

Secondary Teachers' Perceptions of Co-Teaching on Students with Disabilities

A Doctoral Capstone Project

Submitted to the School of Graduate Studies and Research

Department of Education

In Partial Fulfillment of the
Requirements for the Degree of
Doctor of Education

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PennWest University

July 24 2024

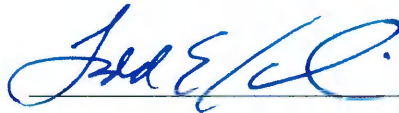
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Acknowledgements

I would like to express my sincere gratitude to my advisor, Dr. Todd Kerskin, for his guidance, support, and encouragement throughout my doctoral studies. Your wisdom and insights have been instrumental in shaping this capstone.

I extend my sincere appreciation to my committee member and superintendent, Dr. Karen Nell, for her valuable feedback, insights, and support throughout this process.

To my family and friends, especially my wife Eileen, thank you for your endless patience and encouragement. Your belief in me has been a constant source of motivation.

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Abstract

Districts across the nation are grappling with rising costs and staff shortages, leading many to adopt co-teaching models as their primary strategy to meet the needs of students with disabilities. This shift is driven by legal mandates that fully advocate for the education of students in the “least restrictive environment” possible. The purpose of this study is to investigate the perceptions of secondary teachers who utilize co-teaching practices, examining the benefits, challenges, and limitations of this instructional model. Employing a concurrent mixed-methods research design, both quantitative and qualitative data were collected from secondary teachers currently or previously involved in co-taught classes within the last school year via an anonymous online survey. Results indicate that while overall perceptions of co-teaching are positive, several concerns and critical factors influencing its success were identified, including the need for adequate planning time, consistent professional development, and strong administrative support. The conclusions suggest that addressing these areas is essential for enhancing the efficacy of the co-teaching model, ultimately fostering more inclusive and supportive learning environments. Further research recommendations are also discussed.

CHAPTER I

Introduction

Co-teaching is a teaching model in which two or more educators share the responsibility for teaching a single group of students. Some research has shown this model to be an effective way to meet the needs of students with disabilities, but there is limited and conflicting research on how this practice is perceived by the teachers who implement it. This study examines the perceptions of secondary teachers who utilize co-teaching practices to determine what they perceive to be the benefits, challenges, and limitations of this instructional model.

To better understand the full impact of co-teaching, the researcher surveyed secondary teachers who currently are or previously were in co-taught classes within the last school year, to get their perspectives of this instructional model. The researcher also wanted to gain a deeper understanding of what they perceive to be the benefits and challenges of co-teaching. Being able to get an in-depth look at how teachers who implement this model perceive it will help determine the impact that co-teaching has on our students with disabilities. This study will focus on the perceptions of teachers within a single school district, so that the results can more easily be applied and generalized to the needs of that specific district.

Focus

The Elizabethtown Area School District, like many districts across the nation, has used the co-teaching model to support inclusionary practices for well over a decade. To implement this model, it requires the utilization of two staff members. Recent staff shortages felt across the nation are making it increasingly more challenging to

consistently fill these positions. Exploring the impact of this model will help this district determine if it continues to be a viable model to implement, or if the district needs to consider alternative models to support students with disabilities within an inclusive environment. Gaining a deeper understanding of teachers' perspectives will be able to help guide administrators into making impactful and data informed decisions regarding the allocation of resources and teachers across the schedules.

Research Questions

The chosen research questions explore the perceptions of secondary teachers regarding the instructional practice of co-teaching. The three main questions being explored are:

- 1) What are teachers' perceptions of the benefits of co-teaching for students with disabilities?
- 2) What are teachers' perceptions of the challenges of co-teaching for students with disabilities?
- 3) What are teachers' perceptions of the factors that contribute to the success or failure of co-teaching for students with disabilities?

This study uses a concurrent mixed-methods research design which means that both quantitative and qualitative data from the subjects are collected through an anonymous online survey. This type of design allows the researcher to gain a deeper understanding of the overall data and therefore can more accurately draw conclusions regarding the perceptions of the staff.

A mixed-methods design helps increase the validity of the findings because the qualitative data corroborates the findings within the quantitative data. Additionally, using

a mixed-methods design addresses some of the limitations of using a single method. The quantitative methods provide a larger amount of data, but may lack in-depth understanding of the social context. Subsequently, the qualitative data provides rich descriptions that cannot be collected through quantitative methods. Combining both methods develops a much more robust and meaningful interpretation of the findings.

Measures of central tendency were used to analyze the quantitative data that were collected from Likert scales within the survey. This method allows for the collected data to be compared and summarized to establish patterns. The qualitative data collected was categorized using coding schemes to identify relationships and themes within the data. Both the results of the quantitative data and the qualitative data were compared and combined to interpret any conclusions found within the data sets.

Fiscal Implications

It is impossible to explore instructional models without considering the fiscal implications of models. By the very nature of this instructional model, it requires two staff members to be in the same classroom simultaneously. This requires a considerable allocation of resources during those academic time periods. Co-taught classes require twice the salary of a traditional classroom model.

In addition to fiscal compensation there are many indirect costs and resources that are associated with implementing co-teaching. One important indirect, and finite, resource is time. If special education teachers are no longer co-teaching, they will be able to spend time doing other professional obligations like progress monitoring, providing interventions, and offering student support in other. Many of these obligations cannot happen while a teacher is engaged in co-teaching. To co-teach effectively, the teachers

must have common planning time together. This costs both planning time and the time spent coordinating schedules to provide for a common time to meet and plan co-teaching practices.

To help support effective co-teaching practices, the district also sets aside time to provide professional development for co-teaching pairs. Professional development is a highly sought after commodity and all districts have many important topics that are vying for that part of the school schedule. If districts did not need to commit those training hours toward co-teaching, the district could look to include training on a variety of other needs.

Summary

Districts across the nation are both struggling with rising costs and staff shortages. It is a necessity for districts to be able to utilize their resources as effectively and efficiently as possible. Fiscal resources and professional staff are limited resources for many districts. In addition the number of students with disabilities is also on the rise across the nation. The specific variables and situation of each school district should determine if the implementation of co-teaching is the best model to use. Districts owe it to both their community stakeholders, and students, to be continually reviewing if co-teaching is continuing to have the desired and intended impact. By researching teachers' perceptions of co-teaching on students with disabilities at the secondary level, districts will have additional data that will be an important part of this puzzle. The districts can then make informed programmatic decisions with the data collected, to ensure that their students with disabilities are receiving the support they need, while also being responsible with the limited resources available.

CHAPTER II

Literature Review

From the impetus of special education legislation, across the nation, and specifically Pennsylvania, local education agencies (LEA) have wrestled with how to ensure that students with disabilities are educated with students who are nondisabled to the maximum extent that is appropriate. This is referred to as the least restrictive environment (LRE). Following the LRE mandate is far from a suggestion or lofty goal for districts as Pennsylvania School Code states, "Students with disabilities shall be educated in the least restrictive environment" (Least Restrictive Environment Requirements, 2008, para. 1).

To meet this mandate, there has been increasing and consistent interest in the development and implementation of inclusive practices. Inclusivity and the practices that support inclusivity can be best viewed as issues of educational placement which are configured and determined through the child's Individual Education Plan (IEP). Within the parameters of the IEP, the team determines the specialized supports, services, modifications, and accommodations that are needed for a student to make progress, as well as access the regular education environment to the maximum extent that is appropriate.

One of the more ubiquitous approaches that LEAs utilize to support inclusive practices is co-teaching. As the name implies this model requires two professional staff members in a classroom. Scheduling two professional staff to one room for a class period is a considerable usage of resources. Staff salaries are always increasing, and many districts are facing a staffing shortage which further complicates implementing the co-

teaching model with fidelity. Districts need to be aware of staff perceptions regarding the practice of co-teaching, as well as what research says about this practice to ensure that this is the best model to implement or continue implementing.

Civil Rights Movement and Special Education Litigation

What we commonly consider to be best practices for supporting students with disabilities did not emerge spontaneously, but instead, the practices evolved from different sources and influences over the past decades. In the United States, the responsibility of public education has traditionally been the responsibility of both the state and local governments. In fact, the United States Constitution does not even mention education. That changed in the 1960s with the arrival of the civil rights movement. The federal government began to offer guidelines and supports to states to help educate school-aged children who were believed to be educationally disadvantaged.

In the late 1960s Swedish psychiatrist and educator Bengt Nirje developed and published the normalization principle. This principle underscored the importance of treating individuals with disabilities with dignity and respect, while striving to create inclusive environments where they can lead fulfilling lives. This principle emphasized the normalization of everyday experiences, community integration, and individualized support, aiming to ensure that individuals with disabilities have the same rights, opportunities and quality of life as their non-disabled peers. It also advocated for attitudinal changes challenging societal prejudices, as well as promoting acceptance and understanding of people with disabilities (Nirje, 1996).

Out of the normalization movement came the deinstitutionalization movement in the later 1970s. Adults with severe disabilities were often involuntarily committed to

hospitals; after multiple lawsuits due to mistreatment, these facilities began to lose favor and started shutting down. These facilities were found to be in violation of the Mental Health and Mental Retardation Act of 1966, which required all states to adopt and implement a least restrictive environment approach for the care provided to these citizens. In *Pennhurst v. Halderman* (1984) the court agreed and opined that if a state assumed responsibility for the habitation of a person with intellectual disabilities, it must provide care in the least restrictive environment that aligns with the individual's needs. This is the exact same sentiment that rippled through public education at around the same time.

Earlier in the seventies, two other milestone statutes were passed regarding the educational rights of children with disabilities: The Education of the Handicapped Act (EHA) and Section 504 of the Rehabilitation Act of 1973. EHA expanded previously existing grant monies to go toward students with disabilities and provided less direct support to students with disabilities in the form of providing funds for additional training to higher education teacher training programs (Education of the Handicapped Act [EHA], 1970).

Section 504 is a nondiscrimination provision included in the Rehabilitation Act of 1973. It was originally targeting employment discrimination, but its scope quickly expanded to include other areas, including public education. Section 504 states that individuals with disabilities cannot be excluded from participating in programs that receive federal financial assistance (Rehabilitation Act of 1973, 1973).

In 1972, two landmark federal courts cases, *Pennsylvania Association for Retarded Children (PARC) v. Pennsylvania* and *Mills v. District of Columbia Board of*

Education, were influential in establishing that all students with a disability had a right to an education. PARC was a class action lawsuit that specifically addressed the educational exclusion of students with what would now be classified as an intellectual disability. Mills expanded upon the PARC ruling by extending the PARC protections to other disability categories, and extended procedural rights to the parents of these students.

These two cases were instrumental in the development of the Education for All Handicapped Children Act (EAHCA). EAHCA built upon the previous EHA by including a requirement to have an Individual Education Plan (IEP) developed for students with disabilities, expanded upon the parental rights of the Mills ruling and further elaborated on: the rights of students with disabilities, the concepts of a free appropriate public education (FAPE), and the right to be educated in the least restrictive environment (LRE) (Education for All Handicapped Children Act, 1975). The impact that this legislation had at the time cannot be minimized or ignored, as it set the stage for special education as it is known today. As Smith (1990) states, "...EAHCA was intended to provide administrators with proof of compliance, teachers with formalized plans, parents with a voice, and students with an appropriate education" (p. 6).

The EAHCA described FAPE as being a setting that, "to the maximum extent appropriate" allowed education with children who do not have disabilities. Under EAHCA, all eligible students were to be located, identified, and evaluated for special education services. All children now had the right to be educated in the most appropriate educational setting for their needs. Since EAHCA, the concept of FAPE has been expanded through additional revisions and regulations; it is one of the most important

entitlements provided to students with disabilities. FAPE is a right that LEAs must provide for all eligible students.

A few years after the implementation of EAHCA, the United States Supreme Court decided the *Hendrick Hudson Central School District v. Rowley* case, which had a significant impact on clarifying the scope of FAPE. The Rowley case is important because it provided the Supreme Court with its first opportunity to interpret the mandate of “appropriate education” that was included in EAHCA. This case revolved around a female student with a hearing-impairment. She did not suffer from any intellectual or cognitive impairments and had done well in school with minimal additional supports. Her parents requested that the school also provide her with an interpreter to maximize her potential. The school denied their request on the grounds that she had been functioning at or above grade level and was benefiting from the educational services they were currently providing.

The court ruled in favor of the LEA because they felt that the student had access to a meaningful education program. They felt that the spirit of the EAHCA was to ensure access and benefit. Inasmuch, that courts should look beyond that standard. Districts were to provide the basic “floor” opportunity to students resulting in some benefit, but they did not need to provide that maximum benefit possible. The term “appropriate” now had a working definition and districts knew that students needed to benefit from services, even though they were not entitled to the best educational programming possible (*Board of Education v. Rowley*, 1982).

Thirty-five years later, in 2017, the Rowley standard was revisited by the United States Supreme Court in the *Endrew v. Douglas County School District* ruling. In this

ruling the courts revised the prior stance that students needed to receive “educational benefit” and now they needed to make “progress”. The courts also included that if students were not capable of acquiring the outcomes of the general education curriculum at their chronological level that progress must be “appropriate in light of the child’s circumstances” (*Endrew v Douglas County School District*, 2017).

While FAPE is a core tenant of special education, as mentioned earlier, EAHCA also introduced the initial regulations of the IEP, which is arguably the most essential and most litigated element of that Act. The IEP is a written agreement reached through a team consisting of parents, general education teachers, special education teachers, LEAs and on some occasions, the students. All aspects of a student's FAPE, including programming, instructional methodologies, and placement, are outlined within his or her IEPs. As with most aspects of special education law, the tenets and provisions of the IEP continue to grow and evolve.

Hayes and Higgins (1978) state that not only is the IEP the “cornerstone” of the law, but that it is the tool designed to make, “teachers responsible and accountable for assuring that each handicapped child receives the required special education and related services set forth in the IEP” (p. 267).

Evolution Of Inclusive Practices

Over the years, the term “least restrictive” kept showing up in various cases and regulations. Both the PARC and Mills cases identified the courts preference for those with disabilities to be included alongside those without disabilities to the greatest extent possible. The term LRE is commonly applied to the special education placement or environment of a student with disabilities. Huefner (2006) states that, “LRE captures the

balance between statutory mandate to provide FAPE and the statutory preference for education of students with disabilities alongside general education students to the maximum extent appropriate” (p. 285).

For some students, LRE may require a self-contained classroom or enrollment in an out of district school. However, for most students, it should mean a general education classroom with supplementary aides and services that allow them meaningful access to the general education curriculum (Huefner, 2006). As with most aspects of special education the concept of LRE has been heavily litigated and the courts have typically relied on the results of three cases in developing the standards they apply to cases involving LRE. There three cases are the Roncker Standard, the Daniel R.R. standard, and the Rachel H. Standard.

The Roncker Standard, frequently referred to as the “Roncker Feasibility Test”, determine several requirements: whether inclusionary practices that would benefit the child outweigh the benefits of a separate special education setting, if the cost shift would negatively impact takeaway too much funding from other programs, and if the student would a disruption to the other students. According to this standard, if the answer was yes to any of those criteria, then the placement would not be feasible. This standard came out of the 1983 case, *Roncker v. Walter* in which the parents of a student with a severe disability wanted him in a regular school instead of the special education school that the district had recommended. The court had to explore if the regular education environment could meet the educational, physical, or emotional needs of the student (*Roncker v. Walter*, 1983).

The Daniel R. R. Standard established a two-prong test to establish regular education placement. In the case of *Daniel v. State Board of Education*, the parents of a student with Down syndrome advocated for him to be educated in the regular education environment. Data showed that the placement was causing more harm than benefit to the student despite the modifications and accommodations that were being provided. The first question within the Daniel R. R. Standard looks to answer if the district attempted to accommodate the needs of the student through the implementation of supplementary aids, services, and programmatic modifications within the regular education setting. If the answer to this question is no, then FAPE has not been provided. If the answer is yes, then the courts examine whether the student is benefiting from his or her current placement.

The second of the two questions for this standard is if the needs of the student cannot be fully accommodated in the regular education environment, is the student being included in the regular education environment to the maximum extent appropriate. This question explores the appropriateness of social and physical inclusion. In this specific case, the court concluded that the student's inclusion in both lunch and recess met the standard (*Daniel v. State Board of Education*, 1989).

In developing the Rachel H. Standard, the courts applied a four-factor test. The four areas the court explored were: the educational benefits of the student being in the regular education classroom full-time, what are the nonacademic benefits of being in the regular education classroom full time, what effects does the student with disabilities have on the classroom teachers and students, and finally, what are the financial costs of including the student in the regular education classroom.

Rachel v. Sacramento City Unified School District (1994), in which this standard was developed, involved the placement of a student with an intellectual disability and significant speech and language difficulties. In this case, the court ruled that the student's IEP goals could be implemented with fidelity within the regular education classroom with the modification and accommodations.

While there are some subtle nuanced differences between these three cases and their standards, there are many overlapping elements that are still used when evaluating the appropriateness of the educational placement of a student with disabilities. All these standards consider the potential disruptive effects that inclusion may have on the regular education environment, as well as explore the fiscal burdens, and implement a multi-factored analysis of the benefits and progress of the student within the setting. Most importantly, none of the standards assume that all student with disabilities should be in the regular education environment or that students need to be placed there and allowed to fail prior to moving to a more appropriate placement.

In 1993, the New Jersey courts settled *Oberti v. Board of Education* and provided additional clarity to defining the rights of students with disabilities and outlining the responsibilities of school districts. In this case, the parents of a student with Down syndrome wanted their student placed in a regular education placement, as opposed to the segregated special education that the district presented to them. The federal court ruled in favor of the parents and emphasized that the inclusion of a student with disabilities is a right, and not a privilege.

This court, like past courts, outlined considerations that may negate inclusion such as where the student would receive the most benefit, the disruption to other students,

and fiscal implications. This court firmly concluded that the inclusion of students with disabilities was a requirement unless the district could show undue burdens. Even though it listed fiscal implications of inclusion, the court also clarified that the lack of funding itself should not be enough to prevent the inclusion of a student with disabilities into the regular education environment (*Oberti v. Board of Education*, 1993).

The court's ruling in *Gaskins v. Pennsylvania* (2005) made a significant impact on special education procedures and inclusionary practices across the commonwealth that are still felt today. The settlement required a five-year agreement that included forming an LRE advisory panel, tiered support for districts who needed support with their inclusionary practices, developing materials to show all students are welcome, and included a section to the IEPs that ensured the IEP teams were intentionally reviewing the supplementary aids and services that could support a student with disabilities in the regular education environment.

The late 1990s and early 2000s ushered in important federal regulations regarding special education. In 2002, the No Child Left Behind (NCLB) act was signed. It included revised academic proficiency standards and the increased qualifications needed for teachers. This included a requirement that teachers needed to be 'highly qualified,' which was then revised in the reauthorization of this act called The Every Student Succeeds Act in 2015.

1997 saw the implementation of the Individuals with Disabilities Education Act (IDEA). This act included new requirements for the discipline of students with disabilities, modified eligibility and evaluation procedures for students, and provided additional ways for parents to participate. In 2004, it was revised to align with NCLB

assessment requirements, revised discipline procedures, and placed a high emphasis on student outcomes.

The language within the IDEA related to the "least restrictive environment" has remained relatively unchanged for decades, while other parts of this extensive federal civil rights law have undergone revisions and adjustments. This language, although straightforward in wording, carries a degree of ambiguity. As discussed earlier, it mandates that each state must ensure that, to the maximum extent appropriate, children with disabilities should be educated alongside their non-disabled peers. Special classes, separate schooling, or any other form of removing children with disabilities from the regular educational environment should only occur when the nature or severity of the child's disability is such that they cannot receive a satisfactory education in regular classes, even with the use of supplementary aids and services.

This statement, however, raises more questions than it provides answers. What qualifies as "appropriate," and when is the "maximum extent" of appropriateness reached? Whose judgment determines whether a child can be satisfactorily educated in the regular classroom? Perhaps the most challenging question, which holds the key to addressing the others, concerns the term "supplementary aids and services." What exactly are these "supplementary aids and services" that public schools are required to employ within "regular classes" to determine if a child with a disability can receive a satisfactory education there? Frustratingly, many of these questions are not answered within the confines of the regulations themselves.

The "least restrictive environment" mandate, as described earlier, and as it has been a fundamental part of the Individuals with Disabilities Education Act (IDEA) from

its inception, primarily deals with one aspect of "restrictiveness." It focuses exclusively on the physical dimension of the issue, requiring that public schools educate children with disabilities alongside their non-disabled peers in what is referred to as "the regular educational environment" or "regular classes." However, it doesn't address what children with disabilities are expected to learn, or how they are expected to perform in these environments and classes.

In 1997, Congress revised the IDEA that introduced language mandating that children with disabilities should receive "special education and related services and supplementary aids and services." These services, among other things, should enable the child "to be involved in and make progress in the general education curriculum" and allow them to participate in extracurricular and other nonacademic activities. This updated version of the "least restrictive environment" concept goes beyond physical presence and requires that children with disabilities not only share the same physical space as their non-disabled peers but also strive to learn the same skills and content and participate in the same extracurricular and nonacademic activities to the greatest extent possible.

As a result, there is now a dual consideration in ensuring access to education for children with disabilities. This involves providing access to the general curriculum and extracurricular experiences, as well as ensuring that this access occurs within the regular educational environment alongside their non-disabled peers. A common modification that districts across the nation implement to meet these mandates is co-teaching.

Theoretical Framework and Models of Co-Teaching

One of the more commonly accepted definitions of co-teaching comes from Friend and Cook (2007). They state that, "Co-teaching occurs when two or more professionals jointly deliver substantive instruction to a diverse, blended group of students in a single physical space" (p. 113). In other words, this educational approach allows students with disabilities to access the regular curriculum while also receiving tailored instruction to address their unique requirements. Typically, in this service model, the general education teacher specializes in delivering content-based instruction, while the special education teacher specializes in customizing the curriculum and delivering specific instruction to cater to the functional, behavioral, and academic needs of students with disabilities (Cook & McDuffie-Landrum, 2020). Ideally, the co-teaching service model should be able to create access to high-learning standards for students through the collaboration between general and special educators.

Scruggs and Mastropieri (1996) conducted a research synthesis on the perceptions of teachers on mainstreaming and inclusion from the years of 1958-1995 and they found that neither the location of the study, nor the time of publication impacted their findings. In their overall findings they discovered that approximately two-thirds of the general education teachers were in favor of the idea of inclusion. A slightly smaller majority expressed their willingness to have students with disabilities in their classes, but their responses depended upon knowing more about the specific disability and the additional obligations that disability might put on the teacher. Additionally, around half of the teachers recognized that inclusion could offer some advantages, only one-third felt they had the time, skills, training or resources needed for inclusion to really be successful.

These findings support that while teachers were open to the idea of inclusionary practices, they saw the need for training and a framework for their students to be successful.

While districts started implementing co-teaching in response to philosophical trends, litigation, and evolving regulations, it has become the most popular method to support students with disabilities in inclusive settings (Cook et al., 2017). Over the years the models have evolved and there are six main models of co-teaching that have been commonly been accepted over the past few decades. They are: team teaching, parallel teaching, station teaching, one teach and one observe, one teach and one assist, and alternative teaching (Friend & Bursuck, 2006).

According to Cook and McDuffie-Landrum (2020), in team teaching, both educators share equal responsibility for presenting the content and actively participating in whole-group instruction. They go on to explain that the team-teaching approach is one of the co-teaching models that can be utilized to benefit all students and works best when both teachers are confident in the subject material. This model allows both teachers to participate in whole class instruction. There are some limitations of this model in that it requires a significant amount of collaboration and planning between the two teachers (Jackson et al., 2017). Additional limitations outlined by Sinclair et al. (2019) include that, "...it does not necessarily provide opportunities for differentiation across student ability levels and requires both teachers to have a high level of content area knowledge for the unit being taught" (p. 306).

Parallel teaching can be described as dividing the class into two groups and having the same content being taught concurrently to each group by a different teacher.

(Cook & McDuffie-Landrum, 2020). This style of co-teaching is commonly used if the teaching team determines that the content is better taught using small-group instruction because it effectively reduces the class size and allows students to have more opportunities to respond and participate during instruction (Cook et al., 2017). One of the benefits of this model is that the small-group format allows teachers to provide more individualized attention and feedback to the students. Because it allows for more individualization and feedback it should be used more frequently than some of the other co-teaching methods (Friend, 2014). Another characteristic that differentiates this style from others is that the groups do not shift or rotate. Furthermore, the students only receive instruction from one teacher during this time.

As with each model, there are challenges and limitations within parallel teaching. If the content knowledge of one teacher was not as strong as the other, the students in that group could be at a disadvantage. Most often, the special education teacher may not also be certified in that content area, so he or she may find it difficult to present the content at the same level that the content expert can deliver it. Based upon that limitation, this model may be more appropriate from reviewing content, instead of using it to introduce new content. Other challenges are that teachers need to closely communicate to ensure that they are pacing their instruction at similar rates. In addition, instructors need to be aware of noise level within the class, because two lessons happening simultaneously could create distractions for some of the learners in the classroom (Friend, 2014).

Station teaching is similar to parallel teaching, in that it involves splitting the class into smaller groups. However, in this model each group, or station, is focused on a different topic or activity and the students rotate through the two stations. Each teacher

facilitates a different station, and the lessons or activities are independent from each other.

Because of its versatility, this model is recommended for frequent usage (Friend, 2014). Within this model, the students can be grouped in a variety of ways and the teachers can run stations aligned with their strengths and even offer a station for independent work if appropriate. For example, the general education teacher might introduce a new topic at the station they lead while the special education teacher might introduce an instruction strategy, graphic organizer, or mnemonic device aligned with the same topic. By breaking the whole class into smaller groups, the teachers can more easily mitigate behavior challenges and provide targeted support to students who may need additional instructional support. This model requires advanced planning; however, it also creates opportunities for differentiation across the smaller groups of students (Sinclair, 2019).

There are some logistical challenges within the station model. The stations need to function independently from each other and cannot be hieratical. The stations need to be able to function so that the students can complete them in any order or rotation. This model also requires significant collaboration and planning between the teachers. In addition, if either teacher is weak in behavior management or lacks instructional control, the noise level and engagement of the students may fluctuate.

In the one-teach, one assist model, one teacher takes the instructional lead, while the other supports or enhances the instruction. This model is utilized when instruction is occurring to the whole group, and if one of the instructors is less confident in the material than the other. Typically, in this model, the content area teacher would assume the

primary teaching responsibilities, while the special education teacher would provide additional supports as needed. Scruggs et al. (2017) found that this typically to be the dominant model of co-teaching utilized, even though it is not highly recommended within the literature. This model is not highly recommended because the special education teacher often ended up playing a subordinate role to the general education teacher. A study by Keeley (2015) found this model to be ineffective in multiple areas, including classroom management and learning. His study concluded that "...as long as the one teach/one assist model is consistently implemented in the co-taught classroom, students are not experiencing any of the student perceived benefits as indicated are present when other co-teaching models are incorporated" (p. 14).

A benefit to this model of co-teaching is that the lesson can be taught more efficiently, with one teacher being dedicated to answering questions or prompting students to get back on-task. Regardless of implementation, this type of classroom would still only have one teacher providing instruction, which drastically minimizes the potential impact of having two teachers in the room, which is a significant limitation. This model has the greatest potential to be over-utilized, especially when teachers lack sufficient planning time.

The one-teach, one-observe model is not mentioned as prolifically in literature as the other models, but it serves an important function and should be considered as a viable option. In this model, one teacher leads the instruction, while the other teacher quietly observes. The observing teacher can be used to collect a variety of data including collecting behavior data on students like time on task or calling out. For collecting data on the teacher such as counting opportunities to respond, if the teacher included all

students in a discussion or other instructional data that the teacher can use to reflect on his or her practices. To further clarify, the role of the observer is not passive, and he or she is actively engaged in data collection for a specific purpose and not just casually watching while instruction is occurring (Sinclair, 2018).

While this model should only be used periodically, it can be used at any time during the year and requires advance planning to ensure that both parties understand their role in that lesson, so that the correct data can be collected. This allows teachers to focus on student learning, student behavior, and their own instructional practices in a way that they never could independently. This type of co-teaching involves a deeper level of trust than the others, because the role of the observer is not to be an evaluator but to be an objective observer.

The final co-teaching model is alternative teaching. In alternative teaching one teacher provides instruction to a smaller group of students, while the other instructs the rest of the class. This model is typically utilized to provide specialized instruction for a particular group of students. Most typically, the small group instruction would be provided by the special education teacher and involve additional practice, repetition or specific differentiation to meet the needs of the students in that small group. For example, the teachers could use the results of a recent formative assessment to identify which students may benefit from having the lesson retaught to them, while the other group engages in other curricular activities.

A strength of this model is that it allows for the students with disabilities to receive targeted intervention to meet their diverse needs, while also allowing an opportunity for students to receive instruction related to their grade-level content with

their non-disabled peers. As with most of these models, collaboration between the two teachers is essential for this model. The teachers will need to determine which students would benefit from the small group instruction, in addition to making sure it is facilitated in a way that those students do not miss out on any essential content during the small group time.

One of the challenges with this model is that the teachers need to ensure that the small group does not become the equivalent of a pullout special education group that happens to occur within the general education environment. This model can be used to provide enrichment, pre-teaching, or to provide more individualized instruction for students with behavioral needs who would benefit from additional attention, but it should not be used regularly and should be used with intentionality, so that the spirit of inclusive practices is being honored.

Research-Based Benefits of Co-Teaching in Special Education

Research has found that co-teaching can benefit students with disabilities, students without disabilities, and the teachers. Scruggs et al. (2007) found that co-teaching provided not only academic benefits to students with disabilities but also could improve their social and behavioral skills. Co-teaching allows students with disabilities to learn along-side their same aged peers, as well as meaningfully participate in specially designed instruction to meet their specialized needs. The findings of a study by Klingner and Vaughn (1999) indicated that students with high incidence disabilities desired equal participation in activities, access to the same books and homework assignments as their classmates. Their peers without disabilities also shared these perspectives; they viewed it as the most fair and equitable approach. Both groups of students also acknowledged that

not all students learn at the same pace or in the same way. Interestingly, both groups also appreciated having teachers who adjusted the pace of instruction, provided clear explanations of concepts, utilized effective teaching strategies, and ensured that all students in the class had an opportunity to learn.

The benefits to all students were not just limited to academic gains. Across multiple studies the benefits of exposure to peer models for appropriate behavior was noted (Scruggs et al., 2007). Another study found that teachers reported that students with disabilities were able to receive additional attention through the implementation of co-teaching practices. (Norris, 1997). A study of 54 secondary students with and without disabilities found that all but one student who was interviewed reported both academic and behavioral benefits from being in a co-taught class (Dieker, 2001).

Salend et al. (1997) found that teachers occasionally observed increased collaboration among their students, both with and without disabilities, in their classes that were co-taught. In fact, multiple studies have found evidence to support that the additional teacher attention that can be provided through the co-teaching model has resulted in academic benefits for all learners (Luckner, 1999; Rice & Zigmond, 2000). Across all studies reviewed, the perceived social benefits that were provided to students without disabilities was more frequently discussed than the academic benefits. A meta-analysis by Scruggs et al. (2007) found that, "Co-teachers in a number of investigations reported on the positive effects of co-teacher collaboration as a social model for students" (p. 401).

In looking at the benefits to the teachers involved with co-teaching, that same meta-analysis by Scruggs et al. (2007) found that, in general, teachers commonly

reported that they had experienced professional advantages because of co-teaching. The study found many teachers felt that there was almost a symbiotic relationship between the co-teaching pairs where the special education teacher gained content knowledge from the general education teacher and the general education teacher gained understanding of how to adapt curriculum and improve their classroom management skills. Additionally, perceptual data collected by Chitiyo (2017) found that 82% of general and special educators felt co-teaching was beneficial; 69% believed co-teaching met the needs of their students. Interestingly, that same study reported that 62% of those teachers believed that they lacked the skills needed to successfully implement co-teaching.

A 2015 study by Sweigart and Landrum had two notable findings related to how the co-teaching model can benefit teachers. First, they found that co-teachers had increased rates of using effective instructional practices with their classes including providing positive feedback and opportunities to respond when compared to their colleagues who did not utilize the co-teaching model. Secondly, they found higher levels of student engagement, plus decreased rates of disruptive behaviors in classes who implemented the co-teaching model.

One theory about these benefits is that they come from the higher teacher to student ratio that can be afforded by the co-teaching model. According to Villa et al. (2008), "...the higher teacher-to-student ratio, that results allows for more immediate and accurate diagnoses of student needs and more active student participation in a variety of learning situations" (p. 16). It is not just the ratio of course, but the practices implemented by the teachers. As Scruggs and Mastropieri (2017) noted, "It is what the two teachers do

and how they do it that can make co-teaching effective for a student with disabilities” (p. 285).

Research-Based Challenges and Limitations of Co-Teaching in Special Education

Ongoing research regarding the impact of the co-teaching model has also identified challenges and limitations of the practice, which impact its effectiveness. One of the most obvious limitations to the co-teaching model is in most districts, the number of general education teachers significantly outnumbers the number of special educators, so not all staff, or students, can participate in the service delivery model. The dependence on collaboration, rather than the physical presence and direct assistance of special educators in any given classroom, is emphasized by the ratio between special and general education teachers (Fuchs et al., 2015). Some of the other challenges and limitations identified include student skill level, behavioral barriers, and detrimental impacts to students with disabilities.

A study by Weiss and Lloyd (2002), found six secondary teachers who felt that some of the students with disabilities did not belong in their co-taught classes but were there because, “a school policy required them to participate in mainstream classes” (p. 65). This comment and the perspectives shared by these teachers illustrates the divergent thinking that exists between educational practice and education law. Schools are mandated to provide the least restrictive environment for students with disabilities, however, not all staff may be willing to adjust to that mandate.

The meta-analysis completed by Scruggs et al. (2007) found instances throughout multiple studies where teachers reported that student behaviors had a negative impact on co-teaching, which left them feeling angry and frustrated. Some of the barriers reported

in this study were that occasionally classes had an imbalance of students with disabilities which resulted in behaviors ranging from defiance to both verbal and physical aggression.

Zigmond and Matta (2004) found that instead of helping to provide specialized instruction, accommodations, and modifications to students with disabilities, the primary role of the special education teacher was often just in helping and assisting students throughout the classroom. While co-teaching may enhance achievement outcomes for certain students with disabilities, it often falls short for the level of intensity needed to improve outcomes for students facing the most severe and persistent deficits (Sinclair, 2019). Special education provides a continuum of services to students with disabilities and cannot offer a 'one size fits all' model. Most important to note, students with learning disabilities differ in the severity of their disabilities. Students facing more severe learning challenges necessitate an instructional intensity that may surpass the scope of the supports and benefits offered through the co-teaching model (Fuchs et al., 2018).

Additionally, due to the frequent implementation of the one-teach, one-assist model as reported in Scruggs et al. (2007), students with disabilities may not be getting targeted instruction at their level and overusing that model may unintentionally result in an "overreliance on one-to-one assistance or stigmatization that students with disabilities always need individual attention to complete assignments" (p. 135).

Boudah et al. (1997) studied the impact of co-teaching on high school students. The study found that the academic performance of the students with disabilities who received the experimental co-teaching treatment declined during the course of the study. In addition, even though there were two teachers in the classroom the students were only

minimally engaged in instructional tasks as compared to students with disabilities who were not in a co-taught class. Another more recent study found that when the special education teacher was present, general education teachers spent significantly less time working with the students with disabilities (Magiera & Zigmond, 2005).

This concerning trend in the research limits the identified and perceived benefits that the co-teaching model has to offer. To offer students with disabilities increased opportunities for instructional experiences that promote their progress, both co-teaching partners must actively participate as instructors and be engaged in delivering the content. Johnson et al. (2022) noted that:

When co-taught classes are led by general educators, the active involvement of the special educators may be determined more by the willingness of the general educator to include special educators in instruction than the beliefs and capabilities of the special educators. (p. 103)

Just the practice of having two adults in the classroom does not seem to result in improved academic outcomes. The adults need to actively engage students in learning. For example, Bottge et al. (2018) conducted a reanalysis on the instruction computing fractions in special education resources rooms, and in inclusive environments. Their results demonstrated that students with disabilities who were taught in co-taught classes performed better in classes where the teachers shared the instructional responsibilities (team teaching), as opposed to when the special educator played little-to-no role in providing direct instruction (one teach, one assist). Interestingly, their findings also supported that student with disabilities, "...who are taught in small groups with a specialized curriculum that targets their learning deficits can make larger academic gains

than students with disabilities who are taught with the general school curriculum in the inclusive math settings" (p. 209).

One study reflected potential challenges of co-teachers overutilizing the one teach, one assist model. Wexler et al. (2018) studied middle school English language arts classes and found that students, both with and without disabilities, were engaged in whole-class or independent work for 86.5% of the class time. Meaning, students with disabilities were, at most, receiving specially designed instruction to meet their needs only 13% of the time. Studies like this underscore the need for districts to continually evaluate the effectiveness of special education service models in their schools. If a district is making the decision to allocate two professional staff to one learning environment, one of those professionals should not spend most of their time supporting whole-class instruction led by the other professional, as that is both ineffective for students and an irresponsible use of district resources.

Hattie (2009) conducted a comprehensive meta-analysis on the influences of student achievement by reviewing over 800 research studies. He reviewed the effect sizes of various influences; he categorized these the factors based on their effect size and determined that influences that have an effect size of 0.4 or higher are considered to have a significant impact on learning. His research determined that the practice of co-teaching had an effect size of 0.19 reflecting that it does not have a significant impact on learning. In fact, the study found that influences that rank that low lead to significantly less than a year's academic growth for students. Typically, the students identified for being in co-taught classes are students with identified learning disabilities and often need to make more than a year's growth to close their academic gaps. Despite the widespread

popularity and potential advantages of co-teaching, effectively implementing this model can be challenging due to a range of commonly encountered challenges and the considerable variation in how it is implemented.

Research-Based Factors that Influence the Implementation of Co-Teaching

Due to the dynamic aspect of co-teaching, researchers have identified multiple factors that can have either a positive or negative impact on the quality and success of co-teaching within a school district. Some of the factors that can have the most meaningful influence on implementing co-teaching include support from administration, how teams are formed, planning time, and professional development.

Administrative support can come in many forms. Administrators oversee developing the schedule and developing class rosters, so they can help determine which grade levels and classes will implement the co-teaching instructional model. To assist with this task, Murawski and Dieker (2008) recommend that principals should strive to schedule classes utilizing the natural proportions of individuals with disabilities. Meaning, since the average natural percentage of people with disabilities in society ranges near 20%, co-taught classes should not be comprised of more than 20% with students that have disabilities. They theorize that if the percentage of students with a disability rises too high, then the anticipated or perceived benefits of co-teaching will be jeopardized.

The support of administrators is so important that in all 32 of the qualitative studies of co-teaching in inclusive settings that we included in a meta-analysis by Scruggs et al. (2007) found no evidence to support the notion that administrative support was not necessary. In fact, many of the teachers interviewed across most of the studies

listed administrative support as one of the primary factors needed for co-teaching to be successful. Although there is evidence highlighting the importance of administrative support for retaining special education teachers and providing quality instruction in co-taught classrooms, there has been limited guidance provided to administrators on their role in supporting co-teaching practices (Sinclair, 2019).

One area where administrative support is essential is creating co-teaching pairings. Scruggs et al. (2007) found that many of the teachers in the reviewed studies stated the importance of co-teachers needing to volunteer to teach together, as opposed to being randomly selected or having it forced on them. Their study also supported that administrators shared the same point of view, and believed that letting teachers pick their partners was important. This view was shared in other articles as well. Murawski and Dieker (2008) noted that:

Too often, administrators throw co-teachers into an arranged co-teaching relationship; and the co-teachers focus on their resentment that no one asked them for their opinion, that they were not trained, or that they do not know the content or the special needs of the students the way that the other educator does. (p. 47)

Rice and Zigmond (2000) in a study of 17 teachers in America and Australia found that many of the teachers interviewed felt that one of the most critical variables in successful co-teaching was the compatibility between the co-teaching partners. Scruggs et al. (2007) also found evidence to support the importance of compatibility. In their meta-analysis, they found multiple instances where a lack of mutual trust and respect had negative effects and, in some circumstances, led to some of the partnerships dissolving.

Sileo (2011) identified communication as a key element that could make or break co-teaching pairs. "Co-teachers' inability to discuss nitty-gritty details regarding shared classroom space, instructional noise levels, discipline, and daily chores often leads to unresolved issues that interfere with efforts to collaborate on behalf of students" (p. 34). Co-teaching partners need to maintain ongoing communication throughout their partnership to ensure that their focus remains on the paramount goals of co-teaching: the academic and social growth and development of their students.

Kramer and Murawski (2017), also encourage administrators to build consistently within the co-teaching partners and stop the practice of frequent switching. They opine that the effectiveness of co-teaching may improve the longer co-teachers are paired together, because they continue to build upon their shared expertise. Conversely, when pairs are mixed often, teachers may not have the time required to develop the content knowledge or instructional strategies from one another. Even maintaining teacher pairs for years and allowing them to pick their own pairs may be ineffective in the long term if the teachers do not have common planning time or ongoing opportunities for collaboration.

In a 2001 study on co-teaching at the secondary level, Deiker found that the teachers shared common struggles about finding adequate planning time. These same teachers reported having, on average, 45.5 minutes per week for planning however they felt they needed at least three times that amount. Due to potential time constraints for co-teachers in their collaborative planning, it is crucial for them to make the most of the time they have available. Technology can play a vital role in enhancing the efficiency of their co-planning efforts. For instance, shared web-based documents can offer a convenient

platform for teachers to make notes, offer suggestions, and communicate with each other regarding critical or time-sensitive thoughts within a single document at various points throughout the day (Scruggs & Mastropieri, 2017).

As teachers continue to consistently engage in this planning process, they will become more comfortable and efficient in planning lessons within the framework of this instructional model (Cook & McDuffie-Landrum, 2020). Co-planning and collaboration may not be easy or natural, especially to newer teaching pairs. In a 2022 study on collective efficacy and co-teaching, Pizana concluded that, "Shared responsibilities, communication, and co-planning are related to a cohesive co-teaching partnership" (p. 1823). To ensure the effectiveness of collaboration, it is crucial that the teachers in each pair have an equal standing. Typically, in co-teaching, the general education teacher often holds the dominant role due to having ownership of the room and knowledge of the content. This dominance persists irrespective of their experience or expertise. Consequently, the overall orientation of the classroom tends to favor the general education teacher and whole-class, and teacher led instruction prevails.

While it is important that teachers have dedicated time for planning together, they may also need guidance and training on how to effectively plan and design accessible lessons and assessments. In a 2017 study by Brendle et al., the authors found that the interviewees felt co-teaching was beneficial for both students and teachers; however, they believed they lacked the skills to effectively co-plan, co-instruct, and co-assess. This fact was acknowledged again in a study by Chitiyo and Brinda (2018), who found that most teachers in their study of 77 teachers reported feeling knowledge about the practice, but were unprepared to implement co-teaching in their district. This underscores the idea that

that districts will need to be intentional with how they plan to provide this needed professional development to their co-teachers.

While some studies found that some teachers prefer to dive in and explore the practice of co-teaching, many other studies revealed most teachers, when interviewed, emphasized the importance of receiving training. Some of the most common areas of training requested were in co-teaching styles, effective communication, using technology in co-taught classes and understanding the characteristics of disabilities (Scruggs et al., 2007).

Relying on a “one and done” approach for professional development is often ineffective. Instead, an essential key to the successful implementation of instructional strategies can be found in utilizing instructional coaches who can model strategies and provide valuable feedback to the co-teaching teams (Leko & Brownell, 2009). Productive professional development grants teachers the necessary time to apply new educational methods in their classrooms, along with ongoing feedback as the year goes on to support teachers redesign and adapt to the changing needs of their students and content areas (Kretlow et al.). After acquiring the initial knowledge about new instructional practices, such as co-teaching, the teachers should participate in follow-up application activities that are reflective of best practices. As summarized in an article by Cook et al. (2021), “Teachers need specific direction and guidance to apply new instructional strategies into their classrooms, co-teachers also need additional support to maximize their expertise and instructional capacity of each teacher” (p. 136).

While researching co-teaching and collaborative teaching methods in Italy, researchers Ghedin and Aquario (2020) found what they describe as the ‘co-teaching

paradox. According to them the 'co-teaching paradox' is, "the contradiction that often exists between what a teacher believes is important and how to achieve it at an ideal level, and what is currently deemed to be important..." (p. 25). The example Ghedin and Aquario used within their study was that most of the teachers they interviewed shared that communication between teachers was important and that both teachers treat each other as equals. However, their findings reflected that while teachers were aware of these perceived benefits, they remained purely aspirational in that the teachers were found to have minimal communication between each other and that the duties were not evenly shared. While the authors acknowledge there is still more to study in this area before this concept can be generalized it might explain some of the limitations that were described above.

Summary

The purpose of this Capstone Project is to help examine the perceptions that secondary teachers have regarding the practice of co-teaching. As civil rights for citizens across the county expanded over the past few decades, so have the civil rights of our most vulnerable students. As is often the case, schools have worked tirelessly to keep up with the changing pace of laws and litigation. Seemingly the school systems can never be "caught-up". There is always new litigation occurring as families, schools, and courts determine what the rights of the students are, versus the obligations of the local education agent. As the rights of our students continue to expand, so have the instructional models and methodologies that we implement. To meet this growing need, many districts implement various forms of the co-teaching model.

Co-teaching has been around for over 30 years as an instructional model to help meet both federal and philosophical changes in who best educates students with disabilities. This service delivery model has become widely embraced at the secondary level as a means of guaranteeing that students with disabilities are exposed to the same curriculum and rigorous academic standards as their non-disabled peers. As the research reviewed above reflects, there are many potential benefits that can be realized through co-teaching; however, it should never be viewed as a panacea for meeting the diverse needs of students with disabilities. This model does have its limitations.

The practice and theory of having both a content area teacher and special education teacher collaborating to better meet the needs of all learners is a promising prospect. Conceptually, co-teaching enables all students to gain access to the regular standards and general curriculum, while also meeting the varied needs of students who require special designed instruction. The research also supports that for co-teaching to be at its most successful, teachers need support from their administration and professional development.

Teachers undoubtedly require clear guidance on how to share teaching responsibilities effectively, to ensure the adequate fulfillment of the needs of students with disabilities. It remains crucial that administrators provide professional development to assist teachers in acquiring guidance and direction. Unfortunately, research also indicates that, despite the prevalence of co-teaching in secondary schools, there is uncertainty among both researchers and educators regarding the actual benefits that students are gaining from the instructional model.

CHAPTER III

Methodology

In recognizing the imperative for school districts nationwide to navigate the challenges of rising costs and staffing shortages, this Capstone Project seeks to explore secondary teachers' perceptions of co-teaching. Compounding the fiscal and staffing concerns of districts, is the fact that the number of students with disabilities is increasing, further forcing and compelling districts to optimize their existing resources in the most effective and efficient ways.

Many school districts nationwide have transitioned to co-teaching models as their primary or predominant approach to accommodate the needs of students with disabilities. This shift is largely driven by the imperative to adhere to legal mandates advocating for the education of students in the "least restrictive environment" to the maximum extent possible. Despite that, during periods of fiscal constraint, the decision to assign special education staff as co-teachers in general education classrooms for a significant portion of the school day often occurs at the expense of ensuring a comprehensive range of placement options within the regular school environment.

The concept of a "full continuum" of placements is integral to the Individuals with Disabilities Education Act's (IDEA, 1997) mandate for the least restrictive environment, alongside the requirement for access to general education settings. This continuum serves as the mechanism through which the tension between the IDEA's emphasis on inclusion and its commitment to individualized instruction is reconciled. Without a diverse array of program and placement options, students requiring intensive,

specialized instruction beyond the scope of the general curriculum may find themselves inadequately accommodated within the regular classroom setting.

While the benefits of integrating more students with disabilities into regular classrooms are evident, this approach must not come at the expense of a robust continuum of instructional alternatives within special education programs. Sacrificing this continuum for the sake of increased inclusion may yield short-term savings, but could ultimately prove detrimental. Properly implementing the IDEA's least restrictive environment mandate necessitates investment; it cannot be achieved through cost-cutting measures alone. The IDEA mandates a comprehensive range of options capable of addressing the diverse needs of every learner in environments as 'typical' as possible.

The decision to implement co-teaching as an instructional model should be based on the unique variables and circumstances within each school district. Gutting one end of the continuum in favor of another can lead to errors, which is why it is crucial for districts to continually assess and evaluate whether co-teaching is the most appropriate instructional model for their specific circumstances. Districts owe it to all stakeholders to regularly review if co-teaching is achieving its desired and intended impact. Understanding teacher's' perceptions of co-teaching at the secondary level can provide valuable data that can be used to inform programmatic decisions.

Reviewing the literature makes it clear that there can be benefits to co-teaching, but the model does not always provide the results that districts intended. Districts need to combine the established knowledge and research on co-teaching practices with the perceptual data of their specific districts, to help them make informed instructional decisions. These programmatic decisions will ensure that students with disabilities

receive the necessary support they need, while also responsibly managing the finite resources within a district. By integrating teachers' insights, districts can adapt and refine their approaches to co-teaching, aligning them with the evolving needs of their student population and the broader educational landscape.

Purpose

In this Capstone Project, the researcher seeks to extend the understanding of the perceptions that secondary teachers have regarding the instructional practice of co-teaching. The perceptions of both regular education teachers and special education teachers who have used this type of instructional model were included in this project to get a more complete understanding of how teachers perceive the benefits and limitations of this practice. To analyze these perceptions, the researcher utilized a mixed-method approach by both looking at the quantitative data of the measures of central tendencies found within the demographic data of the subjects, and comparing and contrasting that with the qualitative data collected by the participants through a survey.

In reviewing the current literature on co-teaching practices, it is clear that there is a practical-knowledge gap between research and practice. A practical-knowledge gap, also known as an action-knowledge gap, is formed when there are discrepancies between the professional behaviors and actions of teachers and the theoretic best practices that are described within educational research (Miles, 2017). This capstone hopes to closely analyze the practices and options of a specific school district to help better guide their future co-teaching practices, and ensure the alignment of research to their practices.

This study will examine what teachers perceive are the benefits and limitations of co-teaching, in addition to what factors both contribute or inhibit its success. Without

focusing on the perceptual data of their staff regarding the practice of co-teaching, schools risk functioning on the individual metrics and beliefs of their teaching staff as opposed to focusing on the evidence-based practices described in the most current research. Ultimately this researcher hopes to validate how the district can maximize the limited resources available due to staffing concerns, and meet the diverse needs of their learners, while also protecting the civil rights of those same learners as outlined by state and federal laws.

Research Questions

Research question #1:

What are teachers' perceptions of the benefits of co-teaching for students with disabilities?

Research question #2:

What are teachers' perceptions of the challenges of co-teaching for students with disabilities?

Research questions #3:

What are teachers' perceptions of the factors that contribute to the success or failure of co-teaching for students with disabilities?

These questions demonstrate the congruence between the research study's objectives and the sought-after data. As evidenced by these questions, if schools are trying to maximize their resources while still providing the required support and services to their students with disabilities, they will need to have a comprehensive understanding of how teachers perceive the instructional models that they are implementing to meet these needs.

Setting and Participants

The Elizabethtown Area School District is nestled in Lancaster County, just 20 miles from the Pennsylvania state capital, and conveniently accessible through major roadways and the railroad system. The district has an enrollment of 3,664 students and comprises two primary buildings, an intermediate school, a middle school, and a high school. This study is being conducted with teachers within the middle and high schools which include grades six through twelve.

Of those 3,664 students, 17.5% have been identified as receiving special education services. Also of note, within the student demographics of the district include that 32% receive free and reduced lunches, 15% are of minority backgrounds, and 1% are designated as being homeless.

The district has 271 professional staff members, 161 support staff, and 22 administrators. 95% of the 22 administrators possess a graduate degree or higher and have had at least ten years of education experience. Out of the 271 professional staff, 69% have been in the field for at least ten years or more.

The operating budget of the district amounted to \$73,040,069 for the 2022-2023 school year. During that same school year, the district spent approximately \$19,934 per student. The attendance rates across the district during that school year ranged from 94% - 96%; the average SAT scores for the high school students exceeded both the state and national average. Additionally, 99% of the students successfully progress to their subsequent grade levels and the district has a graduation rate of 96%. 62% of those graduates continue their academic pursuits at 4-year, 2-year, or alternative post-secondary institutions.

The district has implemented a model known as the “Life Ready Model” for the foundation of their academic programming. Within the Life Ready Model, the district focuses on supporting all students toward one of three graduation pathways. Those three pathways are to obtain a career that pays a livable wage, attend a post-secondary institution, or to seek an opportunity with our nation’s armed forces.

The research chose to focus on the perceptions of secondary teachers, because in this district co-teaching is more often utilized in these grades. Even within the secondary grades of this district, there are variances between the middle school and high school. The middle school includes grades 6 through 8, each grade utilizes a “teaming” structure. There is a learning support teacher assigned to each grade level, so the special education case managers only need to work with one grade-level’s worth of curriculum and one grade level of regular education teachers.

The middle school schedule has the team-specific special education teacher co-teach two English classes and two math classes, each with the same English and math regular education teacher. The high school co-teaching schedule has more variance. While it does include co-taught algebra and English courses the special education teachers meet with administration to determine which classes should be co-taught each semester. Traditionally, the academic courses with the highest percentage of students with disabilities were the ones selected to utilize the co-teaching model.

Approval for the study was granted on August 8th, 2023 (Appendix A). The researcher then worked with the building administrators of both the middle school and high school to identify all special education teachers and regular education teachers who had either participated in co-teaching during the 2002-2023 school year, or who were

participating in the co-teaching model during the 2003-2024 school year. An email in November 2023 was distributed to all the potential participants who had been identified by their administrators (Appendix B). to provide them with information about the study and on how to access the survey if they were interested in participating. This action research was conducted between November 11, 2023, and December 21, 2023, via online survey. Utilizing online surveys for actions research offers a secure and cost-effective means for collecting participant responses. For this study, Google Forms was used to create the survey. An online survey was utilized because it could easily maintain the anonymity of the respondents, and their responses were automatically saved in a data spreadsheet for easy collection and maintenance.

Following the informed consent page, the survey consisted of thirteen questions (Appendix C). Participants had to give consent to the survey before the questions would progress past the informed consent, ensuring that all participants were fully informed on the purpose and methods of the study. The survey questions (Appendix D) were derived from prior dissertations who studied similar themes (Harper, 2009; Sims, 2021) and from the need to answer the three research questions. The survey begins with three questions to help determine the demographics of the participants to help determine if any themes would emerge from any of the subgroups who were surveyed. A series of questions on a Likert scale followed the demographic section. These questions rated the participants' opinions on various elements of the co-teaching model and philosophy regarding the benefits and limitations of this instructional model. The final section focused on open-ended questions that directly related to the research questions.

Research Plan

This research plan emerged from the extensive insights and practical experiences garnered by the researcher, who has over two decades of immersive experience in special education, as both an educator and administrator. Over this tenure, this researcher has keenly observed the dynamic implementation of the co-teaching model within diverse districts nationwide. The researcher's experiential foundations are complemented by a meticulous examination of the scholarly literature pertaining to co-teaching, alongside a comprehensive review of the legal landscape shaping the evolution of special education, inclusionary practices, and the reinforcement of least restrictive mandates.

Special education legislation clearly gives guidance beyond any doubt that the school's obligation is to provide as many opportunities in the regular education environment as is possible. Through those mandates, the practice of co-teaching as an instructional model emerged. Research has attempted to identify and define some qualities and characters that are necessary for successful implementation of this practice.

However, regardless of its widespread adoption in secondary schools, research reveals a pervasive uncertainty among scholars and practitioners regarding the tangible benefits realized by students through this instructional model. This realization underscores the imperative for districts to collect internal feedback to determine the suitability of co-teaching in advancing inclusive educational practices. Central to this internal process is the collection and analysis of teachers' perspectives on co-teaching, constituting a pivotal step in the internal deliberation.

As shown in Table 1, the data collection timeline was structured to align with the school year calendar. It allowed for staff, who were co-teaching for the current year to

have time to get settled and familiar with the routines and structures of the co-teaching model.

Table 1

Data Collection Timelines

Timeline	Data Collection Tasks
September 2022 through October 2022	Secure necessary permissions from district and participants.
November 2022 through December 2022	Administer surveys to collect data on teacher perceptions of co-teaching's benefits, challenges, and effectiveness

From a fiscal lens, the practice of co-teaching does not have a direct impact on the finances of a school district; however, because it is an instructional model, it does utilize limited resources that need to be used as effectively and efficiently as possible. To further explore the fiscal implications of this model, the researcher reviewed the salaries and benefits of those secondary learning support teachers. Table 2 shows these salaries.

Table 2

Special Education Salaries and Benefits

Description	Budget
High School Special Education Teacher Salaries	\$367,908.20
High School Special Education Teacher - Benefits Cost to Employer	\$64,078.46
Middle School Special Education Teacher Salaries	\$321,101.00
Middle School Special Education Teacher - Benefits Cost to Employer	\$91,347.52
Total	\$844,435.18

Note. This study did not review the salaries and benefits of the regular educators involved, as these resources would still need to be allocated regardless of whether the district implemented co-teaching.

Even if a district does not implement co-teaching, it still must invest in special education teachers to meet the compliance regulations associated with state and federal mandates. This number, for this district, is still a relevant financial representation of the fiscal commitment being made by the district to implement this instructional model.

In addition to salaries and benefits, implementing co-teaching entails various indirect costs and resource allocations. One significant indirect cost is the allocation of time. If special education teachers were no longer engaged in co-teaching, they would have the opportunity to dedicate their time to other professional duties, such as progress monitoring, implementing interventions, and providing additional student support, which are currently constrained by the demands of co-teaching throughout the day. Effective co-teaching necessitates collaborative planning time for teachers, which incurs both planning time itself, and the coordination efforts required to synchronize schedules for joint planning sessions.

Furthermore, to bolster effective co-teaching practices, the district earmarks time for professional development sessions tailored for co-teaching pairs. Professional development opportunities are highly valued and in high demand, with numerous crucial topics competing for allocation of this time. Redirecting these training hours from co-teaching to other areas of need would enable the district to address a broader spectrum of training priorities.

By investigating teachers' perceptions of co-teaching's impact on secondary students with disabilities, valuable data can be gleaned to facilitate informed decision-making by the district. This research endeavor aims to provide essential insights for the district to make programmatic decisions that prioritize the support and well-being of students, while judiciously managing the finite resources available.

Research Design, Methods, and Data Collection

For this study the researcher selected to use a mixed-methods approach. “A mixed-methods research design is a procedure for collecting, analyzing, and ‘mixing’ both quantitative and qualitative data in a single study to understand a research problem” (Creswell, 2005, p. 510). Utilizing a mixed-method research (MMR) approach is advantageous when aiming to leverage the respective merits of both quantitative and qualitative data which allows for the exploration of research questions that would be challenging to address using either approach in isolation. Additionally, MMR enables exploration not only of the effectiveness of a practice, but also of the underlying processes and issues shaping its effects. Some of these issues include feasibility, support, barriers of implementation, contextual factors influencing implementation, and stakeholder perspectives. By investigating these aspects, MMR can broaden the scope and potential impact of studies conducted in other methodologies (Klinger & Boardman, 2011).

As stated by Houchins et al. (2022), “Mixed methods research aims to integrate objectivity, subjectivity, co-construction, and multiple interpretations of reality” (p. 187). This study is considered MMR because the quantitative data from the demographics sections and the Likert scales are analyzed alongside the qualitative results collected from the open-ended questions. MMR was a natural choice for a study such as this because it merges the advantages of quantitative and qualitative research to assist practitioners in comprehending and adapting to the viewpoints of students, families, and teachers. This design approach aids in gaining deeper insights into complex teaching and learning processes such as co-teaching and inclusionary practices (Love & Cook, 2022).

MMR should not be confused with multiple-methods research. Multiple-methods research integrates two or more data sources using the same approach. On the other hand, multi-mixed methods or meta-method research combines multiple methods using different methodologies. Typically, a multiple-methods study would involve collecting and analyzing both qualitative and quantitative data separately, without ever integrating the two (Lenk et al., 2023).

The purpose of MMR is to enrich our comprehension of a phenomenon by corroborating findings within a study, or across multiple related studies. The process facilitates the enhancement, elaboration, or clarification of the researcher's findings (Houchins et al., 2022). MMR involves seeking a deeper comprehension of phenomena through the integration and equal appreciation of quantitative and qualitative methods, regardless of whether they yield converging or triangulated findings.

The utilization of both quantitative and qualitative research methods to fulfill the research objectives sets MMR apart from multiple-methods research. This integration enables researchers to harness the distinct advantages offered by MMR (Fetters & Freshwater, 2015). Qualitative designs within MMR have capacity to highlight the personal experiences and alternative perspectives of participants, a dimension overlooked when relying solely on statistics. However, the incorporation of both qualitative and quantitative data in MMR offers potential for critical and emancipatory research, empowering broader audiences, including those who may be motivated to by either words, numerical data, or both words and numerical data (Leko et al., 2023).

MMR proves especially valuable in shaping both the practice and policy of special education within real-world settings, including classrooms that support the needs of students

with disabilities (Klinger & Boardman, 2011). Knowing this made MMR a natural design choice to use to explore these research questions, especially because this structure can be instrumental in pinpointing the timing and reasons behind the effectiveness or ineffectiveness of practices, which can be influenced by contextual factors, implementing requirements, or other situational practices (Howie et al., 2017). MMR will allow the researcher to identify what factors teachers perceive contribute to the success or failure of co-teaching in ways that would be impossible through a single-method design.

In contrast to single-method designs, such as purely quantitative or qualitative designs, MMR is still developing and evolving. According to Leko et al. (2023) MMR has not yet gained solid footing in leading special education research publications. Leko et al. go on to state that, “Despite the increased attention toward the use of MMR writ large, its uptake within the field of special education has yet to be well established in premier special education research outlets” (p. 432). In a recent study by Corr et al. (2021), it was discovered that merely 0.63% of studies published between 2007 and 2019 across 15 prestigious special education journals utilized MMR. Further, the authors observed that MMR was predominantly employed to enhance the interpretation of findings rather than exploring divergent results or intersecting phenomena, indicating a limited scope of research purposes for its application. The dearth of MMR studies in the field of special education increases the significance of MMR, such as this study.

Using MMR to explore the field of special education can be especially effective in many ways. This design can enhance the existing research base by identifying effective practices tailored to the diverse needs of students with learning disabilities. These studies can also support a deeper understanding of contexts and circumstances, which is crucial for

implementing evidence-based practices to meet the needs of students with disabilities. MMR can help illuminate the complex processes, critical features, and contextual characteristics that influence the effectiveness of various practices. By exploring these factors researchers can gain insights into how and why certain practices, such as co-teaching, fail or succeed which can inform programmatic decision making and improve the academic outcomes for students with disabilities (Love & Cook, 2022).

Even within the scope of MMR research, there are many variations; the specific MMR model chosen for this study was chosen with intentionality and with much consideration towards the research questions. Houchins et al. (2022) identified some widespread challenges across MMR designs that could negatively impact the legitimization or quality of the research findings. Some of these challenges include weighting, timing, and integration.

Weighting refers to the priority or emphasis that the researcher places on the types of data (Creswell, 2005). In this study, both the qualitative and quantitative data share equivalent status. Neither set of data are more dominant than the other when analyzing the results. Timing pertains to the scheduling of the qualitative and quantitative data collection. Common timing schedules in MMR are sequential and concurrent (Houchins et al., 2022). Concurrent timing was used for the data collection in this study. Having both the qualitative and quantitative data collected simultaneously allowed for the researcher to analyze the findings more readily than if the data was collected sequentially. A sequential schedule would have also made it more difficult for the researcher to maintain the anonymous nature of the surveys, which was an important element of this study since it helped to encourage open and honest responses.

Integration in MMR refers to the process of combining and synthesizing both the quantitative and qualitative data collected during the study as opposed to separating the findings. Creswell et al. (2001) state, “The basic concept is that integration of quantitative and qualitative data maximizes the strengths and minimizes the weaknesses of each type of data” (p. 6). The integration of this data will occur after all the data has been collected which is common in convergent MMR studies. Integration, occurring during the final stages of interpretation or reporting, is often observed in convergent MMR designs, because they often have distinct, yet interconnected, questions guiding the quantitative and qualitative data collection and analysis. (Leko et al., 2022).

A concurrent design method was chosen for this research. A concurrent design entails that the researcher carries out the distinct quantitative and qualitative phases autonomously, analyzing each set of data separately, and subsequently integrating the findings to gain a comprehensive understanding (Houchins et al., 2022). In basic concurrent mixed designs, three key principles are observed: (a) quantitative and qualitative data are gathered independently, but concurrently, (b) the analysis of quantitative data and qualitative data proceeds independently, without one influencing the analysis of the other, and (c) integration of the findings does not occur until after both data sets have been independently collected and analyzed. Following this, an inference is formulated, which synthesizes the conclusions drawn from the individual quantitative and qualitative analyses and findings (Onwuegbuzie & Johnson, 2006).

The concurrent Mixed Methods Research (MMR) design is a sophisticated approach that offers a rich, comprehensive understanding of research phenomena by seamlessly integrating quantitative and qualitative methods. The richness and depth provided by

qualitative data add significant context and meaning to the statistical evidence gathered from quantitative research, offering a more nuanced view of the study subject (Mertler, 2022). MMR is specifically appropriate for this study because, as stated by Leko et al. (2023), "...MMR can answer questions about what practices work, for whom, and under what conditions" (p. 443). In sum, MMR was chosen for this study because, through the integration of quantitative and qualitative research, it can provide valuable insights that inform special education practices in real-world settings (Love & Cook, 2022).

Ethical Considerations

Like any research endeavor, there is a possibility that participants may experience some level of stress. However, during the IRB approval phase, participants were thoroughly informed about the nature of the study and any associated risks, which were deemed minimal. While there is no risk of physical harm, participants may understandably feel stress about the survey content, reflecting on their perceptions, or the research outcomes. To address this concern, the Informed Consent clearly stated that the study was non-evaluative and assured anonymity of data. Paper surveys were collected without names attached, only using identification numbers. The use of Google Forms allowed for all participants to maintain their anonymity. Participants were also provided with an estimate of the time required for their participation to ensure full awareness.

Validity

Onwuegbuzie and Johnson (2006) theorize that validity within MMR should be termed legitimation and that there are nine main types of legitimation that researchers can use to validate MMR. One of the legitimations used within this research would be categorized as 'weakness minimization'. By their definition, weakness minimization legitimation is, "The

extent to which the weakness from one approach is compensated by the strengths for another approach” (p. 57). In this study, the data collected from the open-ended questions provide richer context to complement the quantitative data; the measures of central tendency from the Likert scales provide more data points about the participants than could have been collected through qualitative methodology.

Using Likert scales can possibly create some challenges that need to be mitigated to preserve the validity of the study. One primary challenge is the limited range of response options typically offered by Likert scales, which may not fully capture the complexity of respondents' opinions or feelings. Additionally, respondents may feel pressured to choose from the provided options, leading to response bias or inaccuracies.

Another challenge arises from the misuse of the neutral option, where some respondents may default to this choice regardless of their actual viewpoint. This can blur the distinction between genuine neutrality and indifference (Mertler, 2022). For this study the researcher chose not to include a neutral response option, so that participants would need to either state degrees of agreement or disagreement, within the question prompts.

Moreover, social desirability bias may lead respondents to provide socially acceptable responses, rather than expressing their true opinions or behaviors. Allowing participants to answer anonymously helps to mitigate the impact of social desirability bias because the results can never be attributed to a specific participant. Likert scales may also struggle to measure the intensity or strength of respondents' attitudes effectively, focusing primarily on the direction of agreement or disagreement. To mitigate these challenges, the researcher used questions that were either pulled from prior research studies, or directly correlated to the research questions being explored in this study.

MMR and research that utilizes a convergent design has naturally occurring elements of triangulation incorporated into it because the data collected is compared for similarities and themes. Convergent designs involve the triangulation of multiple data sources to delve into a broad research topic, offering rich and comprehensive insights. This method proves beneficial for practitioners seeing multifaceted understanding of a practice or topic of interest (Love & Cook, 2022). In this specific study, secondary teachers' perceptions of co-teaching on students with disabilities will be triangulated by comparing the qualitative data from the open-ended questions to the quantitative data collected by the Likert scales.

Internal Review Board Process

In the initial stages of planning for this Capstone Project, several steps were taken to secure approval from the Institutional Review Board (IRB). Before initiating the project, the researcher completed certification through the CITI program, focusing on three main areas: Applying for Approval, a Basics course, and Conflicts of Interest. Following these certifications, the researcher embarked on the next stage of the process, which was drafting a detailed research proposal. This document elaborated on the study, highlighting the problem statement, the significance of the topic, research questions, chosen methodology, plans for data collection, and strategies for data analysis. With this proposal, the candidate sought and received endorsement from the Elizabethtown Area School District, ensuring support for the forthcoming research. This was marked by receiving a formal approval letter from the superintendent. The IRB granted its approval on August 8th, 2023, with the official documentation of the approval available in Appendix A.

Summary

This Capstone Project addresses the pressing need for school districts to navigate challenges such as rising costs and staffing shortages, particularly in the context of increasing numbers of students with disabilities. The project focuses on exploring secondary teachers' perceptions of co-teaching, a prevalent instructional model used to accommodate students with disabilities in regular classrooms.

Many school districts have transitioned to co-teaching models as their primary approach to inclusivity, driven by legal mandates promoting education in the "least restrictive environment." However, concerns arise regarding the potential trade-off between inclusion and the availability of a comprehensive continuum of placement options within the regular school environment, as mandated by the Individuals with Disabilities Education Act (IDEA).

The project aims to understand secondary teachers' perceptions of co-teaching regarding its benefits, challenges, and factors contributing to success or failure. Three research questions guide the study:

1. What are teachers' perceptions of the benefits of co-teaching for students with disabilities?
2. What are teachers' perceptions of the challenges of co-teaching for students with disabilities?
3. What are teachers' perceptions of the factors that contribute to the success or failure of co-teaching for students with disabilities?

A mixed-methods approach is employed, combining quantitative Likert scale questions and qualitative open-ended questions in an online survey administered to teachers involved in co-teaching during the 2022-2023 and 2023-2024 school years. The concurrent

mixed-methods design allows for independent data collection and analysis before integration, minimizing weaknesses inherent in each method.

The Capstone Project contributes to the ongoing dialogue surrounding co-teaching practices in secondary education. By understanding teachers' perceptions, school districts can refine their approaches to co-teaching, balancing the goals of inclusivity and effective resource management. In the upcoming chapter, the researcher will conduct a thorough analysis of the collected data. This analysis will leverage various data points outlined in the methodology chapter to address the three research questions posed in this study. By drawing conclusions from this analysis, both the researcher and the school will gain valuable insights aimed at enhancing outcomes for students in special education.

Chapter IV

Data Analysis and Results

The objective of this chapter is to present the findings and outcomes derived from the study investigating secondary teachers' perspectives on co-teaching. The gathered data aims to depict teachers' views on the benefits and challenges of co-teaching, along with the factors influencing its effectiveness. This data was collected to address the following research questions.

1. What are teachers' perceptions of the benefits of co-teaching for students with disabilities?
2. What are teachers' perceptions of the challenges of co-teaching for students with disabilities?
3. What are teachers' perceptions of the factors that contribute to the success or failure of co-teaching for students with disabilities?

This study focused on not only asking these questions, but to also attempted to gain a deeper understanding of the teachers' perspectives by exploring important elements of co-teaching; common planning time, understanding the goals of this instructional model, if teachers have seen evidence that co-teaching improves academic outcomes, and their satisfaction level with co-teaching.

A mixed-methods strategy was utilized, blending quantitative Likert scale questions and qualitative open-ended inquiries. These questions were presented in an online survey distributed to teachers engaged in co-teaching throughout the academic years of 2022-2023 and 2023-2024. This concurrent mixed-methods framework permitted separate data gathering

and examination prior to merging, thereby mitigating the inherent weaknesses of using just a quantitative or qualitative approach.

Additional demographic information on the participants was collected through the Likert scale survey, which included what grades they taught, if they were a regular education or a special education teacher, and asking how many years the instructor had been teaching. This demographic information helped the researcher determine if there were any trends of commonalities aligned within the response of participants who shared common characteristics or traits.

As explored in the literature review, numerous school districts across the country have adopted co-teaching models as their predominant method to meet the needs of students with disabilities in the least restrictive educational environment. A blend of educational law compliance and shifting philosophical approaches have been the catalyst for this change. Nonetheless, in times of financial limitations, the choice to designate special education personnel as co-teachers in general education classrooms for a substantial portion of the school day often comes at the cost of ensuring a diverse array of placement alternatives within the standard school setting.

This study was limited to one school district within central Pennsylvania, to allow the researcher to get an in-depth understanding of the specific successes, concerns, and perceptions of these secondary teachers. Over the course of five weeks, eligible participants were asked to complete an anonymous survey via Google Forms to share their perceptions. Selected participants were secondary teachers in the district who had participated in co-teaching, either the previous year or who were currently implementing the co-teaching model within their classes.

Demographics of Participants

After reviewing the eligibility criteria for this study, 38 teachers in the district were found to be eligible candidates to receive the survey. Out of those 38 staff who were invited to participate, 15 completed the study. Table 3 reflects the breakdown between how many identified themselves as regular education or special education teachers, and as middle school or high school teachers. No middle school special education teachers chose to participate in the survey which is why that role is not reflected in this table.

Table 3

Professions Roles of Participants

Professional Role	Number of Staff
Regular Education in Middle School	5 Teachers
Regular Education in High School	6 Teachers
Special Education in High School	4 teachers

In addition to inquiring about participants' professional roles, the survey also included a question about the number of years they have been teaching, aiming to investigate whether years of service influenced teachers' perceptions of co-teaching. Table 4 provides a breakdown of survey participants according to their years of service.

Table 4*Years of Teaching Experience Among Participants*

Years of Teaching Experience	Number of Participants
Less than 1 year	-
1 to 4 years	-
5 to 7 years	6
More than 7 years	9

Note. No participants reported having either less than 1 year or 1 to 4 years of teaching experience.

Data Analysis

Four questions of the survey were Likert style questions, asking staff to rate their thoughts and beliefs about co-teaching, and its impact on students with disabilities. The following questions were asked of the participants using the Likert scale:

1. I understand the goals and purpose of co-teaching.
2. Co-teaching is beneficial for students with disabilities.
3. I have seen evidence of improved academic outcomes for students with disabilities who are taught in inclusive classrooms.
4. Overall, I am satisfied with the co-teaching experience.

Participants were asked to rank their thoughts on those questions, using a four-point scale ranging from Strongly Disagree, Disagree, Agree, or Strongly Agree. The survey used a four-point scale, with one representing 'strongly disagree' and four representing 'strongly agree' so that higher scores correlate with stronger agreement. These questions were intentionally designed to not have a neutral or middle choice, so participants had to commit to either

agreeing or disagreeing with the prompts. Those responses were then recorded and analyzed using measures of central tendency.

After the Likert questions, participants were asked a series of opened-ended questions that addressed the research questions and better understand the perceptions of the participants. The open-ended questions asked of the participants were the following:

1. How much planning time do you get with your co-teaching partner(s)?
2. What do you believe are the benefits to co-teaching?
3. When co-teaching is successful, what factors have contributed to that success?
4. What do you believe are the challenges to co-teaching?
5. When co-teaching is not successful, what factors have contributed to that result?
6. Please feel free to contribute any additional thoughts or comments about co-teaching.

As established in the literature review, the amount of planning time that co-teachers have together is an indicator of how successful co-teaching is perceived to be, which is why the research included an open-ended question regarding planning time. The first five open-ended questions directly link to the research questions of the study, while the final question gave participants an opportunity to provide any additional thoughts or comments that they may have on this topic. Only 10 of the 15 participants chose to provide additional information.

The responses of the open-ended questions were analyzed to determine the answers to the research questions and to establish if there were any common themes that could be identified within the responses of the participants.

Results

Table 5 presents the mean scores derived from the disaggregated data obtained from the four Likert scale prompts. Each subcategory's mean, as well as the overall mean scores from all participants combined, are included for reference.

Table 5

Mean Scores of Likert Scale Questions

Subgroups	I understand the purpose	It is beneficial	It improved outcomes	Overall Satisfaction
Regular Education Teachers	3.64	3.72	3.2	3.09
Special Education Teachers	3.75	3.5	3.25	2.75
Middle School Teachers	4	4	4	3.4
High School Teachers	3.5	3.5	2.9	2.8
Teaching for 5-7 Years	3.5	3.5	3.5	3
Teaching for more than 7 years	3.78	3.78	3	3
All Participants	3.67	3.67	3.21	3

Research Question #1

The initial research question aimed to explore teachers' perceptions of the advantages of co-teaching for students with disabilities. Analysis of their responses to questions regarding the benefits of co-teaching revealed several recurring themes.

First, the results emphasize a perceived positive impact on student performance and growth. Participants expressed that with two teachers in the classroom, students received more personalized attention, allowing for direct feedback and assistance tailored to individual needs. This also facilitated smaller group work, fostering a more conducive learning environment.

Teachers also highlight the advantages of having an additional adult in the room for other various purposes. These purposes included improved classroom management, the ability to break into smaller groups, and gaining different perspectives on students' needs. Teachers stated that co-teaching enabled targeted support for students, whether through scaffolding instruction, providing one-on-one assistance, or offering extra help during flex time or after school.

Furthermore, teachers noted the collaborative aspect of co-teaching, which they felt led to improved teaching practices, and lesson delivery. They appreciated the opportunity to work together in creating materials and modifying lessons to enhance accessibility and engagement for all students. It was also stated that co-teaching facilitated quicker and more comprehensive feedback on assignments, contributing to students' overall learning experience.

Overall, teachers perceived co-teaching as a valuable model for promoting student engagement, meeting diverse learning needs, and fostering collaboration among educators.

They shared that by practicing effective co-teaching, both students and teachers had benefited from increased differentiation, specialized instruction, and closer supervision, ultimately leading to improved academic outcomes.

Research Question #2

The second research question looked to identify what the participants perceived to be the challenges of co-teaching. They provided various insights into the challenges of co-teaching, revealing several common themes. One recurrent issue identified was the lack of aligned planning times, particularly between departments, which hinders effective collaboration. This can lead to difficulties in providing support to students across different classes, and results in a disjointed co-teaching experience.

Moreover, they stated that co-taught classes often faced the challenge of becoming a "dumping ground" for struggling students, leading to diverse behaviors that disrupt the classroom dynamic. This creates the need for extensive time and effort from teachers to establish routines and expectations, detracting from instructional time.

Another significant challenge identified was the lack of subject matter knowledge among co-teachers, which limited their effectiveness in providing instructional support. Additionally, some stated that conflicts arose between co-teachers regarding class management and attendance practices, which further complicated the co-teaching dynamic.

Furthermore, participants stated that insufficient time for debriefing after classes, a lack of common planning periods, and disparities in curriculum knowledge posed significant obstacles to effective co-teaching. Additionally, participants opined that when co-teachers are not equally invested in planning and instruction, the burden often falls disproportionately on one teacher, leading to frustration, and inefficiencies, in classroom management.

Ultimately, the challenges of co-teaching underscored the need for better alignment of planning times, improved communication, and equitable workload distribution among co-teachers. Participants stated that addressing these issues is essential for maximizing the effectiveness of co-teaching and enhancing the learning experience for all students involved.

Research Question #3

This question was broken down into two parts within the survey. One question focused on teachers' perceptions of what factors contributed to co-teaching when it was successful. A separate question asked them what factors they felt contributed to the challenges of co-teaching.

Teachers identified several key factors that they felt contributed to successful co-teaching. One repeated theme was the importance of fluid teaching, which allowed for dynamic problem-solving and flexible support structures, such as stations for students who need enrichment or additional assistance. Participants stated that this adaptability ensured that diverse student needs were met more effectively.

Another identified factor was the importance of common planning. Teachers emphasized the necessity of having aligned schedules to plan together to foster a cohesive approach to teaching. This planning was more effective when co-teachers shared common goals for their students and enforced discipline consistently, ensuring that both teachers could provide content support and address student needs with fidelity.

Another thought that was repeatedly shared was that the personal and professional rapport between co-teachers significantly impacted the success of co-teaching. Consistent partnerships over time build trust and familiarity with the curriculum, allowing co-teachers to contribute meaningfully to lessons and take on more active roles in the classroom.

Consistency and shared responsibilities were also identified as important aspects of co-teaching. Teachers highlighted the benefits of having a consistent co-teacher, who understood the strengths and weaknesses of their students, which enhanced the support provided. Additionally, having similar work habits, aligned expectations, and a unified understanding that the classroom is a shared space further contributed to a harmonious co-teaching relationship.

Finally, dedicated time for regular collaboration and planning was mentioned as indispensable. Scheduling blocks specifically for co-taught classes and ensuring that both teachers have time to meet and plan together were mentioned by almost every participant. Some of the benefits of co-teaching that were mentioned were that it allows for reflection, adjustment of teaching strategies, and continuous improvement of the co-teaching approach.

As stated above, to fully answer the third research question, participants were also asked to share their thoughts on what factors have resulted in unsuccessful co-teaching. Teachers identified several factors that contribute to unsuccessful co-teaching, revealing common themes that undermine the effectiveness of this model. A significant issue was the lack of alignment in teaching styles, and behavior management strategies between co-teachers. When one teacher focuses on delivering content, while the other manages behavior, it creates a divide that can lead to student confusion and resentment toward the disciplinarian teacher.

Another prevalent theme was the lack of subject matter expertise among special education teachers. Teachers expressed that when they are placed in classrooms where they are not familiar with the content, their ability to support students effectively is compromised. This challenge is also exacerbated by the scheduling of IEP meetings during co-teaching

periods, which reduced the presence and engagement of special education teachers in the classroom.

Interpersonal conflicts between co-teachers also posed a challenge for some participants. Some stated that differing ideas of co-teaching roles led to tension and ineffective collaboration. It was shared that this was particularly problematic when there was no shared planning time, and when teachers and co-teachers were frequently swapped or changed from year to year, disrupting the consistency needed for effective co-teaching.

Time management issues, such as special education teachers working on IEPs during class time or showing up late, also disrupt the co-teaching dynamic and was also identified as an ongoing challenge. These concerns were compounded when there were no shared expectations, or when one teacher assumed a dominant role over the other, leading to an imbalance in responsibility and authority.

Due to the significant emphasis placed on planning time in the literature review, a survey question specifically inquired about the extent of common planning time available to participants and their co-teaching partners. Analysis revealed variations in experiences between middle school teachers and their counterparts in high school settings.

The middle school teachers shared that some participants had up to 60 minutes for planning and shared a common planning period, which facilitated their collaboration. One teacher noted that while there was no dedicated time in the previous year, they now had about 40 minutes per week for co-planning. Another pair of teachers mentioned they both had the same planning/prep period for an hour and are available for 40 minutes after school. However, not all teams needed to plan extensively; in some cases, participants stated that

their familiarity with the material allows them to interject and assist during lessons, as well as provide advice on accommodations and modifications.

In contrast, the high school teachers reported varying levels of planning time with their co-teaching partners, with many indicating significant challenges. Several teachers mentioned having no specific co-planning time, while others noted that they typically find time after school or prior to students arriving, if needed. One teacher mentioned having approximately 40 minutes a week for planning. There are also instances mentioned where planning times did not align, resulting in virtually no co-planning or only finding a few minutes at the end of the day, often interrupted by other meetings and responsibilities. Only one teacher mentioned having the same planning time as both of their co-teachers, for the first time this year.

Finally, all participants were afforded the opportunity to provide any additional thoughts or comments that they wanted to contribute regarding their experiences with co-teaching. The participants shared a range of perspectives on the factors that contribute to the success or challenges of co-teaching. Many teachers emphasized that effective co-teaching required both teachers to have a strong understanding of the subject matter. Special education teachers stated that they often face difficulties when placed in courses they are not familiar with, leading to a "teach and assist" model, rather than true co-teaching.

Several teachers highlighted the importance of co-planning and shared goals. They stated that when co-teachers are on the same page regarding teaching styles, behavior management, and academic expectations, co-teaching is more effective. Additionally, it was identified that co-teaching should not merely be one teacher managing discipline while the other teaches, but should involve both teachers actively engaging in instructional roles.

Furthermore, teachers pointed out that the structure of co-taught classes can impact their effectiveness. Overloading these classes with too many students with disabilities or behavioral issues created a challenging classroom dynamic and reduced the effectiveness of co-teaching. Teachers suggested that distributing students with disabilities more evenly across classes and ensuring manageable class sizes would improve the learning environment for all students.

In general, educators acknowledge the considerable potential benefits of co-teaching, yet they also underscore the importance of several key factors for its effective implementation. These include the necessity for adequate planning time, a shared and consistent mastery of the subject matter, fostering positive interpersonal dynamics between co-teachers, and ensuring manageable class sizes. Addressing these elements is crucial for unlocking the full potential of co-teaching strategies in the educational setting.

Discussion

The data analysis process used to address the three research questions and draw conclusions for the next chapter required the researcher to integrate various data points, as outlined in the methods chapter of this Doctoral Capstone Research Project and presented in their raw form in this chapter. Specifically, much of the data from the Likert Scales helped to show if the participants identified co-teaching as beneficial and if they found it to be beneficial or not. The answers provided in the Likert scale were directly related to their responses of the open-ended questions.

In taking all the data into account, the researcher analyzed the quantitative data that were derived from the Likert scales first. From that data set, the first data reviewed was the demographic data, which included if the teachers were regular or special education teachers,

grade level or levels they taught, and how many years they have been teaching. This data was then used to place participants into similar sub-groups, to determine if there were any trends that correlated within individual subgroups that would not have been obvious when looking at the data in its entirety.

To determine whether any relationships existed between the responses of different subgroups, the mean scores of their responses to the Likert scales were recorded. Analyzing these mean scores allowed the researcher to assess whether participants agreed or disagreed with the prompts regarding co-teaching more easily.

After reviewing the scores of the quantitative data that was collected from the Likert scales the researcher began to explore the qualitative data collected from the open-ended questions. To accomplish this the researcher collected all the responses and read through them to gain an overall understanding of the content.

After reading the responses, the next step in the research was to identify key themes, patterns, or topics that emerged across the responses for each specific open-ended question. This information was then condensed and reduced to reflect the strongest and most prevalent themes, which were summarized and organized according to the research questions they addressed. Notably, many of the themes identified from participants' responses mirrored those found in the literature review.

Despite the alignment with prior research, there was interesting and surprising variance among the responses of different subgroups. The amount of planning time and the grade levels taught appeared to impact participants' responses to the open-ended questions, highlighting noteworthy differences.

Summary

This Doctoral Research Capstone Project was designed to analyze secondary teachers' perceptions of the instructional practice of co-teaching. Additionally, the project aimed to explore the factors that teachers believe contribute to the success or failure of the co-teaching model. Data was collected using Likert scales, demographic information, and open-ended questions, providing comprehensive insights into teachers' perspectives.

There was both variance and correlation within the participants' responses based on demographics such as years of experience, teaching level (middle school or high school), and whether they were special education or regular education teachers. As the data was reviewed, additional patterns emerged regarding teachers' perceptions of the success of co-teaching. These patterns were particularly evident among teachers who had common planning time, consistent co-teaching partners, and a solid understanding of the co-teaching model.

In reviewing the open-ended responses, overarching themes became more apparent. Many of the participants' thoughts closely aligned with the perceptions discussed in the literature review. Despite this alignment, there were also notable differences. Although all participants worked for the same school district, they had a variety of experiences and differing opinions regarding the practices of co-teaching. These varied perspectives highlighted both commonalities and disparities in how co-teaching was implemented and perceived across the district, revealing the complexity and diversity of experiences among the teachers.

In the next chapter, the researcher will draw conclusions and identify the themes that emerged from the collected data points. The conclusions derived from this analysis will inform the extent to which the practice of co-teaching can be effectively utilized in secondary

classes. Areas for further study will also be identified, providing a foundation for future research. Additionally, any limitations that may have impacted the implementation or results of this research will be thoroughly discussed, offering a comprehensive understanding of the study's scope and potential constraints. This chapter will include valuable insights and practical recommendations for enhancing co-teaching practices in secondary education.

Chapter V

Conclusions and Recommendations

This chapter synthesizes the data to provide conclusions and recommendations related to the three research questions outlined in this Doctoral Research Capstone Project. This mixed-methods research aims to illuminate secondary teachers' perceptions of co-teaching practices as an instructional model. The conclusions are based on multiple data sources, encompassing both qualitative and quantitative elements, including Likert scale survey results, and open-ended questions. Additionally, this chapter explores potential implications for future practices within the Elizabethtown School District, including any associated fiscal considerations. Acknowledging the inherent limitations in the design and implementation of this project, the limitations will also be discussed to transparently present the conclusions and recommendations. This discussion will lead to considerations for future research topics focused on effectively meeting the diverse needs of students with disabilities while adhering to inclusion mandates and educating students in the general education setting to the maximum extent possible.

The literature review in this research project illustrates the evolution of legal mandates and civil rights that have led to inclusionary practices, explaining why many districts have adopted co-teaching to meet these requirements. It also examines the benefits of co-teaching, its challenges and limitations, and the factors that affect its effectiveness. This chapter integrates these concepts with the research findings to provide a comprehensive view of how secondary teachers in the Elizabethtown Area School District perceive co-teaching, and the potential future implications of these perceptions for the district.

Conclusions

This project aimed to answer three research questions. These questions will be presented in order, followed by conclusions drawn from the data for each. The researcher will summarize the overall results from all participants for each question and then analyze any identified themes within the sub-categories.

Research Question #1

The first question aimed to explore teachers' perceptions of the benefits of co-teaching for students with disabilities. As described in the previous chapter, participants highlighted several benefits of co-teaching for student performance and classroom dynamics. They noted that having two teachers in the classroom allowed for more direct feedback, frequent answers to student questions, and the opportunity for smaller group work. They felt this setup enhanced individualized support and better addressed student needs. Many also shared that co-teaching also improved classroom management, offered varied instructional approaches, and enabled teachers to cover for each other during absences, maintaining continuity in instruction.

The benefits they described were not just academically focused. Participants mentioned that co-teaching facilitates behavior management, scaffolding, and targeted support, making it easier to meet students' specific needs. The collaboration between teachers fostered improved lesson planning, differentiation, and creative assignments, ultimately benefiting both students and teachers by providing more immediate feedback and increasing student engagement.

In looking at the survey results, question one was explored by participants responding to what degree they felt co-teaching is beneficial for students with disabilities ranging from

strongly disagree, a 1, to strongly agree, a 4. The mean score of all the participants for that question was 3.67, which supports their open-ended responses that they feel the practice is beneficial for students. Regular education teachers and special education teachers responded to this question similarly, with the mean score from the regular education teachers being 3.72, and the mean score for the special education teachers being 3.5. It is difficult to draw too many conclusions between these two sub-groups, because no special education teachers from the middle school opted to participate.

Similarly, there was also little variance when the data was disaggregated to look at if years of teaching impacted the results. Teachers who had 5-7 years of experience reported a mean score of 3.5, and teachers with more than 7 years of teaching experience had a mean score of 3.78, which is slightly higher than the other group. No teachers reported having less than five years of experience.

The largest variance between subgroups was identified at the building level. The mean score reported from all the high school participants was 3.5, while the mean score from all the middle school participants was a 4.0; meaning, that all of the middle school participants strongly agreed that co-teaching is beneficial for students with disabilities.

Research Question #2

Research question number two focused on what teachers perceive to be the challenges of co-teaching with students with disabilities. As discussed in the previous chapter, participants shared numerous insights on the challenges associated with co-teaching. Participants identified several challenges associated with co-teaching, that also reflected many of the challenges discussed in the literature review. Key issues included the need for significant planning and coordination between teachers, which can be time-consuming and

difficult to manage. Some participants noted inconsistencies in teaching styles and approaches, which they felt could lead to confusion and ineffective instruction. Additionally, some stated concerns about inequalities in distribution of workload and the potential for one teacher to dominate the classroom. Other challenges mentioned include limited professional development opportunities for effective co-teaching, lack of administrative support, and insufficient resources to implement co-teaching successfully.

Furthermore, in reviewing the survey results, participants addressed question two by indicating the extent to which they have observed improved academic outcomes for students with disabilities taught in inclusive settings. They also rated their overall satisfaction with co-teaching, using the same four-point Likert scale previously discussed. The mean score for participants' perceptions of improved academic outcomes was 3.21, while the mean satisfaction rating for co-teaching was 3. These scores indicate a general level of agreement among teachers. However, there was less consensus on the effectiveness of co-teaching in improving academic outcomes, and even less agreement regarding overall satisfaction with the practice.

When specifically examining whether participants have observed improved outcomes for students with disabilities in inclusive settings, the mean scores were as follows: regular education teachers rated this at 3.2, while special education teachers rated it slightly higher at 3.25. There was also a difference when exploring years of service. The mean score for teachers with 5-7 years of experience was 3.5, while the mean score for teachers with more than 7 years of experience came in lower, at a 3. In the open-ended question section, one participant, a high school regular education teacher with more than 7 years of experience, asked to contribute more thoughts regarding his or her ratings on this question. The

participant shared that, "I think leveling classes based on skill level is much more effective. I have not found differentiating between 5+ grade levels to effectively meet the needs of all students." He or she went on to explain further that, "It's silly to assume that even great differentiation won't leave some students in over their heads or bored. That being said, we've worked to be more intentional regarding the students who are placed in co-taught classes, and I think that really helps".

The most variance between subgroups came when the responses of the high school teachers were compared with the responses of the middle school teachers. The mean scores for the high school teachers were a 2.9, while the mean score for the middle school teachers was again a unanimous 4.0 reflecting all participants strongly agreed with this prompt.

Interestingly, the mean scores for years of service were the same. Teachers who had 5-7 years of experience had a mean score of three, as did the mean score for teachers who have been teaching for more than 7 years.

In looking at overall satisfaction with the co-teaching experience, regular education responded with a mean score of 3.09, with the special education teachers rating their overall experience lower as a 2.75. The difference in these scores also aligns with the findings discussed in the literature review. The literature, and even comments from participants in this study, reflect that occasionally the special education teacher can be related to a lesser status and must focus more on behavior management than instruction. This can be especially true on the secondary levels, if the special education teacher lacks confidence in the content being taught.

Research Question #3

The third and final research question examined teachers' perceptions of the factors that contribute to the success or failure of co-teaching for students with disabilities. Five survey questions were utilized to explore this topic. Participants rated their understanding of the goals and purpose of co-teaching through Likert scale questions. Additionally, open-ended questions were used to gather insights on the amount of planning time they received, the factors they believed influenced the success or failure of co-teaching, and any other thoughts or comments they wanted to share regarding the practice.

The mean score for all participants when asked if they understood the goals and purpose of co-teaching was a 3.67, reflecting an overwhelming belief that they understood the objectives and aims of this instructional model. There was little change between the sub-groups. Regular education teachers rated themselves a 3.63, while special education teachers rated themselves slightly higher with a 3.75. Teachers with 5-7 years of experience rated themselves at a 3.5, and teachers with more than 7 years of teaching experience had a mean score of 3.78. Finally, all middle school teachers rated themselves as strongly agreeing with this statement resulting in a mean score of 4.0, and high school teachers had a lower mean score of 3.5.

The literature stressed the importance of common planning time for co-teaching to be beneficial and successful, so the question exploring how much planning time participants have to utilize was particularly important. The data on planning time for co-teaching showed a range of experiences among participants. Some stated they have no dedicated planning time, while others report having up to 60 minutes a week or common planning periods. Many participants mentioned difficulties in aligning planning schedules, leading to minimal, or no

formal planning time. Some teachers shared that they make time before or after school to plan, although this is often disrupted by other responsibilities, such as IEP meetings. Despite these challenges, some co-teachers manage to collaborate effectively, with one teacher familiar enough with the material to assist with accommodations and modifications on the fly.

In analyzing the results by subgroups, no significant differences were found between regular education teachers, special education teachers, or based on years of experience. The only notable variations were among building-specific subgroups. High school teachers generally reported either having no planning time or having to arrange their own, whereas middle school teachers reported having planning times ranging from 40 to 60 minutes per week. Middle school teachers also reported the most positive overall experience with co-teaching, underscoring the importance of having common planning time, as highlighted earlier in the literature review.

To better understand teachers' perceptions of co-teaching, participants were asked to share their opinions on what factors have contributed to co-teaching being successful in their experience. Teachers identified several key factors contributing to successful co-teaching. They stated that effective collaboration is crucial, and emphasized the importance of fluid teaching dynamics and the ability to draw from different perspectives to solve problems. As discussed briefly above, consistent co-planning time was mentioned as they felt it allowed them to align their goals, enforce discipline uniformly, and ensure students recognize both teachers as sources of help and information.

Another perceived benefit that was mentioned by participants was the development of interpersonal relationships between teachers and their students. Teachers also highlighted the

importance of consistent placement with the same co-teachers over time, as this fosters familiarity with the curriculum and trust. The quality, personality, and subject matter expertise of the special education teacher were also identified as significant factors by the regular education teachers. Participants stated that their experiences were more successful and positive, when they were paired with co-teachers who were described as cooperative, proactive, resourceful, and motivated, capable of providing additional examples, framing concepts differently, and pulling small groups for focused instruction.

Consistency and reliability in the co-teaching relationship were also identified as important factors by participants. Special education teachers' knowledge of their students' strengths and weaknesses, as well as establishing positive relationships with students, contribute to building trust and rapport. Lastly, similar work habits, aligned expectations, and dedicated time for regular planning and collaboration, were also identified as key factors to co-teaching being a successful experience.

Conversely, teachers were also asked to share their thoughts regarding what factors they felt led to co-teaching experiences not being successful. Key issues they identified included a lack of alignment in teaching styles and behavior management approaches, which they stated led to confusion among students and resentment towards the teacher who primarily handles discipline. Another significant concern was the inconsistency in teacher presence and engagement, with some special education teachers frequently absent or preoccupied with tasks like IEP meetings during co-teaching blocks.

A high number of IEP students in the classroom and insufficient subject matter knowledge among special education teachers were also mentioned as challenging factors. Some stated that when special education teachers are placed in subjects outside their

expertise, the effectiveness of co-teaching diminishes. Furthermore, time management issues arose when special education teachers were compelled to work on IEPs during class time, instead of co-teaching.

According to some participants, interpersonal conflicts stemming from differing understandings of co-teaching roles, lack of shared expectations, and insufficient common planning time also undermined the co-teaching dynamic. Other factors mentioned were inconsistent co-teaching pairings year after year, overloaded teachers, and rotating special education teachers across multiple classes, which further disrupted the continuity needed for effective collaboration. Finally, the two other frequently mentioned factors that negatively impacted the implementation of the co-teaching model, preventing it from reaching its full potential, were overloaded classrooms with too many students and not enough collaborative planning time.

The final open-ended question allowed the teachers to contribute any additional thoughts or comments about their co-teaching experiences. Many stated that they believed co-teaching could be highly effective when executed well, particularly when co-teachers are familiar with the content and have consistent assignments within the same department. However, challenges arose when special education teachers were not highly qualified in the subjects they co-taught, making it difficult to establish a robust co-teaching model. This often resulted in a "teach and assist" approach rather than using more effective models of co-teaching.

Some participants emphasized that co-teachers are not just for discipline, but are there to provide academic support. Time management and understaffing in special education were cited as significant obstacles, limiting the feasibility of co-teaching beyond a supportive role,

without additional hiring. The importance of a positive, collaborative relationship between co-teachers was highlighted as essential for success, with consistent co-teaching partnerships over time being particularly beneficial.

The perceived value of co-teaching extended beyond academic outcomes. Participants noted that while quantitative data might not show significant improvements in academic scores, the qualitative benefits, such as improved classroom climate and individualized student support, were substantial. Effective co-teaching fostered a sense of support and mutual respect amongst the participants. There was a concern that removing co-teaching could overburden general education teachers, and negatively impact the inclusive classroom environment.

Some teachers advocated for leveling classes based on skill levels, to better meet student needs, arguing that significant skill disparities made effective differentiation challenging. Participants also called for shared responsibilities between special and general education teachers to enhance the co-teaching model. Overall, teachers expressed a strong belief in the value of co-teaching, and a desire for continued improvement and support for this instructional approach.

Overall, the conclusions drawn from the collected data largely align with the insights from the literature review. Most teachers involved in co-teaching consider it a beneficial instructional practice. However, they also acknowledge its limitations and challenges. This project also highlighted the perceived importance of administrative support for co-teaching, by providing common planning time for co-teaching partners. Teachers with dedicated planning time reported higher levels of satisfaction and observed more benefits compared to those without common planning time.

Based on these findings, the most efficient way to improve the practice of co-teaching at the Elizabethtown Area School District is to encourage administration and teachers to be intentional with the practice to maximize the potential benefits of this instructional model. One of the most critical aspects of successful co-teaching is the provision of common planning time. Administrators play a pivotal role in scheduling and ensuring that co-teaching partners have dedicated time to collaboratively plan lessons, discuss student progress, and develop cohesive strategies. When teachers have this common planning time, they can create more unified and effective lesson plans, address student needs more comprehensively, and align their teaching methods. The data collected from this project indicates that teachers who have regular planning time report higher levels of satisfaction and perceive greater benefits from co-teaching compared to those who do not have this opportunity.

Maintaining consistent co-teaching partnerships is another key factor in the success of this instructional model. When teachers work together over an extended period, they develop a stronger rapport and a deeper understanding of each other's teaching styles and strengths. This consistency fosters a more seamless and integrated classroom environment where both teachers can effectively support student learning. Administrators should strive to minimize changes in co-teaching pairings year after year, to maintain this stability.

Additionally, providing ongoing professional development is essential to expand the types of co-teaching beyond the common 'one teach - one assist' model. Professional development can introduce teachers to a variety of co-teaching strategies, such as parallel teaching, station teaching, and team teaching, allowing them to diversify their approach and better meet the diverse needs of their students.

It is equally important to recognize when co-teaching is not effective or beneficial. Administrators and teachers must be vigilant in assessing the impact of co-teaching on student outcomes and teacher satisfaction. If a co-teaching partnership is not yielding positive results, it may be necessary to reevaluate, and potentially, discontinue the practice. Factors such as mismatched teaching styles, insufficient content knowledge, or a lack of genuine collaboration can undermine the effectiveness of co-teaching. In such cases, administrators should work with teachers to find alternative solutions, whether that involves additional training, reassigning co-teachers, or exploring different instructional models.

These results and recommendations will be presented to building administrators and used to develop district guidelines for co-teaching. The goal of these guidelines is to ensure that co-teaching is implemented efficiently, with fidelity, and in contexts that are most likely to maximize its potential outcomes. These guidelines will establish non-negotiable elements, such as common planning time, and provide recommendations on when to use specific co-teaching models to reduce the over-reliance on the 'one teach - one assist' model.

Co-teaching has significant fiscal implications that schools and districts must carefully consider. One of the primary costs associated with co-teaching is the need for additional staffing. Co-teaching requires having two certified teachers in the same classroom, which can double the personnel costs for a single class. This increase in staffing necessitates a larger budget for salaries and benefits. In districts already facing tight budgets, allocating funds for additional teachers can be challenging and may require reallocation of resources from other programs.

Beyond staffing costs, co-teaching also requires investments in professional development. Effective co-teaching hinges on teachers receiving comprehensive training in

collaborative teaching strategies, differentiated instruction, and classroom management techniques. Although professional development sessions, workshops, and ongoing training programs incur additional costs, these programs are crucial for ensuring that co-teachers are well-prepared to deliver high-quality instruction and maximize the benefits of co-teaching. Furthermore, providing common planning time for co-teachers might necessitate schedule adjustments, and could lead to potential costs associated with rearranging school schedules, or hiring substitute teachers to cover planning periods.

That said, co-teaching is only cost-efficient when implemented correctly, with adequate resources allocated for professional development, common planning time, and appropriate staffing. If school districts cannot commit to these necessary investments, they may be better off exploring other inclusive practices that are more cost-effective. Without proper execution, co-teaching can become an inefficient use of resources, failing to deliver the intended educational benefits for students with disabilities. Therefore, it is crucial for districts to evaluate their capacity to support co-teaching effectively before adopting it as a primary instructional strategy.

Limitations

The two main limitations of this study were that only 15 out of the 38 eligible teachers chose to participate, and that none of the special education teachers from the middle school chose to participate. The small sample size may not adequately represent the larger population, thereby limiting the generalizability of these findings. Because there were only 15 respondents, the data collected might reflect a narrower range of perspectives and experiences, causing potential bias to the results.

With so few participants, the sample size was quite small, which limited the researcher's ability to generalize the findings to a broader population. Due to the size, and the fact that this sample was ultimately a non-representative sample, as well as the lack of participation from specific subgroups, the data collected might not have captured the diversity of experiences and perspectives within the larger group, leading to conclusions that may not apply universally.

Any time you have eligible participants that choose not to participate you risk non-response bias (Fraenkel & Wallen, 2009). Non-participation can lead to biased results, because the responses may not accurately reflect the views of the entire population. For instance, those who did respond might have had stronger opinions or more extreme experiences with co-teaching, whereas those who did not respond might be more neutral or have different concerns that remain unaddressed. Specially, for this study, it would have been beneficial to have had participation from special education teachers in the middle school and a larger response rate from all the other eligible participants. Due to this survey being anonymous, it was also impossible to see if there were other trends in who did or did not respond.

A low response rate can also be an indicator of other limitations, such as the relevance of the study topic to potential participants, the clarity of the survey, or the effectiveness of the outreach strategy. Were the participants overwhelmed with other tasks and did not feel like they had time to take a survey? Maybe email was not the most efficient way to communicate with the participants? Perhaps many of the eligible participants were ambivalent to this topic and do not see it a priority in their personal lives.

The low response rate could also impact the confidence of these findings and the conclusions generated from the data collected. Conclusions drawn from a limited number of responses could be more prone to questioning and skepticism. Due to these factors, it would be difficult to generalize these findings across other settings

Recommendations

Several avenues for future research have emerged as a result of this Capstone Project. One potential area of exploration is the long-term impact of co-teaching on student outcomes, particularly focusing on academic achievement, social skills development, and post-secondary transition. Understanding how sustained co-teaching relationships affect students over multiple years could provide deeper insights into the efficacy of this instructional model.

From that idea, exploring the academic achievement of students in co-taught classes would be an important topic for future research. Investigating how co-teaching influences standardized test scores, grade point averages, and other academic performance indicators could provide evidence of its effectiveness, or conversely, its ineffectiveness. Such research could compare the academic outcomes of students in co-taught classes, with those in traditional single-teacher classrooms, examining variables such as subject matter, grade level, and the presence of students with disabilities. This would not only validate the co-teaching model, but also identify specific conditions under which it is most beneficial. Understanding the direct impact of co-teaching on student achievement is essential for justifying the allocation of resources, and for improving instructional strategies to maximize student success.

Additionally, future research could investigate the professional development needs of co-teachers. This includes exploring the types of training and support that are most effective in preparing teachers for co-teaching roles, as well as examining the impact of ongoing professional development and instructional coaching on teacher efficacy and student outcomes. This would help identify specific competencies and skills that enhance the success of co-teaching partnerships.

Another important area for future research is the role of administrative support in the success of co-teaching. Studies could examine how different levels of support from school administrators, such as providing common planning time, affect the implementation and effectiveness of co-teaching. Investigating how school culture, building schedules, and leadership practices influence co-teaching dynamics, would offer valuable insights for improving the practice.

Researchers could also explore the perspectives of students on co-teaching. Understanding how students perceive the benefits and challenges of being taught by co-teachers, and how these perceptions vary across different demographic groups, could provide a more comprehensive view of the impact of co-teaching on the student experience.

Finally, comparative studies could be conducted to explore the differences in co-teaching practices and outcomes across various educational settings, such as urban vs. rural schools, or among different subject areas. Such research could highlight contextual factors that influence the success of co-teaching and help identify strategies to specific environments. By pursuing these and other research avenues, the field can continue to build on the foundational knowledge of co-teaching, ultimately leading to more effective instructional practices, and improved outcomes for both teachers and students.

Summary

Chapter V has synthesized the data to address the three research questions, elucidating secondary teachers' perceptions of the co-teaching instructional model. The conclusions were derived from various data sources, including both qualitative and quantitative elements, such as Likert scale survey results and open-ended questions. While the overall perceptions were generally positive, several concerns and specific factors that influence the success of co-teaching were identified and thoroughly examined.

The literature review for this research project illustrated the evolution of legal mandates and civil rights that have led to inclusionary practices and explained why many districts have adopted co-teaching to meet those requirements. It also examined the benefits of co-teaching, its challenges and limitations, and the factors that affect its effectiveness. This chapter integrated those concepts with the research findings to provide a comprehensive view of how secondary teachers in the Elizabethtown Area School District perceive co-teaching, and the potential future implications of these perceptions for the district.

The first research question aimed to explore teachers' perceptions of the benefits of co-teaching for students with disabilities. As described in the previous chapter, participants highlighted several benefits of co-teaching for student performance and classroom dynamics. They noted that having two teachers in the classroom allowed for more direct feedback and the opportunity for smaller group work. They felt this instructional model enhanced individualized support and better addressed student needs. Many also shared that co-teaching improved classroom management, offered varied instructional approaches, and enabled teachers to cover for each other during absences, maintaining continuity in instruction.

The benefits they described were not just academically focused. Participants also mentioned that co-teaching facilitated behavior management and targeted support, making it easier to meet students' specific needs. The collaboration between teachers fostered improved lesson planning, differentiation, and creative assignments, ultimately benefiting both students and teachers by providing more immediate feedback and increasing student engagement.

The second research question focused on what teachers perceive to be the challenges of co-teaching with students with disabilities. Participants identified several challenges that were reflected in the literature review. Key concerns included the need for significant planning and coordination between teachers, which they stated can be time-consuming and difficult to manage. Some participants noted inconsistencies in teaching styles and approaches, which they felt led to confusion and ineffective instruction. Additionally, some expressed concerns about unequal distribution of workload, and the potential for one teacher to dominate the classroom. Other challenges mentioned included limited professional development opportunities for effective co-teaching, lack of administrative support, and insufficient resources to implement co-teaching successfully.

The third research question examined teachers' perceptions of the factors that contribute to the success or failure of co-teaching for students with disabilities. Participants rated their understanding of the goals and purpose of co-teaching through Likert scale questions and provided insights on planning time, factors influencing success or failure, and additional comments on co-teaching. Effective collaboration, consistent co-planning time, and the development of interpersonal relationships between teachers and students were repeatedly identified. Teachers emphasized the importance of consistent placement with the same co-teachers over time, fostering familiarity with the curriculum, and trust among

colleagues. The quality, personality, and subject matter expertise of the special education teacher were significant factors for regular education teachers, with successful experiences reported when paired with cooperative, proactive, resourceful, and motivated co-teachers.

The final open-ended question allowed teachers to share additional thoughts on their co-teaching experiences. Many believed co-teaching could be highly effective when executed well, particularly with content-familiar co-teachers and consistent department assignments. Challenges arose when special education teachers lacked qualifications in subjects, resulting in a "teach and assist" approach, rather than more effective co-teaching models. Some participants emphasized that co-teachers are not just for discipline, but also provide academic support. Time management and understaffing in special education were mentioned as obstacles, limiting co-teaching feasibility beyond a supportive role without additional hiring. Positive, collaborative relationships and consistent co-teaching partnerships over time were highlighted as essential for success.

Participants noted that while quantitative data might not show significant academic improvements, qualitative benefits, such as improved classroom climate and individualized student support, were substantial. Effective co-teaching fostered a sense of support and mutual respect. There was concern that removing co-teaching could overburden general education teachers, and negatively impact the inclusive classroom environment. Some advocated for leveling classes based on skill levels, arguing that significant skill disparities made effective differentiation challenging.

This Capstone Project has provided valuable insights into secondary teachers' perceptions of the co-teaching instructional model. These findings indicate that while co-teaching is generally viewed favorably, its success is contingent upon several critical factors,

including adequate planning time, consistent professional development, and strong administrative support. The identified challenges, such as mismatched teaching styles and insufficient resources, underscore the need for a thoughtful and strategic approach to co-teaching implementation. Future research should continue to explore these dynamics, particularly the long-term academic impacts on students, to refine co-teaching practices and ensure they effectively meet the diverse needs of all learners. Additionally, it is important to recognize that co-teaching may not be the best model in all circumstances. By addressing these areas, educational stakeholders can better support the co-teaching model where appropriate, ultimately enhancing its efficacy and fostering more inclusive and supportive learning environments.

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APPENDICES

Appendix A.**IRB Approval Letter**

Institutional Review Board
250 University Avenue
California, PA 15419
instreviewboard@calu.edu
Melissa Sovak, Ph.D.

Dear Walt Smith,

Please consider this email as official notification that your proposal titled "Secondary Teachers' Perceptions of Co-teaching on Student with Disabilities" (Proposal #PW23-011) has been approved by the Pennsylvania Western University Institutional Review Board as submitted.

The effective date of approval is 08/08/2023 and the expiration date is 08/07/2024. These dates must appear on the consent form.

Please note that Federal Policy requires that you notify the IRB promptly regarding any of the following:

- (1) Any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented)
- (2) Any events that affect the safety or well-being of subjects
- (3) Any modifications of your study or other responses that are necessitated by any events reported in (2).
- (4) To continue your research beyond the approval expiration date of 08/07/2024, you must file additional information to be considered for continuing review. Please contact instreviewboard@calu.edu

Please notify the Board when data collection is complete.

Regards,

Melissa Sovak, PhD.
Chair, Institutional Review Board

Appendix B.**Email to Co-Teachers**

Colleagues,

You are getting this email because according to my records you have participated in co-teaching this school year, last school year, or both.

As part of a graduate program I am conducting some research on our co-teaching model and I am asking for your help by completing an anonymous survey.

Attached is a copy of the informed consent. The same information can also be found on the first question on the survey if you wish to participate. Participation is both voluntary and anonymous.

CO-TEACHING SURVEY

I am asking that interested participants complete the survey by 12/22/23. Please let me know if you have any questions and thanks in advance for your consideration.

--

Walt Smith

Appendix C.

Informed Consent

Teachers' Perceptions of Co-Teaching

You are being asked by Walt Smith and Dr. Todd Keruskin from PennWest University to participate in a research study. Participation in the study is voluntary, and you may stop anytime.

The purpose of the study is to examine the perceptions of secondary teachers who utilize co-teaching practices to determine what they perceive to be the benefits, challenges, and limitations of this instructional model.

In this study, you will be asked to complete an anonymous survey on your experiences as a teacher who has, or is, participating in the co-teaching model.

It will take about 5- 10 minutes to complete the study.

The potential risks during the study are nothing greater than daily living. Remember, you may stop taking the survey at any time.

There are no direct benefits to participants from the research. It will help the researchers better understand your perceptions of the benefits and challenges of the co-teaching model.

SECURITY OF DATA

The online study is completely anonymous; you will not be asked to give any information that could identify you (e.g., name). The survey is NOT linked to IP addresses or your email. Individual responses will not be presented, just the aggregated data.

Remember, taking part in this study is voluntary. If, while taking the survey, you feel uncomfortable or no longer want to participate, you may stop at any time. To stop taking the survey, you may either:

(1) proceed to the last page of the survey and press "Submit," or (2) if you wish to exit the survey, close your browser completely.

There are no consequences if you decide to stop participating in this study.

There is no identifiable information collected from you during this study; all other information from this study will be confidential within local, state, and federal laws. The PennWest University Institutional Review Board (IRB) may review the research records. The study results may be shared in aggregate form at a meeting or in a journal, but there is no

identifiable information to be revealed. The records from this study will be maintained for a minimum of three (3) years after the study is complete.

Your information collected in this research *will not* be used or distributed for future research, even if all your identifiers are removed.

If you have questions about the research or a research-related injury, you can contact Dr. Todd Keruskin at keruskin@pennwest.edu. If you have a question about your rights as a research participant that you need to discuss with someone, you can contact the PennWest University Institutional Review Board at InstReviewBoard@pennwest.edu.

If you would like a copy of this informed consent, please print this screen or contact Walt Smith at walter_smith@etownschools.edu.

By clicking on the "I agree" box and continuing with the survey, you have acknowledged that you have read the informed consent and are at least 18 years old. Also, you acknowledge that you agree to participate in the study and have the right not to answer any or all the questions in the survey. Finally, you understand your participation is entirely voluntary, and you may quit the study at any time without penalty.

Informed Consent

_____ I have read the above and agree.

_____ I do NOT wish to participate at this time.

Appendix D.**Teachers' Perception of Co-Teaching Survey**

1. What grades do you work with in your co-teaching classroom(s)? Please check all that apply from this school year or last school year.

- | | |
|--------------------|---------------------|
| a. 6 th | e. 10 th |
| b. 7 th | f. 11 |
| c. 8 th | g. 12 |
| d. 9 th | |

2. Are you a regular education teacher or a special education teacher.

- a. Regular Education Teacher
- b. Special Education Teacher

3. How many years have you been teaching?

- | | |
|---------------------|----------------------|
| a. Less than 1 year | c. 5 to 7 years |
| b. 1 to 4 years | d. More than 7 years |

4. How much planning time do you get with your co-teaching partner(s)?

5. I understand the goals and purpose of co-teaching.

1	2	3	4
Strongly Disagree			Strongly Agree

6. Co-teaching is beneficial for students with disabilities.

1	2	3	4
Strongly Disagree			Strongly Agree

7. I have seen evidence of improved academic outcomes for students with disabilities who are taught in inclusive classrooms.

1	2	3	4
Strongly Disagree			Strongly Agree

8. Overall, I am satisfied with the co-teaching experience.

1	2	3	4
Strongly Disagree			Strongly Agree

s

9. What do you believe are the benefits to co-teaching?
10. When co-teaching is successful, what factors have contributed to that success?
11. What do you believe are the challenges to co-teaching?
12. When co-teaching is not successful, what factors have contributed to that result?
13. Please feel free to contribute any additional thoughts or comments about co-teaching.

