisted of a team of four teachers, two special education teachers, one general education math teacher, and one general education reading teacher.

Special education teachers each paired with the math and reading teacher throughout the school day. Both co-teaching teams use the Alternative Teaching model. Special education teachers re-taught lessons or provided enrichment in small groups to both special education and general education students. Small groups varied according to data collected from previous lessons. The four co-teachers shared a common planning period. They attended professional learning communities (PLCs) and TAP meetings together to collaborate and share feedback with the master teacher and mentor teachers. The principal occasionally attended PLC meetings and monitored the co-teaching through class observations and TAP evaluations.

The principal had an optimistic outlook about the co-teaching model and planned to implement the model with all grade levels in the future. He supported co-teachers by providing one class period of extra planning time to plan lessons and collaborate with TAP Mentor teachers. He also provided supplies and other resources requested by co-teachers. He often asked about their experience and solicited suggestions for improving the co-teaching model. He stated that pairing for co-teaching was challenging due to opposing personalities. He also stated that some co-teaching relationships were complicated due to constant complaints of feeling inadequate from the special education teacher for reading.

The special education teacher for reading is a veteran teacher of 23 years. She has a bachelor's in Secondary Education with a certification in Special Education-Mild/Moderate grades one through twelve. She also has a master's degree in Education. She taught self-contained special education and moved to full inclusion. The 2017-2018 school year was her first year as a co-teacher, sharing a space with a colleague. She stated

a significant concern did not have her own space. She moved into the general education teacher's class and received a desk in a corner. She stated that once paired with the general education teacher; she had no input on the room décor or setup. She felt little support or intervention from the administration when voicing her concerns. However, she said her relationship with her general education teacher improved over time, and they did eventually work well together planning lessons. Her role was to provide input on differentiation and modification of the lesson as well as research enrichment lessons for advanced students. She enjoyed the small group and pullout time and expressed improvement in student outcomes on benchmark assessments and classwork for those students.

School C

One of the largest middle schools in the District with a population of 761 students, School C, is a neighborhood school located in southeast Shreveport. School C is labeled as a Technology School, supplying each class with MacBook laptop carts and class-sets of Apple IPad. This school has five computer labs in addition to the technology lab located in the school library. The special education population includes a total of 81, 45 students with an exceptionality of "specific learning disability." School C has a minority rate of 92%. During the 2017-2018 school year, the teacher ratio was 18 to one and overall state test proficiency in math of 36% and 46% in reading.

The principal of School C moved to America from Germany after high school. He earned a bachelor's degree in Accounting. He taught math in Los Angeles and China before returning to obtain his secondary math certification while teaching math at School C. He later earned a master's degree in Educational Leadership before serving as

Assistant Principal of Instruction and later became principal. He believes School C represents the ethnic, economic, and cultural mix that defines the city's diverse population. His motto is "Educating the whole child through curricular and extracurricular activities." He implemented to co-teaching model, along with an administrative team, to provide all students access to the rigorous curriculum for all students.

The master teacher is a native of Shreveport, Louisiana, serving the community through education for 15 years. She taught kindergarten for 13 years before becoming the master teacher for the TAP program at School C. She worked closely with the school principal and mentored the teacher to implement the co-teaching model for all grade levels six through eight. She worked with co-teachers weekly field-testing lessons, providing feedback, and modeling lesson during PLCs. She monitored the co-teaching model using the TAP rubric and highlighted components developed during leadership meetings.

The general education teacher earned a bachelor's degree in early childhood. She began her career in education as a fourth-grade teacher before moving on to School C as an eighth-grade English teacher. She is a certified Reading Specialist and has a master's degree in Education. She served as a co-teacher at School C for three years, each year with a different special education teacher.

The co-teaching model at School C consisted of special education teachers, general education teachers, and paraprofessionals. The principal utilized paraprofessionals in social studies and sciences classes across all grade levels due to a lack of certified teachers on staff. The principal implemented the one teach, one assist

model. The general education teacher provided the lecture and instruction, and the paraprofessionals assisted all students during lessons. The math and reading classes included special education teachers and general education teachers utilizing the Alternative Teaching model. The special education teacher provided small group instruction to re-teach lessons or provided additional strategies and modifications to lessons while the general education teacher provided whole group lessons. The master teacher and mentor teacher convened with co-teachers weekly during common planning time to discuss issues, share lesson ideas, and review data to modify or revise schedules and lessons to accommodate student needs.

The principal initially did not believe the co-teaching model would work due to staffing issues. He stated the lack of certified special education staff made it difficult to pair teachers adequately and appropriately and schedule students with disabilities. During the 2017-2018 school year, there were three certified special education teachers to service the entire special education population across all grade levels. Two special education teachers were placed in reading co-teaching classes for sixth and seventh grade, and one teacher was assigned to math co-teaching classes for all grade levels. Special education teachers' co-teaching time was divided among class periods with general education teachers.

The principal and master teachers supported the co-teachers by providing opportunities for co-teachers to share their concerns and ideas on how to improve the co-teaching model. The master teacher shared and model lessons to improve the daily structure of the co-teaching model. Additional paid trainings and resources were offered to co-teachers to help meet student needs. The principal met with co-teachers throughout

the school year to assess how teachers collaborated and worked closely to meet student needs.

School D

The magnet component at School D included a rigorous curriculum offering advanced placement classes, advanced labs, educational field trips, and hands-on lessons. The magnet program was designed for students living outside the neighborhood district but qualified for advanced placement. There are 25 slots per grade level, six through eight, designated for students not zoned for School D. Students are admitted based on grades, teacher recommendations, and state testing results. School D is the second-largest middle school in the School District, with a total population of 1050 students. A total of 109 students received special education services during the 2017-2018 school year. A total of 33 (38%) of those students with IEPs had an exceptionality of "Specific Learning Disability." The teacher ratio was 18 to one, with a 57% minority enrollment. During the 2017-2018 school year, 50% of students' scored proficient on state testing in math and 73% proficient in reading. School D positioned the top 20 % of the state of Louisiana for diversity in student enrollment.

The principal of School D has served as an educator for 17 years. She began her career as a high school social studies teacher before becoming the Assistant Principal at a middle school in Dallas, Texas. She later moved back to Shreveport to begin her position as Principal. She works closely with her administrative team to ensure all students are supported academically, socially, and emotionally. The school motto is, "We will accomplish student achievement through an optimistic approach to the growth and development of our students." Her goal is for students to leave her school prepared to

become productive leaders and citizens in the community. She believes excellent schools are the result of excellent communication between students, parents, and staff.

The co-teaching model was in practice at School D for years before the principal moving into the administrative position. In previous years, the co-teaching model consisted of a special education teacher and a general education teacher in a general education class setting. They co-taught using the Alternative teaching method. She discovered that this model did not produce the results the administrative team hoped to achieve. She decided to add mentor teachers and special education lead teachers to her administrative team. They attended professional development and additional training during the summer to learn more about co-teaching methods that produced positive results in other school districts.

After attending an education conference in Texas, she believed she found a co-teaching method that best aligned with the structure and demographic for her school. This co-teaching model consisted of general education teachers, and special education teachers have a class of general education and special education students in one setting with a paraprofessional in each class as an *instructional specialist* assisting students with lessons and providing interventions as needed. Paraprofessionals also provided modifications and pulled students to the Content Mastery Center (CMC lab) for one-on-one assistance or small group testing. The principal adopted this method of co-teaching due to a lack of staffing of certified teachers. She believed this method provided opportunities for special education teachers to teach content as well as afford a smaller teacher to student ratios for a large population of students. She appointed a lead special education teacher to write IEPs for students with disabilities with input from the special education content teacher

and the general education teacher. She expressed this co-teaching method decreased behavior concerns, especially for those students with discipline issues, as well as improved grades and test scores overall for *all* students. She stated that this model also had some challenges. Some paraprofessionals were apprehensive about the workload, declaring they were expected to take on teacher tasks and duties without the appreciation and compensation of teachers. She also received complaints from paraprofessionals that they were class disciplinarians, and content teachers lacked classroom management skills. In such cases, the principal worked closely with paraprofessionals and co-teachers to resolve issues and provide classroom training management by appointing mentor teachers to model strategies and lessons.

The general education co-teacher at School D earned her bachelor's degree in Secondary Education. She began her career in education as an elementary teacher. She wanted to work with older students and decided to move her career forward to middle school, where she began teaching seventh- grade math. She had no experience co-teaching. She expressed feeling overwhelmed and unprepared during the first year as a co-teacher. She also felt the bulk of the responsibility was placed on her due to being the only certified staff member of the co-teaching pair.

The special education lead teacher has 25 years' experience in education. She earned a bachelor's degree in Secondary Education. She is certified in special education, mild-moderate, grades one through twelve. She taught special education at School D throughout her career, including self-contained, full inclusion, and co-teaching. The 2017-2018 school year was her first year as the special education lead teacher. She worked closely with co-teachers to discuss interventions, modifications, and strategies on

IEPs for students with disabilities. She expressed her experience in her position has been positive, yet overwhelming. Despite not teaching a class, she said the paperwork load for the large population of students with disabilities was challenging. In addition to writing IEPs, she had to attend all IEP meetings and schoolboard hearing for students with disabilities, which was time-consuming. She also claimed that cooperation from some co-teachers was challenging. Often teachers were not available to provide input for IEPs or did not correctly implement strategies and interventions documented on the IEP for students with disabilities to be successful in the general class setting.

School E

Located in west Shreveport, Louisiana, School E serves grades five through eight and had a population of 725 students during the 2017-2018 school year. The special education population during that year was 98 students, 44 with an exceptionality of "Specific Learning Disability." The minority enrollment was 42% and teacher to student ratio as 17 to one. Math proficiency was 35%, and reading proficiency was 58%. School E positioned in the top 50% for diversity enrollment in the state of Louisiana.

The principal of School E served in education for 18 years. He earned a bachelor's degree in Social Studies with a minor in English. He earned a doctorate in Education. He began his career as a social studies teacher. A few years later, he became principal of School E. The principal believed that all children could learn, just differently. He also believed keeping the atmosphere positive is the key to success as well as keeping the lines of communication open among staff, students, and parents. He believed one way to improve communication among staff is to implement PLCs and TAP master teachers

and mentor teachers to collaborate on interventions and strategies to improve student outcomes.

The principal of School E implemented the co-teaching model coupled with the TAP program as a tool to train teachers throughout the school year. He paired mentor teachers with general and individual education teachers to field-test lessons through co-teaching. Mentor teachers studied research-based lessons and shared those lessons with special education teachers and general education teachers. Teachers provided feedback and suggestions for revisions and modifications to accommodate advanced students and students with disabilities. After collaborating for lessons, the mentor teachers would schedule days with the special education and general education teachers to co-teach the discussed lessons to field-test student outcomes. During PLC meetings, co-teachers would collaborate with mentor teachers to review data collected from the lessons and discuss student outcomes. The principal and master teacher would attend the PLC sessions as well to evaluate the co-taught lessons using the TAP rubric. Lessons with favorable outcomes were shared and modeled at other PLC sessions with other teachers in the content areas. Some lessons would be revised or modified according to student needs. Lessons with positive student outcomes are collected throughout the school year and stored for future use. The principal and master teacher provided feedback and shared ideas and resources to improve lessons and accommodate student needs.

The master teacher at School E earned a bachelor's degree in Cellular and Molecular Biology. She earned a master's degree in Health Administration in 2009 and a second master's in Teaching in 2012. She conducted research and presented findings on differentiated instruction and response to intervention methods. She taught high school

Biology in the District and was promoted to content coach. During the 2017-2018 school year, she becomes the TAP Master teacher for School E, where she facilitated PLCs and cluster meetings, facilitated paring mentor teachers with special education and general education teachers for field-test co-teaching, and evaluated lesson plans. She expressed her new position as a Master teacher as challenging yet rewarding. She believes that she has contributed to student achievement at School E by facilitating the co-teaching model as well as building a rapport with co-teachers during PLCs.

The general education teacher at School E is a native to the Shreveport area. She earned a bachelor's degree in English and obtained a certification in secondary English. She earned a master's degree in Educational Leadership. Her career in education began in 2010 as a sixth-grade English/Language Arts and Reading teacher. After five years, she began teaching high school English in a School District in Mansfield, Louisiana, and later returned to the School District in Shreveport to teach ninth-grade English. She was familiar with the co-teaching model but explained that the structure of the model at School E was a new experience. She attested that working with the master teacher and mentor teacher was very beneficial to improving her craft as an English teacher. Collaborating with colleagues and discussing lessons and student outcomes weekly sharpened her skills of adjusting lessons and provided additional supports to meet student needs.

The special education teacher at School E is a military veteran turned educator in 2010. While in the Air Force National Guard, he earned a bachelor's degree in Kinesiology. While teaching health and coaching football at a high school in Shreveport, the special education teacher was diploid to Kuwait. After returning, he obtained his

master's degree in Educational Leadership. He aspires to transfer into an administrative role in the future. His experience with co-teaching was challenging. He explained he did have some issues with his paired mentor teacher and felt as though communication and collaboration were lacking. He felt unappreciated and not respected by his paired mentor teacher and felt as though it significantly affected student outcomes from field-tested lessons. He expressed concerns to the school principal and master teacher. He was reassigned to a mentor teacher the following semester and declared the process became more feasible and productive.

School F

During the 2017-2018 school year, School F transitioned from high school to middle school, serving grades six through eight. With a population of 746 students, School F had a teacher-student ratio of 18 to one and a special education population of 136 students. Students with an exceptionality of "Specific Learning Disability" made up 28% of the special education population. School F had a minority enrollment at 98.5% with 35% proficiency in math and 22% proficiency in reading.

The principal of School F served as an educator for 23 years. She began her career as an educator in special education at a middle school in Shreveport after earning a bachelor's degree in General Studies and obtaining a certification in Special Education Mild-Moderate, one through twelve. She earned a master's degree in Educational Leadership and obtained certification in Administration Supervision. After serving as a self-contained special education teacher, the principal transitioned to leadership as an Instructional Specialist and later forged to an administrative role as a Special Education

Supervisor for the School District. She served as Supervisor for seven years before she was appointed Principal of School F.

As an advocate for equality and inclusion for students with disabilities, the principal of School F created an administrative team to improve student academic performance for all students. During the 2017-2018 school year, she organized an administrative team, including a Master teacher, three Mentor teachers, and a Lead Special Education teacher. The teacher met weekly during the summer before the school year to structure a co-teaching model that met the needs of the student demographic for that school. The administrative team created a co-teaching model that consisted of special education teachers and general education teachers in a general class setting in reading and mathematics. Co-teachers shared classroom space, planned lessons together, and presented data to the administrative team in weekly PLC sessions. Unlike other participating schools in the study, School F implemented the co-teaching model One Teach, One Observe. The general education (content) teacher provided whole group instruction to a homogenous class of general education students and students with disabilities. The special education teacher observed student participation, classwork, and assessments and devised strategies and interventions to improve student outcomes. Co-teachers collaborated during planning time to review student data and presented outcomes to the administrative teams during PLC sessions. The master teacher and mentor teachers provided suggestions and feedback and shared ideas to revise and improve lessons. Co-teachers attended paid training and professional development quarterly to learn more about the co-teaching structure and strategies to improve student outcomes in their content areas. The principal expressed that the implementation of these

co-teaching models was extraordinarily time-consuming, and pairing teachers was a challenge. She made teacher- pairing adjustments twice during the school year and felt the lack of compatibility affected student outcomes.

The special education teacher earned a bachelor's degree in elementary special education and earned a master's degree in Education. She began her teaching career as an elementary special education inclusion teacher before transitioning to middle school at School F. She exclaimed her experience as a co-teacher was positive. She declared the time to observe students and collect data provided opportunities to learn about each students' academic needs and collaborating with colleagues. The administrative team improved morale and rapport among staff.

The general education teacher at School F graduated with a bachelor's degree in Elementary Education and earned a master's degree in Music Education. She married and moved to Shreveport, where she began her career as an English teacher at School F. She has severed as a seventh-grade English teacher for five years. Her first experience co-teaching during the 2017-2018 school year was challenging. She said her first year teaching students with disabilities was difficult due to low academic levels. She declared the collaboration with the special education teachers was helpful and inspired her to continue her education and work toward a Reading Specialist certification. She also expressed that working with the administrative team weekly provided opportunities to express concerns and take on a leadership role in adjusting lessons and revising class structure to improve academic outcomes.

Emergent Themes

Each principal in the research study implemented the co-teaching model with an approach unique to their schools' needs. No Child Left Behind (NCLB) became law in 2004 to provide opportunities for *all* students to succeed academically. Each school leader implemented the co-teaching program to align with federal guidelines and provisions required under the Individuals with Disabilities Education Act (IDEA). Semi-structured interviews with school leaders and participating in co-teachers fostered emerging themes that created a framework for co-teaching.

School Leader's Role

Participating principals, master teachers, mentor teachers, and special education lead teachers worked carefully developing co-teaching models that accommodate the academic needs of the students they serve. School leaders' attempted to provide access to the curriculum by placing students in the *Least Restrictive Environment*. The co-teaching model was implemented to ensure students with disabilities learn and interact with non-disabled peers. School leaders scheduled co-teaching classes and paired co-teachers according to content knowledge, personality traits, and student needs. When interviewing the principal at School A, she stated,

> I met with my administration TAP team over the summer before the school year. We reviewed credentials for all general education and special education teacher. My team distributed a brief questionnaire to teachers about teaching styles, educational philosophy, and classroom needs. We then paired co-teachers according to content and personality. Students were scheduled according to academic needs on IEPs and achievement levels on state testing.

School leaders' roles included monitoring co-teaching lessons, monitoring data from lessons, and providing necessary resources to increase positive student outcomes. Master teachers and mentor teachers facilitated professional learning communities (PLCs) and cluster meetings to review, model, and revise lessons and discuss concerns about the co-teaching relationship. School principals attended IEP meetings to provide input and share ideas to meet the needs of students with disabilities.

School Leader Support and Preparation

School leaders supported and prepared co-teachers by providing feedback, training, and professional development to improve teacher relationships and increase knowledge about the co-teaching process. School E had a master teacher that modeled lessons and mentor teachers co-taught with the general education and special education teachers to field-test research-based lessons. The principals at all schools participated, and some facilitated PLCs to review and discuss student data as well as address concerns. School leaders supported teachers that were having challenges and reassigned teachers to match personality types and teaching styles.

The principals supported co-teachers by creating an environment in which teachers could approach school leaders with lesson ideas, student concerns, and request for additional resources to improve student achievement. A teacher from a general education School C expressed she had concerns about sharing her classroom space with a colleague as well as teaching students with disabilities. She stated she had had students with disabilities in her class before the co-teaching experience but those students that were high functioning with little or no behavior issues. She claimed the significant adjustment was classroom management and collaborating for lesson planning. The

principal allotted additional time for co-teachers to co-plan and participated in PLCs and collaborate with the administrative team to ensure the co-teaching relationships were coherent as possible.

School principals at participating schools allotted time for planning and preparing co-teaching lessons. Special education and general education teachers were granted additional planning periods at some participating schools. In contrast, other participating principals provided opportunities to attend paid training for co-teaching after hours and on weekends. The general education teacher at School C expressed she felt supported by the school administrative team and attested that the school principal provided many opportunities to learn more about the co-teaching experience. She also expressed the principal provided an open-door, safe space to express concerns and share ideas about scheduling, pairing with teachers, and lesson activities.

School Leader Evaluation of Co-Teaching

Participating principals in the study all used the Teacher Advancement Program (TAP) rubric as the primary tool to evaluate the co-teaching model. School principals, master teachers, and mentor teachers observed and evaluated co-teachers four times throughout the school year. The TAP rubric assessed Design and Planning, Learning and Environment, and Responsibilities. School leaders scheduled pre-conferences and post-conferences for all observations with co-teachers. Teachers received reward incentives for growth in state standards as well as individual performance and student outcomes. School leaders convened with co-teachers to monitor co-teaching lessons and provided feedback and strategies to improve student outcomes and co-teaching relationships. The principal at School B attested the TAP rubric provided an outline for goal setting, teacher

accountability, and school climate. He expressed the TAP rubric helped improve the overall morale and rapport among staff.

School Leader and Co-Teacher Collaboration

Participating school principals expressed significant improvements in collaboration, feedback, and accountability among co-teachers. The principal from School F explained,

> Years before implementing the co-teaching model at my school, I often only communicated with my staff during a faculty meeting, observations, or email announcements. I am proud to say the most favorable outcome from co-teaching at my school has been the open communication and the safe space to express concerns and share ideas. I have learned so many things that I could change to improve my school. I discovered that I have a very creative and talented staff.

Master teachers and Mentor teachers facilitated PLCs and cluster meetings weekly to discuss students' data and collaborate with co-teachers about ideas and feedback for lesson plans and class activities. School principals attended PLCs and cluster meetings periodically to provide input, discuss concerns, and received feedback from the teachers. The master teacher at School E expressed that having the opportunity to work from both sides of education, the teacher and the administrator, allowed her to serve as a liaison and bridge the gap between teacher and school administrator.

School principals met with IEP teams and served as the administrative team member in IEP meetings. They provided input on IEPs and provided resources and materials necessary to ensure students with disabilities achieved success in the full inclusion setting. Special education lead teachers collaborated with school leaders to

create schedules, accommodations, and modifications for students with disabilities. The special education lead teacher at School D was responsible for writing all IEPs for students with disabilities. She stated that working with the schools' leaders to ensure students with disabilities are receiving the most appropriate accommodation and modifications has been a significant challenge. However, before the new structure of the co-teaching model, she had not had as many opportunities to collaborate with school leaders or give input about lessons and the learning environment for students with disabilities. That part she enjoyed.

The Co-Teaching Experience

Participating principals expressed positive experiences implementing the co-teaching models as well as challenges. Participating principals most commonly expressed the challenge of implementing the co-teaching models with a shortage of certified teachers, especially certified special education co-teachers. The principal at School D claimed one reason she designed the co-teacher model at her school, utilizing paraprofessionals as "instructional specialists" was due to the lack of special education staff. She stated she did not have enough special education teachers to adequately pair general education teachers and special education teachers for all grade levels. The principal at School C stated,

> My most challenging task implementing the co-teaching model was the inexperienced staff. I hired so many new teachers before implementing the co-teaching model. I initially thought that it could be a good thing because I figured I could pair new teachers with veteran teachers. However, in some ways, it caused

my novice teachers to become too dependent on veteran teachers and not discover their teaching styles and beliefs about teaching.

Some principals also expressed co-teachers complained about planning time for lessons, the feeling of being overwhelmed with the constant contact, and time spent with colleagues. Some veteran teachers had difficulty adjusting to the change of sharing space, lesson plans, and teaching lessons. Some principals also expressed that large class sizes due to mainstreaming students with disabilities increased behavior issues and triggered classroom management issues for co-teachers. Participating principals worked closely with other school leaders and some solicited input from participating co-teachers to match partners properly. However, some principals stated they have had to reassign teachers or provide intensive support to some co-teaching partners due to personality conflicts. The general education teacher at School A stated that her first experience as a co-teacher was “disastrous,” to say the least. She expressed the special education teacher was a football coach that was never available for planning and rarely in the class due to games or “other obligations.” The school principal replaced that special education teacher after the general education teacher expressed her concerns to the administrative team.

Co-teachers at the participating schools denoted mostly positive experiences participating in the co-teaching process. While many expressed the extended time necessary to plan and collaborate with teachers and administration was challenging, most co-teachers believed the experience provided opportunities to review data more often and receive ideas and feedback about the lessons and class activities. The teacher at School E attested that a positive aspect of co-teaching is that the lessons could continue if one teacher is absent or is pulled to attend meetings. She also exclaimed that having an

additional teacher present provided opportunities to support students individually or in small groups. The intense planning and collaboration provided students access to specialized instruction. The general education teacher at School F stated,

> …I enjoyed team teaching. We were able to play off one another in terms of banter and student engagement, the team with one another, and support each other. In that regard, I enjoyed team teaching more than the "traditional" teaching model. I was lucky to have a partner that shared similar teaching beliefs and teaching styles. She was also a stern disciplinarian who was a tremendous help to me for classroom management.

Other participating teachers expressed the co-teaching experience fostered student engagement and enthusiasm. Students with disabilities were more engaged, and the "stigma" of having an IEP was decreased in the co-teaching classes. A general education teacher claimed an increased knowledge of Federal Special Education laws and improvement in differentiating lessons to accommodate student needs according to IEPs.

Student Outcomes

School principals denoted positive experiences for students with disabilities. The principal at School C exclaimed students with disabilities at her school were more engaged, and it was challenging to identify which students had IEPs. Principals indicated having access to the general curriculum increased learning expectations for students with disabilities, which lead to improved academic achievement. The principal at School A stated that she noticed academic improvement for most students that participated in the co-teaching classes. Weekly discussions and revisions to lesson plans and activities

fostered more tailored lessons to accommodate student needs, improving academic progress for all students.

The researcher obtained permission from the school district to retrieve LEAP 2025 test score data from the six participating middle schools. Reading and mathematics score data were entered into Statistical Package for Social Sciences (SPSS) software and analyzed using descriptive statistics and one-way analysis of variance (ANOVA). For descriptive statistics, the researcher analyzed 235 students with disabilities participating in a co-teaching model that scored at an achievement level of "approaching basic or above" in comparison to achievement levels of 105 students with disabilities that did not participate in the co-teaching model. The results (see Table 3 and Table 4) indicate that 10% of students with disabilities participating in the co-teaching setting scored at an achievement level "basic or above" and 44% performed at an achievement level of "approaching basic or above" in reading. Reading results for students with disabilities that did not participate in the co-teaching model at the six middle schools indicate 10% at achievement levels of "basic or above" and 53% at achievement levels of "approaching basic or above." LEAP scores for students in the co-teaching setting for mathematics demonstrate 5.6% at "basic or above" and 46% at an achievement level of at least "approaching basic." In contrast, results for students with disabilities that did not participate in the co-teaching model demonstrate achievement levels of 6.7% at "basic or above" and 45% at a minimum level of "approaching basic."

Table 3

Level of Achievement for Students with Disabilities (Specific Learning Disability) in Co-Teaching

Achievement Level	Frequency of students in Co-teaching Setting Reading	Percent of Achievement Levels	Frequency of Students in Co-teaching Mathematics	Percent of Achievement Levels
Unsatisfactory	132	56.6%	125	53.2%
Approaching Basic	79	33.6%	96	40.9%
Basic	21	8.9%	11	4.7%
Mastery	3	1.3%	2	0.8%
Advanced	0	0	0	0

Note. N= 235

Table 4

Level of Achievement for Students with Disabilities (Specific Learning Disability) Not in Co-Teaching

Achievement Level	Frequency of students in Non-Co-teaching Reading	Percent of Achievement Levels	Frequency of Students in Non- Co-teaching-Mathematics	Percent of Achievement Levels
Unsatisfactory	49	46.7%	58	55.2%
Approaching Basic	46	43.8%	40	38.0%
Basic	10	9.5%	7	6.7%
Mastery	0	0	0	0
Advanced	0	0	0	0

Note. N=105

Analysis of variance (ANOVA) tested the difference between two or more means, analyzing the influences of an independent variable on a dependent variable. In this research study, the independent variables, co-teaching, and non-co teaching class settings had no significant influence on the dependent variable, the achievement levels of students with disabilities in reading and mathematics. The difference among the means for reading

scores (see Table 5) are not statistically significant ($F = 0.857$, $df = 1, 339$). The difference among means in mathematics is also not statistically significant level ($F = 0.045, 1, 338$). Therefore, the null hypothesis is not rejected at the $p<0.05$ level.

Table 5

Analysis of Variance for Difference Among Means for LEAP 2025 Achievement Levels

		Sum of Squares	df	Mean Square	F	Sig.
Reading Level	Between Groups	0.412	1	0.412	0.857	0.355
	Within Groups	162.599	338	0.481		
	Total	163.012	339			
Math Level	Between Groups	0.018	1	0.018	0.045	0.832
	Within Groups	132.519	337	0.393		
	Total	132.537	338			

Note: p>0.5

Summary

This chapter included a review of the findings of the research study. Results of the study included semi-structured interviews with school leaders and participating co-teachers and well as a quantitative analysis of student LEAP 2025 scores of students with disabilities participating in the co-teaching model at six participating schools. The first research question assessed how the school leader's role in implementing the co-teaching model influenced teacher collaboration. The school leaders at the participating schools created teams to organize, implement, monitor, and evaluate the co-teaching process. Weekly administrative teams, including school principals, master teachers, mentor teachers, and special education lead teachers, convened to review and evaluate co-

teaching partnerships, scheduling, and learning environments for co-teaching classes. School leaders facilitated professional learning communities (PLCs) and cluster meetings to review student data, share lesson ideas and strategies, and address concerns and resources needed to improve or maintain the co-teaching model.

Most school principals in the study expressed positive outcomes and improvement in school morale since the implementation of the co-teaching model. Collaboration among school leaders and co-teachers increased with the co-teaching model. Teachers collaborated daily to discuss lessons, plan and modify activities, and assess student outcomes. Teachers met with other co-teaching colleagues during PLCs and cluster meetings to share strategies, lesson modifications, and model lessons to improve student outcomes.

The second research question asked how the school leader's role in the implementation of the co-teaching model impact the academic achievement for students with disabilities in reading and mathematics. The interpretation of the data implied that school leaders' role in the implementation of a co-teaching model had no statistically significant impact on academic achievement in reading and mathematics for students with disabilities. The achievement level of students with disabilities in the co-teaching class setting aligns closely with those students with disabilities that did not participate in the co-teaching model during the 2017-2018 school year.

CHAPTER 5

CONCLUSIONS AND IMPLICATIONS

Chapter 4 was a review of the findings in the study, revealing how a school leader's role in implementing a co-teaching model influences teacher collaboration and academic outcomes for students with disabilities. Semi-structured interviews with school leaders and co-teachers fostered emerging themes related to school leadership roles, school leader support, and teacher preparation. Other themes included co-teacher experiences and students' outcomes. Weekly discussions among school leaders and co-teachers provided opportunities to assess teacher relationships, create lesson ideas, and discuss learning environment needs and resources.

The purpose of the research study was to discover the relationship between a school leader's role in the co-teaching process and its influence on teacher relationships and student achievement. Chapter 5 is a discussion of the conclusions and implications devised from the findings from the research study concerning the conceptual framework of distributed leadership. The concept of distributed leadership countered the idea of the administrative hero that dashes into the failing school and single-handedly "saves the day" with his charm, charisma, and new expectations. The conceptual framework for distributed leadership is sharing the undertaking of leading roles, responsibility, and accountability.

Distributed Leadership: Conceptual Framework in Co-Teaching

The field of educational leadership has transitioned from individual authority to shared leadership through multiple individuals within an organization (Mayrowetz, 2008). School principals in the study created a co-teaching environment with designated duties and shared responsibilities among master teachers, mentor teachers, special education lead teachers, and co-teachers. Each staff member assigned to participate in the co-teaching model upheld specific roles and accountability to ensure its success. According to DeMatthews (2014), the conceptual framework for distributed leadership in professional learning communities (PLCs). Interdependency among stakeholders fostered collaboration, and relationship building among colleagues and merged the communication gap between school administrators and teachers. Clearly defined roles and equal leadership responsibilities contributed to the success of the co-teaching model.

While principals expressed planning and facilitating the PLCs required extensive meetings, additional planning time with administrative teams, and constant communication with teachers, it eliminated the traditional task of micro-managing teachers with pre-packaged school reform programs. Co-teachers expressed that PLCs provided opportunities to focus on student data, focus on long-term goals, communicate ideas, and adjust the learning environment to accommodate the students they serve. Principals distributed leadership among staff by appointing staff members to facilitate, monitor, and assess the co-teaching process while helping school leaders and co-teachers overcome barriers during PLC sessions. School principals managed resources and monitored the PLC culture and expectations.

The co-teaching model, in conjunction with PLCs, re-packaged school reform programs into a collage of accountability, teacher flexibility, and intervention models that accommodate all student needs. Principals in the study looked to non-traditional practices to address the sophisticated instructional expectations and federal policies emerging in the education field. The shift in the education paradigm lead principals to create an environment for continued learning for teachers and school leaders with consistent communication and reflection. Professional learning communities fostered an environment of trusting relationships, content knowledge, and expertise among school leaders and teachers. Overall, principals and school leaders in the study attested the co-teaching experience improved teacher- to- administration and teacher-to-teacher communication engaged all stakeholders in leadership, and enhanced the school climate while working to meet the needs of students.

Co-Teaching and Academic Outcomes for Students with Disabilities

The purpose of the research study was to analyze how the co-teaching model affected academic outcomes for participating students with disabilities. School leaders at participating schools organized three significant components of the co-teaching model: (1) Scheduling students with disabilities, (2) Facilitating professional learning communities for co-teachers, and (3) Reviewing student data and evaluating academic outcomes. The researcher analyzed LEAP 2025 scores for students with disabilities from the 2017-2018 school year to assess correlations between those students participating in the co-teaching class setting with non-disabled students and academic achievement.

Academic achievement levels derived from LEAP 2025 raw score results ranged from Unsatisfactory to Mastery level. No students with disabilities at participating

schools in the study achieved Advanced level during the 2017-2018 school year. Scores entered into the Statistical Package for Social Sciences (SPSS) software were analyzed using One-Way Analysis of Variance (ANOVA). Results from the study indicated no statistically significant difference among means in reading or mathematics for participating students with disabilities. However, achievement levels for students with disabilities participating in the co-teaching model at the six schools in the study were slightly higher than students with disabilities that did not participate in the co-teaching model at those schools. Students with disabilities scored at achievement levels of "Basic or above" in reading at 10% in the co-teaching classes and 9.5% in reading in non-co-teaching classes. Students scored at "Basic or above" levels at 5.7% in math in co-teaching classes and 6% in non-co-teaching classes. Students with disabilities that did not participate in the co-teaching classes were assigned to resource room or self-contained classes. Content across all core subject areas were parallel. Resource room students received instruction in inclusion settings for 40-79% of the school day while self-contained students with disabilities spent less than 40% of the school day in a general education setting. The research study built around the research questions:

> How does the school leader's role in the implementation of a co-teaching model impact the academic achievement for students with disabilities in reading and mathematics?

Students with disabilities achievement levels did improve with the implementation of the co-teaching classes. However, there was no statistical significance between score

means. School leaders interviewed in the study revealed behavior improvements with students with disabilities as well as improvement in classwork and communication with peers.

Limitations

The researcher acknowledged the internal and external limitations of the research study. Generalizations about teacher collaboration and student outcomes were used with caution due to the small percentage of the School District participating in the study as well as the small population of data for students with disabilities analyzed in the study. The researcher only analyzed data for students with an exceptionality of "Specific Learning Disability." Students with disabilities with other exceptionalities were not considered in the research study. The researcher did not receive interview responses for all school leaders or co-teachers at the participating schools. Results in the study may not reflect all school leaders or co-teachers at participating schools. Student data collected for the study are results from the 2017-2018 school year. Participating schools have made adjustments and revised the co-teaching process, re-assigned co-teachers, and replaced school leaders. Therefore, student results and co-teaching experiences may have progressed or diminished. An increased time frame for the study may have yielded different results.

Recommendations for Further Study

Based on the results of the research study, the following recommendations can be made for further research: (a) Expand the study for students with disabilities with all exceptionalities. The researcher only analyzed data for students with an exceptionality of

"Specific Learning Disability." Perhaps a study with all students with disabilities, including those with significant behavior disorders and those classified as gifted and talented, would yield statistically different results. (b) Only six of the 14 schools in the District participated in the research study. Additionally, the School District had 15 high schools that implemented the co-teaching model. The researcher could include all secondary schools in the district to increase participants and validations of results. (c) The researcher included all co-teaching models in the study. Each participating school structured the co-teaching model to accommodate the needs of the school. The researcher could perhaps increase the period for the study and conduct a case study on one particular co-teaching model or compare and contrast two of the most utilized models in the School District. (d) The researcher could expand the study beyond one School District and compare the implementation process and results between school districts.

Implications for Practice

This study added to the literature on the implementation of a useful co-teaching model and its influence on teacher collaboration, student outcomes, and overall school climate. The study also revealed the significance of the roles of school leaders and the distribution of shared leadership. Qualitative and quantitative data supported students with disabilities participating in a useful co-teaching model improved academically and socially. Standards in the co-teaching class setting are higher, and students with disabilities are exposed to a learning environment of structured routines and higher academic expectations.

The results of the study had implications for district levels implementing the co-teaching model in the full inclusion class setting. The results of the study could assist

school principals with implementing components of the co-teaching model such as professional learning communities (PLCs), cluster meetings, and shared leadership. Data collected from the study could provide guidelines for scheduling, teaching partnerships, and classroom learning environments for the co-teaching model. Many school districts are challenged with reform programs to improve student academic outcomes, improve school climate, and teacher accountability. The research study results provide strategies and educational structures that produce accountability, positive school climate, and improved learning outcomes. The research study results provide an avenue for school leaders to deviate from the traditional educational structure and foster an educational climate that addresses educational reform.

Conclusions

School Improvement and accountability have increased with the No Child Left Behind Act and the Individuals with Disabilities Education Act (IDEA). The purpose of these provisions was to increase teacher accountability and improve academic achievement for *all* students, especially students with disabilities. School administrators are challenged to create learning and social environments that foster safe spaces for communication and interaction among students in all class settings. Students with disabilities are mainstreamed into the general education class setting with expectations to improve academically and socially. The co-teaching model was implemented to adhere to Federal guidelines as well as improve student outcomes.

The research study was conducted to evaluate the co-teaching implementation process from the perspective of the school leader with input from participating co-teachers. Emergent themes resulting from the study included: The School Leader's Role,

School Leaders Support, and Teacher Preparation, School Leader Evaluation, Teacher Collaboration, and Student Outcomes. The insight gained through the research study included perceptions of co-teacher roles and responsibilities, shared leaderships, and student academic achievement. The qualitative and quantitative data indicated positive results from the implementation of the co-teaching model with positive teacher rapport and communication and positive academic results for students with disabilities.

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APPENDIX A

GUIDED INTERVIEW QUESTIONS FOR

SCHOOL LEADERS

Guided Interview Questions for School Leaders:

1. Describe your role as a school leader.
2. What is your role in implementing the co-teaching model at your school?
3. How do you and/or other school leaders support co-teachers at your school?
4. How are co-teachers selected and paired for a particular inclusion setting?
5. How are students with disabilities scheduled for a co-teaching class setting?
6. How do school leaders at your site participate in IEPs for students with disabilities that participate in the co-teaching model?
7. What are some of the challenges you have had as a school leader in implementing and supporting the co-teaching model at your school site?
8. How do you or other school leaders evaluate your co-teaching program?
9. How do you assess academic outcomes for students with disabilities that participate in your co-teaching model?
10. How would you describe your impact on the implementation of the co-teaching model and the academic outcomes for students with disabilities?
11. What is your role in facilitating or participating in professional learning communities for co-teachers at your school site?
12. From your perspective, how have professional learning communities impacted co-teacher collaboration and academic outcomes for students?

APPENDIX B

GUIDED INTERVIEW QUESTIONS FOR CO-TEACHERS

Guided Interview Questions for Co-Teachers

1. Describe your role in lesson planning, practice, and evaluation of daily lessons as a co-teacher.
2. How does your experience as a co-teacher differ or align with your experience as a “traditional” classroom teacher?
3. Which component(s) of the co-teaching model appears to be the most challenging or effective?
4. In what capacity do you participate in the IEP process for students with disabilities that participate in your co-teaching classes?
5. How do you assess and adjust to meet student needs with your co-teaching partner?
6. How to school leaders (administrators, mentor teachers, lead teachers, etc.) prepare and support you in your co-teaching partnership?
7. What are some positive aspects of your co-teaching partnership?
8. From your perspective, how does co-teaching impact academic outcomes for students with disabilities in your co-teaching classes?
9. How do you actively participate in professional learning communities with school leaders and other co-teachers?
10. How has your participation in professional learning communities impacted your collaboration with your co-teaching partner, school leaders, and other co-teachers?

APPENDIX C

HUMAN USE APPROVAL LETTER

LOUISIANA TECH
UNIVERSITY

MEMORANDUM

OFFICE OF SPONSORED PROJECTS

TO: Mrs. Laquina Chanel Dove-Cummings and Dr. Pamela Morgan

FROM: Dr. Richard Kordal, Director of Intellectual Property & Commercialization (OIPC)
rkordal@latech.edu RK

SUBJECT: HUMAN USE COMMITTEE REVIEW

DATE: September 23, 2019

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

"The School Leader's Role in Implementing the Co-teaching Model and its Impact on Teacher Collaboration and Academic Outcomes for Students with Disabilities"

HUC 20-021

The proposed study's revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

Projects should be renewed annually. ***This approval was finalized on September 23, 2019 and this project will need to receive a continuation review by the IRB if the project continues beyond September 23, 2020.*** **ANY CHANGES** to your protocol procedures, including minor changes, should be reported immediately to the IRB for approval before implementation. Projects involving NIH funds require annual education training to be documented. For more information regarding this, contact the Office of Sponsored Projects.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study. If changes occur in recruiting of subjects, informed consent process or in your research protocol, or if unanticipated problems should arise it is the Researchers responsibility to notify the Office of Sponsored Projects or IRB in writing. The project should be discontinued until modifications can be reviewed and approved.

Please be aware that you are responsible for reporting any adverse events or unanticipated problems.