

**Examining Components of an Effective Middle School Co-Teaching Instructional Model  
That Successfully Meets the Needs of Students with Disabilities**

by

**Lauren Marie McGuirk**

B.S. Ed., Pennsylvania State University, 2008

M.S. Ed., Duquesne University, 2011

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This dissertation was presented

by

**Lauren Marie McGuirk**

It was defended on

March 31, 2020

and approved by

Robert Isherwood, Ed.D., Associate Professor of Special Education, Slippery Rock  
University Amy Srsic, Ed.D., Clinical Assistant Professor, Instruction and Learning

Dissertation Director: Diane L. Kirk, Ph.D., Clinical Associate Professor,  
Administrative and Policy Studies

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# **Examining Components of an Effective Middle School Co-Teaching Instructional Model That Successfully Meets the Needs of Students with Disabilities**

Lauren Marie McGuirk, Ed.D.

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This program evaluation investigated and evaluated the implementation of a co-teaching model in a school district. A formative program evaluation was conducted to determine changes and modifications to create a more successful co-teaching program. This study had two purposes. The first was to determine how schools enable successful collaboration between general education and special education teachers in order to implement effective co-teaching programs. The second was to identify the responsibilities of school administrators when planning for successful implementation of co-teaching models and inclusive schools. This research sought to evaluate a co-teaching program, define its strengths, identify areas of need, and make recommendations for ongoing improvement.

The need for this research is evident as co-teaching classrooms are utilized to better educate students with disabilities, yet evaluation of the co-teaching models at the inquiry site has never occurred. Accordingly, this study sought to provide insight for school and district leaders who desire to refine their co-teaching classrooms and improve inclusive practices in their schools.

The inquiry questions surrounding this problem of practice include:

1. What pedagogical knowledge do teachers have that enhance their ability to support an inclusive school?
2. Which elements of implementing co-teaching models are most important for teachers?

3. What attitudes, beliefs, and perceptions do general education teachers have about co-teaching and inclusive practices?
4. What attitudes, beliefs, and perceptions do special education teachers have about co-teaching and inclusive practices?
5. How can school principals promote inclusive schools by supporting effective co-teaching instructional models?

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## **Preface**

There are several people to thank for their help and support. First and foremost, to my supportive family that includes my fiancé, my parents, and my siblings. Having been raised in a family with a sibling with special needs, I have learned firsthand the importance of acceptance and inclusion. Each family member, but especially my sister, Nicole, continue to inspire me and remind me of what unconditional love means. To my fiancé, Lee, who has shown me his continuous support through encouraging me and challenging me through this process. I love you with all of my heart. Even though “doctor” is a title that I have desired for many years, it does not compare to the title of your “wife”. Thank you for your constant love and support always, and I cannot wait for our wedding day.

To my parents, David and MaryAnn, thank you for teaching me what unconditional love looks like and feels like. You both have always challenged me to be the best version of myself, and I am forever grateful. You were the first demonstration of what special education advocacy looks like, which has inspired me since I was a child. Thank you for being the most loving parents to my sister and your daughter, Nicole, and to me.

To my siblings, David, Lindsay, and Nicole. David, your leadership and guidance has shaped me into the strong leader that I am today. Watching you raise Liam continues to inspire me in more ways than you will ever know. Lindsay, you continue to pave the way for me and Nicole as I follow in your footsteps and as you advocate for children with disabilities. I love that we share a similar love and passion for special education and improving the lives of people with special needs. Nicole, you have been my hero and best friend for as long as I can remember. You inspire

me every single day and are a constant reminder about what it means to persevere and overcome adversity. I love you so much!

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## **1.0 Introduction**

The implementation of an inclusive school setting requires active involvement from numerous stakeholders, including community members, students, teachers, and administrators. In an inclusive school, all members believe that in order to provide the best learning community, everyone must accept one another's differences and maximize both student and teacher potential (Friend, 2019).

Special education federal regulation includes requirements for *least restrictive environments* and *specially designed instruction*, among others. However, inclusion models like co-teaching are not mandated by the Commonwealth of Pennsylvania, resulting in various forms of implementation, some more successful than others. Federal legislation such as the Individuals with Disabilities Education Act (IDEA) of 2004, along with a state class action lawsuit, *Gaskin vs. Commonwealth of Pennsylvania* (2005), both resulted in heightened efforts to include students with disabilities in general education classes, which has also created a need for general and special educators to collaborate in the classroom, a model known as co-teaching (Cook & Friend, 1995; Scruggs & Mastropieri, 2017).

### **1.1 Statement of the Problem**

Having served as both a special education co-teacher and an administrator in Pennsylvania public schools, I understand the effort it takes to promote an inclusive-school setting. I recognize that inclusive schools benefit students because they promote acceptance, foster empathy, and

include differentiated instruction for all students. However, effective inclusive schools require extensive, ongoing effort from administrators and teachers. As educators work to address increasing mandates and to promote inclusive schools, one strategy adopted in many school districts is co-teaching (Friend, 2019).

Even though many schools are adopting co-teaching models, the results are mixed. In my experience, the following barriers hinder the success of the co-taught classroom: minimal co-planning time for the general and special education teaching team, minimal collaboration for lessons and assessments, limited professional development opportunities, and infrequent communication with administrators about co-teaching models and expectations. Additionally, as a classroom teacher, I frequently only assisted the students with disabilities and provided minimal instruction, which is not a characteristic of effective co-teaching. Characteristics of effective co-teaching include communication, collaboration, and shared ownership of the classroom. Yet in practice, the most common co-teaching model includes a general education teacher in charge of the classroom with a special education teacher in a subordinate role (Scruggs, Mastropieri, & McDuffie, 2017). This model, better known as “one teach, one assist,” is the most common co-teaching model used in my place of practice.

The principal’s role in promoting an inclusive school is critical, as the building leader has the power to initiate change and reform. Schools with effective inclusion programs have strong building leaders who engage in tasks beyond traditional administrative roles, like using data to support decisions, fostering a shared vision, and creating collaborative structures (Furney, Aiken, Hasazi, & Clark-Keefe, 2005). Promoting inclusive schools and acting as the local education agency (LEA) representative requires the principal to support and supervise co-teaching models. The LEA representative is responsible for ensuring IDEA compliance at the local or building level,

which includes advocating for all students and ensuring appropriate individualized education program (IEP) implementation. Many principals, however, do not have experience with special education supervision or co-teaching, but need to know what to look for, listen for, and ask when observing, evaluating, and supervising co-teachers (Murawski & Bernhardt, 2015). Regardless of special education experience, principals can still support inclusive schools and enhance co-teaching effectiveness.

Successful co-taught inclusive classrooms result not from the characteristics of the students but from collaborative and supportive relationships between co-teachers and their building principals. In the research setting, the examination of co-teaching models and inclusive schooling should focus on identifying strengths and areas of growth. This study will help to determine the components of an effective middle school co-teaching model and the supports needed by teachers to achieve successful implementation of the model.

## **1.2 Why is It a Problem?**

Facilitating change in schools begins with identifying areas of improvement and engaging stakeholders to provide insight and feedback about current needs and potential changes. This process is no different for improving inclusive practices and increasing effectiveness of co-teaching models. For change to occur, it must be supported by the administration as well as by the teachers who implement the changes (McLeskey & Waldron, 2002). However, if collaborative problem-solving practices do not exist, poor implementation, or no change at all, may occur.



### **1.3 Significance of Problem at Place of Practice**

The purpose of this inquiry is to identify strengths and areas of need and to make recommendations for ongoing improvement in current co-teaching models. To date, co-teachers at the research site have not been provided opportunities to examine the models and identify areas of need with school leadership. Minimal professional development and instructional support for co-teachers are consistent concerns at the research site. These problems could be attributed to the low priority placed on co-teaching classrooms, resulting in inconsistency with implementation and reliance on inexperienced co-teachers (defined as those with three years or fewer of experience).

### **1.4 Definitions of Terms**

The following terms provide context for this study.

1. Assessment: Assessment can be defined as continuous evaluation, summaries, observations, and reviews to provide teachers information and students feedback (Fisher & Frey, 2007).
2. Co-Design Model: The Co-Design Model is defined as the interaction of professionals engaged in collaborative efforts who share in the responsibilities for the administration of instructional and non-instructional duties and tasks within an educational setting (Barger-Anderson, et al., 2010).
3. Co-instruction: Co-instruction is defined as professionals engaged in consistent and routine collaborative efforts for the implementation of instructional practices within an educational setting (Barger-Anderson, et al., 2010).

4. Co-teaching: Co-teaching refers to the partnership of a general education teacher and a special education teacher to collaboratively deliver instruction to a diverse group of students, including those with disabilities, in a way that flexibly and deliberately meets their learning needs (Friend, 2008).
5. Education for All Handicapped Children Act (EHA): This law was enacted by Congress in 1975 (Public Law 94-142) to support states and localities in protecting the rights of, meeting the individual needs of, and improving the educational outcomes for all people with disabilities and their families (U.S. Department of Education, 2007).
6. Elementary and Secondary Education Act (ESEA): ESEA was enacted in 1965 in order to commit to equal opportunity for all students (U.S. Department of Education, 2017).
7. Every Student Succeeds Act (ESSA): ESSA was signed into law in 2015 to replace the No Child Left Behind (NCLB) Act, with a goal of fully preparing students for success in college and careers through equity, high academic standards, high-quality preschool, and more (U.S. Department of Education, 2017).
8. Free Appropriate Public Education (FAPE): Section 504 of the Rehabilitation Act of 1973 protects the rights of individuals with disabilities in programs and activities. Section 504 requires a school district to provide a “free appropriate public education” to each qualified person with a disability who is in the school district’s jurisdiction, regardless of the nature or severity of the disability (U.S. Department of Education, 2010).
9. Inclusion: Inclusion occurs when students with disabilities receive an appropriate public education in the general education classroom and are provided with adequate supports and accommodations to be successful academically and socially.

10. Inclusive school: An inclusive school environment exists when all students, regardless of need or disability, receive appropriate education in the general education classroom and are provided with adequate supports and accommodations by all staff members to be successful academically and socially. In an inclusive school, all staff members share this belief in the importance of inclusive schooling.
11. Individualized Education Program (IEP): An IEP is a legal document under IDEA and serves as the cornerstone of quality education for any child with a disability. An IEP outlines performance levels, annual goals, special education and related services, participation with nondisabled children, and any accommodations needed for a child to be successful in school (U.S. Department of Education, 2000).
12. Individuals with Disabilities Education Act (IDEA): This amendment to EHA in 1997 and 2004 makes available a free appropriate public education to eligible children with disabilities, and also provides related services to those children. The IDEA governs how state and public agencies provide early intervention, special education, and related services to millions of infants, toddlers, children, and youth with disabilities (U.S. Department of Education, 2015).
13. Instructional support coach: Instructional support coaches are school-based and collaborative, serve in a nonevaluative support role for teachers, and do not directly instruct students except to model for teachers.
14. Leadership: Leadership refers to a school or district leader who leads an inclusive school through management and administration of programs, knowledge of curriculum and pedagogy, public and community leadership, and ability to build and change culture (Barger-Anderson, et al., 2013).

15. Learning support: Learning support is appropriate for children whose greatest need for academic support is in the areas of reading, writing, math, or speaking and listening (PaTTAN 2018).
16. Least Restrictive Environment (LRE): IDEA outlines the requirements for LRE as each public agency must ensure that, to the maximum extent appropriate, children with disabilities are educated with children who are nondisabled, and removal of children with disabilities from the regular education environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily (Bureau of Special Education, 2002).
17. Life skills support: Life skills support is appropriate for children whose greatest need is to learn academic, functional, or vocational skills that will enable them to live and work independently (PaTTAN 2018).
18. Local Educational Agency (LEA): As defined in IDEA (2004), the LEA is recognized as an administrative agency that is qualified to supervise the provision of specially designed instruction to meet the unique needs of children with disabilities; knowledgeable about the general education curriculum; and knowledgeable about the availability of resources of the LEA (IDEA, 2004).
19. No Child Left Behind (NCLB): This reauthorization to ESEA was enacted in 2002 and represented a significant step forward for children in many respects, particularly where students were making progress and where they needed additional support. NCLB's prescriptive requirements became increasingly unworkable for schools and educators, however (U.S. Department of Education, 2017).

20. Specially Designed Instruction (SDI): As defined in IDEA (2004), specially designed instruction is adapting, as appropriate to the needs of a child with a disability, the content, methodology, or delivery of instruction to address the unique needs of the child that result from the child's disability; and to ensure the child access to the general education curriculum, so that the child can meet the educational standards within the jurisdiction of the public agency that apply to all children (U.S. Department of Education, 2017).

## **2.0 Literature Review**

The literature review includes the following: federal regulations related to the history of inclusion, inclusion practices in schools, co-teaching models in schools, and the principal's role in leading effective co-teaching models that support inclusive schools. The literature review begins with a history of inclusion that impacted expectations and standards for educating students with disabilities. Specific attention is given to federal regulations such as the Individuals with Disabilities Education Act (IDEA) of 2004 and the Every Student Succeeds Act (ESSA) of 2015 (previously named the Elementary and Secondary Education Act [ESEA] of 1965 and then reauthorized as the No Child Left Behind Act [NCLB] of 2001).

The second portion of the literature review focuses on inclusion practices, co-teaching models, and the principal's leadership role in promoting inclusive school cultures and co-teaching classrooms.

### **2.1 Federal Regulations Related to the History of Inclusion**

#### **2.1.1 IDEA/ESEA/ESSA**

For nearly 40 years, federal regulations have required schools to provide access to general education for all children with disabilities. These regulations include the Education for All Handicapped Children's Act (EHA) of 1975, renamed the Individuals with Disabilities Education Act (IDEA) in 2004. The four main purposes of the law include the following:

- Education: Assure that all children with disabilities receive a free appropriate public education
- Identification: Improve how children with disabilities are identified and educated
- Evaluation: Evaluate the success of these identification and education efforts
- Protection: Provide due process protections for children and families (25 Year History of IDEA, 2007)

Since that time, new laws have been passed to ensure the inclusion and success of students with disabilities, including the Every Student Succeeds Act (ESSA) of 2015, which is the second reauthorization of the Elementary and Secondary Education Act (ESEA) of 1965. The ESEA reauthorization increases support for inclusion and improved outcomes of students with disabilities (Blueprint for Reform of the Elementary and Secondary Education Act, 2010). IDEA mandates stronger accountability mechanisms that are aligned with the Elementary and Secondary Education Act, as amended in 2001 to the No Child Left Behind Act (NCLB), which holds school districts responsible for students' performance and success, including students with disabilities (U.S. Dept. of Education, 2010). These laws require public schools to address and meet the needs of students with disabilities and ensure accountability and consequences if school districts fail to do so. Furthermore, under both IDEA and ESSA, states are responsible for developing plans and programs to improve educational services for students with disabilities (Ballard & Dymond, 2017; Bureau of Special Education [BSE], 2017; Friend, 2019; U.S. Dept. of Education, 2010). Together, IDEA and ESSA stress the importance of providing high-quality instruction, interventions, and supports to students with disabilities. Children with disabilities are achieving at levels that would not have been imagined in previous decades, and IDEA is the catalyst for that success (U.S. Department of Education, 2007, 2010).

Both IDEA (2004) and ESSA (2015) require schools to ensure that students with disabilities have access to and make progress in the general education curriculum. Access to the general education curriculum results in students with disabilities being educated in the least restrictive environment (LRE). The U.S. Department of Education (2008) reports that 5,660,491 students with disabilities are educated in general education classrooms for at least part of the day. To better understand these regulations, further explanation can be found in Table 1: Federal Regulations Impacting Special Education.

**Table 1. Federal Regulations Impacting Special Education**

Regulation	Date	Expectations	Currently in Practice
Education for All Handicapped Children's Act (EHA)	1975	Major mandates of the law included: zero reject, least restrictive environment, nondiscriminatory identification and evaluation, individualized education program, due process, and parental participation (Barger-Anderson, Isherwood, & Merhaut, 2013).	No
Individuals with Disabilities Education Improvement Act (IDEA)	2004	Major mandates of the law include: students attend neighborhood schools instead of private schools or institutions, post- secondary school enrollment, and post-school employment for students with disabilities (25 Year History of IDEA, 2007).	Yes
Elementary and Secondary Education Act (ESEA)	1965	Major expectations of the law include: quality and equality in educating students, national goal of full educational opportunity, and provision of resources to school districts serving low-income students.	No



**Table 1** continued

No Child Left Behind (NCLB) Act	2001	Major results of the law include: measures put in place to expose achievement gaps, national dialogue on education	No
		improvement, and school districts owning responsibility for the performance of all students, including those with disabilities.	
Every Student Succeeds Act (ESSA)	2015	Major expectations of the law include: rigorous and fair accountability for all levels of school performance, meeting the needs of diverse learners, and greater equity in providing students a fair chance to succeed (ESEA Diverse Learners, 2015).	Yes

### 2.1.2 Implications

Although federal mandates have resulted in positive outcomes for students with disabilities and their families, they are also reminders that our public education system maintained lower expectations for people with disabilities for decades. Before IDEA, expectations for students with disabilities were minimal, and services that supported student success were virtually non-existent in many school districts. Extensive work is still needed in order to overcome decades of low expectations and deeply ingrained beliefs among some stakeholders who believe that nothing can be done to improve the achievement of students with disabilities (Quenemoen & Thurlow, 2017).

### **2.1.3 Least Restrictive Environment**

IDEA requires that all students, regardless of disability, have the right to a free and appropriate public education (FAPE) in the least restrictive environment. Educating students with disabilities in the least restrictive environment can lead to students being educated in the general education classroom, using the general education curriculum. The least restrictive environment is a location where students with disabilities can receive an education and related services in the regular classroom to the greatest extent possible (Marx et al., 2014). In order for this learning environment to prove successful for students with disabilities, highly qualified teachers must be present in the classroom. The 2004 amendments to IDEA promised to provide an adequate supply of qualified teachers trained with IDEA support (Friend, Cook, Hurley-Chamberlain, & Shamerger, 2010; U.S. Department of Education, 2010). To best meet the needs of students with disabilities, *an adequate supply of teachers* must include general education teachers and special education teachers. Both types of educators are equally important as IEP team members and encourage success for students with disabilities.

## **2.2 Inclusion Practices in Schools**

Federal regulations such as IDEA and ESSA require that students with disabilities receive education in the general education classroom. Consequently, the implementation and amendments of IDEA have resulted in increased opportunities to include students with disabilities in public schools and in general education classrooms. “In the past 35 years, classrooms have become more inclusive and the futures of children with disabilities brighter. Significant progress has been made

toward protecting the rights of, meeting the individual needs of, and improving educational results for infants, toddlers, children, and youths with disabilities” (U.S. Department of Education, 2010). Prior to IDEA or LRE mandates, little attention was paid to educating students with disabilities in the general education classroom using the general education curriculum. P.L. 94-142 mandates rights for children with disabilities, including the right to a free and appropriate public education (FAPE) provided in the least restrictive environment (Altshuler & Kopels, 2003).

Resource rooms, or self-contained special education classrooms, were commonly found in public schools, resulting in minimal socialization time for students with disabilities with their non-disabled peers, failure to provide access to the least restrictive environment, and limited access to the general education curriculum. Before IDEA, student progress was not properly documented or evaluated. Since IDEA, students with disabilities have been required to participate in state standardized tests and show progress towards IEP goals and objectives. In addition, educators are held accountable for these results. Inclusion efforts made the educational accomplishments of students with disabilities matter (Zigmond & Kloo, 2009).

Although educators began using the term *inclusion* following passage of IDEA, the federal law does not include the term. “The term *inclusion* replaced the previous terminologies such as *integrated special education* and *mainstreaming*, in the early 1990s and continues to be used by members of the field today, although the term does not appear in IDEA” (Odom, Buysse, & Soukakou, 2012). For this reason, researchers describe and define inclusion in several different ways. Idol (2006), for example, explains that inclusion occurs when students with disabilities receive their entire academic curriculum in the general education program. To the contrary, Friend (2019) argues that inclusion is a belief system or philosophy that guides practices in any specific school. For the purposes of this study, inclusion will be defined as when students with disabilities

receive an appropriate public education in the general education classroom and are provided with adequate supports and accommodations to be successful academically and socially.

General education and special education teachers must be supportive of and involved in planning and implementing inclusive schools (McLeskey & Waldron, 2002). Additionally, special education teachers and general education teachers are equally responsible for ensuring the successful implementation of inclusion practices in a public school.

### **2.2.1 Co-Design Model**

Inclusion in schools cannot exist without collaboration among stakeholders. Collaboration typically involves creating communities of professionals who work together to share ideas, solve problems, and promote changes that benefit students (Barger-Anderson, Isherwood, & Merhaut, 2013). Collaboration that supports and promotes an inclusive school involves special education teachers, general education teachers, and building and district administration. One of the main goals of collaboration in the educational setting is to achieve shared accountability for all students, including those with disabilities, in an inclusive environment (Barger-Anderson, Isherwood, & Merhaut, 2013).

The Co-Design Model is defined as the interaction of professionals engaged in collaborative efforts who share in the responsibilities for the administration of instructional and non-instructional duties and tasks within an educational setting (Barger-Anderson, et al., 2010). The Co-Design Model for collaborative instruction guides educators and administrators when planning for successful co-teaching and promoting an inclusive school environment. This model consists of nine elements: leadership; assembly of site; curriculum knowledge; co-instruction; classroom management; adaptations, accommodations, and modifications; assessment; personality

types; and co-design time. These elements can be found in Table 2: Strategic Co-Teaching in Your School: Using the Co-Design Model.

**Table 2. Strategic Co-Teaching in Your School: Using the Co-Design Model**  
(Barger-Anderson, Isherwood, & Merhaut, 2013, pages 34-38)

Leadership	The leadership element emphasizes the crucial need for administration to ensure sustainability, continued reinforcement, and a long-term commitment throughout the collaborative initiative.
Assembly of site	Assembly of site addresses issues such as location of the teaching site, the arrangement of furniture and other items within the shared space, and promoting communication between the collaborative partners to help them plan these logistics.
Curriculum knowledge	The curriculum knowledge element refers to the different backgrounds, knowledge, and skill sets that each teacher brings to the collaborative classroom.
Co-instruction	The co-instruction element refers to professionals who are engaged in a consistent and routine collaborative effort for the implementation of instructional practices within an educational setting.
Classroom management	Classroom management includes creating the collaborative environment and managing teacher-student relationships within that environment. Both educators must agree upon rules, roles, responsibilities, and other important issues necessary for managing a shared classroom effectively.
Adaptations, accommodations, and modifications	Accommodations and modifications are types of adaptations. For this element, the collaborative partners must communicate about their educational philosophies and beliefs and presentation of adaptations, not only on assessments but also during instruction.
Assessment	This element refers to formative and summative assessments. Assessment in the collaborative classroom requires dialogue and agreement between partners in terms of types and frequency.
Personality types	This element focuses on understanding one's own personality type as well as a partner's personality type.
Co-design time	The co-design time element stresses the importance of ensuring that collaborative partners have time for common planning.

### **2.2.2 Involvement of Stakeholders**

Several stakeholders must be involved when planning for inclusion of a student with disabilities. In my experience, all IEP team members, including the parents, general education teacher, special education teacher, principal, and, sometimes, the student, must be involved in order to ensure successful inclusion practices. IEP team members must share input to determine the supports and accommodations that a student with disabilities requires in order to reach the highest level of success in the school environment.

While the concept of educating students with disabilities in general education classrooms is not new, its impact on students and educators continues to be examined (Friend, 2019; Salend & Duhaney, 1999). General education teachers may understand the importance of differentiation, develop empathy and compassion, and gain collaboration skills through their work with special education teachers and IEP teams. IDEA requires that regular education teachers, as members of IEP teams, are aware of the needs of the children with disabilities placed in their classrooms (Altschuler & Kopels, 2003).

Students are important stakeholders to consider when planning for an inclusive school. Students without disabilities may experience benefits from working and learning alongside their peers with disabilities. Research proves that students without disabilities who participate in inclusive schools or inclusive classrooms are found to be more accepting and understanding of differences, as well as more likely to develop positive perspectives concerning their classmates with disabilities (Hendrickson, Shokoohi-Yekta, Hamre-Nietupski, & Gable, 1996; York, Vandercook, Macdonald, Heise-Neff, & Caughey, 1992).

## 2.3 Co-Teaching Models in Schools

Federal protections for children with disabilities continue to evolve. Students with disabilities are being educated in general education classrooms more than ever before. As a result of IDEA and educating students in their least restrictive environments, co-teaching is a model that continues to grow more popular across schools.

Numerous definitions exist for the term *co-teaching*. For the purposes of this study, co-teaching is defined as “the partnership of a general education teacher and a special education teacher for the purpose of collaboratively delivering instruction to a diverse group of students, including those with disabilities, in a general education setting in a way that flexibly and deliberately meets their learning needs” (Friend, 2008).

Interest in co-teaching has increased considerably, and the factors contributing to that interest include NCLB of 2001 and IDEA of 2004 (Friend, Cook, Hurley-Chamberlain, & Shamerberger, 2010; Friend, 2015). Co-teaching is one approach that is valuable for facilitating the inclusion of students with disabilities in the general education classroom and relies on collaboration between the general education teacher and special education teacher. Consequently, both special education teachers and general education teachers are expected to educate students with varying needs and to create successful outcomes in a single classroom. In co-teaching, the general education teacher takes the lead on critical elements of curricular competencies and pacing, but the special education teacher adds expertise related to the process of learning, the highly individualized nature of some students’ needs, and an emphasis on teaching until mastery (Friend et al., 2010). The benefit of two educators with particular skill sets has potential to provide a highly effective instructional model for students with various needs. This potential can only be met if both educators are willing to communicate and collaborate effectively. Co-teaching requires three

important components: co-planning, co-instructing, and co-assessing. Without these, co-teaching is ineffective or simply nonexistent (Murawski & Lochner, 2011).

The intent of co-teaching is to make it possible for students with disabilities to access the general curriculum while at the same time benefiting from specialized instructional strategies necessary to nurture their learning (Friend, et al., 2010). The level of accessibility to the general education curriculum and the specially designed instructional strategies are both determined by the IEP team, which includes both co-teachers and the school principal.

### **2.3.1 Types of Models**

Varying instructional models are used in co-taught classrooms. Several of these co-teaching models have proven successful for both teachers and students. However, lesson planning and instructional strategies should be driven by the content of the lesson, not the model that is preferred. The six approaches to co-teaching, found in Table 3: (Marilyn Friend Co-Teaching Approaches, Co-Teach! Building and Sustaining Effective Classroom Partnerships in Inclusive Schools) can be accomplished by arranging students and teachers in different ways (Friend, 2019). Strengths and weaknesses can be associated with each approach, depending on the type of lesson being taught. Friend et al. (2010) note that within these six approaches, teachers address the IEP goals and objectives of students with disabilities while at the same time meeting the learning needs of other students in the class.



**Table 3. Marilyn Friend Co-Teaching Approaches, *Co-Teach! Building and Sustaining Effective Classroom Partnerships in Inclusive Schools*, (2019, p. 111)**

One Teach, One Observe	Co-teachers can decide in advance what types of specific observational information to gather during instruction and can agree on a system for gathering the data.
Station Teaching	Teachers divide content and students. Each teacher teaches the content to one group and subsequently repeats the instruction for the other group. If appropriate, a third “station” could give students an opportunity to work independently.
Parallel Teaching	Teachers are both teaching the same information, but they divide the class and do so simultaneously to improve instructional effectiveness.
Alternative Teaching	One teacher takes responsibility for the large group, while the other works with a smaller group.
Teaming	Both teachers are delivering the same instruction at the same time.
One Teach, One Assist	One teacher maintains primary responsibility for teaching, while the other teacher circulates through the room providing unobtrusive assistance to students as needed.

It is recommended that teachers utilize approaches like Station Teaching, Parallel Teaching, and Alternative Teaching more frequently in order to target specific skills and to provide small group instruction to students. Through strategic planning and data collection, teachers can target specific skills and specially designed instruction can be delivered to students.

However, past research suggests that One Teach, One Assist - with the special education teacher assisting - is the most frequently used approach (Scruggs, et al., 2007; Weiss & Brigham, 2000). This approach places the special education teacher in a subordinate role, which defeats the purpose of co-teaching and undermines the special education teacher’s expertise.

The Teaming approach allows for the general education teacher and special education teacher to showcase their collaboration skills as they instruct the class simultaneously. Last, One Teach, One Observe requires one teacher to mainly observe the class with the purpose of data collection and observation.

More research is needed to determine how schools promote successful collaboration between general education and special education teachers in order to implement effective co-teaching classrooms.

## **2.4 Roles in Leading Effective Co-Teaching Models**

Principals establish school culture, develop goals and vision, and execute these practices daily to ensure the success of the school. Implementing inclusive practices and co-teaching classrooms is no different. As an instructional leader, the principal's goal is to improve the learning of students with and without disabilities by providing constructive feedback to the co-teachers in the inclusive classroom (Murawski & Lochner, 2011).

### **2.4.1 Inclusive Schools and School Leadership**

Schools with effective inclusion programs have strong leadership from principals who are engaged in work beyond routine administrative tasks. These practices include using data to support decisions, fostering a shared vision, and creating collaborative structures (Furney, Aiken, Hasazi, & Clark-Keefe, 2005). Principals act as change agents in order to facilitate reform, disrupt systems, and challenge ineffective practices. When inclusive thinking is central to the principal's approach

to leadership, inclusive practices will be central to the teachers as well as staff members (Friend, 2019).

Administrators can facilitate inclusion implementation efforts over time by monitoring student progress and teacher performance and by maintaining a clear focus on inclusive education in discussions with staff members, students, community members, and central office administrators (Walther-Thomas, Bryant, & Land, 1996).

#### **2.4.2 Supervision of Co-Teaching**

The principal's involvement in implementing co-teaching is crucial to the success of the classroom. Principals can control building schedules, planning time, collaboration opportunities, and instructional expectations, all of which are significant components of effective co-teaching. While the role of a school leader continues to become more and more complex, principals can ensure effective implementation of programs by engaging and involving necessary stakeholders and promoting professional partnerships. A collaborative culture is necessary in order to find ways to meet the needs of increasingly diverse learners (Friend, 2019). Administrators can support co-teachers by modeling traits that promote collaboration and by fostering these traits in others (Cook & Friend, 1995). Principals spend 42 percent of their time co-performing with someone else, including teachers, subject-area specialists, and assistant principals (Spillane & Hunt, 2010). For this reason, principals should empower the special education and general education teachers, as well as instructional support coaches and special education administrators, when planning for co-teaching implementation.

### **3.0 Methodology**

This chapter describes the methodology used in the data collection and data analysis for this study. Included are descriptions of the approach, participants, instrumentation, data collection, data analysis, and acknowledgement of limitations.

#### **3.1 Application to Place of Practice**

The district chosen for this study boasts high inclusion rates for students with disabilities and offers multiple supports and services for students with disabilities, both inside and outside of the general education classroom. The district's special education population has not exceeded 14 percent or declined below 12 percent over the past five school years, with a total school enrollment of 1,925 students. The district employs four building principals and two assistant principals. Of these school leaders, one administrator has a background in special education. While this study will examine co-teaching practices across the entire district, a more in-depth examination will occur at the middle school building. With four school buildings serving students in kindergarten through high school, the district employs an average of 3.5 special education teachers per building, a total of 14 for the entire district. Of these special education teachers, seven act as special education co-teachers in general education classes such as math, English language arts, and science across the four buildings.

Learning support and life skills support are the special education programs offered by the district for students with disabilities. This study will focus on students in the learning support

program. Students in learning support exhibit numerous kinds of disabilities that include specific learning disability, autism, emotional disturbance, other health impairment, and more.

Professional development for co-teachers is considered in this study. In the past decade, one of the special education teachers has received professional development involving inclusive practices and co-teaching. The minimal instructional support for the general education teachers is no different. General education teachers have experienced little to no professional development involving the needs of students with disabilities, collaborative practices, and co-teaching strategies.

Another factor to explore is the absence of teacher choice when participating in a co-teaching classroom. Historically, inexperienced teachers as well as long-term substitutes have been scheduled to teach co-taught classrooms without consideration for the teachers' levels of comfort or knowledge of inclusive practices.

### **3.2 Statement of Inquiry Questions**

Informed by the literature on the topic, a program evaluation will be conducted in the middle school setting. The staff's knowledge of co-teaching and components of effective inclusive schools will be examined to determine areas of need. The inquiry questions for this problem of practice include:

1. What pedagogical knowledge do teachers have that enhance their ability to support an inclusive school?
2. Which elements of implementing co-teaching models are most important for teachers?

3. What attitudes, beliefs, and perceptions do general education teachers have about co-teaching and inclusive practices?
4. What attitudes, beliefs, and perceptions do special education teachers have about co-teaching and inclusive practices?
5. How can school principals promote inclusive schools by supporting effective co-teaching instructional models?

The purpose of the study is to investigate and evaluate the implementation of a co-teaching model in a school district. Data was gathered from surveys, focus groups, and individual interviews. The survey design was used to gather information from a large set of teachers across one school district who have participated in a co-teaching instructional model in the past five years. Survey questions covered beliefs, experiences, challenges, professional development, and administrative support. Secondly, two separate focus groups consisted of a group of general education middle school teachers and a group of special education middle school teachers in order to gather specific data from a subset of a larger population. Lastly, individual interviews occurred with teachers who participated in the focus groups to gain a better understanding of individual teacher opinions of co-teaching models and inclusive schools.

### **3.3 Approach**

A program evaluation approach was chosen for the investigation and evaluation of the current co-teaching instructional model at the inquiry site. For the purposes of this study, a formative program evaluation was used to determine what changes and modifications could be

made to the current practices to create a more successful co-teaching program. Formative evaluation can be defined as data collection analysis and activities that occur over the course of program implementation and are used to determine whether or not a program is working (Bond, Boyd, & Rapp, 1997). According to Bond, Boyd, and Rapp (1997), formative evaluation has many objectives. Of these objectives, the program evaluation of co-teaching models focused on providing information to improve the program, identifying issues of interest, and clarifying the program's strengths and limitations. The inquiry design was an evaluation for the chosen school district's middle school.

Research is needed to determine how schools enable successful collaboration among general education and special education teachers in order to implement effective co-teaching programs for inclusive schools. Mertens (2015) notes that evaluation can be conducted on social and educational policies, programs, products, or personnel (p. 51). This research sought to evaluate a co-teaching program, to define its strengths, to identify areas of need, and to make recommendations for ongoing improvement.

The inquiry setting for the survey is a western Pennsylvania public school district with a student population of approximately 1,950 students. The inquiry setting for the focus groups and individual interviews is a district middle school with approximately 475 students. The district consists of four school buildings and serves students in grades K-12. Demographic data for the inquiry setting can be found in Table 4: Inquiry Setting Demographic Data.

**Table 4. Inquiry Setting Demographic Data**

Description	District Percentage of Students Race/Ethnicity/Student Group	School Percentage of Students Race/Ethnicity/Student Group
Economically Disadvantaged	16.5%	15.6%
English Language Learners	0.6%	0.6%
American Indian/Alaskan Native	0.2%	0.4%
Asian	2%	1.5%
Black	4%	3.2%
Hispanic	2.2%	2.7%
Native Hawaiian or other Pacific Islander	0.0%	0.0%
Two or more races	7.0%	5.5%
White	84.6%	86.7%

Approximately 156 teachers are employed by the district. Of the 156 teachers, approximately 30 were surveyed. Additionally, nearly 50 percent of the teachers have an average of 15 years of experience or more. The district special education program consists of learning support and life skills support. A total of 18 special education teachers are employed, with 15 serving the learning support program and three teachers serving the life skills support program. The breakdown of teaching staff for the district and the middle school can be found in Table 5: Inquiry Setting Teacher Data.

**Table 5. Inquiry Setting Teacher Data**

Description	District	Middle School
Number of teachers	156	30
Number of learning support teachers	15	3
Number of life skills support teachers	3	1
Number of paraprofessionals	30	5



The special education population of the District has not exceeded 14 percent or declined below 12 percent over the past five school years. The percent of special education population by disability can be found in Table 6: Special Education Population – District.

**Table 6. Special Education Population – District**

Disability	District (n=255)	High School (n=91)	Middle School (n=64)	Elementary A (n=59)	Elementary B (n=41)
Autism	14.11%	20.88%	9.37%	11.86%	9.76%
Emotional Disturbance	8.63%	13.19%	9.37%	1.69%	7.32%
Hearing Impairment	2.75%	2.20%	4.69%	1.69%	2.43%
Intellectual Disability	3.53%	4.40%	3.13%	5.10%	0%
Multiple Disabilities	0.78%	1.10%	1.56%	0%	0%
Other Health Impairment	22.35%	31.87%	12.5%	16.95%	24.39%
Specific Learning Disability	32.16%	23.07%	53.13%	27.12%	26.83%
Speech or Language Impairment	15.69%	3.29%	6.25%	35.59%	29.27%

The District boasts high inclusion rates for students with disabilities. Nearly 70 percent of all special education students are included in general education classrooms for 80 percent of the school day or more, which is nearly 10 percent higher than the state average. Additionally, multiple supports and services are offered to students with disabilities, both inside and outside of the general education classroom. To promote the success of students with disabilities and the implementation of an inclusive school setting, a purposeful and effective co-teaching model is required. Therefore,

the inquiry setting of this district and middle school are ideal settings to conduct this research and program evaluation.

### **3.4 Participants**

The participants in this study included general education and special education teachers at the inquiry site who have participated in a co-teaching model in the past five years.

A mixed methods design included a survey, two focus groups, and individual interviews with focus group participants. For the survey, a sample of 30 teachers were invited to participate, which allowed for a projected response rate of 75 percent, or 23 teachers from across the school district. Of the 30 teachers invited to participate in the survey, 83 percent (25 teachers) completed the survey. Following the survey, two focus groups were conducted with teachers at the middle school. One group included five general education middle school teachers (two English Language Arts teachers and three mathematics teachers representing grades 6-8), and the second group consisted of three special education middle school teachers (learning support teachers representing grades 6-8), all of whom have participated in a co-teaching classroom in the past five years. Last, the individual interviews included all of the participants (8 teachers) from both focus groups to allow for teachers a final opportunity to share their experiences and opinions privately.

### 3.5 Instrumentation

For this mixed methods study, three instrumentation methods were used. First, the survey instrument, “Co-Teaching Survey” (see in Table 7) was created in Qualtrics. This survey was adapted from The Co-Teaching Experiences and Attitudes Survey (CEAS) developed by Pancsofar and Petroff (2013). The survey includes 20 questions with various response formats: multiple choice, rank order, yes/no, and short answer. The survey also includes demographic questions to determine participants’ number of years teaching, number of years as a co-teacher, and content taught.

**Table 7. Co-Teaching Survey**

Question	Answer Type	Question Type
1. How many years of professional teaching experience do you have?	Multiple choice (1-3, 4-7, 8-10, 11 or more)	Demographic
2. How many years have you been employed as a teacher with the district?	Multiple choice (1-3, 4-7, 8-10, 11 or more)	Demographic
3. What level do you currently teach?	Multiple choice (HS, MS, Elementary)	Demographic
4. Since gaining employment within the district, how many years have you participated in a co-teaching model?	Multiple choice (1-3, 4-7, 8-10, 11 or more)	Demographic
5. What level did you teach while you participated in a co-teaching model?	Multiple choice (HS, MS, Elementary)	Demographic
6. Please indicate if you were the general education teacher or special education while co-teaching.	Multiple choice (General Education Teacher, Special Education Teacher, Both)	Demographic

**Table 7** continued

7. Please indicate the course name that you co-taught (i.e. Language Arts, Algebra, Chemistry, etc.)	Text entry	Demographic
8. When you served in a co-taught setting, did you volunteer to teach in this role?	Multiple choice (Yes/No)	Demographic
9. Approximately how many co-teachers have you taught with in this school district?	Multiple choice (1, 2, 3, 4, 5, 6 or more)	Demographic
10. Of the co-teaching approaches shown below in the table, please rate how likely you were to implement each model per week: -One Teach, One Observe -Station Teaching -Parallel Teaching -Alternative Teaching -Team Teaching -One Teach, One Assist	Multiple choice (Likert-single answer; 5 options)	Inquiry question
11. Of the co-teaching models shown below in the table, please rank order the most preferred by dragging the models to the top (1 = most preferred, 6 = least preferred) -One Teach, One Observe -Station Teaching -Parallel Teaching -Alternative Teaching -Team Teaching -One Teach, One Assist	Rank (1-6)	Inquiry question

**Table 7** continued

<p>12. Answer the following questions using the scale below:</p> <ul style="list-style-type: none"> <li>-How comfortable are you with understanding the purpose of a co-teaching model?</li> <li>-How comfortable are you with using different approaches to co-teaching?</li> <li>-How comfortable are you with engaging in co-planning with a co-teacher?</li> <li>-How comfortable are you with sharing responsibilities with a co-teacher?</li> <li>-How comfortable are you with using problem solving strategies with a co-teacher?</li> <li>-How comfortable are you with handling conflict with a co-teacher?</li> </ul>	<p>Multiple choice (<i>Matrix table, Likert-single answer; 5 options</i>)</p>	<p>Inquiry question</p>
<p>13. Answer the following questions using the scale below:</p> <ul style="list-style-type: none"> <li>-How comfortable are you with identifying the needs of students with disabilities?</li> <li>-How comfortable are you with being an IEP team member and understanding IEP documents?</li> <li>-How comfortable are you with providing differentiated instruction to students with disabilities?</li> <li>-How comfortable are you with creating modifications/ accommodations to meet the needs of students with disabilities?</li> <li>-How comfortable are you with providing instruction that meets the needs of students with disabilities as well as general education students?</li> </ul>	<p>Multiple choice (<i>Matrix table, Likert-single answer; 5 options</i>)</p>	<p>Inquiry question</p>

**Table 7** continued

<p>14. In your professional teaching career, how often did you have the opportunity to learn about the following practices:</p> <ul style="list-style-type: none"> <li>-Co-teaching models</li> <li>-Different approaches to co-teaching</li> <li>-Co-planning with a co-teacher</li> <li>-Shared teaching responsibilities with another teacher</li> <li>-Problem-solving strategies with a co-teacher</li> </ul>	<p>Multiple choice (<i>Matrix table, Likert- single answer; 5 options</i>)</p>	<p>Inquiry question</p>
<p>15. In your professional teaching career, how often did you have the opportunity to learn about the following practices:</p> <ul style="list-style-type: none"> <li>-Identifying the needs of students with disabilities</li> <li>-Providing differentiated instruction to students with disabilities</li> <li>-Creating modifications/accommodations to meet the needs of students with disabilities</li> <li>-Providing instruction that meets the needs of students with disabilities as well as general education students</li> <li>-Being an IEP team member and understanding the IEP documents</li> </ul>	<p>Multiple choice (<i>Matrix table, Likert- single answer; 5 options</i>)</p>	<p>Inquiry question</p>
<p>16. As it applies to this research setting, please indicate your level of agreement with the following statements:</p> <ul style="list-style-type: none"> <li>-The support provided to students with disabilities in co-taught classrooms is generally sufficient</li> <li>-Students with disabilities learn more in co-taught classrooms than in special education resource rooms</li> <li>-General education students benefit from being in a co-taught classroom</li> <li>-Students with disabilities in co-taught classrooms develop a better sense of as a learner.</li> </ul>	<p>Multiple choice (<i>Matrix table, Likert- single answer; 5 options</i>)</p>	<p>Inquiry question</p>

**Table 7** continued

<p>17. As it applies to this research setting, please indicate your level of agreement with the following statements.</p> <ul style="list-style-type: none"> <li>-Co-teaching is typically embraced by all staff members</li> <li>-<b>School</b> administration is supportive in overseeing, assisting, and evaluating co- taught classrooms</li> <li>-<b>District</b> administration is supportive in overseeing, assisting, and evaluating co- taught classrooms</li> <li>-Co-teaching leads to better collaboration among teachers</li> <li>-Co-teaching leads to more inclusive school environments</li> </ul>	<p>Multiple choice (<i>Matrix table, Likert-single answer</i>)</p>	<p>Inquiry question</p>
<p>18. During your time as a co-teacher, please indicate to what extent the following occurred:</p> <ul style="list-style-type: none"> <li>-Participated in co-planning with the co- teacher</li> <li>-Participated in grading of assignments and assessments with the co-teacher</li> <li>-Reviewed IEP information with the co- teacher (i.e. specially designed instruction, goals, present levels of performance)</li> <li>-Participated in curriculum professional development with the co-teacher</li> <li>-Participated in professional development, specific to co-teaching, with the co- teacher</li> </ul>	<p>Multiple choice (<i>Matrix table, Likert-single answer</i>)</p>	<p>Inquiry question</p>

**Table 7** continued

19. Please indicate to what extent the following factors were barriers to successful co-teaching implementation. -Co-planning -Building schedule -Content -Difficulty managing behaviors -Personality differences with co-teacher -Professional Development -Other (open response)	Multiple choice ( <i>Matrix table, Likert-single answer</i> ); open response	Inquiry question
20. Your feedback and opinions are important to this study. Please use the space below if you have additional feedback regarding the co-teaching and inclusion practices within this research setting.	Short answer	Inquiry question

Second, the focus group questions (found below in Table 8) were adapted from the guiding questions used in Phillip Woods' (2017) dissertation titled *Perceptions of Secondary Teachers on the Co-Teaching Model: An Examination of the Instructional Practices in Co-Teaching Classrooms in Western Pennsylvania*. Additionally, each interview question relates to at least one element of the Co-Design Model (Barger-Anderson et al., 2010). The Co-Design elements were also used when analyzing the data from the focus group.



**Table 8. Focus Group Questions for General Education and Special Education Teachers**

Focus Group Interview Question	Co-Design Model Element
1. Describe how you and your co-teacher initially designed how to implement co-teaching within your class.	Co-instruction, Co-design time, Assembly of site
2. Describe the strengths for the current co-teaching strategies in place in this school.	Co-instruction, Leadership, Curriculum knowledge
3. Describe the weaknesses for the current co-teaching strategies in place in this school.	Co-instruction, Leadership, Curriculum knowledge
4. Describe the approach to planning and implementation of co-teaching taken by your school/district.	Co-instruction, Co-design time, Leadership, Assembly of site
5. How would you characterize the planning and collaboration between you and your co-teaching partner? a. How could this process be improved?	Co-instruction, Co-design time, Assembly of site
6. How do you decide on responsibilities with your co-teacher in regards to: a. Classroom management b. Student discipline c. Parent communication d. Assessment/grading e. Instruction f. Special education paperwork	Co-instruction, Co-design time, Curriculum knowledge, Classroom management Adaptations, accommodations, and modifications, Assessment, Personality types
7. Describe the level of support you receive from building administrators and district administrators regarding co-teaching.	Leadership
8. Describe any professional development you have received regarding co-teaching. a. Are you in need of professional development regarding co-teaching?	Leadership, Curriculum knowledge
9. In what ways has co-teaching impacted the students in your classroom?	Co-instruction, Classroom management
10. Describe any barriers encountered when implementing an inclusive approach to serving students with special needs.	Leadership, Co-instruction, Personality type

Last, the interview questions (found below in Table 9) were created based on the findings from the survey and the focus groups. The semi-structured interviews allowed for focus group participants to share individual feedback and personal opinion.

**Table 9. 1:1 Interview Questions for Focus Group Participants**

1. Based on the focus group feedback, teachers expressed a need for clear expectations about co-teaching models and an inclusive school. What do you think the expectations should be for co-teaching partners?
2. Given the 3 essential components of a co-teaching model (co-planning, co-assessing, and co-instructing) which component do you need professional development in to strengthen your implementation of the model?
3. Do you have anything else that you would like to share that would further improve the current co-teaching model?

### **3.6 Data Collection**

All teachers currently employed at the inquiry site who have participated in a co-teaching model in the past five years received an email explaining the purpose of the study and my role as the principal investigator. The invitation to participate included the definition of co-teaching, displayed co-teaching models, and explained how the survey will be used to evaluate the current co-teaching models. An additional email was sent one week after the initial email as a reminder for completion.

All completed surveys generated data in Qualtrics. Qualtrics allowed for various data displays, charts, and percentages. It is important to note that all data in Qualtrics remained anonymous; no personal identifiable information was requested, and IP addresses were not stored. The focus groups occurred after the survey results were collected and the survey closed.

Audio recording was used to document the participants' answers during the focus groups, and transcripts were coded after both groups were complete. Prior to beginning the focus groups, participants' permission was requested in order to be audio recorded.

The individual interviews were scheduled after the focus groups were conducted. Participants were informed after the focus groups ended that the final stage of the research project would include one-on-one interviews. The questions for the individual interviews were created based on the results of the survey and focus groups. Participants' responses were logged manually rather than recorded. Data management occurred simultaneously as the surveys were being completed and stored in Qualtrics. For security and safety purposes, the data was saved continuously and files were password-protected.

### **3.7 Data Analysis**

Different forms of analysis were required for the survey, focus groups, and individual interviews. The survey data generated in Qualtrics included both rating scale questions and open-ended questions. The descriptive statistics from the rating scale questions included frequency of each response option. Because the survey included new teachers, veteran teachers, general education teachers, and special education teachers, it was imperative to consider the frequency of response patterns by groups, which allowed for powerful comparative data. The survey instrument allowed me to examine the results in numerous ways to gain a clear understanding of each teacher's pedagogical knowledge and perceptions of co-teaching and an inclusive school. Comparative data was gathered for general education teachers and special education teachers, and focused on varying

perceptions and perceived barriers. Additionally, I analyzed the open-ended questions in order to discover common themes and findings.

The focus groups allowed teachers to express their opinions freely and honestly. The interview questions included teachers' experiences with co-teaching, previous partnerships with co-teaching partners, and administrative support. Some questions were different for the two groups in order to focus on the experiences of the general education teachers or the experiences of the special education teachers. A transcription service was used to assist with providing a written account of the focus group responses.

Focus group response data was analyzed using the nine elements of the Co-Design Model (Barger-Anderson, Isherwood, & Merhaut, 2013) listed below:

1. Leadership
2. Assembly of site
3. Curriculum knowledge
4. Co-instruction
5. Classroom management
6. Adaptations, accommodations, and modifications
7. Assessment
8. Personality types
9. Co-design time

After examining all nine elements of the Co-Design model, some elements were more relevant than others when analyzing the focus group response data, but all elements were addressed when analyzing the responses.

The final source of data in this research was one-on-one interviews with each teacher who participated in the focus group interviews (n=8). Data analysis for one-on-one interviews was similar to the analysis used for the focus groups. However, because the one-on-one interviews consisted of fewer questions and were more personalized, the responses were logged rather than audio-recorded. The interview data was coded and included with the reports.

For the survey, focus groups, and individual interviews, no personal identifiable information was collected. To ensure confidentiality and privacy, pseudonyms were used to help de-identify the data. Prior to the survey and focus groups, I assured all participants that their responses would remain confidential and their identities protected.

### **3.8 Limitations**

There are limitations to this study. First, the limited sample size presented a limitation regarding the generalizability of the findings, especially for the focus groups and interviews (n = 8). Second, participant responses risked inaccuracy due to the research study occurring within my place of practice, where I serve as an administrator. I am hopeful that participants were honest; however, some responses may have depended on participants' level of trust and comfort with me, particularly in the focus groups and interviews. Because I have established professional relationships with all participants, I am hopeful that this limitation was inconsequential. Third, minimal representation existed since all participants are teachers from the same school district, which limited the feedback and findings to southwestern Pennsylvania within one organization. Last, researcher bias could present a limitation. I am an administrator at the research site, and my experience in special education may have influenced the interpretation of the data. My

understandings and interpretations guided the study, especially with the qualitative data extracted from the focus groups and interviews and open-ended question in the survey.

## **4.0 Results**

The focus of this research study is to examine current practices in the school's co-teaching models that promote inclusive schooling in order to meet the needs of special education students. This study initially explored perceptions, attitudes, and knowledge of teachers across the district through a survey, but then focused on a single middle school setting with teachers who have participated in co-teaching models within the past five years through focus groups and one-on-one interviews.

### **4.1 Surveys**

#### **4.1.1 Participant Demographics**

The survey included nine demographic questions. It was completed by 25 teachers at the inquiry site and included eight elementary teachers, 12 middle school teachers, and four high school teachers. One respondent did not answer this demographic question, resulting in a total of 24 responses for this question. Seventeen general education teachers completed the survey, and seven special education teachers completed the survey. One respondent did not answer this question, resulting in a total of 24 respondents for this question. Based on the demographic data, middle school teachers comprised almost half of the survey participants. Table 10 displays participant demographic data, including level taught. Table 11 displays the breakdown of general education teachers and special education teachers.

**Table 10. Level Currently Taught**

	Percentage	Total
Elementary	33.3%	8
Middle School	50%	12
High School	16.7%	4
Total	100%	24

**Table 11. Type of Teacher**

General Education	70.8%	17
Special Education	29.2%	7
Total	100%	24

Table 12 displays the years of professional teaching experience for the survey participants. It is important to consider that 56 percent of respondents have been teaching for 13 years or more, yet no more than 24 percent of teachers have participated in a co-teaching model for 13 years or more (shown below in Table 13). To the contrary, the highest percentage of respondents were teachers who have only participated in a co-teaching model for one to three years (32 percent).

**Table 12. Years of Professional Teaching Experience**

Years of Experience	Percentage	Total
1 to 3 years	8%	2
4 to 6 years	16%	4
7 to 9 years	8%	2
10 to 12 years	12%	3
13 or more years	56%	14
Total	100%	25



**Table 13. Years of Co-Teaching Experience**

Years of Co-Teaching Experience	Percentage	Total
1 to 3 years	32%	8
4 to 6 years	24%	6
7 to 9 years	12%	3
10 to 12 years	8%	2
13 or more years	24%	6
Total	100%	25

Table 14 displays the number of co-teachers that survey participants have taught with at the inquiry site. Seven participants (28 percent) revealed that they have co-taught with six or more teachers at the inquiry site. However, the highest number of participants (40 percent) have only co-taught with one person at the inquiry site.

**Table 14. Number of Co-Teaching Partners**

Number of Co-Teaching Partners	Percentage	Total
1 partner	40%	10
2 partners	4%	1
3 partners	20%	5
4 partners	8%	2
5 partners	0%	0
6 or more partners	28%	7
Total	100%	25

The final demographic question asked if participants had volunteered to teach in the co-taught classrooms. The responses were nearly even with 52 percent reporting “no” and 48 percent reporting “yes” (see Table 15).

**Table 15. Volunteer to Co-Teach**

No	52%	13
Yes	48%	12
Total	100%	25

#### **4.1.2 Survey Question #10**

Question 10 asked teachers to rate how likely they were to implement each co-teaching model on a weekly basis, using a Likert scale (1=extremely unlikely, 5=extremely likely) for the six co-teaching models. The responses show that teachers were not somewhat unlikely to use any of the six models. Conversely, the majority of teachers reported that they were neither likely nor unlikely to use any of the models in a week’s time. The normal distribution of this data can be considered typical for these responses. With a mean of 4.84, the majority of participants (21 out of 25) rated One Teach, One Assist as the model that they were extremely likely to implement. Table 16 lists the mean and standard deviation for the participants’ ratings.

**Table 16. Responses to Short Answer Survey Question: Rate How Likely You Are to Implement Each Model Per Week**

Answer Choice	Mean	Standard Deviation
One Teach, One Observe	2.88	1.236
Station Teaching	3.68	1.108
Parallel Teaching	3.00	1.443
Alternative Teaching	3.80	.957
Teaming	3.00	1.683
One Teach, One Assist	4.84	.374

#### **4.1.3 Survey Question #11**

For Question 11, survey participants were asked to rank order the most preferred co-teaching model to the least preferred model. Table 17 displays the models that teachers rated the most preferred and the least preferred. Nine out of 25 (36 percent) of respondents ranked One Teach, One Assist as their most preferred co-teaching model. However, 56 percent of participants ranked One Teach, One Observe as their least preferred model.

Because this data set was of an interval nature (i.e. rank order), Spearman's Rank Order Correlation was used to compare the relationship between the rankings. The relationship between One Teach, One Observe and Team Teaching, as well as the relationship between One Teach, One Assist and Team Teaching, each showed a significant correlation. The relationship between One Teach, One Observe and Team Teaching is negative ( $r = -.586$ ), meaning that teachers who ranked Team Teaching high were likely to rank One Teach, One Observe low. Further, the relationship

between One Teach, One Assist and Team Teaching is also negative ( $r = -.485$ ), meaning that teachers who ranked One Teach, One Assist high were likely to rank Team Teaching low.

**Table 17. Preferred Co-Teaching Models**

	Most Preferred		Least Preferred	
	Percentage	Count	Percentage	Count
One Teach, One Observe	4%	1	56%	14
Station Teaching	24%	6	8%	2
Parallel Teaching	8%	2	20%	5
Alternative Teaching	8%	2	0%	0
Teaming	20%	5	16%	4
One Teach, One Assist	36%	9	0%	0
Total	100%	25	100%	25

#### **4.1.4 Survey Questions #12 and #13**

Survey Questions 12 and 13 required teachers to rate their level of comfort with various co-teaching and special education practices. Question 12 asked teachers to rate their comfort level by using a Likert Scale (1=extremely uncomfortable, 5=extremely comfortable) with topics related to co-teaching implementation. Responses indicate that participants are generally comfortable with understanding the purpose and implementation of a co-teaching model. Table 18 lists response data for this question. To determine whether there were differences between general education and special education teachers' responses, a non-parametric test, the Mann-Whitney U Test, was used because the responses for this question reflected abnormal data, meaning the responses didn't fit a

normal curve. After completing this test, no significant differences were found for any of the responses to this question.

**Table 18. Co-Teaching -- Teacher Comfort Level**

	Minimum	Maximum	Mean	Standard Deviation
How comfortable are you with understanding the purpose of a co-teaching model?	3	5	4.56	.651
How comfortable are you with engaging in co-planning with a co-teacher?	3	5	4.68	.557
How comfortable are you sharing responsibilities with a co-teacher?	3	5	4.72	.614
How comfortable are you with using problem solving strategies with a co-teacher?	3	5	4.72	.542
How comfortable are you with handling conflict with a co-teacher?	2	5	4.36	.995

For Question 13, teachers were asked to identify their level of comfort by using a Likert Scale (1=extremely uncomfortable, 5=extremely comfortable) regarding educating students with disabilities in their classrooms. All teachers reported that they are either somewhat comfortable or extremely comfortable with their role as an IEP team member and educating students with disabilities (see Table 19). Similar to Question 12, the Mann-Whitney U Test was used to determine whether there were differences between general education and special education teachers' responses. This test revealed differences between special education teachers' responses and general education teachers' responses. Special education teachers' responses suggested that they are extremely comfortable (median = 4.94) with being an IEP team member and educating students with disabilities in their classrooms. General education teachers' responses reflected that

they are less comfortable than special education teachers (median = 4.52). Although different, this data is not significant given the difference in roles and responsibilities between special education and general education teachers.

**Table 19. Educating Students with Disabilities -- Teacher Comfort Level**

	Minimum	Maximum	Mean	Standard Deviation
How comfortable are you with identifying the needs of students with disabilities?	4	5	4.68	.476
How comfortable are you with being an IEP team member and understanding the IEP documents?	4	5	4.76	.436
How comfortable are you with providing differentiated instruction to students with disabilities?	4	5	4.60	.500
How comfortable are you with creating modifications/accommodations to meet the needs of students with disabilities?	4	5	4.64	.490
How comfortable are you with providing instruction that meets the needs of students with disabilities as well as general education students?	4	5	4.60	.500

#### **4.1.5 Survey Questions #14 and #15**

Survey questions 14 and 15 asked teachers to identify how often they had opportunities to learn about specific practices and items regarding co-teaching and special education. Question 14 asked teachers to report how often they had been provided the opportunity to learn about specific practices related to co-teaching. Teachers chose “rarely” (2) and “sometimes” (3), resulting in mean data points of 2.88, 2.72, 2.84, and 2.76. For each option, teachers selected “rarely” most

frequently. Finally, no significant differences were found between special education teachers' responses and general education teachers' responses. See Table 20: Co-Teaching Practices – Frequency of Opportunities to Learn.

**Table 20. Co-Teaching Practices -- Frequency of Opportunities to Learn**

	Minimum	Maximum	Mean	Standard Deviation
How frequently have you had the opportunity to learn about co-teaching models?	1	5	2.88	1.092
How frequently have you had the opportunity to learn about different approaches to co-teaching?	1	5	2.72	1.021
How frequently have you had the opportunity to learn about co-planning with a co-teacher?	1	5	2.84	1.068
How frequently have you had the opportunity to learn about shared responsibilities with another teacher?	1	5	2.84	1.143
How frequently have you had the opportunity to learn about problem-solving strategies with another teacher?	1	5	2.76	1.091

For Question 15, teachers were asked to identify how often they have been given the opportunity to learn about specific issues related to students with disabilities. Similar to Question 14, no significant differences were found between the special education teachers' ratings and the general education teachers' ratings. A Likert scale was used (1=never, 5=very often). Teachers' responses to Question 15 suggest that they have been provided more opportunities to learn about educating students with disabilities than learning about co-teaching practices. When answering Question 15, none of the participants chose "1" on the Likert Scale, representing "never." Almost half of the participants (44 percent) reported that they have sometimes been given the opportunity

to learn about providing direct instruction to students with disabilities and creating modifications/accommodations to meet the needs of students with disabilities. Over half of participants (56 percent) indicated that they have often been provided the opportunity to learn about providing instruction that meets the needs of students with disabilities as well as general education students. See Table 21: Educating Students with Disabilities – Frequency of Opportunities to Learn.

**Table 21. Educating Students with Disabilities -- Frequency of Opportunities to Learn**

	Minimum	Maximum	Mean	Standard Deviation
How frequently have you been given the opportunity to learn about identifying the needs of students with disabilities?	2	5	3.96	.935
How frequently have you been given the opportunity to learn about providing direct instruction to students with disabilities?	2	5	3.68	.852
How frequently have you been given the opportunity to learn about creating modifications/accommodations to meet the needs of students with disabilities?	2	5	3.68	.852
How frequently have you been given the opportunity to learn about providing instruction that meets the needs of students with disabilities as well as general education students?	2	5	3.88	.833
How frequently have you been given the opportunity to learn about being an IEP team member and understanding the IEP documents?	2	5	4.00	.957



#### 4.1.6 Survey Questions #16 and #17

Questions 16 and 17 asked teachers to rate their level of agreement or disagreement regarding their opinions about co-teaching classrooms and potential benefits. For both questions, no significant differences were found between special education teachers' responses and general education teachers' responses. For Question 16, teachers were asked to rate their level of agreement or disagreement regarding their overall beliefs and attitudes about co-teaching. A Likert scale was used (1=strongly disagree, 5=strongly agree). The highest level of agreement came from the statement indicating that the support provided to students with disabilities in co-taught classrooms is generally sufficient (mean=4.24). Responses are listed in Table 22: Beliefs and Attitudes About Co-Teaching – Level of Agreement.

**Table 22. Beliefs and Attitudes about Co-Teaching -- Level of Agreement**

	Minimum	Maximum	Mean	Standard Deviation
The support provided to students with disabilities in co-taught classrooms is generally sufficient.	2	5	4.24	.723
Students with disabilities learn more in co-taught classrooms than in special education resource rooms.	3	5	4.04	.735
General education students benefit from being in a co-taught classroom.	2	5	4.20	.913
Students with disabilities in co-taught classrooms develop a better sense of self as a learner.	2	5	4.40	.764

For Question 17, teachers were asked to rate their level of agreement or disagreement regarding co-teaching and special education as they relate to other stakeholders, including staff members, school administration, and district administration. A Likert scale was used (1=strongly disagree, 5=strongly agree). The highest levels of agreement came from the statements indicating that co-teaching leads to better collaboration among teachers (mean=4.48) and that co-teaching leads to more inclusive school environments (mean=4.72). Responses are listed in Table 23: Co-Teaching and Stakeholders – Level of Agreement.

**Table 23. Co-Teaching and Stakeholders -- Level of Agreement**

	Minimum	Maximum	Mean	Standard Deviation
Co-teaching is typically embraced by all staff members.	2	5	3.50	1.022
School administration is supportive in overseeing, assisting, and evaluating co-teaching classrooms.	2	5	4.00	1.041
District administration is supportive in overseeing, assisting, and evaluating co-taught classrooms.	1	5	3.52	1.122
Co-teaching leads to better collaboration among teachers.	2	5	4.48	.823
Co-teaching leads to more inclusive school environments.	4	5	4.72	.458

#### **4.1.7 Survey Question #18**

Question 18 asked teachers to identify how often they participated in specific tasks with their co-teachers. No significant differences were found between special education teachers’

responses and general education teachers' responses to Question 18. A Likert scale was used (1=never, 5=very often). Teachers' responses show that most teachers (88 percent) have sometimes (3), rarely (2), or never (1) participated in professional development specific to co-teaching with their co-teacher (mean=2.44). Additionally, nearly 84 percent of teachers reported that they often review IEP information with their co-teachers (mean=4.40). See Table 24: Collaboration with Co-Teacher – Level of Frequency.

**Table 24. Collaboration with Co-teacher -- Level of Frequency**

	Minimum	Maximum	Mean	Standard Deviation
Indicate the extent you participated in co-planning with the co-teacher.	1	5	4.20	1.080
Indicate to what extent you participated in grading of assignments and assessments with the co-teacher.	1	5	3.04	1.136
Indicate to what extent you reviewed IEP information with the co-teacher.	3	5	4.40	.764
Indicate to what extent you participated in professional development, specific to curriculum, with the co-teacher.	1	5	3.32	1.406
Indicate to what extent you participated in professional development, specific to co-teaching, with the co-teacher.	1	5	2.44	1.227

#### **4.1.8 Survey Question #19**

Question 19 asked teachers to identify if certain factors presented barriers to successful co-teaching implementation. The identified barriers included co-planning, building schedule, content, difficulty managing student behaviors, personality differences with co-teacher, and professional

development. Teachers also had the option to write in their own barriers, and even though four participants identified “other,” no one added a specific barrier. The majority of teachers (84 percent) identified personality differences with co-teacher as rarely (2) or never (1) being a barrier to successful implementation of co-teaching (mean=1.56). After conducting an independent-samples t-test to determine differences between special education teachers and general education teachers, it was determined that overall, special education teachers reported that they encounter barriers more frequently than general education teachers. However, this difference was quite small, resulting in minimal significance. Table 25 displays the responses for Question 19.

**Table 25. Barriers to Co-Teaching -- Level of Frequency**

Indicate to what extent the following factor was a barrier to successful co-teaching implementation:	Minimum	Maximum	Mean	Standard Deviation
Co-planning	1	5	2.36	0.97
Building schedule	1	5	3.20	1.23
Content	1	5	2.13	0.97
Difficulty managing behaviors	1	5	2.96	0.96
Personality difference with co-teacher	1	3	1.56	0.75
Professional development	1	5	2.68	1.12
Other	3	5	4.00	0.71

#### **4.1.9 Survey Question #20**

The final survey question was an open-ended question that allowed teachers to share opinions about the current co-teaching practices and suggestions for improvement. Six participants

chose to include a statement. The responses included feedback about experiences with co-teaching as well as constructive feedback regarding continued improvement for co-teaching and special education programming. One teacher revealed:

*I think some teachers are still struggling with the idea of full inclusion in general and are typically panicked to find out that they have students with learning or behavioral disabilities in their classrooms as they feel uncomfortable addressing the issues the students can bring to the classrooms.*

Another teacher shared:

*I have had tremendous co-teaching relationships that have benefited students in extremely positive ways. The consistent changes in personnel or scheduling make developing those strong relationships really difficult. As a result, the model is less effective at times.*

Opinions about the benefits of co-teaching and inclusive practices were also shared: *Inclusion in the classroom is a benefit to all. Students with disabilities thrive when being taught with their regular education peers. Both sets of students learn valuable life lessons by sharing the classroom experience.*

*I think co-teaching and inclusion benefits all students, special education and regular education. You can build positive relationships with all students, and you can work well as a team with your co-teacher.*

## **4.2 Focus Groups**

### **4.2.1 Participant Demographics**

The special education teacher focus group included three learning support teachers who support students in grades 6, 7, and 8. The participants have been employed with the district as special education teachers for at least 10 years. It is important to note that all three of the special education teachers currently participate in both English language arts and mathematics co-taught classrooms with general education teachers.

The general education teacher focus group included five general education teachers who support students in English language arts or mathematics in grades 6, 7, and 8. Three of the participants were math teachers, and two were English language arts teachers. The participants have varied years of experience as general education teachers with the district. Three teachers have 10 years of experience or less with the district and 2 teachers have over 15 years of experience with the district. All of the general education teachers have participated in a co-taught classroom within the past five years.

### **4.2.2 Inquiry Question #1**

*What pedagogical knowledge do teachers have that enhance their ability to support an inclusive school?*

This question sought to examine teachers' knowledge of co-teaching and co-teaching models, determine their professional development experience around co-teaching and inclusion,

and show any education and training that the school district has provided to them on co-teaching and inclusive schools.

Many of the survey questions supported this inquiry question, in addition to focus group Questions 1 and 8, which required teachers to describe how they designed implementation of co-teaching, describe any professional development they have received regarding co-teaching, and share if they were in need of professional development regarding co-teaching.

Question 1 asked teachers to share how they initially implemented co-teaching in their classrooms. Both general education and special education teachers focused their answers on time spent in common planning and differentiating lesson plans so that both teachers knew their instructional responsibilities.

For Question 8, three out of eight teachers (37.5 percent) stated that they had received professional development on co-teaching within the past two years. The other five participants (62.5 percent) revealed they had never received professional development or training related to co-teaching or supporting an inclusive school. Additionally, all focus group participants reported that they were in need of professional development related to co-teaching.

#### **4.2.3 Inquiry Question #2**

*What elements of implementing co-teaching models are most important for teachers?*

This question sought to highlight teachers' feedback and insights regarding the current co-teaching models as well as areas of growth for the implementation of those models. Two focus group questions addressed this inquiry question. Question 3 asked teachers to identify weaknesses for the current co-teaching strategies in place, and Question 5 asked teachers to identify areas of improvement for the planning and collaboration processes between co-teaching partners. For both

of these focus group questions, general education teachers and special education teachers responded differently.

For Question 3, general education teachers identified the many roles and responsibilities of special education teachers as a perceived weakness for current co-teaching strategies. They expressed that the additional responsibilities for special education teachers can sometimes disrupt the co-teaching schedule and models. For example, one teacher responded:

*For me it is the other responsibilities that our co-teachers have, so we can't always count on them being there on time. Sometimes we have group activities planned and a student may be having a meltdown, so I am on my own, plan B. That fluctuates a lot by year and by the student population.*

Another teacher followed up by saying:

*Sometimes we have to find a different way . . . the ability to adjust on my own and being able to make those changes myself has been good.*

Special education teachers answered Question 3 in a different way. They discussed general education staff turnover, inconsistent flexibility, and willingness to co-teach demonstrated by general education teachers, and lack of training and professional development as weaknesses of the co-teaching strategies currently in place. One veteran teacher stated:

*Staff turnover - I have had nine different English language arts teaching partners in 11 years. Math used to have a high level of turnover, but it's been more consistent for me more recently, but I've still had six, I think, co-teachers for math during that time.*

In addition to staff turnover, special education teachers also discussed the need for training and professional development for all co-teachers, not only regarding co-teaching but also



curriculum. Finally, two of the special education teachers mentioned the lack of flexibility and willingness that general education teachers have had in the past. One teacher explained:

*While a strength is willingness, in the past it has been a weakness. Right now, I work with people that are very willing to implement co-teaching models, but that hasn't always been the case and it makes a huge difference in the benefits. Similar with flexibility - it can be a strength if people are flexible, but a major weakness if they are not.*

For Question 5, teachers were asked to identify areas of improvement to the planning and collaboration process between co-teachers. General education teachers' areas of improvement focused on time. They suggested that a specific, uninterrupted time once per week devoted to co-teaching planning and collaboration would be helpful. Additionally, they mentioned the need for more time, possibly once per month, to look ahead at units and develop plans. Finally, the teachers discussed time to analyze and use data more frequently to benefit the students in co-taught classrooms. One teacher suggested:

*We have so much data that it would be nice to kind of plan around that more.*

Another teacher added:

*We could really use more of the data that we have collected to build specific groups.*

Special education teachers offered different improvement suggestions for Question 5. Even though they mentioned specific recommendations about use of planning time, they thought time should be devoted to co-teaching models and aligning the models to lesson plans. One teacher suggested an improvement to the overall collaboration process:

*I think it might be beneficial too for all math teachers or English language arts teachers to get together and share. Maybe other co-teachers are doing something that really works that I have never thought of.*

Even though responses differed between focus groups, both groups of teachers provided specific and observable factors that need to be addressed and developed to improve the implementation of co-teaching models at the inquiry site.

#### **4.2.4 Inquiry Question #3**

*What attitudes, beliefs, and perceptions do general education teachers have of co-teaching and inclusive practices?*

Numerous focus group questions supported this inquiry question. Questions 2, 6, and 9 all addressed general education teachers' attitudes and beliefs regarding co-teaching and inclusive practices.

Question 2 asked teachers to describe strengths for the current co-teaching strategies in place. The five general education teachers all identified various strengths of current co-teaching strategies. Some of these strengths included common planning time and willingness to collaborate as well as specific strengths of the special education teachers, like knowledge of students and communication with families of students with disabilities. One teacher discussed the importance of successful collaboration between the general education teacher and the special education teacher:

*When I met my co-teacher, I didn't know her. So just the willingness to work together and not be afraid to share ideas and to communicate and then to build on that has been really cool.*

Another teacher spoke about the benefits of co-teaching and inclusion for all students, not just students with disabilities:

*Everyone benefits from a co-teaching experience. We would never group the students with special needs and group the students without when we do our small groups. Instead, we group students who may need help with specific skills.*

Question 6 provided teachers with a list of various responsibilities and asked teachers to identify if the responsibilities were typically individual or collective with the special education teacher. The responsibilities included classroom management, student discipline, parent communication, assessment/grading, instruction, and special education paperwork. Of these responsibilities, the general education teachers agreed that classroom management, student discipline, parent communication, and instruction were equal responsibilities with the special education teachers. When the group was asked about assessment and grading, four out of the five teachers answered “individual” and one teacher responded “collective.” One teacher explained that the special education teacher will provide input on adaptations or modifications. Another teacher explained:

*When it comes to grading assessments, it is all one person. And I think it needs to be for consistency purposes; however, I think a different person could grade the assessments each time, which is not occurring.*

Special education paperwork was also a responsibility that respondents reported was mostly individual to the special education teacher. However, one teacher reported the following:

*We all feel pretty comfortable. If there was a specially designed instruction that I thought was important, I would feel comfortable saying that, and I think the special education teacher would take that input.*

Question 9 asked teachers to describe how co-teaching has impacted the students in their classrooms. All five teachers reported the positive impact that co-teaching has had on all students in their classrooms. One teacher responded:

*Anytime you have two teachers who are able to circulate through a classroom of 20 or 25 kids, that makes a huge impact. The kids know that both teachers have the answers and the same amount of knowledge.*

Identifying the attitudes and beliefs of general education teachers about co-teaching and inclusive practices is an important component to this research study. These attitudes and beliefs, as well as a comparison to special education teachers' attitudes and beliefs, are examined in a later section.

#### **4.2.5 Inquiry Question #4**

*What attitudes, beliefs, and perceptions do special education teachers have of co-teaching and inclusive practices?*

Focus group questions that supported this inquiry question included Questions 2, 6, and 9. These questions addressed special education teachers' attitudes and beliefs about co-teaching and inclusive practices.

Question 2 asked special educators to describe strengths for the current co-teaching strategies in place. The three special education teachers agreed that weekly common planning time was a definite strength, as well as overall willingness of staff to implement the co-teaching models. One teacher added:

*I feel like it's just kind of ingrained in our school and that's what it is, that that's the mindset, so people are very willing to implement co-teaching.*

Question 6 provided teachers with a list of various responsibilities and asked teachers to identify if the responsibilities were typically individual or collective with the general education teacher. The responsibilities listed included classroom management, student discipline, parent communication, assessment/grading, instruction, and special education paperwork. Of these responsibilities, the special education teachers reported that classroom management, student discipline, and instruction are collective responsibilities shared between the general education and special education teachers. For parent communication, the teachers agreed that this responsibility depends on the situation and characterized it as collective. For assessment/grading, two of the special education teachers reported that they provide input on the creation of assessments and accommodations for students on assessments. One teacher responded:

*For the test format and test layout or even the test questions I provide suggestions.*

*But that's mainly the regular education teacher who does the grading of the assessment.*

In terms of special education paperwork, the special education teachers reported that this is an individual responsibility.

Question 9 asked teachers to describe how co-teaching has impacted the students in their classrooms. The three special education teachers agreed that all students are positively impacted by co-teaching. One teacher spoke about how special education students specifically benefit:

*I personally feel like it just changes how they view themselves. It increases their self-esteem. It challenges them more. I feel like they try to kind of hold it together more than they do in a small group environment.*

Another teacher added:

*I feel like it benefits all students. Whether those identified or not, just to have two teachers there supporting them and strategizing, being able to do more of the group*

*rotations or give individualized assistance in a more timely fashion to anyone in the class. Those kinds of things are beneficial for all of the students. And I think in particular, I've seen students who if they would have been in a pulled-out math class, for example, they just wouldn't be exposed to the same level of depth.*

Examining special education teachers' attitudes and beliefs about co-teaching as well as inclusive practices is an important component to this research. Allowing for comparative analysis between the special education teachers' responses and the general education teachers' responses is an important component to this study.

#### **4.2.6 Inquiry Question #5**

*How can school principals promote inclusive schools by supporting effective co-teaching instructional models?*

This question sought teachers' feedback and insights regarding support received from building and district administrators for co-teaching and inclusive schools. Two focus group questions addressed this inquiry question. Question 4 asked teachers to describe the approach to planning and implementation of co-teaching taken by the school and district, and Question 7 asked teachers to describe the level of support they have received from building and district administrators regarding co-teaching.

For Question 4, both focus groups described similar approaches to planning and implementation of co-teaching at the school level and at the district level. Teachers shared that expectations for co-teaching had never been shared. One general education teacher explained:

*I guess I don't really know what the expectations really are, building or district-wide. We plan together because it's helpful for us. But I don't know whether that's an*

*expectation that planning actually happens once a week or how often it's supposed to happen. Expectations would be helpful.*

The teachers also shared that their voice and choice is typically not considered when planning for co-teaching classrooms. Yet, all the teachers are provided common planning time with their co-teaching partner. A special education teacher shared:

*We've been told that we're co-teaching, but beyond that, I think it's been pretty much do your thing. I think more recently there's been an expectation that we do meet, which we were doing anyway in terms of getting together, but definitely nothing that's been communicated to me in a more formal way than that.*

When answering Question 4, both special education and general education teachers communicated the desire for clear directives and expectations for co-teaching partners, as well as professional development and administrative support that addresses co-teaching and inclusive practices.

Question 7 asked teachers to describe the level of support that they have received from building and district administrators regarding co-teaching. Teachers spoke positively about the support that they receive from building administration. One special education teacher stated:

*Administration is definitely supportive. They allow us the common planning time. I think it's a focus and they go through the scheduling process to make sure that we have kids that are in classes where their needs can be met the most through a co-taught environment. So I think the administration is definitely supportive in that regard.*

Another special education teacher added:

*I feel like co-teaching is just the mindset here, so I feel like it's very supportive by district and building administrators.*

A general education teacher shared similar feedback but included:

*Administrative support has definitely improved over my 14 years, but there still are not directives and I don't know if all teachers would want clear directives of what co-teaching should look like, but if they exist we probably need better clarification.*

When answering Question 7, the general education teachers shared that district administrative support has not existed. Additionally, they explained that minimal professional development opportunities have been offered or scheduled for the general education teachers. One teacher described a training she received from the local intermediate unit two years ago, but the other teachers stated they have never received training that addresses co-teaching.

### **4.3 One-on-One Interviews**

#### **4.3.1 Participant Demographics**

The one-on-one interviews included the same teachers who participated in the focus groups: three learning support teachers who support students in grades 6, 7, and 8, and five general education teachers who support students in English language arts or mathematics in grades 6, 7, and 8. All eight teachers have participated in a co-taught classroom within the past five years at the middle school inquiry site. Following the survey and focus group interviews, three interview questions were developed based on the responses from the survey and focus group interviews.



#### 4.3.2 Interview Question #1

*Based on the focus group feedback, teachers expressed a need for clear expectations about co-teaching models and an inclusive school. What do you think the expectations should be for co-teaching partners?*

Three common themes were discovered after all eight participants responded to this interview question. The most frequent answers included common and collaborative planning, understanding and knowledge of co-teaching, and shared responsibility. Seven out of the eight teachers (87 percent) responded with an answer that included common and/or collaborative planning. For understanding and knowledge of co-teaching, 87 percent of teachers mentioned this theme in their answer during the interview. The final theme, shared responsibility, was discussed by five out of eight teachers (62 percent).

It is important to mention that teachers' answers included other themes, such as types of co-teaching models and use of data, but only two teachers mentioned these themes in their answers. The final theme included in three teachers' answers was willingness or dedication. Even though only 37 percent of participants mentioned this theme, it is significant to mention in the report of the data.

### 4.3.3 Interview Question #2

*Given the three essential components of a co-teaching model (co-planning, co-assessing, and co-instructing), which component do you need professional development in to strengthen your implementation of the model?*

The survey and focus group data consistently make clear that teachers had not been provided professional development on co-teaching over the past several years, which led to this question on specific components of co-teaching. Seven out of eight teachers (87 percent) revealed that co-assessing was the component for which they most needed professional development in order to strengthen the implementation of co-teaching. For the teachers, co-assessing refers not only to the creation of the assessments but also the grading of the assessments. The majority of the general education teachers (80 percent) mentioned that creation of assessments and grading assessments is not a shared responsibility with the special education teacher, even though they would like it to be a shared task.

Furthermore, the special education teachers shared that they provide input regarding accommodations for assessments but face obstacles with co-assessing in the co-teaching classroom. One special education teacher shared, “My strength is not English language arts, so assessing writing and other skills is not a strength.” Another special education teacher added that barriers to assessing and grading exist, especially for students with special needs. That teacher explained, “Students with disabilities in co-taught classrooms are assessed on grade level material, so it is difficult to modify or change benchmark assessments or classroom-based assessments.”

#### **4.3.4 Interview Question #3**

*Do you have anything else that you would like to share that would further improve the current co-teaching model?*

This question allowed teachers to share any final thoughts about co-teaching and how it could continue to improve. Several themes were mentioned in the teachers' answers that mirrored the themes derived from the focus group interviews. These themes included common planning, clear expectations, willingness to participate, and relationship between the co-teachers.

Three out of eight (37 percent) participants mentioned the importance of both teachers demonstrating a willingness to participate in the co-teaching classroom. Approximately half of the teachers (50 percent) discussed the importance of the relationship between co-teachers, and some respondents suggested relationship-building strategies that teachers should engage in to build a more positive rapport. Two teachers (25 percent) mentioned clear expectations that should be in place in order for the co-teaching models to improve. Two teachers also mentioned protected common planning time, not just scheduling common planning time, so that schedules are not disrupted for various reasons (i.e. coverage, meetings, etc.). One teacher discussed the importance of consistency across all school buildings to ensure successful transition for students from one co-teaching classroom to another.

#### **4.4 Data Analysis Using Co-Design Elements**

The Co-Design Model for collaborative instruction guides educators and administrators when planning for successful co-teaching and promoting an inclusive school environment. The

Co-Design Model consists of nine elements: Leadership; Assembly of Site; Curriculum Knowledge; Co-instruction; Classroom Management; Adaptations, Accommodations, and Modifications; Assessment; Personality Types; and Co-Design Time. After considering all nine elements of the Co-Design model, some were more applicable than others when analyzing the response data from the surveys, focus groups, and interviews. These elements include Leadership, Co-instruction, and Assessment.

#### **4.4.1 Leadership**

The Leadership element emphasizes the crucial need for administration to ensure sustainability, reinforcement, and commitment throughout the collaborative initiative. Based on the response data, administration provided minimal opportunities for professional development that would increase teachers' pedagogical knowledge on co-teaching and inclusion. According to the survey data, fewer than half of the teachers strongly agreed that school administration is supportive in overseeing, assisting, and evaluating co-taught classrooms. Additionally, fewer than a quarter of teachers strongly agreed that district administration is supportive in overseeing, assisting, and evaluating co-taught classrooms. Similar responses about administration were shared in the focus groups as well.

Although school administration provides common planning time for co-teachers, teachers suggested a need for “protected” common planning time so that co-teachers are guaranteed this time on a weekly basis. Teachers also shared the need for clear expectations for common planning. Utilization of data, alignment to IEP documents, and implementation of specific co-teaching models are examples of potential expectations for co-teachers during common planning time.

Clear expectations were discussed by many teachers in the focus groups and the one-on-one interviews. Teachers shared concerns that expectations have not been communicated in regard to co-teaching, leading most teachers to believe that expectations do not exist.

#### **4.4.2 Co-instruction**

Co-instruction is an important element of the Co-Design Model that aligned with the inquiry questions. Co-instruction refers to professionals who are engaged in a consistent and routine collaborative effort for the implementation of instructional practices. It stresses the importance of collaboration in an inclusive setting through instruction and professionalism (Barger-Anderson, Isherwood, & Merhaut, 2013). Important factors to consider for this element include models of co-teaching and a consistent partnership.

Both in the focus groups and interviews, special education teachers especially discussed struggles associated with inconsistent co-teaching partners over the years. One special education shared in the focus group:

*I have had nine different English language arts teaching partners in 11 years. Math used to have a high level of turnover, but it's been more consistent for me more recently, but I've still had six, I think, co-teachers for math during that time.*

The survey revealed that 56 percent of teachers have co-taught with three or more partners, and nearly 30 percent of teachers have co-taught with six or more co-teaching partners. However, consistent partnerships and professionalism are both enhanced when co-teaching partners remain consistent over time (Barger-Anderson, Isherwood, & Merhaut, 2013).

Models of co-teaching are important factors of Co-instruction. According to the survey data, over half of teachers (56 percent) reported that they had rarely or never participated in

professional development on co-teaching. Additionally, almost half of the teachers (44 percent) reported that they have rarely been given the opportunity to learn about co-teaching models. Furthermore, approximately half of the teachers (48 percent) revealed that they had rarely been given the opportunity to learn about different approaches to co-teaching. Even though it is recommended that teachers utilize approaches like Station Teaching, Parallel Teaching, and Alternative Teaching more frequently in order to target specific skills and to provide small group instruction to students, only 20 percent of teachers reported that they were extremely likely to use these approaches throughout the week. Conversely, 84 percent of teachers identified One Teach, One Assist as the model they were most likely to use throughout the week.

#### **4.4.3 Assessment**

Assessment is critical to any classroom. Assessment in the co-teaching environment requires dialogue and agreement between the co-teaching partners in terms of types and frequency of assessments (Barger-Anderson, Isherwood, & Merhaut, 2013). Co-assessment also refers to assessment, both formative and summative, that results in grades for students.

The survey data revealed that 36 percent of teachers sometimes participate in grading assessments with their co-teaching partners, 16 percent revealed they sometimes grade assessments with their partners, and 12 percent shared that they never grade together. During the focus groups, teachers expressed a desire to participate in co-assessing. In the interviews, when asked about an area for which there is a professional development need, nearly 88 percent of teachers chose co-assessment. In the general education teacher focus group, one teacher shared:

*Creating assessments is mostly an individual responsibility that the general education teacher has, but the special education teacher will provide input on adaptations.*

When asked about grading of the assessments, one general education teacher stated that grading assessments is a collective responsibility, and another teacher interjected:

*I would love for that to be more collective. When it comes to tests and quizzes, one person assesses the students. And it should be for consistency purposes, but I think it could be a different person each time.*

Co-teaching requires collaboration between teachers to engage in co-planning, co-instructing, and co-assessing. A need exists at the inquiry site for co-assessment strategies to be considered as part of the co-teaching classrooms.

## **5.0 Summary and Conclusions**

This chapter contains a summary of the study, including interpretation of the findings, limitations and reflection, and discussion.

### **5.1 Summary**

The purpose of this inquiry was to identify strengths and areas of need and to make recommendations for ongoing improvement in current co-teaching models. A program evaluation was conducted at the inquiry site. The staff's knowledge of co-teaching and components of effective inclusive schools was examined to determine areas of need. The study attempted to answer the following inquiry questions:

1. What pedagogical knowledge do teachers have that enhance their ability to support an inclusive school?
2. Which elements of implementing co-teaching models are most important for teachers?
3. What attitudes, beliefs, and perceptions do general education teachers have about co-teaching and inclusive practices?
4. What attitudes, beliefs, and perceptions do special education teachers have about co-teaching and inclusive practices?
5. How can school principals promote inclusive schools by supporting effective co-teaching instructional models?



Inquiry Question 1 sought to identify teachers' knowledge of co-teaching and ability to support an inclusive school. After exploring Question 1 and examining the survey data and focus group responses, factors to be addressed for both general education and special education teachers were identified through Question 2. By examining teachers' knowledge of co-teaching models and inclusive practices, recommendations can be made for continued improvement and development of the current co-teaching practices. Because the research findings illustrate the need for professional development for co-teachers specific to co-teaching and effective co-assessment strategies, future trainings and professional development should be considered to strengthen the co-teaching practices and build teachers' capacities in regard to co-teaching.

Inquiry Questions 3 and 4 sought to identify the attitudes, beliefs, and perceptions of general education teachers and special education teachers in regard to co-teaching and inclusive practices. Many participants reported the positive impacts that co-teaching classrooms and inclusion have on the entire school. Additionally, special education and general education teachers' attitudes, beliefs, and perceptions proved to be similar between the two groups. Through examination of teacher beliefs, attitudes, and perceptions, further recommendations can be made for continued improvement of the special education programs.

To answer Inquiry Question 5 (How can school principals promote inclusive schools by supporting effective co-teaching models?), respondents were asked to identify their level of agreement and the level of frequency with which building and district leaders have supported, evaluated, and overseen co-teaching classrooms. They were also asked to describe the approach to planning and implementation of co-teaching taken by school and district leadership and if they have ever been provided the opportunity to learn about co-teaching models and inclusive practices by school or district leadership. The findings revealed that both special education and general

education teachers share an interest in strengthening the collaborative partnership with school and district leaders in order to improve the co-teaching models and inclusive practices.

The purpose of this study was to identify ways to improve inclusive practices and strengthen current co-teaching models. As stated in Chapter 1, facilitating change in schools begins with identifying areas of improvement and engaging stakeholders to provide insight and feedback about current needs and potential changes. Data from the study highlighted the need for co-teachers at the research site to examine co-teaching practices and identify areas of need with school leadership. Data also revealed that professional development and instructional support for co-teachers would further strengthen the co-teaching classrooms and inclusive practices.

## **5.2 Interpretation of Findings**

### **5.2.1 Inquiry Question #1**

*What pedagogical knowledge do teachers have that enhance their ability to support an inclusive school?*

Several conclusions can be made regarding the staff's knowledge of co-teaching and their ability to support an inclusive school. Based on the survey data, over half (56 percent) of the participants have 13 years or more of professional teaching experience, but only 32 percent of respondents have participated in a co-teaching model for more than 10 years. Teachers' attitudes toward inclusive classrooms are connected to the level of training, knowledge, and experience in working with students with disabilities (Barger-Anderson, Isherwood, & Merhaut, 2013). Given that almost 70 percent of teachers who have participated in a co-teaching model in the past years

have fewer than 10 years co-teaching experience, ongoing professional development and education on co-teaching and inclusive schools should be a priority for the district.

According to the survey data and specific co-teaching models, over 80 percent of teachers revealed that they are extremely likely to use One Teach, One Assist on a weekly basis. One Teach, One Assist is often viewed as the default model and is overused by teachers (Barger-Anderson, Isherwood, & Merhaut, 2013). Conversely, only 20 percent of teachers reported that they were somewhat likely to implement models that can target specific skills and utilize small group instruction like Station Teaching, Parallel Teaching, and Alternate Teaching. The most essential component of successful co-teaching is the effective arrangement of the teachers and students so that learning is maximized (Friend, 2019). Based on these responses, a strong need exists for professional development in regard to effective co-teaching models and implementation at the inquiry site.

Additionally, nearly half of the teachers reported that they have rarely been given the opportunity to further their knowledge about co-teaching models, different approaches to co-teaching, and problem-solving strategies with a co-teacher. Therefore, a strong need exists for general education and special education co-teachers to engage in professional development and training about co-teaching models, different approaches to co-teaching, and problem-solving strategies with a co-teacher.

Findings pertaining to teachers' knowledge in supporting inclusive schools and students with disabilities revealed different information, however. Over half of the teachers reported that they have been given the opportunity to learn about providing instruction to students with disabilities, identifying the needs of students with disabilities, and providing differentiated instruction to students with disabilities. When professional development is provided to teachers in

the area of instructing students with disabilities, teachers may be more willing, more positive, and more effective in their approach to supporting inclusive schools (Barger-Anderson, Isherwood, & Merhaut, 2013). Finally, over 75 percent of teachers revealed that they have been provided opportunities to learn about educating students with and without disabilities. Given the response data, targeted professional development and training is needed for the teachers at the inquiry site in regard to inclusive practices, co-teaching, and expectations.

### **5.2.2 Inquiry Question #2**

*What elements of implementing co-teaching models are most important for teachers?*

Many factors for teachers need to be addressed and developed regarding successful implementation of co-teaching models. First, over half (52 percent) of the survey participants shared that they did not volunteer to participate in a co-teaching classroom. Although minimal teacher voice and choice is historically common for planning for co-teaching, it is important that teachers are included in the planning process for successful implementation of co-teaching models. The survey, focus groups, and interviews revealed a significant need and desire for co-teaching expectations. Currently, expectations for the models and co-teaching partners are not communicated at the inquiry site. A common definition, list of expectations, and clear examples of what co-teaching should look like should be created and provided to all staff. Along with overall expectations, teachers reported a need for common planning expectations. Even though teachers are provided with scheduled common planning time once per week, teachers expressed a need for a clear outline of what should occur during this time. Time spent participating in co-assessment, analyzing data, and developing lesson plans that include specific co-teaching models should be included in this outline. Because over half of teachers did not volunteer to participate in a co-

teaching classroom, it is important that current co-teaching partners are involved in the development of these expectations with school leadership.

Teachers also revealed the need for smaller class sizes for co-teaching classrooms. Currently, the average co-teaching classroom at the inquiry site consists of 19.25 students and can range from 15 students to 25 students. Teachers reported a need to cap the class size at 20 or fewer so that small group instruction and specific co-teaching models are easier to facilitate.

Co-assessment was a common theme in the survey, focus groups, and interviews. General education teachers revealed the desire to participate in co-assessing strategies so that assessment would be a shared responsibility. A co-teaching partnership must include communication about differentiation, accommodations, and grading practices – this communication will lead to a cohesive delivery of instruction and assessment (Pratt, et al., 2017).

Finally, teachers' willingness to participate in co-teaching models needs to be considered. Teachers who participated in the focus groups and interviews expressed a need to schedule teachers into co-teaching classrooms who demonstrate a willingness to collaborate, to be flexible, and who desire to teach in this type of role.

### **5.2.3 Inquiry Questions #3 and #4**

*What attitudes, beliefs, and perceptions do general education (Inquiry Question #3) and special education (Inquiry Question #4) teachers have about co-teaching and inclusive practices?*

Numerous questions in the survey and focus groups sought to identify attitudes, beliefs, and perceptions of both general education and special education teachers regarding co-teaching and inclusive practices. In order to answer this inquiry question, it is important to understand teachers' experiences with co-teaching and inclusive practices.

When completing the survey, teachers were asked to rate their level of comfort in regard to special education practices and co-teaching models. When asked about understanding the purposes of co-teaching models, engaging with a co-teacher, sharing responsibilities with a co-teacher, using problem-solving strategies with a co-teacher, and handling conflict with a co-teacher, more than 50 percent of participants responded that they were extremely comfortable with all of the above co-teaching factors. Additionally, when asked about identifying the needs of special education students, educating students with disabilities, understanding IEP documents, creating modifications/accommodations for students, and providing instruction that meets the needs of students with disabilities, more than 50 percent of teachers indicated that they were extremely comfortable with all of the above special education items. According to the respondents' comfort levels with specific co-teaching and special education components, their perceptions of co-teaching and inclusive schools are positive.

The teachers also were asked to identify their level of agreement with co-teaching and inclusive practices. Given that 76 percent of teachers expressed agreement that general education students benefit from co-teaching classrooms and that students with disabilities benefit more from being educated in a co-taught environment versus a resource classroom, teachers overall are supportive of co-teaching classrooms and inclusive schools.

This study also sought to determine differences, if any, between general education and special education teachers' beliefs and attitudes about co-teaching and inclusive schools. In the survey responses, minimal differences existed between the groups. Question 19 (*Indicate to what extent the following factors were barriers to co-teaching implementation: co-planning, building schedule, content, difficulty managing student behaviors, personality difference with teacher, and professional development*) exposed a difference in responses between general education and

special education teachers. Special education teachers indicated that they more frequently encounter barriers to co-teaching implementation than general education teachers. Furthermore, in the focus group and interview responses, special education teachers also expressed a need for consistent co-teaching partners, while the general education teachers did not express a concern in this area. To combat these concerns, special education teachers should realize that they can increase the success of the co-teaching experience by communicating effectively, maximizing planning time, and mastering content knowledge when possible (Scruggs & Mastropieri, 2017).

In contrast, general education teachers reported that working with a consistent special education teacher has been positive for both the teacher and the co-teaching classroom, proving that the special education teacher has remained consistent but the general education teachers have changed over the years. Co-instruction, respect, and trust are enhanced when co-teaching partners remain consistent over time (Barger-Anderson, Isherwood, & Merhaut, 2013). Due to these conflicting perceptions, it is important that the general education teachers understand this struggle that special education teachers grapple with.

#### **5.2.4 Inquiry Question #5**

*How can school principals promote inclusive schools by supporting effective co-teaching instructional models?*

Several conclusions can be made about how school principals can promote an inclusive school by supporting effective co-teaching instructional models. First, all stakeholders must be involved in the planning, scheduling, and implementation of co-teaching models. The survey and focus group responses show that teachers are simply told that they are co-teaching, but the expectations for the model are unknown. Co-teaching requires a paradigm shift. Before working

on collaboration and communication, administrators and educators must embrace the mindset that inclusion is an issue of both equity and social justice – then, teachers and administrators will be more prepared for co-teaching (Murawski & Bernhardt, 2015). Involvement of all stakeholders and development of expectations starts with building leadership. Given that teachers are simply scheduled into co-teaching classrooms and have limited, if any, input, building and district leadership must begin to empower and engage educators so that all are involved in the promotion of an inclusive school.

Even though the survey revealed that nearly 75 percent of teachers agreed that school administration is supportive in overseeing, assisting, and evaluating co-teaching classrooms, and nearly 50 percent of teachers agreed that district administration is supportive of co-teaching classrooms, the focus groups revealed different information. According to the focus group data, special education teachers feel more supported by building and district administration. While the special education teachers revealed they feel strong support and focus on co-teaching models and inclusive practices, the general education teachers shared that they feel no support from district administration and that building administrative support has only existed in more recent years.

### **5.3 Limitations**

Limitations exist for this study. The sample size for this research was one of the most notable limitations. The sample size included 25 participants for the survey, eight participants for the focus groups, and eight participants for the interviews. Further research would benefit from increasing the sample size to allow for more responses and feedback. The limited sample size also enabled minimal differences between the general education teachers and the special education



79 teachers' responses. Future research should consider an equal number of general education participants and special education participants that may reveal significant differences in the data.

The sample was also limited to one inquiry site. Further examination of co-teaching models and inclusive practices at schools should include additional settings that are not limited to one school district. With a larger sample size, research could include comparisons across schools (i.e. elementary, middle school, and high school).

Additionally, because the survey, focus groups, and interviews involved two types of stakeholders involved in special education programming, other research projects could involve additional stakeholder groups. School and district administrators could complete surveys and possibly participate in focus group interviews and one-on-one interviews to gain a wider range of response data and, if allowable, student feedback regarding their experiences in co-taught classrooms.

#### **5.4 Discussion and Future Implications**

This study contributes to co-teaching research as the effective implementation of a co-taught middle school classroom is still being explored through quantitative and qualitative research. Co-teaching is an instructional model that allows for both general education and special education students to be educated in one inclusive environment in which individual students' needs can be met by two teachers. While much research exists about co-teaching, feedback from teachers who participate in co-teaching classrooms is still needed, particularly regarding frequency of models used and expectations of an effective co-teaching classroom. The feedback from teachers is a crucial piece for future research. The data from this study points to co-assessment,

expectations, professional development, and collaboration with school leaders as areas of improvement in order to continue to improve co-teaching practices.

Co-teaching models and inclusive practices are not mandated by state or federal regulations, such as IDEA. Therefore, policies and funding do not exist at the local, state, and federal levels. Consequently, co-teaching models vary across schools, resulting in teachers and administrators having varied expectations for what those models should look like. Because of these varied models, schools such as the inquiry site often boast successful inclusive practices and effective co-teaching classrooms, yet invest limited time and effort into evaluating those programs. Data from this study revealed a need for clear expectations, observation, and evaluation of the current co-teaching classrooms. While IDEA includes mandates like least restrictive environment and specially designed instruction, there is no mention of how school districts should implement these practices and no consistent evaluative component that holds school districts accountable for appropriate inclusion and co-teaching implementation. Research is needed to determine best practices that school districts should follow when planning and implementing co-teaching models and promoting inclusive schools.

The results of this study will be shared at the inquiry site but also to a broader audience. First and foremost, the findings of the survey, focus groups, and one-one-one interviews, as well as recommendations, will be shared with the school district where the research occurred. Given specific recommendations related to the inquiry questions, school leaders in the district should be encouraged to consider the recommendations and pursue changes that strengthen the co-teaching practices.

In order to broaden this research, results and recommendations will be shared with local school districts. This study and its findings will be presented at a meeting with local special

education directors at the local intermediate unit in order to share the results and to inform district administration about recommendations for co-teaching models and inclusive schools. The goals of this presentation include the following: explain the purposes of the study, share the methods that were used, inform stakeholders of results, and recommend further actions based on the research conclusions. This presentation will help district administration to understand the need to establish clear expectations in regard to co-teaching and inclusive practices and the importance of continuous support and evaluation of special education programs.

### **5.5 Reflection**

Bond et al. (1997) explain the following about program evaluation: “Documentation is an important piece of the evaluation puzzle. It involves describing (rather than assessing) current conditions, events, or people to help gain a better understanding of the context in which a program occurs” (p. 11). This entire research process has led me to gain a better understanding of my staff and their insights about co-teaching and the benefits of educating students in an inclusive school. While the documentation process that consisted of a survey, two focus groups, and eight individual interviews was complex, it proved to me how imperative it is to gather different forms of data to support a problem of practice. Engaging in this inquiry process and questioning past practices has confirmed for me the need for improvement and examination of the current co-teaching practices. Additionally, the inquiry process has led me to question if the research site is promoting an inclusive environment for students with disabilities as best it could. And if it is not, how can I leverage change within my place of practice?

This process has changed me as an educator, an administrator, and an advocate for students with disabilities. I became a special education teacher in order to teach students with disabilities and promote change in the school environment. Being able to utilize my leadership position so that I can influence teachers to make positive impacts not only on students with disabilities, but all students, is quite remarkable.

This program evaluation has had a lasting impact on my practices as a school leader. It has forced me to listen, analyze, problem-solve, and reflect. However, this inquiry study is only the beginning of the evaluation process as I continue to examine special education programming in schools. The methods used in this study promoted teacher voice, empowerment, and mutual trust between me and the teachers with whom I work. I am eager to share the results with those teachers and acknowledge my appreciation to them for their honesty and willingness to reveal vulnerabilities. This research process has inspired me to further my work as a school leader to support and evaluate co-teaching classrooms but also to continue to promote the importance of inclusive schools that value all students' abilities and strengths.

## Appendix A IRB Documentation

### University of Pittsburgh Institutional Review Board

Human Research Protection Office  
3500 Fifth Avenue, Suite 106  
Pittsburgh, PA 15213  
Tel (412) 383-1480  
[www.hrpo.pitt.edu](http://www.hrpo.pitt.edu)

#### APPROVAL OF SUBMISSION (Exempt)

Date:	September 23, 2019
IRB:	STUDY19070033
PI:	Lauren McGuirk
Title:	Examining Components of an Effective Middle School Co-Teaching Instructional Model that Successfully Meet the Needs of Students with Disabilities
Funding:	None
Grant Title:	None

The Institutional Review Board reviewed and approved the above referenced study. The study may begin as outlined in the University of Pittsburgh approved application and documents.

#### Approval Documentation

Review type:	Initial Study
Approval Date:	9/23/2019
Exempt Category:	(1) Educational settings

Determinations:	None
Approved Documents:	<ul style="list-style-type: none"><li>• Interview Questions for General Education and Special Education Teachers.docx, Category: Data Collection;</li><li>• Co-Teaching Survey Questions.docx, Category: Data Collection;</li><li>• Interview Letter_Script.pdf, Category: Recruitment Materials;</li><li>• McGuirk Exempt Application Form, Category: IRB Protocol;</li><li>• McGuirk Permission Letter [REDACTED].docx, Category: Data Collection;</li><li>• Survey Recruitment Letter for Survey.pdf, Category: Recruitment Materials</li></ul>

As the Principal Investigator, you are responsible for the conduct of the research and to ensure accurate documentation, protocol compliance, reporting of possibly study-related adverse events and unanticipated problems involving risk to participants or others. The HRPO Reportable Events policy, Chapter 17, is available at <http://www.hrpo.pitt.edu/>.

Clinical research being conducted in an UPMC facility cannot begin until fiscal approval is received from the UPMC Office of Sponsored Programs and Research Support (OSPARS).

If you have any questions, please contact the University of Pittsburgh IRB Coordinator, [Dana DiVirgilio](#).

Please take a moment to complete our [Satisfaction Survey](#) as we appreciate your feedback.

## Appendix B Permission Letter for Survey

Dear Teachers,

Co-Teaching is the partnership of a general education teacher and a special education teacher for the purpose of collaboratively delivering instruction to a diverse group of students, including those with disabilities, in a general education setting in a way that flexibly and deliberately meets their learning needs. In an effort to identify strengths and areas of growth of co-teaching approaches and promote inclusionary practices, a research study will be conducted to assess the co-teaching practices of the district.

This survey is entirely voluntary. It will help to identify aspects of co-teaching and how to best improve the instructional model in order to meet the needs of students with disabilities in general education classrooms. Although much has been written and researched regarding co-teaching, feedback is needed from the [REDACTED] teachers regarding this practice. As a teacher, it is critically important to gain information from you because you are an integral part of the special education process and your opinion and feedback matters.

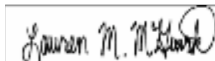
Your perspective can provide valuable information as to the effectiveness of the co-teaching model based on your experiences in your classroom and in the school. Your participation in this study is entirely voluntary. All results will be kept confidential; your name will not be included on any documents. The survey should take 10 minutes to complete. No financial benefits exist if you choose to participate in this research. Minimal risk is involved which includes discomfort sharing feedback and opinions.

If you choose to exit the survey prior to finishing, the data will be retained and continue to be used, unless participants request that data be destroyed.

To complete the survey, click on this link: ([Co-Teaching Survey](#)).

If you have any questions or concerns about the survey or the research, please feel free to contact me directly at [LMM232@pitt.edu](mailto:LMM232@pitt.edu). Thank you in advance for your help. Your participation is greatly appreciated.

Sincerely,



Lauren McGuirk

## Appendix C Permission Letter for Focus Groups

Dear Middle School Teachers,

Co-Teaching is the partnership of a general education teacher and a special education teacher for the purpose of collaboratively delivering instruction to a diverse group of students, including those with disabilities, in a general education setting in a way that flexibly and deliberately meets their learning needs. In an effort to identify strengths and areas of growth of co-teaching approaches and promote inclusionary practices, a research study will be conducted to assess the co-teaching practices of the district.

This focus group is entirely voluntary. It will help to identify aspects of co-teaching and inform future instructional practices. For this 15-20 minute focus group, I appreciate any insights you can provide.

You can stop at any time or skip any questions. All of your responses are confidential, and data will be kept private. I will not publish any quotes that might offend anyone or put anyone's employment at risk.

You can stop the interview at any time, and data will collected will be retained and continued to be used, unless you request that data be destroyed.

If you have any questions or concerns about the interview or the research, please feel free to contact me directly at [LMM232@pitt.edu](mailto:LMM232@pitt.edu). Thank you in advance for your help. Your participation is greatly appreciated.

Sincerely,



Lauren McGuirk

## Appendix D Permission Letter for One-on-One Interviews

Dear Middle School Teachers,

Co-Teaching is the partnership of a general education teacher and a special education teacher for the purpose of collaboratively delivering instruction to a diverse group of students, including those with disabilities, in a general education setting in a way that flexibly and deliberately meets their learning needs. In an effort to identify strengths and areas of growth of co-teaching approaches and promote inclusionary practices, a research study will be conducted to assess the co-teaching practices of the district.

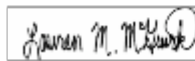
This interview is entirely voluntary. It will help to identify aspects of co-teaching and inform future instructional practices. For this 5-10 minute interview, I appreciate any insights you can provide.

You can stop at any time or skip any questions. All of your responses are confidential, and data will be kept private. I will not publish any quotes that might offend anyone or put anyone's employment at risk.

You can stop the interview at any time, and data will collected will be retained and continued to be used, unless you request that data be destroyed.

If you have any questions or concerns about the interview or the research, please feel free to contact me directly at [LMM232@pitt.edu](mailto:LMM232@pitt.edu). Thank you in advance for your help. Your participation is greatly appreciated.

Sincerely,



Lauren McGuirk



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