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PERCEPTIONS OF CO-TEACHING IN SECONDARY INCLUSION CLASSROOMS

By
Tori Renee Hill

A Dissertation Submitted to the
Gardner-Webb School of Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

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Approval Page

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Abstract

PERCEPTIONS OF CO-TEACHING IN SECONDARY INCLUSION CLASSROOMS.

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This study examined secondary teacher and administrator perceptions of co-teaching practices as they relate to preservice and in-service training. In this mixed methods study, general education math and English teachers and special education teachers in three suburban high schools were given a survey to provide input regarding co-teaching practices in their schools/district. The survey results were analyzed to determine trends of variables relating to teacher perceptions. Additionally, interviews with four administrators (three schools and one district) were conducted to correlate expectations, strengths and weaknesses, and training with the results of the teacher survey. Multiple themes emerged, which included collaboration/planning, administrative support, volunteer/willingness, training/professional development, and relationship/trust. The results of the study showed teacher preparation programs were not consistent in providing a foundation on teaching students with disabilities, and there are weaknesses in professional development for successful co-teaching practices. Analyses of both survey and interview data provide insight into co-teaching in math and English classrooms and identify possible implications for the district's co-teaching practices.

Keywords: co-teaching, inclusion classrooms, professional development, teacher perceptions, special education

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Chapter 1: Introduction

The inclusion of students with disabilities in general education classrooms is a movement that has grown over the past decade in public education. Co-teaching practices in inclusive classrooms are a common occurrence at schools since the 1990 revision of the Individuals with Disabilities Education Act (IDEA). IDEA of 1997 was a catalyst for more students with disabilities being served in the general education setting, naming the general education classroom as the first consideration of placement and the least restrictive environment (Mastropieri & Scruggs, 2017; Shippen, Crites, Houchins, Ramsey, & Simon, 2005). According to the National Center for Education Restructuring and Inclusion (1995), “Students with disabilities in inclusive classrooms show academic gains in a number of areas, including improved performance on standardized tests, mastery of Individual Education Program goals, grades, on-task behavior and motivation to learn” (Whitbread, n.d., p. 6). Successful placement of students in the inclusion setting takes training and support from various sources for general education teachers (DeSimone & Parmar, 2006; Mastropieri & Scruggs, 2017).

As a result of mainstreaming students with disabilities into an inclusive classroom, co-teaching between a general education teacher and a special education teacher has become a more widely used practice to meet student needs in the general education setting (Cook & Friend, 1995). Co-teaching can be effective in meeting the needs of all students with and without disabilities and is likely to increase student learning outcomes by providing expertise from different areas that can enrich instruction (Murawski & Dieker, 2004). However, the decision to implement co-teaching in an inclusive setting should be organized and methodically executed. Cook and Friend

(1995) stated, “Co-teachers need preparation, administrative support, and opportunities to nurture their collaborative relationships” (p. 21). As reported by Solis, Vaughn, Swanson, and McCulley (2012), the implementation of co-teaching is very broad; therefore, “a critical factor in the success of co-teaching models is the professional relationship formed between teachers prior to and throughout the co-teaching experience (Ploessl, Rock, Schoenfeld & Blanks, 2010; Trent et al., 2003)” (p. 499). Districts must work to provide training and support to teachers for successful co-teaching classrooms and relationships.

Benefits of Co-Teaching

Co-teaching between general education teachers and special education teachers in the same classroom builds on the benefits of inclusion. Students with disabilities are exposed to the general education curriculum and profit from a special education teacher’s knowledge of student learning and disabilities and the content expertise of the general education teacher while still receiving services outlined in their Individual Education Program (IEP), lower student-to-teacher ratio, and removal of the stigma of being in special education (Keefe & Moore, 2004; Magiera, Smith, Zigmond, & Gebauer, 2005; Mastropieri & Scruggs, 2001).

Challenges of Co-Teaching

Research has also exposed challenges of co-teaching across all grades and at specific levels. This study will focus on the secondary setting where research by Mastropieri and Scruggs (2017) has shown high stakes testing, inconsistent strategies, the need for study skills, content area knowledge, and fast pacing have presented challenges not found on the elementary level (Keefe & Moore, 2004; Mastropieri & Scruggs, 2001).

In addition, factors affecting successful co-teaching, in general, can become a barrier if not provided. Planning, communication, administrative support, collaboration, general and disability-specific teaching skills, and parity are aspects teachers have identified as concerns when implementing co-teaching practices in the school (Hernandez, 2013; Mastropieri & Scruggs, 2001).

Statement of the Problem

General education teacher training programs are inconsistent in the amount of preparation given for working with students with special needs in the inclusion setting. Van Laarhoven, Munk, Lynch, Bosma, and Rouse (2007) stated, “educators may not have the necessary attitudes or dispositions, or perhaps more important, the professional skills to successfully instruct students in diverse, inclusive classrooms” (p. 440). In-service training is often used to provide knowledge and strategies for working with special education students, but more emphasis has been placed on teacher preparation programs to help prepare teachers for working in an inclusion setting (Van Laarhoven et al., 2007). According to a study by Keene (2018), a lack of professional development is a crucial concern in the success of inclusion and co-teaching.

According to the U.S. Department of Education, National Center for Education Statistics (2019), in 2015, 62.5% of students with learning disabilities were served in a regular school in the general education classroom for 80% or more of the school day. Many districts no longer use the traditional structure of separate classrooms for students with mild/moderate disabilities because they are now taught in classrooms with their non-disabled peers for a majority of their time spent in school (Strawderman & Lindsey, 1995). General education teachers must be prepared to work with special needs students

in the inclusion setting (Bowlin, 2012; Cook, 2002).

Through research, many factors have been considered to relate to teacher perception of inclusion settings such as training, support, resources, and other factors including grade level, demographics, time in the profession, types of disabilities, and class size (Olinger, 2013; Whitaker, 2011; Wiggins, 2012). McCray and McHatton (2011) found when working with students with disabilities,

the pedagogy used to prepare teacher candidates for collaboration or inclusion was not well documented. These findings were not surprising considering research (SPeNSE, 2001) that showed that less than one-third of early career general educators (< six years) reported receiving pre-service training in collaboration with special educators, the area that had the greatest effect on their sense of efficacy. (p. 136)

A study completed by Stoler (1992, as cited in Kim, 2011) produced results identifying teacher educational history as a factor influencing perceptions of inclusion. The higher the degree obtained by secondary teachers, the less favorable perception of inclusion. Training was also identified as a factor where the more coursework and in-service training was provided to teachers, the more positive the attitude.

Stefanidis, King-Sears, and Brawand (2018) conducted a study highlighting contextual factors that might influence the perceived benefits of co-teaching. Data showed age is inversely proportional to teacher views of co-teaching and suggest further research is needed that considers age as it relates to co-teaching (Stefanidis et al., 2018). In addition, Wade, Welch, and Jensen (1994) associated the length of a general education teacher's time in one school can adversely affect the willingness to collaborate with other

staff. There has been a shortage of research relating to inclusion and co-teaching at the secondary level which has challenges that may differ from the elementary setting (Keefe & Moore, 2004; Mastropieri & Scruggs, 2001). Elementary classrooms are more student centered and more likely to use research-based practices because they are teaching the students how to learn. High school classrooms focus more on content and what to learn, leading to a lower frequency of research-based instruction (Shippen et al., 2011).

This study took place in a suburban school district, District ABC, in the southeastern United States, serving approximately 16,075 students. Over the past 16 years, the district has seen a 173% increase in the student population. High School X has an approximate enrollment of 1,973 students, High School Y has an approximate enrollment of 2,100 students, and High School Z has an approximate enrollment of 1,000 students. High School Z opened for the 2019-2020 school year to help alleviate overcrowding at the other two schools and currently has only students in grades 9-11 (grades 9-12 in 2020-2021). The district surpasses the state percentage of students scoring C or higher on English I and Algebra I end-of-course assessments. The district's on-time graduation rate also exceeds the state percentage.

The majority of students with special needs in the district are served in an inclusion setting which aligns with the national statistic reporting 80% of approximately six million students with disabilities attend general education classes for at least half of the school day (U.S. Department of Education, as cited by Stefanidis et al., 2018). Due to the number of students in inclusion classes, teachers must have background knowledge of various disabilities and the structure of inclusion classes, including strategies for working with special needs students (Mastropieri & Scruggs, 2001). In addition, many of the

inclusion classrooms are co-taught by a general education teacher and special education teacher (Pratt, Imbody, Wolf, & Patterson, 2017). The researcher wanted to identify teacher perceptions of co-taught classrooms, which include students with various identified disabilities.

Conceptual Framework

Friend is a current leader in the field of special education and co-teaching. She has developed a framework outlining 10 questions to guide co-teaching program development. Friend's guiding questions are

1. What do we mean by co-teaching?
2. What is the rationale for co-teaching?
3. When is co-teaching the appropriate instructional option?
4. What does co-teaching look like?
5. Who should be involved in co-teaching?
6. How much co-teaching should take place?
7. How can co-teachers maintain a collaborative working relationship?
8. What do co-teachers need to be successful?
9. How do we plan for a co-teaching program?
10. How do we introduce co-teaching and communicate with others about it (Cook & Friend, 1995)?

These questions are meant to be guiding questions to spark conversation and reflection regarding one's co-teaching practices, whether the role is administrator, special education teacher, or general education teacher. While there are no right answers, as Friend and Barron (2019) suggested, there are key concepts for districts to follow.

Co-teaching usually involves two teachers in the same classroom (Mastropieri & Scruggs, 2001). For this study, the nature of co-teaching will involve one general education teacher specialized in content knowledge and one special education teacher specialized in understanding unique learning needs and adjusting curriculum and instruction to meet the needs of the students (Magiera et al., 2005). These classrooms will provide instruction as needed for teaching content standards in math and English and earning Carnegie Units required for high school graduation. The rationale for the co-taught classrooms in the district is to provide support for students with various disabilities which affect their ability to learn material in the same manner as non-disabled peers. Students are able to progress toward graduation in the same manner through a continuum of support with one of the least restrictive environments being the general education classroom. Figure 1, developed by the researcher in this study, illustrates an example of the continuum of services provided in high schools in District ABC.

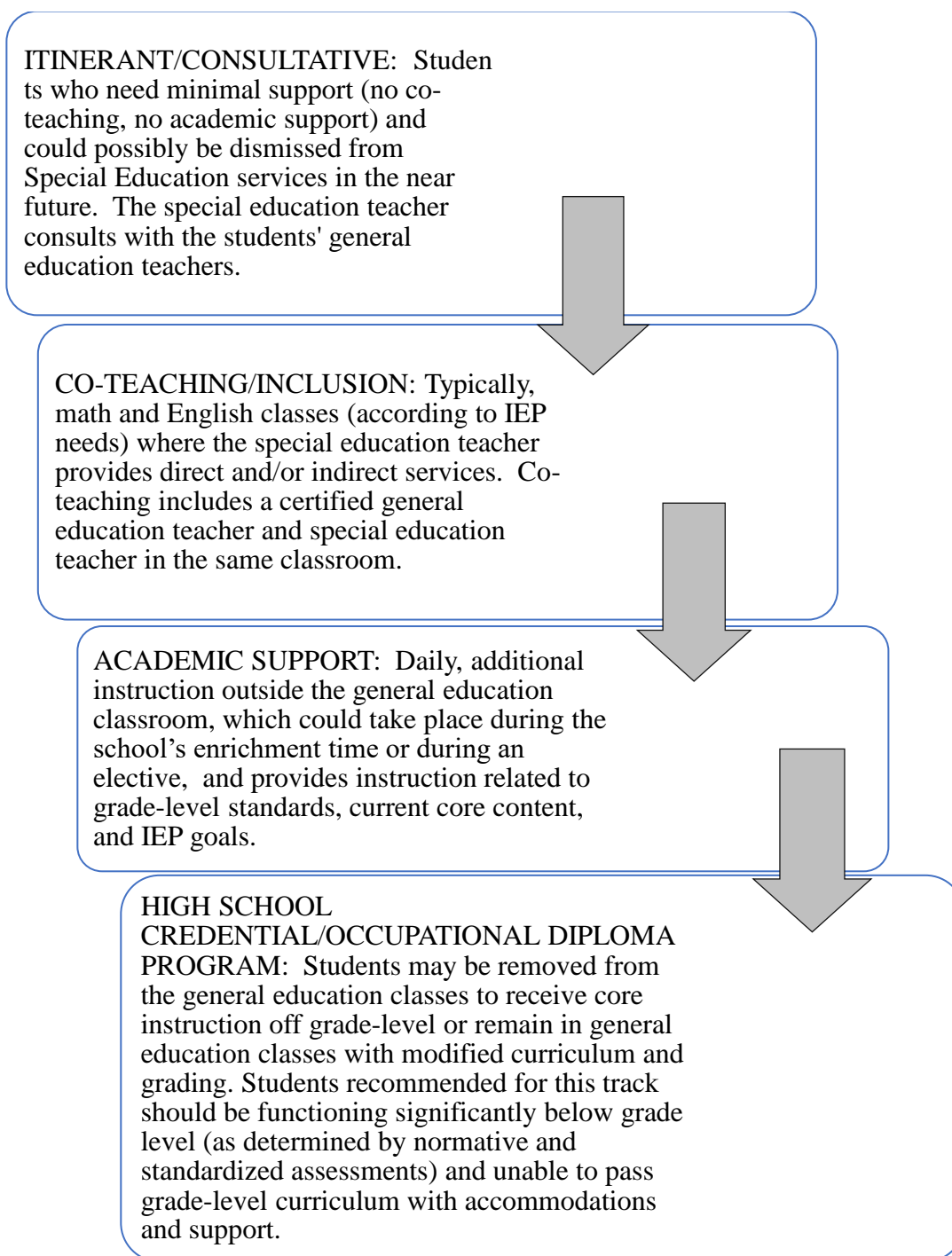


Figure 1. Continuum of Services.

Co-teaching is considered an appropriate option when multiple students need a required course and also require direct instruction through the services outlined in their

IEP. If an IEP team determines a student's best placement is in a general education classroom, having two teachers in the room may allow for the school to provide accommodations, modifications, or instruction needed to make the content accessible to the student.

According to Friend, Cook, Chamberlain, and Shamberger (2010), there are several common co-teaching approaches. Each approach has pros and cons, leaving the school to determine the best option for each classroom. These approaches are as follows:

1. One Teaching, One Assisting – One teacher takes a clear lead while the other teacher has more of a supporting role.
2. Station Teaching – Teachers divide content and rotate students between the stations.
3. Parallel Teaching – Teachers divide the class and teach the same content to smaller groups of students.
4. Alternative Teaching – One teacher works with a large group, and one teacher works with students who benefit from small group instruction.
5. Team Teaching – Both teachers share the instruction, often switching off during the lesson. One teacher might lead a discussion while the other models note-taking, for example.

Administrators must choose who should be involved in co-teaching. Co-teachers should be open to sharing a classroom with others as well as be open to having more than one way to do things. Another essential characteristic is volunteering to co-teach (Cook & Friend, 1995). The teachers' level of willingness can affect the co-teaching relationship. In addition to who should co-teach, administrators must determine the

amount of co-teaching to take place. This involves several factors such as personnel, number of students with IEPs, level of support, and the size of the school (Cook & Friend, 1995).

Co-teachers must have “effective and ongoing communication” (Cook & Friend, 1995, p. 12) in order to be successful. Discussion regarding classroom procedures, discipline, and instruction is vital. Open communication needs to take place in the planning stages and once co-teaching has begun.

In order for co-teachers to be successful, they must have professional preparation and administrative support (Mastropieri & Scruggs, 2001). Teachers must be trained in instructional strategies and students with disabilities (Cook & Friend, 1995). Cook and Friend (1995) also stated, “Our experiences in providing both pre-service and in-service education and our technical assistance experiences in co-teaching have demonstrated the necessity for preparation at both levels” (p. 15). Research has shown there is inconsistency in the type and amount of training for co-teachers (Keene, 2018). Administrators can support co-teachers through training, resources, incentives, and providing time for planning.

Planning and implementing co-teaching is a process. District and school administrators must determine a structure, description of the program, goals and objectives, eligible personnel, responsibilities, types of service, and evaluation measures (Cook & Friend, 1995). Teachers must be effective when co-teaching for the students to benefit.

Research shows teacher quality has a significant effect on student achievement (National Research Council, 2000). Many factors can affect teacher performance in the

classroom. According to Gaines and Barnes (2017), lack of teacher training (preservice or in-service), providing instruction for students with atypical needs, lack of administrative and special education teacher support, an increase in negative student-teacher interactions in the classroom, and evaluations based on student standardized scores can all have an impact on teacher self-efficacy and perceptions in the classroom. The researcher wanted to identify teacher perceptions of co-taught classrooms as a function of preservice and in-service training. Figure 2 illustrates the framework through which this research was conducted.

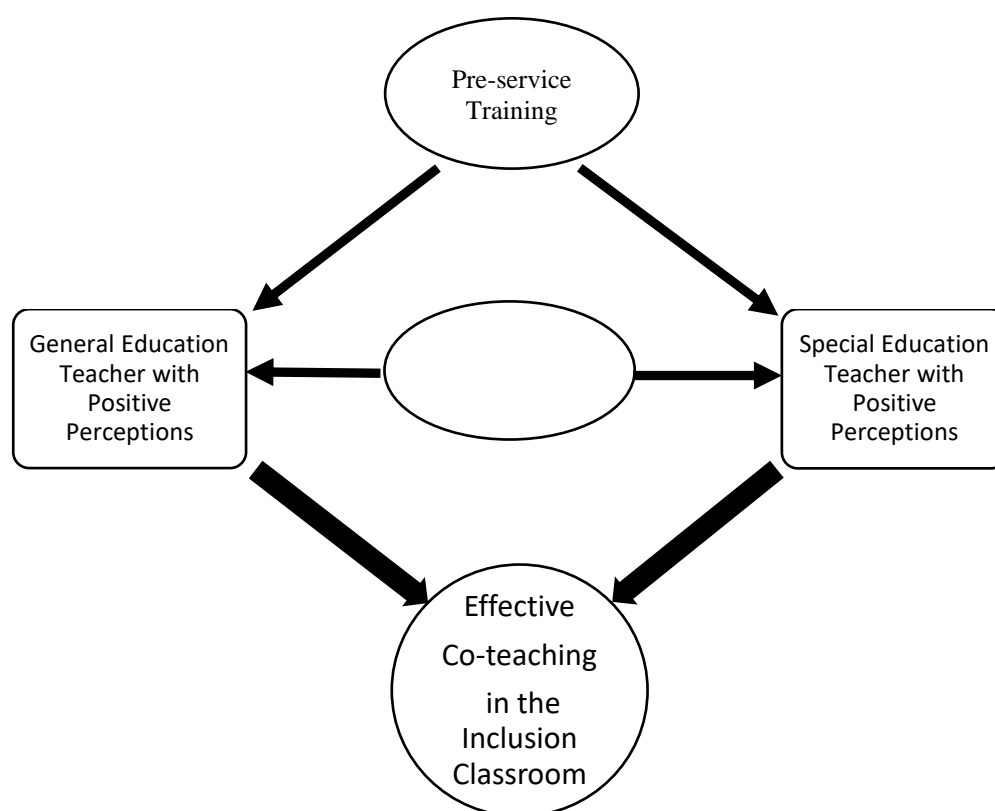


Figure 2. Framework of Study.

In Figure 2, the transition from preservice training to classroom co-teaching practices is displayed. Teachers begin their careers through the successful completion of

a preservice program in order to earn an initial teaching certificate. General education teachers and special education teachers follow different teaching programs in which content varies. If preservice training provides knowledge and experiences that lead to positive perceptions of co-teaching, it lays a foundation for effectiveness. Preservice training must then be followed up with, and supplemented by, in-service training for the knowledge of working with students with varied abilities and best practices in co-teaching. If these two steps, or layers, of training are provided, there will be a better chance of effective co-teaching in the inclusion classroom from both the general education teacher and special education teacher.

Purpose of the Study

The purpose of this study was to identify teacher perceptions of co-taught classrooms to determine possible weaknesses and training needs. Specifically, the researcher sought to answer the question, “How do preservice courses and in-service training affect teacher knowledge of special education and teacher perceptions of co-teaching to address the needs of individuals with disabilities in their classrooms?”

It is important to investigate this for several reasons. First, students with special needs are increasingly placed in inclusion settings with non-disabled peers, and general education teachers deliver the core content to those students (DeSimone & Parmar, 2006; Mastropieri & Scruggs, 2017).

Although actual research on the benefits of including students with such disabilities has been scarce over the past 10 years, there is general agreement that educating students with disabilities in inclusive settings results in positive academic and learning outcomes, social acceptance, consistent interactions and

friendships for students with disabilities, and enhanced understanding of diversity for their peers. (Constantinescu & Samuels, 2016, p. 11)

Second, teachers in inclusion classrooms need to have appropriate training for working with diverse disabilities (King-Sears, Carran, Dammann, & Arter, 2012). In a study looking at students with behavioral and emotional disorders, one teacher shared that “despite taking some special education courses, the lack of practical understanding of disabilities often leaves her not knowing how to best support her students with emotional and behavioral disabilities” (Constantinescu & Samuels, 2016, p. 11). Third, many districts have moved to co-teaching models for inclusion classrooms. Co-teaching models involve one general education teacher as the content specialist and one special education teacher as an instruction delivery specialist.

Many studies of inclusion give consideration to training and prior education but not necessarily as a primary focus. In addition, inclusion and co-teaching at the secondary level have challenges that may differ from the elementary setting; therefore, research is needed to identify and address concerns specific to grades 9-12 (Keefe & Moore, 2004; Mastropieri & Scruggs, 2001). There is potential for further studies focusing on the training aspect related to teacher perceptions of co-teaching in secondary inclusion classes.

Research Questions

The researcher addressed four primary questions:

1. How do general education and special education teacher perceptions compare regarding preservice training effectiveness for working in an inclusion, co-taught secondary classroom?

2. How do general education and special education teacher perceptions compare regarding in-service professional development effectiveness for working in an inclusion, co-taught secondary classroom?
3. What effect does preservice training have on the confidence level of teachers when working with special needs students in the secondary inclusion classroom?
4. What are secondary teacher perceptions, including perceived limitations, of co-teaching practices?

Overview of Methodology

Qualitative and quantitative data were collected using an electronic survey.

English, math, and special education teachers at each high school in the district were invited to participate in the survey for a total of 101 participants. A link to the survey was sent by email so identifying data would not be associated with specific participants, allowing for anonymity of responses. Individual interviews were conducted with a district administrator and the assistant principal over curriculum and instruction at each high school to gain knowledge of co-teaching within the district from multiple administrative levels.

Definition of Terms

Accommodations. Adjustments made to tests/assignments for the timing, formatting, setting, scheduling, response, and/or presentation (Wright, 2010).

Modifications. Adjustments made to tests/assignments which alter what the test/assignments measure and what students are required to learn (White, 2018).

Inclusion. A setting where students with disabilities who qualify under IDEA are

in the general education classroom along with non-disabled peers. A belief or philosophy all students should belong to a classroom regardless of ability (Friend, 2016).

Individual Education Program (IEP). A legal document as outlined under IDEA that provides an individual plan for educating a student with a qualifying disability (“Learning About IEPs,” 2019).

Preservice. The education of teachers before they enter into service as a teacher (Shippen et al., 2005).

Special education. Specially designed instruction provided to students identified with a disability as it relates to their IEP. This term is used to differentiate between the general education curriculum/services for students without disabilities and curriculum/services for those with disabilities (IDEA, 2004).

Special needs students. Students identified with a disability and receiving services through an IEP.

General education. The program of education that typically developing children should receive as determined by state or Common Core standards (Wright, 2010).

Mild to moderate disabilities. Disabilities that allow a special education student to function outside of a self-contained classroom and participate with non-disabled peers 40% or more of the school day. Students with more mild or moderate disabilities range from specific learning disabilities, like struggling in reading or math, to speech impairment where the student needs speech therapy for pronunciation issues (University of Arkansas, 2016).

Co-teaching. Two or more professionals in the same classroom; a method for providing specialized instruction needed for students with disabilities while ensuring

access to the general curriculum in the least restrictive environment (Friend, 2016).

One teach, one observe. One teacher leads large-group instruction while the other teacher gathers academic, behavioral, or social data on specific students or the class group (Friend et al., 2010).

One teach, one assist. One teacher provides instruction while the other teacher circulates through the room providing assistance to students as needed; should be the least often used co-teaching approach (Friend et al., 2010).

General education teacher. Teacher for typically developing students (Wright, 2010).

Special education teacher. Teacher who works with students who have a wide range of learning, mental, emotional, and physical disabilities (Special Education Teachers: Occupational Outlook Handbook, 2019).

Highly qualified teachers. To be deemed highly qualified, teachers must (a) have a bachelor's degree, (b) have full state certification or licensure, and (c) prove that they know each subject they teach (U.S. Department of Education, 2005).

Perception. Observation; a mental image or concept; quick, acute, and intuitive cognition (Merriam-Webster, n.d.).

Professional development. Specialized training, formal education, or advanced professional learning intended to help administrators, teachers, and other educators improve their professional knowledge, competence, skill, and effectiveness (Great Schools Partnership, 2013).

Significance of the Study

The increase in the use of inclusion models in public education affects higher

education teacher training programs, district-level personnel, school-level administration, general and special education teachers, and students. Many teacher preparation programs evaluate and adjust their course of study to prepare preservice teachers for teaching in an inclusive setting (Cooper, Kurtts, Baber, & Vallecorsa, 2008; Harvey, Yssel, Bauserman, & Merbler, 2010; King-Sears et al., 2012;). However, “there is little empirical evidence to support specifically which knowledge, skills and attitudes pre-service programs need to enhance” (King-Sears et al., 2012, p. 132). A study in how training relates to teacher perceptions provides a foundation for building appropriate preservice and in-service training opportunities for working with special education students using a co-teaching model in the secondary inclusion classroom, which houses a unique set of circumstances apart from the elementary setting.

Limitations

There are certain limitations involved in this study. First, the researcher was unable to control the number of surveys returned and the urgency with which they were completed. A sizeable group of teachers within the district was the target for this study in the hopes a significant number would return the surveys to provide reliable data. The researcher was successful in getting a response rate of 53.5%, which was larger than anticipated. Second, the proportion of general education teachers to special education teachers participating in the study was slightly skewed by the number of respondents. There was a higher percentage of special education teachers who responded (68%) compared to general education teachers (48.7%). Third, the researcher is an employee of District ABC. Teachers currently co-teaching with the researcher were excluded from the study, and all data were anonymous; but working relationships with colleagues could

hinder the honesty with which the surveys were completed.

Delimitations

This study involved secondary teachers in a single school district in the southeastern United States. The teachers surveyed had undetermined years of teaching experience as a certified special education teacher, math teacher, or English teacher. The researcher considered participants with certification in all core content areas, but the identified district utilizes co-teaching mostly in math and English classes. The district conveyed to the researcher a more accurate perception would result in limiting the participants to those areas. The researcher chose to follow the direction of the district when determining participants in the study.

Conclusion

Since the No Child Left Behind Act (NCLB, 2001) mandate, the push for special education students to be placed into inclusion classrooms has been significant, when historically these students were taught in classrooms with disabled peers only (Chen, 2016; Mastropieri & Scruggs, 2017). General education teachers now have to work more collaboratively with special education teachers to provide instruction in classrooms with non-disabled peers (Harvey et al., 2010). Traditionally, preservice training for general education teachers allowed for little instruction related to special education (Bowlin, 2012). Now, teacher education programs must find methods for preparing teachers to work with a diverse population of students with disabilities in the general education setting (Van Laarhoven et al., 2007).

Administrators also play a significant role in the perception of inclusion as previous research indicates teachers believe quality co-teaching is dependent on

administrative support (Sinclair et al., 2019). Cook, Semmel, and Gerber (1999) conducted a study analyzing the “Attitudes of Principals and Special Education Teachers Toward the Inclusion of Students with Mild Disabilities” (p. 1). This study concluded there is a disconnect in perceptions where administrators have more favorable opinions of inclusion than teachers in inclusive classrooms. A study that identifies teacher perceptions of co-teaching and provides information pertinent to training and practices is needed in the identified school district at both the teacher and administrative level.

Chapter 2: Literature Review

Overview

The purpose of this study was to determine the effects of training on teacher confidence and perception of co-teaching students with special needs in the general education inclusion classroom. Teachers often express concern over legalities and lack of knowledge when working with special education students (Harvey et al., 2010). Historically, teacher preservice coursework has not been very intensive in the area of special education, and this study will determine what makes the biggest difference in their confidence when teaching in an inclusion classroom (Bowlin, 2012; Harvey et al., 2010). Factors related to teaching in the inclusion classrooms are the history of special education, the least restrictive environment, aspects of an inclusion model, teacher education and certification, and stressors involved with teaching in public schools.

Co-teaching between a general education teacher and a special education teacher in the same classroom has become more widely used since the 1990 revision of IDEA (Cook & Friend, 1995). Students with disabilities must have access to the general education curriculum and be served in the least restrictive environment. Schools have incorporated co-taught classrooms to best serve many students with disabilities in the general education classroom (Cook & Friend, 1995). Through co-teaching, needs can be met for struggling students with and without disabilities (Murawski & Dieker, 2004).

Theoretical Framework

Vygotsky developed a theory based on social interactions (David, 2014; Whitaker, 2011). He believed in active learning and a collaborative relationship between the teacher and students (David, 2014). His three major themes were “social interaction

plays a fundamental role in the process of cognitive development,” “the More Knowledgeable Other (MKO),” and “the Zone of Proximal Development (ZPD)” (David, 2014, p. 1). MKO is someone who has a higher understanding or ability level than another. Typically, this person is an elder but may also be a peer. ZPD refers to the space between the ability to function or perform a skill with assistance to performing independently. Vygotsky believed learning occurs in that space (David, 2014).

A second theorist within the framework is Albert Bandura. “Bandura (1977) believes humans are active information processors and think about the relationship between their behavior and its consequences” (McLeod, 2016, para. 17). The social learning theory, later renamed the social cognitive theory, has four processes involved: attention, retention, reproduction, and motivation. Learning can take place through observation, and these four processes determine the extent. Attention refers to how often we notice or are exposed to the behavior and whether or not it grabs the learner’s attention. Retention is how well the behavior is remembered over a period of time. Reproduction is the ability of the learner to reproduce the observed behavior which can be limited by physical capabilities. Last, motivation is the desire to perform the behavior that is affected by the rewards or punishment observed after the behavior takes place (McLeod, 2016).

Together, Vygotsky and Bandura developed a foundation for special education students in the inclusion classroom (David, 2014; McLeod, 2016). The more students with mild to moderate disabilities are around their non-disabled peers, the more they get to experience learning on a different level (Whitaker, 2011). Students are able to learn from their peers (MKO) and gain insight from observing higher level students in the

classroom (Whitaker, 2011). Special education was the primary source of the data used to support Vygotsky's theories (Gindis, 1999). From the social perspective, "the primary problem of a disability is not the sensory or neurological impairment itself, but its social implications" (Gindis, 1999, p. 335). Vygotsky was a founder of the Experimental Institute for Special Education in Russia (Vygodskaya, 1999). He introduced the concept of primary, secondary, and tertiary disabilities and the analysis of the whole child, including that a child with a disability is a child first, and the impairment is second (Gindis, 1999; Vygodskaya, 1999).

Due to the incorporation of special needs students in the general education classroom, general education teachers must be knowledgeable of the abilities the students bring with them (Cooper et al., 2008; King-Sears et al., 2012; Van Laarhoven et al., 2007). Teachers should have background knowledge of various types of disabilities and research-based strategies for teaching and learning to occur (Cooper et al., 2008; King-Sears et al., 2012; Van Laarhoven et al., 2007). Vygotsky determined the goal of a teacher working with students with disabilities is to help the student live in this world and to make compensations for any shortcomings to lessen the aspects of negative socialization (Gindis, 1999). Lack of knowledge related to the instruction of students with disabilities, or disabilities themselves, can cause high-stress situations in classrooms for the teachers, students, and parents (Cooper et al., 2008; King-Sears et al., 2012; Van Laarhoven et al., 2007). Teachers who are prepared are better able to incorporate special needs students in the classroom and experience success (Cooper et al., 2008; King-Sears et al., 2012; Van Laarhoven et al., 2007).

History of Special Education

In the 19th century, educational reformer Horace Mann helped lay the foundation

for the public school system by leading the cause for all students to attend school (Wright, 2010). School attendance was mandatory; and he felt if students with different, varying backgrounds attended school together, it would help foster tolerance and understanding for others in the community (Wright, 2010). In the late 1800s and early 1900s, court cases ruled for two students to be removed from common schools due to poor academic ability and cerebral palsy (Esteves & Rao, 2008). Students with special needs mostly attended separate schools.

Brown v. Board of Education (1954) was the first significant court case to later influence the education of students with disabilities. The case ruled that the segregation of students based on the color of their skin was unlawful. Segregation can cause feelings of inferiority. As a result of this ruling, parents of students with disabilities felt their students were being discriminated against by having to attend a separate school (Esteves & Rao, 2008; Wright, 2010).

The Elementary and Secondary Education Act (ESEA) of 1965 provided federal money to schools to help improve education for underprivileged children. In 1966, ESEA was amended to provide federal aid to schools in order to expand programs to educate handicapped children (Esteves & Rao, 2008; Wright, 2010).

Two court cases in 1972 were significant in the development of education for students with disabilities. *Pennsylvania Association for Retarded Children (P.A.R.C.) v. Commonwealth of Pennsylvania (1972)* and *Mills v. Board of Education of District of Columbia (1972)*. These two cases established the groundwork for students with disabilities attending public schools with placement decisions made which included the parents and students with disabilities receiving due process under the law before being

removed from a public school (Esteves & Rao, 2008; The Right to Education, 2016; Wright, 2010).

Section 504 of the Rehabilitation Act of 1973 (n.d.) prohibits discrimination on the basis of disability in programs run by the federal government or who receive financial assistance from the federal government. Institutions must provide reasonable accommodations for people with disabilities (Esteves & Rao, 2008; Rehabilitation Act of 1973, n.d.; Wright, 2010). In 1990, the Americans with Disabilities Act required the compliance of school districts and institutions that do not receive federal aid (Esteves & Rao, 2008).

A significant change was made in 1975 when the Education for All Handicapped Children Act (Public Law 94-142) was signed. A more common name for this act is IDEA. When it was passed, it guaranteed “a free appropriate public education to each child with a disability” (Thirty-Five Years of Progress, 2010, para. 1). In addition to ensuring access to education for students with disabilities, procedural safeguards were also developed to protect the rights of parents and students (Wright, 2010).

IDEA has been amended several times with adjustments made to the age of the students and the importance of the IEP and parent involvement (Driscoll & Nagel, 2010; Esteves & Rao, 2008; Wright, 2010). In 1990, traumatic brain injury and autism were added as qualifying categories, and transition plans were integrated into the IEP (University of Kansas School of Education, 2020). The legislation was amended again in 1997, adopting the name IDEA and expanding the age range for developmental delays, and ensured all students have access to the same curriculum (University of Kansas School of Education, 2020).

NCLB was an update to ESEA of 1965. NCLB stressed the federal government would hold schools accountable for the academic progress of all students, including subcategories such as special education students, for example, who typically fall behind their non-disabled peers. States risked losing federal Title I money if they chose not to comply (Klein, 2015).

IDEA was reauthorized again in 2004 to help align with NCLB. The National Center for Learning Disabilities (2019) explained some of the major changes:

- *Highly qualified teachers.* “Special education teachers who teach core academic subjects (as defined by the No Child Left Behind Act) to students with disabilities must be ‘highly qualified’ in special education and also be highly qualified in the academic subjects they teach.” (para. 12)
- *Individualized education programs (IEPs).* Each IEP must contain annual goals that are measurable and based on “peer-reviewed research” (para.15).
- *Specific learning disabilities.* Schools no longer use the criteria of a severe discrepancy between achievement and intellectual ability to determine if a child has a specific learning disability. Schools must use determining factors such as inadequate achievement based on age-level expectations, insufficient progress with the use of research-based interventions, and “evidence of a pattern of strengths and weaknesses in performance, achievement, or both.” (para. 4).

General Education Teacher Responsibilities Under IDEA

When a student is tested and determined to qualify for special education under one of the 13 categories, an IEP is developed (The Individualized Education Program Process in Special Education, 2013). An IEP is a document put together by a team of

people who address needs and services for the student (The Individualized Education Program Process in Special Education, 2013). The special education teacher, general education teacher, and a representative of the local educational agency (LEA) are required to be in attendance (The Individualized Education Program Process in Special Education, 2013). The parents of the qualifying student are always invited to every IEP meeting and are welcome to bring in additional people. For the initial evaluation and development of the IEP, a school psychologist must be involved. Anyone else involved with the student's education and services is also invited (The Individualized Education Program Process in Special Education, 2013).

The rules for the IEP meeting are there to provide parents with information and include them in the decision-making process which reflects decisions set forth with IDEA (Driscoll & Nagel, 2010). Appendix A to Part 300 – Notice of Interpretation for IDEA specifies the following regarding general education teacher roles in developing IEPs:

As required by Sec. 300.344(a)(2), the IEP team for a child with a disability must include at least one regular education teacher of the child if the child is, or may be, participating in the regular education environment. Section 300.346(d) further specifies that the regular education teacher of a child with a disability, as a member of the IEP team, must, to the extent appropriate, participate in the development, review, and revision of the child's IEP, including assisting in--(1) the determination of appropriate positive behavioral interventions and strategies for the child; and (2) the determination of supplementary aids and services, program modifications, and supports for school personnel that will be provided for the child, consistent with 300.347(a)(3). (IDEA Regulations, 2004)

Teachers have a wide range of abilities represented in their classrooms. They must be able to differentiate instruction and understand the learning needs of all students. In addition, teachers must know which students have IEPs and the services and accommodations included in the plan. There are four important pieces of information each general education teacher must have when working with students receiving services through an IEP. These four items are (a) which students have a disability and who has an IEP, (b) an understanding of the special education referral process, (c) basics of the 14 qualifying disability categories, and (d) know where to find resources, including other providers, in the school (“What do General Education Teachers Need to Know about Special Education,” 2019). In addition, teachers need to provide accommodations and modifications as outlined in the IEP, collaborate with the special education teacher and related service providers (speech therapist, occupational therapist, physical therapist, vision therapist, behavior interventionist), maintain communication with the parents, assess student progress on a regular basis, and maintain communication with the student’s IEP case manager (Johnson & Homan, n.d.). Much of this information may come from courses taken when preparing to become a teacher; however, the extent of the information provided may vary from university to university and course to course.

Least Restrictive Environment

During the development of the IEP, a decision must be made as to the placement of the student within the education setting. There is a continuum of services available to the student according to their disability and need from 100% of the day with non-disabled peers in general education classes to self-contained settings where the student is with disabled peers the majority of the day. IDEA Regulations (2004) state students must be

placed in the least restrictive environment as outlined in Section 300.114:

- (2) Each public agency must ensure that—(i) To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled; and
 - (ii) Special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.
- [20 United States Code (U.S.C.) Sec. 1412(a)(5)(A); 34 Code of Federal Regulations (C.F.R.) Sec. 300.114]. (p. 27)

The realm of special education has a wide variety of special services available to students who qualify, and it is important to remember special education refers to a service, not a place (Hayes & Bulat, 2017). IDEA requires that children with disabilities be

educated with children without disabilities, and that special classes, separate schooling, or other removal of children with disabilities from regular educational environments occur only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be. (PACER Center, 2020, para. 6)

Special education service models span from homebound instruction to inclusive instruction in the general education classroom for 100% of their school day. The IEP team meets to determine the most appropriate and least restrictive environment needed for each student served through special education (PACER Center, 2020). Students

receiving core instruction in the general education setting can be supported in a variety of ways. The team may determine a student needs consultative services in general education. A special education teacher consults with the general education teacher regarding the needs of the student and provides support to the student by working with the general education teacher directly. This type of service delivery is considered indirect because the special education teacher is not providing instruction directly to the student (PACER Center, 2020). A second service model allows for the general education teacher and special education teacher to co-teach in the same classroom. This type of model is referred to as inclusion; however, it is not identified in any legislation (Whitaker, 2011). Inclusion places students with IEPs in the general education classroom for the majority of the school day (Strawderman & Lindsey, 1995).

Co-teaching can be done in a multitude of methods such as parallel teaching, one teach-one assist, tag-team teaching, etc. The next level of support available for a student is the pull-out, or resource, model. In this model, students are provided core instruction from a general education teacher but may receive additional support in a separate setting from the special education teacher on a regular, usually daily, basis. In some cases, a resource model is used when a special education teacher provides the primary instruction in a subject. For students needing extensive support to attend general education classes, a paraprofessional may attend the classes with them. The paraprofessionals assist students in the general education classes allowing for access to the general education curriculum they might not receive otherwise (Idol, 2006). Paraprofessionals (also known as paraeducators) are “school employees who work alongside and/or under the direction of a licensed or certificated educator to support and assist in providing instructional and non-

instructional services to children, youth, and their families” (National Education Association, 2019, para.1).

Pull-out or Resource Setting

The pull-out model involves students with disabilities being removed from their non-disabled peers for a portion of the school day. A qualified special education teacher has the primary responsibility for providing instruction, assessment, and feedback (Weiss & Lloyd, 2002). A benefit to a separate setting for special education students is the ability of the teacher to slow down instruction, break the information into smaller units, and provide more individualization (Thompkins & Deloney, 1995; Weiss & Lloyd, 2002). Opponents of resource classes (separate classes for students with disabilities) feel the material may be too watered down; there may be lower expectations of these students; and once students are in segregated programs, they tend to stay in segregated programs in the future (Thompkins & Deloney, 1995).

Inclusion and Co-Teaching

The term “inclusion” is not mentioned in IDEA but is generally referred to when discussing the placement of a student with a disability with non-disabled peers in the general education classroom (PACER Center, 2020). A variety of methods can be used in an inclusion setting with both a special education teacher and a general education teacher responsible for instruction. This pairing of teachers in the inclusion classroom is termed “co-teaching.” The two qualified teachers collaborate in planning, teaching, and assessing student learning (Witcher & Feng, 2010). The general education teacher usually provides the role of a content specialist, while the special education teacher helps to identify problems within the learning environment and provides strategies and

interventions to address these problems (Mastropieri & Scruggs, 2017). The most common setup of a co-taught classroom is for one teacher to teach and one to assist. Special education teachers indicate that the roles in co-taught classrooms change according to teacher personalities, content, and pressure from outside sources, such as administration (Weiss & Lloyd, 2002). The highest success rate is evident when the special education teacher and general education teacher have common planning and common goals (Mastropieri & Scruggs, 2017). When the teachers work closely and collaboratively, the instruction is more meaningful and responsibilities are more evenly shared in the classroom which benefits all students (both students with and without disabilities). Mastropieri and Scruggs (2017) stated, “Effective co-teaching depends on co-teachers engaging in a true partnership, in which the special education teacher helps design and implement the validated strategies known to be effective with students with disabilities and other special educational needs” (p. 292).

Need for Co-teaching

In 1997, IDEA was reauthorized and incorporated the requirement of all students having access to the same curriculum (University of Kansas School of Education, 2020). NCLB legislation stressed the federal government would hold schools accountable for the academic progress of all students, including subcategories of students who typically fall behind their non-disabled peers. Part of the accountability would be yearly testing of all third- through eighth-grade students in reading and math (Frontline, 2002). As a result of IDEA and NCLB, co-teaching between a general education teacher and a special education teacher in the same classroom has become more widely used (Cook & Friend, 1995). Students with disabilities must have access to the general education curriculum

and be served in the least restrictive environment. Therefore, schools have incorporated co-taught classrooms to meet the needs of struggling students with and without disabilities (Murawski & Dieker, 2004). This instructional arrangement meets the requirements of education legislation and is used in elementary, middle, and high schools across the nation.

While the instructional arrangements meet the requirements of legislation, there are challenges unique to secondary classrooms. High school inclusion classes have challenges such as the level and pace of content, the need for students to have independent study skills, and high-stakes testing (Mastropieri & Scruggs, 2001). In addition, inadequate professional development, caseload concerns, scheduling concerns, lack of common planning, and marked gaps in student skills pose barriers to successful co-teaching practices (Kozik, Cooney, Vinciguerra, Fradel, & Black, 2009).

Teacher Education and Certification

The 10th Amendment to the U.S. Constitution recognized any powers not given to the federal government, or prohibited to the states, should be given to the states, therefore making education a province of the states (Jefferson-Jenkins & Hill, 2011). The district in this study is in the southeastern United States, and the researcher identified paths to becoming a certified teacher to associate with potential survey responses. The most frequent means of obtaining certification are completion of college teacher preparation programs, out-of-state certified teachers transferring into the state, and alternative certification such as the Program of Alternative Certification for Educators (PACE) and Career and Technology Education (CATE; South Carolina Department of Education, 2020). Each of these pathways requires a minimum of a bachelor's degree. For the

purpose of this study, the primary focus will be on teachers who have completed teacher preparation programs through an accredited college or university.

Since NCLB was put into place requiring teachers to be highly qualified, the need for general education teachers and special education teachers to work collaboratively in an inclusion setting has increased (Cooper et al., 2008). Special education teachers are certified K-12 and typically do not have the necessary requirements to be considered highly qualified in each specific subject area. In an inclusion classroom, the general education teacher fulfills the highly qualified requirement, and the special education teacher contributes to requirements outlined in IDEA. The increased need for inclusion classrooms translates into the need for more training for general education teachers regarding special education services.

Conclusion

Education is evolving as a result of new research and legislation. Since *Brown v. Board of Education* (1954), parents and educators have been seeking the setting most beneficial to the learning needs of students with disabilities (Esteves & Rao, 2008; Wright, 2010). Inclusion has become widely used to meet requirements of education initiatives and prevent segregation of students with disabilities in public schools (Esteves & Rao, 2008; The Individualized Education Program Process in Special Education, 2013; Wright, 2010). Core values for the philosophy of inclusion are “(a) positive attitudes toward increased inclusion of students with disabilities; (b) high sense of teaching efficacy; and (c) willingness and ability to adapt one’s teaching to meet the individual educational needs of students with disabilities” (King-Sears et al., 2012, p. 132).

Prior research has determined there are common factors that may affect co-

teaching in the secondary setting. These factors are teacher attitude, administrative support, planning time, student scheduling, caseload concerns, and self-efficacy (Keene, 2018; Whisnant, 2015). Kozik et al. (2009) conducted an appreciative inquiry in an effort to develop a “profile of secondary inclusive educators” (p. 79). Teachers and administrators contributed to developing a vision for secondary teachers in the inclusive classroom. The results of this study led to the identification of values, skills, and knowledge necessary for teachers in inclusive secondary classrooms. Core values are passion, social justice, lifelong learning, the courage to change, and appreciation of diversity. Vital skills are working collaboratively and communicating. In addition, it is crucial for teachers to know research-based practices and developmental levels of adolescents (Kozik et al., 2009). The researcher sought to use this study of District ABC to gather data, in conjunction with prior research, to improve the inclusion/co-teaching model through communication and training.

Chapter 3: Methodology

Introduction

A study by McCray and McHatton (2011) found that teachers did not feel prepared to work in collaboration with special education teachers. According to Mastropieri and Scruggs (2001), “Teacher attitudes toward inclusion have been seen to be less positive on the secondary level” (p. 272). High school inclusion classes have challenges such as the level and pace of content, the need for students to have independent study skills, and high-stakes testing (Mastropieri & Scruggs, 2001). Successful inclusion of students with disabilities is dependent upon collaboration and background knowledge. If teachers do not receive preservice training in the area of inclusion of students with special needs, it can affect their perception of the inclusion classroom and, as a result, successful co-teaching practices. Research has shown one third of general education teachers with 1-6 years of experience received preservice training on collaborating with special education teachers (McCray & McHatton, 2011). Many universities maintain a focus on content knowledge in teacher preparation programs, which leave little time for instructional skills focused on teaching diverse learners. Often, teacher preparation programs allow for little field experience teaching students with disabilities (Carroll, Forlin, & Jobling, 2003). A review of course requirements for elementary education, middle-level education, and math education majors at a local 4-year college reveals one field-based course specifically for working with students with disabilities and gifted students. This is the only course whose description includes exceptional learner characteristics.

Previous research indicates teachers feel quality co-teaching is dependent on

administrative support (Sinclair et al., 2019). Teachers find importance in both the general education teacher and special education teacher volunteering to co-teach, along with being provided common planning time, training in co-teaching, and compatibility between pairs of co-teachers (Cook & Friend, 1995; Mastropieri & Scruggs, 2017; Sinclair et al., 2019). In addition, administrators must have knowledge of laws regarding special education and best practices to successfully implement co-taught classes. They need to know about effective teaching practices, including the variety of co-teaching approaches to better understand what is being observed in the classroom (Murawski & Bernhardt, 2016). Partnering teachers, conflict resolution, and appropriate scheduling and common planning are the responsibility of the administrators, which means they need to be knowledgeable of co-teaching practices (Friend et al., 2010). Many aspects affect the practice of co-teaching and the perceptions of those involved. The researcher feels it is important to identify perceptions of co-teaching at the secondary level, including those aspects important to its success as a service model and roles within the classroom.

Research Setting

District ABC has a total of 17 schools: nine elementary schools, five middle schools, and three high schools. Two additional elementary schools and one middle school will open by August 2021. There are 1,154 teachers, 83 administrators, and 627 support staff employed by this district; and it is the fastest growing school district per capita in the state. It is in close proximity to several colleges and universities that offer teacher certification programs. Of almost 17,000 students served in the district, 13.4% are students with disabilities other than speech. The school district utilizes inclusion for a majority of the students with special needs. The inclusion setting involves a general

education teacher as the content teacher with varying degrees of support from special education teachers. Co-taught classes are one level of support offered, which pairs a general education teacher and a special education teacher in the same classroom. High Schools X, Y, and Z are all on a 90-minute block schedule resulting in students taking four courses during the fall semester and four different courses during the spring semester for a total possibility of eight graduation credits each year.

Research Questions

The researcher will address four research questions.

1. How do general education and special education teacher perceptions compare regarding preservice training effectiveness for working in an inclusion, co-taught secondary classroom? (quantitative/qualitative)
2. How do general education and special education teacher perceptions compare regarding in-service professional development effectiveness for working in an inclusion, co-taught secondary classroom? (quantitative/qualitative)
3. What effect does preservice training have on the confidence level of teachers when working with special needs students in the secondary inclusion classroom? (quantitative/qualitative)
4. What are secondary teacher perceptions, including perceived limitations, of co-teaching practices? (quantitative/qualitative)

Research Design and Rationale

The purpose of this mixed methods research study was to identify secondary teacher perceptions of co-teaching and determine the extent preservice and in-service training affects those perceptions. A mixed methods approach was used, allowing the

researcher to gather both quantitative and qualitative data to determine results related to training and teacher perceptions. Creswell, Plano Clark, Gutmann, and Hanson (2003) provided an example of a visual presentation of procedures as identified by Steckler, McLeroy, Goodman, Bird, and McCormick (1992). A variety of procedures may guide a mixed methods study; however, this researcher used a procedure where both quantitative and qualitative measures were used concurrently.

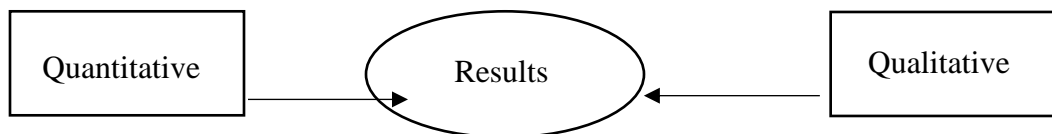


Figure 3. Research Method.

According to Creswell (2014), mixed methods research is an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks. The core assumption of this form of inquiry is that the combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone. (p. 32)

Specifically, the researcher used a triangulation design when interpreting and analyzing data.

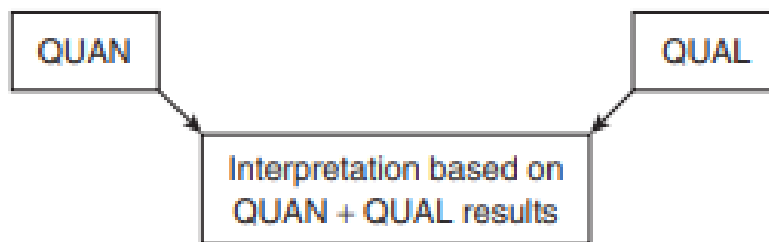


Figure 4. Triangulation Design (Creswell, 2006).

Triangulation requires a careful review of data collected to produce more accurate and valid qualitative results (Creswell, 2014). Triangulation can be used in qualitative research that involves collection methods such as interviews and surveys. For this study, the researcher used triangulation to analyze data from teacher surveys, school-level administrator interviews, and the district-level administrator interview.

Instrumentation

Survey development and validation. The Teacher Attitude Towards Inclusive Education Questionnaire (Kern, 2006) and The Multidimensional Attitudes Toward Inclusive Education Scale (Mahat, 2008) have been used to develop a survey tailored to co-teaching as opposed to general inclusion practices. The researcher studied these surveys used in previous research and developed a survey specific to co-teaching and based on the needs of the district through input from the Executive Director of Special Services. A meeting was held between the researcher, the Executive Director of Special Services, and the Coordinator of Specialized Instruction to review the two previously published surveys and create a survey to best fit the data collection needs within the district. Once the Perceptions of Co-Teaching Survey was developed, it underwent an expert review by professionals in the fields of special education, general education, and

teacher preparation to identify and correct potential threats to validity, such as question clarity and conciseness, and to identify any leading questions (see Appendix A).

The survey is divided into three sections: demographic, Likert-scale response questions, and open-ended questions. The researcher collected demographic and perception data among study participants using a Qualtrics survey distribution system which allows for anonymity. After a preliminary review of the Likert scale survey, the researcher identified possible categories for questions. Interview questions were developed to gather information regarding current co-teaching practices, including procedures for determining co-taught classes and pairing of teachers, strengths and weaknesses, and implications for possible future training based on categories from the survey instrument. The four research questions, along with themes within the survey, guided the researcher to develop interview questions related to both sources. The researcher affiliated the research questions with methods of data collection which are outlined in Table 1.

Table 1

Alignment of Research Questions with Data Collection Methods

Research Questions	Tools/Instruments	Data to be Collected	Method of Analysis
1. How do general education and special education teacher perceptions compare regarding preservice training effectiveness for working in an inclusion, co-taught secondary classroom?	Demographic Items 3, 8	Qualitative	Descriptive analysis of themes
	Likert Survey Items 1, 11	Quantitative	Descriptive Statistics using statistical software: measures of central tendency, frequency distribution, Chi-square
2. How do general education and special education teacher perceptions compare regarding in-service professional development effectiveness for working in an inclusion, co-taught secondary classroom?	Demographic Items 6, 7, 9, 10	Qualitative	Descriptive analysis of themes
	Likert Survey Items 3, 14	Quantitative	Descriptive Statistics using statistical software: measures of central tendency, frequency distribution, Chi-square
	Open Response 1	Qualitative	Descriptive analysis of themes
3. What effect does preservice training have on the confidence level of teachers when working with special needs students in the secondary inclusion classroom?	Demographic Items 3, 4, 5, 8	Qualitative	Descriptive analysis of themes
	Likert Survey Items 2, 5	Quantitative	Descriptive Statistics using statistical software: measures of central tendency, frequency distribution
4. What are secondary teacher and administrator perceptions, including perceived limitations, of current co-teaching practices?	Likert Survey Items 4, 6, 7, 8, 9, 10, 12, 13, 15, 16, 17, 18, 19, 20	Quantitative	Descriptive Statistics using statistical software: measures of central tendency, frequency distribution
	Open Response 1	Qualitative	Descriptive analysis of themes
	Interview Questions 1, 2, 3, 4, 5, 6	Qualitative	Descriptive analysis of themes

Quantitative. Quantitative data were analyzed using descriptive statistics and a chi-square test for independence to determine possible associations between variables. The researcher specifically looked for associations between variables such as teacher certification and satisfaction of current co-teaching practices, attitudes towards collaboration between general education teachers and special education teachers, and a

perceived need for further training in successful co-teaching practices. Quantitative data were collected through an electronic survey with a demographics section and a 20-question Likert scale which consisted of the following answer choices: strongly disagree, disagree, agree, and strongly agree. Understanding if pairs of categorical variables are significantly related or not helps the researcher identify weaknesses to be addressed with training opportunities.

Qualitative. Qualitative data were collected through open-ended response questions at the end of the quantitative survey questions along with responses from individual administrative interviews with participants from each of the three high schools and the district office. An interview protocol was used for the researcher to record information for analysis. According to Creswell (2014), a protocol should include a heading, instructions for the interviewer, the questions (usually one icebreaker followed by four to five questions related to the research), probes for the questions to ask for more detail or encourage the participant to elaborate, spaces to record each response, thank you statement, and a log (p. 194). The researcher developed an interview protocol adapted from a sample protocol form from the National Center for Postsecondary Improvement (2003; see Appendix B). Individual surveys were audio-recorded and transcribed by a third party. The qualitative data were coded to identify themes and analyzed concurrently with the quantitative data.

Role of the Researcher

In an effort to gain insight from stakeholders at various levels within the district, the researcher conducted face-to-face interviews with a district administrator familiar with special education and inclusion and assistant principals over curriculum and

instruction at each high school. The interviews were recorded and offered to each participant along with a transcript to ensure no bias in the researcher transcription or coding. Participants all indicated they did not require a recording or transcript. The researcher assured the participants both the recording and transcript would be kept confidential and would be available at their request. Questions in the interview protocol aligned with Research Question 4.

Research Questions:

1. How do general education and special education teacher perceptions compare regarding preservice training effectiveness for working in an inclusion, co-taught secondary classroom?
2. How do general education and special education teacher perceptions compare regarding in-service professional development effectiveness for working in an inclusion, co-taught secondary classroom?
3. What effect does preservice training have on the confidence level of teachers when working with special needs students in the secondary inclusion classroom?
4. What are secondary teacher and administrator perceptions, including perceived limitations, of co-teaching practices?

At the time of the study, the researcher was an employee of District ABC and served as a special education teacher co-teaching geometry in High School Y. The researcher served as a facilitator of survey development, data collection, interviewer, and analyzer of data. The researcher was not a participant in the study, and confidentiality and anonymity were ensured so participants would feel free to respond truthfully to

survey questions. Participants were recruited by email with support from the administration at each high school. A benefit of a researcher being employed with the participants is the potential freedom with which participants will respond to the survey. Additionally, the researcher does not have authority over any participant in the research which may cause a threat to validity. Identifying information was not used such as names or schools where the participants work.

A two-stage approach was employed to complete this study. The first stage of the study employed an electronic survey to collect data related to demographics, perceptions, and training. The Teacher Attitude Towards Inclusive Education Questionnaire (Kern, 2006) and The Multidimensional Attitudes Toward Inclusive Education Scale (Mahat, 2008) were used to develop a survey tailored to co-teaching as opposed to general inclusion practices. These surveys have been used and validated in previously published research. The researcher for this study evaluated the published instruments to develop a survey specific to co-teaching and based on the needs of the district. The Perceptions of Co-Teaching Survey was reviewed by professionals in the fields of special education, general education, and teacher preparation. The instrument was then piloted by a general education teacher and special education teacher outside of the district used in this study. Both teachers have experience co-teaching in high school classrooms. Feedback was received regarding clarity of questions, length of the survey, and formatting (see Table 2).

Table 2

Feedback from Pilot Survey

Reviewer	Feedback
1	Length is appropriate and questions are easy to understand. Appears user-friendly.
2	The questions look good and the wording is consistent.

Part one of the survey collected information regarding the demographics of the participants. Participants responded to questions regarding the following: gender, age, educational level, path to teaching certification, certification area, number of years teaching in high school, total number of years teaching, number of education courses taken regarding teaching students with special needs and/or co-teaching, number of professional development courses taken regarding teaching students with special needs and/or co-teaching, and years of experience co-teaching. Part two of the survey consisted of 20 questions with respect to training, colleague/administrative support, collaboration/ planning, experience, and benefits of co-teaching. The participants responded using a Likert scale with the options of strongly disagree, disagree, agree, and strongly agree. The Likert scale was developed in 1932, by Rensis Likert, to measure attitudes (Sullivan & Artino, 2013). Many Likert scales, such as the one used for this study, utilize an even number of responses in order to avoid a neutral opinion, which will force respondents to closely analyze and form an opinion as to whether they agree or disagree with each question (Trochim, 2006). Part three of the survey contained one ranked response question and two open-ended questions for participants to construct responses and share information without constraints. The ranked response question asked participants to rank training delivery methods they believe would be most beneficial with regard to co-

teaching. This allowed participants to identify the most and least preferred methods of professional development (Vannette, 2019). The remaining two questions were open-ended questions asking for topics for which participants feel training would be beneficial and comments or suggestions regarding co-teaching practices in the participants' schools. The researcher used descriptive analysis and a chi-square test for independence for the demographic data and Likert scale and the remaining data were analyzed according to demographics as well as underlying constructs or themes from open-ended questions.

In the second stage of the study, the researcher interviewed a district administrator and the assistant principals over curriculum and instruction at each high school in the district. Six interview questions were written to correlate to possible themes by which the participant survey was analyzed. Interview questions addressed Research Question 4 from an administrator perspective.

Research Methodology

Participants. The population studied was high school general education teachers in math and English and high school special education teachers in a K-12 school district. These teachers are certified to teach in the state represented in the study. According to the South Carolina Department of Education (2020), the options to obtain an initial certification to teach in this state are

Earn a bachelor's or master's degree either from an institution that has a state-approved teacher education program and is accredited for general collegiate purposes by a regional accreditation association, or from a South Carolina institution that has programs approved for teacher education by the State Board of Education, or from an institution that has programs approved for teacher

education by the National Council for Accreditation of Teacher Education (NCATE). Professional education credit must be earned through an institution that has a teacher education program approved for initial certification. (p. 1)

Two sample groups within the population were established. Sample 1 consisted of general education teachers certified in math or English at the high school level. This study focused on math and English teachers since the majority of co-taught classes in District ABC's high schools occur in math and English courses. Sample 2 consisted of teachers with special education certification in the three high schools. These teachers are certified K-12 often with a specific focus in areas such as "early childhood special education, emotional disabilities, hearing impairments, learning disabilities, mental disabilities, multi-categorical special education, severe disabilities, visual impairments, and speech/language pathology" (South Carolina Special Education Certification & Requirements, 2020, p. 1).

For the purpose of this study, the secondary schools (high schools) were the primary focus. The initial survey was sent to 76 general education teachers and 25 special education teachers, for a total of 101 possible participants. The math and English departments at the high schools have a higher occurrence of co-teaching than elementary and middle schools; therefore, the researcher and district director felt having participants from these schools would give a more accurate sense of the co-teaching practices in the district with an expected return rate of 30%.

In order to gain a perspective of the design of co-teaching envisioned by the district, a district administrator with experience and involvement in co-teaching was interviewed along with an assistant principal over curriculum and instruction at each of

the three high schools. The interviews contained open-ended questions with the intention of gaining views and opinions from school- and district-level administrators (Creswell, 2014). These individuals have authority over personnel and logistics in co-teaching practices. Interview questions were developed to align with survey questions in order to triangulate the results.

Procedures. The study was conducted during the second semester of the 2019-2020 school year. The researcher met with the Director of Special Services for the school district in order to determine possible needs of the district regarding co-teaching and gain feedback on the development of the survey along with approval for the survey to be sent to participants. The researcher transferred the survey into an electronic form through a Qualtrics survey distribution system. Surveys were sent, via email invitation, to the identified research participants with an expected return date 2 weeks later. Email reminders were sent 1 week prior to the deadline and within 24 hours of the deadline to thank those who had completed the survey and remind willing participants to complete the survey. The researcher collected the electronic data for quantitative data analysis of demographics and Likert scale questions and qualitative data analysis on open-ended responses based on common trends and themes. Concurrent with the survey window, individual interviews with a district administrator and three high school administrators over curriculum and instruction were conducted by the researcher. The interviews were audio-recorded and transcribed in order to code and identify themes also related to the teacher survey. All data were analyzed and synthesized to determine the relevance of training on co-teaching along with strengths and weaknesses within the district. According to Creswell (2014), a researcher must “purposefully select participants or sites

(or documents or visual material) that will best help the researcher understand the problems and the research question” (p. 198). The administrators and teachers were chosen according to their involvement in co-teaching at the high schools in the district.

Data Analysis Plan

Permission was obtained from the school district for the researcher to send an invitation to 101 secondary teachers with a link to electronically complete the survey. A 2-week time frame was given to help encourage timely completion of the questionnaire. Once the survey was completed, the raw data were collected using the electronic platform that houses the instrument. The researcher analyzed the data to look for themes and any associations between the variables using the chi-square test for independence and descriptive analysis. Descriptive statistics of the quantitative data provided the researcher with an overall picture of demographic data and answers to individual survey questions. Descriptive statistics were also used to compare ordinal data related to co-teaching training delivery methods between general education teachers and special education teachers. The chi-square test for independence was used to determine if a relationship exists between demographic data and various questions on the survey pertaining to co-teaching practices at the participants’ schools. Qualitative data from the surveys and interviews were sorted and deductive coding was used to determine trends or themes. Deductive coding involves using a rough codebook and sorting data into categories classified by a term or phrase (Creswell, 2014; Yi, 2018). By determining themes, the researcher gained an understanding of the responses and developed strategies for co-teaching needs or concerns.

Interview Questions

The researcher analyzed the Perceptions of Co-Teaching Survey for underlying themes within the Likert scale (Part 2 of the survey). Potential themes were training, colleague/administrative support, collaboration/planning, and experience. The following questions were developed for the interview protocol (see Appendix B).

Interview Questions:

1. Briefly describe your understanding of co-teaching in high school inclusion classrooms.
2. What do you consider an ideal co-teaching arrangement regarding the delivery of instruction in a classroom with both a general education teacher and a special education teacher?
3. What types of training/professional development has been provided in this school/district regarding co-teaching?
4. Are there plans for future co-teaching professional development at the school and/or district level?
5. What factors are important for successful co-teaching in high schools?
6. What perceived limitations might exist regarding the implementation and practice of co-teaching at the high school level?

Data Management

Data collected through the research study were kept confidential. Surveys were submitted through an anonymous link, so no identifying data were associated with the responses. The interview recording and transcript were kept in a digital format on a password-protected computer. Paper documents were kept in a locked file cabinet.

Threats to Validity

Internal. An internal threat to the study could be the number of participants due to the study being limited to special education teachers, math teachers, and English teachers in the secondary setting. The researcher and district agreed to focus on the secondary level with math, English, and special education teachers most likely to have co-teaching experience. Focusing on a specific content area limits the number of possible participants which then could limit the number of returned surveys, making the sample size rather small. A smaller sample size could affect the reliability of the data.

External. The research was conducted in a suburban school district with three high schools. This setting can pose an external threat due to being limited to a specific geographic area. Co-teaching practices may vary across schools, districts, and states.

Conclusion

Inclusion is a philosophy in special education that has increased over the past decade (Mastropieri & Scruggs, 2017). Due to national mandates, general education teachers must be prepared to work with students with varying special needs within the general education classroom. General education teachers and special education teachers need the skills and experience necessary to work collaboratively to meet the needs of all students (Cook, 2002). While some teaching programs incorporate dual certification or field experience with special education, others still lack giving preservice teachers enough exposure to students with special needs and co-teaching to prepare them for working in an inclusion classroom. Teachers have expressed concern with not feeling adequately prepared or having background knowledge to support them in the co-taught, inclusion setting. Using a mixed methods study incorporating a survey and interview, the

researcher sought to identify any relationships between training and teacher confidence and preparedness for the co-taught, inclusion classroom. Chapter 4 presents data, outcomes, and detailed explanations of the results. Chapter 5 summarizes the research and gives implications and recommendations for action and further study.

Chapter 4: Results

Introduction

The purpose of this study was to determine secondary teacher perceptions of co-teaching practices as they relate to preservice and in-service training. According to Friend and Barron (2019), co-teaching is defined as the service delivery model “when a general educator and a special educator collaborate in the typical classroom to simultaneously (a) deliver the grade-level curriculum and (b) meet the specialized needs of students with disabilities” (p. 7). In this mixed methods study, with a population size N=101, general education math and English teachers and special education teachers in three local high schools were given a survey in order to provide input regarding co-teaching practices in their schools/district. Demographics were analyzed with survey answers to determine trends of variables relating to teacher perceptions. Additionally, interviews with a district-level administrator and three high school curriculum and instruction administrators were conducted to correlate expectations, strengths and weaknesses, and training with the results of the teacher survey. Chapter 4 delivers an analysis of survey and interview data to provide insight into co-teaching in math and English classrooms and identify possible implications for the district’s co-teaching practices.

Research Questions

To determine teacher and administrator perceptions of co-teaching in District ABC, the researcher gathered data from the results of four research questions:

1. How do general education and special education teacher perceptions compare regarding preservice training effectiveness for working in an inclusion, co-

taught secondary classroom?

2. How do general education and special education teacher perceptions compare regarding in-service professional development effectiveness for working in an inclusion, co-taught secondary classroom?
3. What effect does preservice training have on the confidence level of teachers when working with special needs students in the secondary inclusion classroom?
4. What are secondary teacher and administrator perceptions, including perceived limitations, of co-teaching practices?

Co-Teaching Survey

Data collection. The study was conducted during the second semester of the 2019-2020 school year. The researcher met with the Director of Special Services for the school district in order to determine possible needs of the district regarding co-teaching and gained feedback on the development of the survey along with approval for the survey to be sent to participants. The researcher transferred the survey into an electronic form through a Qualtrics survey distribution system. Qualtrics is a web-based survey tool used to design, send, and analyze surveys (Qualtrics XM, n.d.). The population (N=101) in this study was identified according to certification, content area, and school (secondary). The subjects meeting the research criteria were sent an email invitation to participate in the co-teaching research via survey link (see Appendix C). According to Creswell (2014), a researcher must “purposefully select participants or sites (or documents or visual material) that will best help the researcher understand the problems and the research question” (p. 198). Through collaboration with and direction from District ABC

district office, the administrators and teachers were chosen according to their roles and departments, which have a higher incidence of involvement in co-teaching at the high schools compared to other core subjects. The survey population and participation are displayed in Table 3.

Table 3

Survey Population and Participation

Survey Recipients	Survey Distribution	Survey Respondents	Percent Participation
General Education Teachers	76	37	48.7%
Special Education Teachers	25	17	68%
Total Population	101	54	53.5%

Of the 101 teachers who received the survey, the response rate was 48.7% (37 of 76) for all general education teachers and 68% (17 of 25) for special education teachers. The response rate for the total population of teachers in this study was 53.5% (54 of 101).

A 2-week window was given for survey participation. Seven days into the survey window, subjects received an email thanking those who had completed the survey and reminding others of the importance of the research and upcoming deadline (see Appendix D). A final survey reminder was sent within 24 hours prior to the close of the survey window (see Appendix E). The researcher collected the electronic data for quantitative data analysis of demographics and Likert scale questions. In addition, a qualitative data analysis on open-ended responses based on common trends and themes was conducted. All data were analyzed and synthesized to determine the relevance of training on co-teaching along with strengths and weaknesses within the district.

Results from Co-Teaching Survey

Demographics. The first 11 questions on the Perceptions of Co-Teaching Survey

(see Appendix A) collected demographic and background information about the participants. This information included gender, age range, education level, path to teaching certification, certification areas, number of years teaching at the high school level, total number of years teaching, number of courses taken regarding teaching students with special needs, number of school or district-led professional development courses taken regarding teaching students with special needs, number of years of co-teaching experience, and the co-teaching model most often used in his/her classroom.

Survey items 1 and 2. Survey items 1 and 2 gathered demographic data related to gender and age of the participants completing the survey. Age ranges were provided to allow ease of answering through an electronic format and were provided in a multiple-choice menu.

Table 4

Survey Items 1 and 2: Gender and Age Range

Gender	Total Number (n)	Percentage (%)
Male	11	20
Female	43	80
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Age Range		
<25	1	1.9
25-35	16	29.6
36-45	27	50.0
46-55	8	14.8
>55	2	3.7

Of 54 responses, 20% were male and 80% female. Fifty percent of respondents indicated they were in the 36- to 45-year-old range. The next highest category was those 25-35 years old.

Survey items 3, 4, and 5. Survey items 3, 4, and 5 gathered data related to

participants' highest level of education and certification(s). Degree levels are based on credit hours and programs completed in colleges and universities. A bachelor's degree is a minimum of 120 credit hours and takes approximately four years to complete. An additional 18 hours of coursework at the college level results in bachelor's plus 18. A master's degree is awarded through a master's program with 30 credit hours. Additional hours of coursework beyond the master's degree results in a master's plus 18 or master's plus 30 certification, depending on the program. The highest degree awarded is a doctorate which requires 90-120 additional credit hours through an approved doctorate program (Moody, 2018). Table 5 identifies the respondents' education level, teacher preparation program platform, and subject area certification.

Table 5

Survey Items 3, 4, and 5: Education, Path to Teaching, and Subject

Education Level	Total Number (n)	Percentage (%)
Bachelor's	8	14.8
Bachelor's +18	4	7.4
Master's	33	61.1
Master's +18	9	16.7
Doctorate	0	0.0
Path to Teaching Certification		
Traditional College	50	92.6
Online College	1	1.8
Alternative (Career Change)	3	5.6
Subject Area(s) on Teacher Certificate		
English	15	27.8
Math	22	40.7
Special Education	17	31.5

The majority (61.1%) of these teachers have a master's degree, and 92.6% earned their teaching certificates through a traditional college path. There was a total of 37

general education teachers and 17 special education teachers who responded to the survey.

Survey items 6, 7, and 10. Survey items 6, 7, and 10 gathered data related to participant years of experience. The survey asked respondents to identify the number of years teaching high school, total number of years teaching, and years of co-teaching experience.

Table 6

Survey Items 6, 7, and 10: Years of Experience

Number of Years Teaching High School	Total Number (n)	Percentage (%)
0-5	12	22.2
6-10	14	25.9
11-15	14	25.9
16-20	6	11.1
21-25	6	11.1
26+	2	3.7
<hr/>		
Total Number of Years Teaching		
0-5	6	11.1
6-10	9	16.7
11-15	17	31.4
16-20	9	16.7
21-25	10	18.5
26+	3	5.6
<hr/>		
Years of Co-teaching Experience		
0-5	28	51.8
6-10	10	18.5
11-15	12	22.2
16-20	2	3.7
21-25	1	1.9
26+	1	1.9

The largest percentage (25.9%) of respondents had between 6 and 15 years of teaching experience in the high school setting. The highest percentage (31.4%) for the total number of years teaching was 11 to 15 years. Approximately 51.8% of those

completing the survey had 0 to 5 years of co-teaching experience, while 6 to 15 years combined had 40.7%. These data represent how co-teaching has emerged over the last 15 years as there is a significant drop in the number of teachers involved with co-teaching for 16 or more years.

Survey items 8 and 9. Survey items 8 and 9 gathered data related to training teachers have received related to teaching students with special needs. For the purpose of this study, the courses were divided into preservice and in-service training.

Table 7

Survey Items 8 and 9: Training

Number of Preservice Courses for Special Needs	Total Number (n)	Percentage (%)
0-1	12	22.2
2-3	22	40.7
4-5	2	3.7
6-7	1	1.9
8-9	3	5.6
10+	14	25.9
Number of In-Service Courses/Training for Special Needs		
0-1	14	25.9
2-3	14	25.9
4-5	8	14.8
6-7	2	3.7
8-9	1	1.9
10+	15	27.8

The largest percentage (40.7%) of respondents answered they received two to three preservice courses for special needs. Of the 22 teachers in this group, there were 21 general education teachers and one special education teacher. The next highest percentage (25.9%) was in the 10+ category. Of 14 teachers who responded they had 10+ preservice courses regarding special needs, there was one general education teacher

and 13 special education teachers. For in-service training, the majority (51.8%) had received zero to three courses/training for special needs. Of the 15 teachers indicating 10+, three were general education teachers and 12 were special education teachers.

Survey item 11. Survey item 11 asked participants to identify the co-teaching model most often used in their classrooms. Answer choices were provided in a drop-down menu format and included brief descriptions for clarity. The choices were

- One Teaching, One Assisting (One teacher takes a clear lead while the other teacher supports)
- Station Teaching (Teachers divide content and rotate students between the stations)
- Parallel Teaching (Teachers divide the class and teach the same content to smaller groups of students)
- Alternative Teaching (One teacher works with the large group, and one teacher works with a small group)
- Team Teaching (Both teachers share the instruction, often switching off during the lesson).

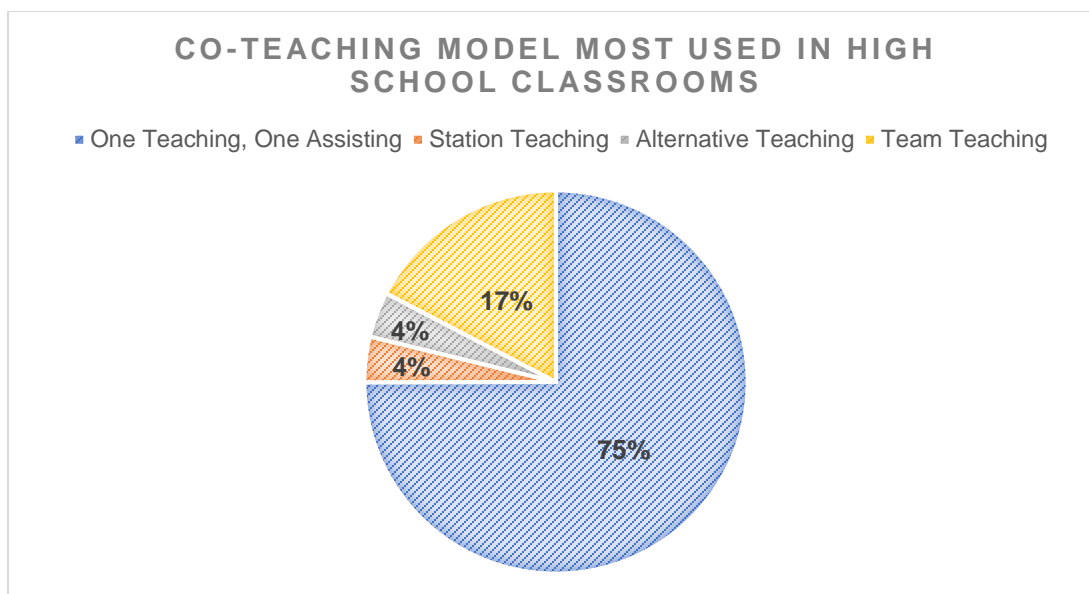


Figure 5. Co-Teaching Model Frequency.

As shown in Figure 5, 75% of the respondents chose one teaching, one assisting as the model used most in their classrooms, 17% chose team teaching, while station teaching and alternative teaching both received 4% of respondents. There were no respondents who chose parallel teaching.

Qualitative Data Analysis

Qualitative analysis is a process used to synthesize raw data into a summary and develop an understanding of experiences, usually resulting in three to eight main categories or themes (Thomas, 2003). The researcher used open-ended response questions at the end of the Perceptions of Co-Teaching Survey along with responses from individual administrative interviews to collect qualitative data. Once all qualitative data were collected through the survey and interviews, the data were downloaded (survey) or transcribed (interviews). The researcher identified high-frequency phrases and grouped those responses by question. These responses were coded to draw out possible themes

across research participants. Once themes were established, the data were synthesized and organized into a table showing input from both teachers and administrators. These themes are discussed in Chapters 4 and 5.

Quantitative Data Analysis

The researcher used a Likert scale to solicit responses from survey participants. The results of the questions were analyzed using descriptive statistics and a chi-square test for independence. The use of descriptive statistics allows the researcher to easily identify and compare answers between general education teachers and special education teachers and analyze their combined responses to assess teacher perceptions within this study as a whole (Trochim, 2020). The chi-square test compares categorical data collected with expected frequencies if left to chance. It allows the researcher to determine if observed frequencies are significantly different from expected frequencies (Urdan, 2010). Table 8 displays survey questions and overall analysis of Likert scale responses with corresponding chi-square values.

Table 8

Survey Item Analysis

Item for analysis		Descriptive Statistics		Chi-square Results			
		Disagree (%)	Agree (%)	χ^2	df	p	Significant (Yes/No)
1	My educational background has prepared me to effectively teach students with mild/moderate cognitive delays and deficits.	15.38	84.61	22.239	3	<.05	Yes
2	I received sufficient training in order to effectively teach students with an IEP through a preservice teacher preparation course/program.	28.85	71.15	18.138	3	<.05	Yes
3	I am encouraged by my administrators to attend conferences/workshops on teaching students with special needs.	50.00	50.00	11.234	3	<.05	Yes
4	My colleagues (teachers) are willing to help me with issues which may arise when I have students with an IEP in my classroom.”	5.88	94.12	3.396	3	>.05	No
5	I feel comfortable working collaboratively with special education teachers when students with an IEP are in my classroom.	7.69	92.31	6.337	2	<.05	Yes
6	Collaborative teaching of students with special needs can be effective particularly when students with an IEP are placed in a regular classroom.	2.08	97.92	0.871	2	>.05	No
7	I have had positive, effective co-teaching relationships in my classroom.	14.58	85.42	6.110	3	<.05	Yes
8	I have had negative, ineffective co-teaching relationships in my classroom.	27.08	72.92	0.758	3	>.05	No
9	When co-teaching, I have had regular, ongoing planning sessions with my co-teacher.	60.42	39.58	2.317	3	>.05	No
10	All students benefit from being placed in a co-taught classroom setting.	36.17	63.83	6.629	3	>.05	No
11	I received training in successful co-teaching practices through a preservice teacher preparation course/program.	53.19	46.80	2.633	3	>.05	No

(cont.)

Item for analysis		Descriptive Statistics		Chi-square Results			
		Disagree (%)	Agree (%)	χ^2	df	p	Significant (Yes/No)
12	Administrators solicit feedback of co-teaching practices from general and special education teachers.	75.00	25.00	3.163	3	>.05	No
13	Feedback provided to administrators is used to make changes in the school’s co-teaching practices.	77.08	22.92	5.214	3	>.05	No
14	I am provided with sufficient in-service training through my school district which allows me the ability to teach students with an IEP.	52.08	47.92	2.633	3	>.05	No
15	I feel supported by my administrators when faced with challenges in a co-taught classroom.	29.17	70.83	2.851	3	>.05	No
16	I am provided with sufficient materials in order to make appropriate accommodations for students with special needs.	32.61	67.40	3.971	3	>.05	No
17	My co-teachers have been a vital, contributing factor to the learning environment.	19.15	80.85	8.127	3	<.05	Yes
18	My co-teaching experience has involved both the general education teacher and special education teacher providing instruction in the classroom.	26.08	73.92	6.973	3	>.05	No
19	The majority of my co-teaching experience has been the model “One teach, One assist.”	14.90	85.10	5.132	3	>.05	No
20	I am satisfied with the co-teaching practices at my school.	51.06	48.94	2.080	3	>.05	No

As shown in Table 8, 14 of 20 question response sets did not prove to be statistically significant between general education teachers and special education teachers based on the chi-square test. Six question response sets did prove to be statistically significant between general and special education teachers with a *p* value less than .05.

Findings of Research Question 1

The first of the four research questions asked, "How do general education and

special education teacher perceptions compare regarding preservice training effectiveness for working in an inclusion, co-taught secondary classroom?” The researcher sought to gain data pertaining to co-teacher perceptions of preservice training effectiveness by using quantitative and qualitative survey questions. Quantitative data were collected through Likert survey items 1 and 11.

Survey item 1. Survey item 1 used a Likert scale with possible ratings of strongly disagree, disagree, agree, and strongly agree. These ratings were given a value from 1-4, with 1 representing strongly disagree and 4 representing strongly agree. A chi-square test of independence was performed to examine the relationship between certification and educational preparation to effectively teach students with mild/moderate cognitive delays and deficits.

Table 9

Likert Survey Item 1

My educational background has prepared me to effectively teach students with mild/moderate cognitive delays and deficits.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=36)	1	2.78	7	19.44	25	69.44	3	8.33
Special Education Teachers (n=16)	0	0.00	0	0.00	5	31.25	11	68.75
Combined (n=52)	1	1.92	7	13.46	30	57.69	14	26.92

There was a significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to Likert survey item 1, $\chi^2(3, N=52) = 22.239$, $p < .05$. Special education teachers were more likely than general education teachers to answer their educational background had prepared them to effectively teach students with disabilities. Overall, the majority of respondents (84.61%) indicated they feel prepared as a result of their educational backgrounds.

Survey item 11. Teachers were asked to respond to the statement, “I received training in successful co-teaching practices through a preservice teacher preparation course/program.” As seen in Table 10, responses to this question varied with the majority of the teachers choosing either disagree or agree.

Table 10

Likert Survey Item 11

I received training in successful co-teaching practices through a preservice teacher preparation course/program.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=32)	6	18.75	14	43.75	10	31.25	2	6.25
Special Education Teachers (n=15)	1	6.67	4	26.67	5	33.33	5	33.33
Combined (n=47)	7	14.89	18	38.30	15	31.91	7	14.89

When a chi-square test was run, the result was not significant in regard to Likert survey item 11, $\chi^2(3, N=48) = 2.633, p > .05$. Teacher responses were not likely to be dependent on, or influenced by, their certifications.

Research Question 1 sought to identify teacher perceptions of preservice training effectiveness related to working in inclusion, co-taught secondary classrooms. According to the data, special education teachers were more likely to answer their educational background has prepared them to effectively teach students with disabilities. However, the majority of respondents, including the general education teachers, indicated they feel prepared to be a part of a co-taught classroom as a result of their educational backgrounds. Teachers appear to be evenly split across responses (disagree versus agree) when asked if they had training in successful co-teaching practices as part of a teacher preparation program.

Findings of Research Question 2

The second research question asked, “How do general education and special

education teacher perceptions compare regarding in-service professional development effectiveness for working in an inclusion, co-taught secondary classroom?" The researcher sought to gain data pertaining to co-teacher perceptions of school and/or district in-service training effectiveness by using quantitative survey questions and qualitative open response survey questions. Quantitative data were collected through Likert survey items 3 and 14. Qualitative data were collected through the survey ranked response question and open response question 1.

Survey item 3. When asked about being encouraged by administrators to attend conferences/workshops on teaching students with special needs, the answers were split with 50% of the participants strongly disagreeing or disagreeing and 50% of the participants agreeing or strongly agreeing.

Table 11

Likert Survey Item 3

I am encouraged by my administrators to attend conferences/workshops on teaching students with special needs.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=35)	4	11.43	18	51.43	10	28.57	3	8.57
Special Education Teachers (n=15)	0	0.00	3	20.00	6	40.00	6	40.00
Combined (m=50)	4	8.00	21	42.00	16	32.00	9	18.00

As shown in Table 11, there was a significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to Likert survey item 3, $\chi^2(3, N=50) = 11.234, p < .05$. Teachers with special education certification were more likely to agree they are encouraged to attend conferences/workshops, and teachers without special education certification were more likely to disagree showing they are not encouraged to attend conferences/workshops on teaching students with special needs.

Survey item 14. Teachers were asked to respond to the statement, “I am provided with sufficient in-service training through my school district which allows me the ability to teach students with an IEP.”

Table 12

Likert Survey Item 14

I am provided with sufficient in-service training through my school district which allows me the ability to teach students with an IEP.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=33)	8	24.24	11	33.33	13	39.39	1	3.03
Special Education Teachers (n=15)	2	13.33	4	26.67	7	46.67	2	13.33
Combined (n=48)	10	20.83	15	31.25	20	41.67	3	6.25

As seen in Table 12, a majority (57.57%) of general education teachers report they are not provided with sufficient in-service training which allows them the ability to teach students with an IEP. When a chi-square test was run, the result was not significant in regard to Likert survey item 14, $\chi^2(3, N=48) = 2.633$, $p > .05$. Teacher responses did not depend on whether or not they had a special education certification.

Ranked response question. The end of the Perceptions of Co-Teaching Survey consists of ranking and open response questions. Participants were asked to rank a list of training delivery methods in order from most beneficial to least beneficial. The question was built for the respondents to electronically drag and drop their options into their chosen order.

Table 13

Survey Item 12: Training Delivery Method

Most Beneficial In-Service Training Delivery Method	Special Education		General Education		Combined	
	sum	%	sum	%	sum	%
District-level training	4	30.77	7	20.00	11	22.92
Out-of-district training	1	7.69	3	8.57	4	8.33
Coursework at college/university	1	7.69	3	8.57	4	8.33
School building-level training	1	7.69	3	8.57	4	8.33
Article(s) provided to you	0	0.00	0	0.00	0	0.00
Time for consultation with special education teachers	2	15.38	13	37.14	15	31.25
Observation of successful co-taught classrooms	4	30.77	6	17.14	10	20.83

The special education teachers identified district-level training and observation of successful co-taught classrooms as the top choices for professional development. The general education teachers chose time for consultation with special education teachers as their top choice. There was a significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to the ranking of the last two delivery methods. A significant difference was identified for “time for consultation with special education teachers,” $X^2(1, N=48) = 2.851, p < .05$. In addition, a significant difference was identified for “observation of successful co-taught classrooms,” $X^2(1, N=48) = 18.790, p < .05$. Collectively, the special education teachers and general education teachers agreed on the top three beneficial training delivery methods: time for consultation with special education teachers (31.25%), district-level training (22.92%), and observation of successful co-taught classrooms (20.83%).

Open response question 1. Participants were asked to respond to two final questions at the end of the Perceptions of Co-Teaching Survey. The first open response question asked teachers to “Please list questions or topics related to inclusive education and co-teaching for which you feel training would be beneficial.” The researcher

organized the responses into categories, or themes, by reviewing high-frequency phrases.

Figure 6 shows these common themes by certification (teachers with special education certification and teachers without, or general education teachers).

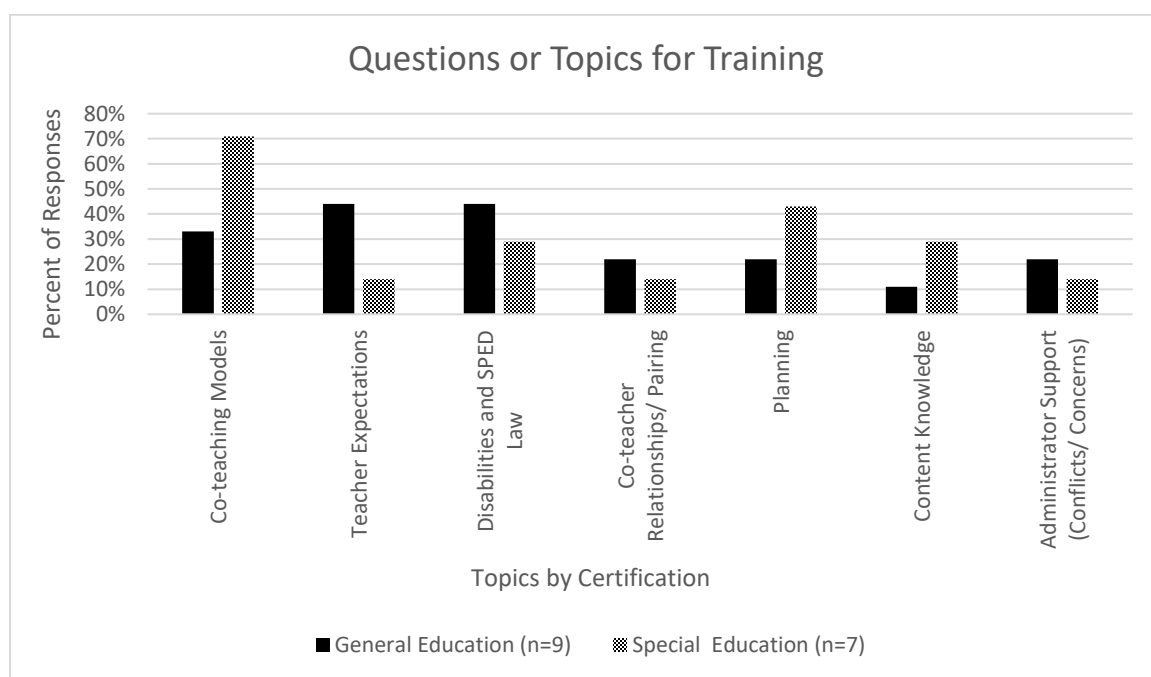


Figure 6. Possible Training Topics.

General education teachers feel the weakest areas in their schools needing to be addressed are co-teaching models, what the expectations are for teachers within the classroom, and disabilities and special education law. Special education teachers feel the weakest areas in their schools needing to be addressed are co-teaching models, common planning, and content knowledge.

Research Question 2 sought to identify teacher perceptions of in-service professional development effectiveness related to working in inclusion, co-taught secondary classrooms. Overall, the answers from both general education and special education teachers were split 50/50 in regard to administrators encouraging them to

attend professional development, with special education teachers being more likely to answer affirmatively. General education teachers feel they are not provided with sufficient in-service training to support them in teaching students with an IEP. All teachers agreed on the top three beneficial training delivery methods: time for consultation with special education teachers, district-level training, and observation of successful co-taught classrooms. The top areas identified as weaknesses where teachers would appreciate more training are co-teaching models, teacher expectations in co-taught classrooms, disabilities, special education law, common planning, and content knowledge.

Findings of Research Question 3

The third research question asked, “What effect does preservice training have on the confidence level of teachers when working with students with special needs in the secondary inclusion classroom?” The researcher sought to gain data pertaining to co-teacher confidence when working with students with special needs by using quantitative survey questions. Quantitative data were collected through Likert survey items 2 and 5.

Survey item 2. General education teachers, as compared to special education teachers, were more likely to disagree regarding training to effectively teach students with an IEP while in a preservice teacher preparation program.

Table 14

Likert Survey Item 2

I received sufficient training in order to effectively teach students with an IEP through a preservice teacher preparation course/program.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=36)	3	8.33	11	30.56	19	52.77	3	8.33
Special Education Teachers (n=16)	0	0.00	1	6.25	5	31.25	10	62.50
Combined (n=52)	3	5.77	12	23.08	24	46.15	13	25.00

As shown in Table 14, there was a significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to Likert survey item 2, $\chi^2(3, N=52) = 18.138, p < .05$. Overall, the majority of respondents (71.15%) indicated they received sufficient training through a preservice teacher preparation course/program.

Survey item 5. Teachers were asked if they feel comfortable working collaboratively with special education teachers when students with an IEP are in their classrooms.

Table 15

Likert Survey Item 5

I feel comfortable working collaboratively with special education teachers when students with an IEP are in my classroom.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=36)	0	0.00	4	11.11	16	44.44	16	44.44
Special Education Teachers (n=16)	0	0.00	0	0.00	4	25.00	12	75.00
Combined (n=52)	0	0.00	4	7.69	20	38.46	28	53.85

A significant majority (76.73%) of general education teachers report feeling comfortable working collaboratively with special education teachers. All special education teachers answered this question as agree or strongly agree. There was a significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to Likert survey item 5, $\chi^2(2, N=52) = 6.337, p < .05$. Special education teachers were more likely to answer on the affirmative side than general education teachers.

Research Question 3 sought to determine what effect preservice training has on the confidence level of teachers when working with students with special needs in the secondary inclusion classroom. There was a significant difference between teachers with

special education certification and teachers without special education certification (general education) in regard to receiving sufficient training through a preservice teacher preparation course/program to teach students with an IEP. However, the majority of all teachers affirmatively answered they felt training in this area was sufficient. A significant majority (88.88%) of general education teachers indicated they are comfortable with working collaboratively with special education teachers.

Findings of Research Question 4 – Survey Data

The fourth research question asked, “What are secondary teacher and administrator perceptions, including perceived limitations, of current co-teaching practices?” The researcher sought to gain data pertaining to perceptions of co-teaching practices currently used in District ABC’s three high schools by using quantitative survey questions and qualitative survey and interview questions. Quantitative data were collected through Likert survey items 4, 6, 7, 9, 10, 12, 13, and 15-20. Qualitative data were collected through survey open response question 2 and administrator interview questions 1-6.

Survey item 4. Survey item 4 asked participants to respond to the statement, “My colleagues (teachers) are willing to help me with issues which may arise when I have students with an IEP in my classroom.”

Table 16

Likert Survey Item 4

My colleagues (teachers) are willing to help me with issues which may arise when I have students with an IEP in my classroom.”	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=35)	1	2.86	2	5.71	17	48.57	15	42.86
Special Education Teachers (n=16)	0	0.00	0	0.00	6	37.50	10	62.50
Combined (n=51)	1	1.96	2	3.92	23	45.10	25	49.02

There was not a significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to Likert survey item 4, $\chi^2(3, N=51) = 3.396, p > .05$. Overall, 94.12% of teachers who answered this question feel they have support from their colleagues.

Survey item 6. Teachers were asked to reflect on their perceptions of the effectiveness of collaborative teaching of students with special needs in the regular classroom. Collaborative teaching involves working with another teacher in order to provide instruction to students with various abilities in the general education classroom.

Table 17

Likert Survey Item 6

Collaborative teaching of students with special needs can be effective particularly when students with an IEP are placed in a regular classroom.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=33)	1	3.03	0	0.00	19	57.58	13	39.39
Special Education Teachers (n=15)	0	0.00	0	0.00	8	53.33	7	46.67
Combined (n=48)	1	2.08	0	0.00	27	56.25	20	41.67

As shown in Table 17, 97.92% of respondents answered on the affirmative side of the scale. The results of the chi-square test indicate the relationship between certification and likelihood of answers is not significant, $\chi^2(2, N=48) = 0.871, p > .05$.

Survey item 7. Likert survey item 7 asked teachers to reflect on the occurrence of positive, effective co-teaching relationships in their classrooms.

Table 18

Likert Survey Item 7

I have had positive, effective co-teaching relationships in my classroom.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=33)	3	9.09	4	12.12	16	48.48	10	30.30
Special Education Teachers (n=15)	0	0.00	0	0.00	8	53.33	7	46.67
Combined (n=48)	3	6.25	4	8.33	24	50.00	17	35.42

As shown in Table 18, general education teachers, as compared to special education teachers, were more likely to disagree regarding having had positive, effective co-teaching relationships in their classrooms. There was a significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to Likert survey item 7, $\chi^2(3, N=48) = 6.110$, $p < .05$.

Survey item 8. The opposite perception was assessed with Likert survey item 8 where teachers were asked to reflect on the occurrence of negative, ineffective co-teaching relationships in their classrooms.

Table 19

Likert Survey Item 8

I have had negative, ineffective co-teaching relationships in my classroom.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=33)	6	18.18	2	6.06	18	54.55	7	21.21
Special Education Teachers (n=15)	3	20.00	2	13.33	8	53.33	2	13.33
Combined (n=48)	9	18.75	4	8.33	26	54.17	9	18.75

General education teachers, as compared to special education teachers, were more likely to agree regarding having had negative, ineffective co-teaching relationships in their classrooms. There was no significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to Likert survey item 8, $\chi^2(3, N=48) = 0.758$, $p > .05$.

Survey item 9. Co-teaching requires planning and collaboration between teachers. Teachers were asked to assess the occurrence of regular, ongoing planning sessions with their co-teachers.

Table 20

Likert Survey Item 9

When co-teaching, I have had regular, ongoing planning sessions with my co-teacher.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=33)	7	22.21	12	36.36	12	36.36	2	6.06
Special Education Teachers (n=15)	2	13.33	8	53.33	3	20.00	2	13.33
Combined (n=48)	9	18.75	20	41.67	15	31.25	4	8.33

As displayed in Table 20, the majority of general education teachers (58.57%) and special education teachers (66.66%) disagreed when responding to the statement, “When co-teaching, I have had regular, ongoing planning sessions with my co-teacher.” Overall, 60.42% of participants stated they do not have regular, ongoing planning sessions with co-teachers. This result was not significant, $\chi^2(3, N=48) = 2.317, p > .05$.

Survey item 10. Likert survey item 10 addressed the perception of all students benefiting from being placed in a co-taught classroom setting. The results are displayed in Table 21.

Table 21

Likert Survey Item 10

All students benefit from being placed in a co-taught classroom setting.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=31)	5	16.13	9	29.03	11	35.48	6	19.35
Special Education Teachers (n=16)	2	12.05	1	6.25	6	37.50	7	43.75
Combined (n=47)	7	14.89	10	21.28	17	36.17	13	27.66

A chi-square test was used to determine there is no significant difference between teachers with special education certification and teachers without special education certification in regard to Likert survey item 10, $\chi^2(3, N=47) = 6.629, p > .05$. Teacher perceptions varied greatly and the chi-square test for independence found their perceptions on student benefit from co-teaching were not related to their certification

area.

Survey item 12. Teachers were asked if administrators solicit feedback on co-teaching practices in their schools. This may take the form of informal conversations, surveys, meetings, and/or emails.

Table 22

Likert Survey Item 12

Administrators solicit feedback of co-teaching practices from general and special education teachers.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=33)	11	33.33	15	45.45	7	21.21	0	0.00
Special Education Teachers (n=15)	3	20.00	7	46.67	4	26.67	1	6.67
Combined (n=48)	14	29.17	22	45.83	11	22.92	1	2.08

The majority (75%) of both general education and special education teachers combined answered disagree or strongly disagree. When a chi-square test was run, the result was not significant in regard to Likert survey item 12, $\chi^2(3, N=48) = 3.163, p > .05$.

Survey item 13. As a follow up to the previous item, Likert survey item 13 asked if the feedback provided to administrators is used to make changes in the school's co-teaching practices.

Table 23

Likert Survey Item 13

Feedback provided to administrators is used to make changes in the school's co-teaching practices.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=33)	13	39.39	15	45.45	4	12.12	1	3.03
Special Education Teachers (n=15)	2	13.33	7	46.67	5	33.33	1	6.67
Combined (n=48)	15	31.25	22	45.83	9	18.75	2	4.17

Table 23 shows 77.08% of all teachers feel feedback provided to administrators is not used to make changes in the school's co-teaching practices. When a chi-square test was run, the result was not significant in regard to Likert survey item 13, $\chi^2(3, N=48) =$

5.214, $p > .05$.

Survey item 15. Teachers were asked to identify if they feel support from administrators when faced with challenges in a co-taught classroom.

Table 24

Likert Survey Item 15

I feel supported by my administrators when faced with challenges in a co-taught classroom.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=33)	4	12.12	7	21.21	18	54.54	4	12.12
Special Education Teachers (n=15)	1	6.57	2	13.33	7	46.67	5	33.33
Combined (n=48)	5	10.42	9	18.75	25	52.08	9	18.75

General education teacher responses varied across answer choices more than special education teacher responses. There was no significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to Likert survey item 15, $\chi^2(3, N=48) = 2.851$, $p > .05$.

Survey item 16. Survey item 16 asked participants to rank the following statement, “I am provided with sufficient materials in order to make appropriate accommodations for students with special needs.” The material used for accommodations could include special paper, paper for printed material typically provided orally or electronically, computer programs, and extra textbooks.

Table 25

Likert Survey Item 16

I am provided with sufficient materials in order to make appropriate accommodations for students with special needs.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=32)	4	12.50	9	28.13	13	40.63	6	18.75
Special Education Teachers (n=14)	0	0.00	2	14.29	9	64.29	3	21.43
Combined (n=46)	4	8.70	11	23.91	22	47.83	9	19.57

There was no significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to Likert survey item 16, $\chi^2(3, N=46) = 3.971, p > .05$.

Survey item 17. Likert survey item 17 asked teachers to respond to “My co-teachers have been a vital, contributing factor to the learning environment.”

Table 26

Likert Survey Item 17

My co-teachers have been a vital, contributing factor to the learning environment.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=32)	3	9.38	6	18.75	17	53.13	6	18.75
Special Education Teachers (n=15)	0	0.00	0	0.00	11	73.33	4	26.67
Combined (n=47)	3	6.38	6	12.77	28	59.57	10	21.28

As seen in Table 26, a majority (80.85%) of both general education and special education teachers report co-teachers have been a vital contributing factor to the learning environment. A chi-square test shows there was a significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to Likert survey item 17, $\chi^2(3, N=47) = 8.127, p < .05$. All participants with special education certification answered on the affirmative side of this question.

Survey item 18. Survey participants were asked to reflect on the structure of their co-teaching experiences and the occurrence of instruction from both the general education teacher and special education teacher in the classroom.

Table 27

Likert Survey Item 18

My co-teaching experience has involved both the general education teacher and special education teacher providing instruction in the classroom.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=31)	2	6.45	8	25.81	18	58.06	3	9.68
Special Education Teachers (n=15)	0	0.00	2	13.33	7	46.67	6	40.00
Combined (n=46)	2	4.34	10	21.74	25	54.35	9	19.57

A chi-square test shows there was not a significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to Likert survey item 18, $\chi^2(3, N=47) = 6.973, p > .05$. The majority of all teachers answered this question affirmatively.

Survey item 19. Likert survey item 19 asked teachers to reflect on co-teaching models used in their classrooms. They responded to the statement, “The majority of my co-teaching experience has been the model ‘One Teach, One Assist.’”

Table 28

Likert Survey Item 19

The majority of my co-teaching experience has been the model “One Teach, One Assist.”	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=32)	0	0.00	4	12.50	17	53.13	11	34.38
Special Education Teachers (n=15)	2	13.33	1	6.67	8	53.33	4	26.67
Combined (n=47)	2	4.26	5	10.64	25	53.19	15	31.91

As seen in Table 28, approximately 85.1% of all survey participants agreed or strongly agreed, the majority of their co-teaching experience has been the model One

Teach, One Assist (McLeskey, Maheady, Billingsley, Brownell, & Lewis, 2019). There was no significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to Likert survey item 19, $\chi^2(3, N=47) = 5.132, p > .05$.

Survey item 20. The final Likert survey item asked the participants to reflect on overall co-teaching practices at their school. Answers were distributed across all options for both groups.

Table 29

Likert Survey Item 20

I am satisfied with the co-teaching practices at my school.	Strongly Disagree		Disagree		Agree		Strongly Agree	
	sum	%	sum	%	sum	%	sum	%
General Education Teachers (n=32)	7	21.88	10	31.25	11	34.38	4	12.50
Special Education Teachers (n=15)	1	6.67	6	40.00	6	40.00	2	13.33
Combined (n=47)	8	17.02	16	34.04	17	36.17	6	12.77

Approximately 53% of general education teachers and 46% of special education teachers disagreed with being satisfied regarding co-teaching in their schools. Nearly 47% of general education teachers and 53% of special education teachers agreed with being satisfied with co-teaching in their schools. Overall, perceptions were split, with 51.06% being dissatisfied and 48.94% being satisfied with co-teaching practices in their schools. There was no significant difference between teachers with special education certification and teachers without special education certification (general education) in regard to Likert survey item 20, $\chi^2(3, N=47) = 2.080, p > .05$.

Open response question 2. The second open response questions asked teachers to “Please list any comments or suggestions you would like to share regarding co-teaching in your school.” The researcher organized the responses into categories, or

themes. Responses were downloaded from the online survey program and organized by question. High-frequency phrases were identified and grouped to determine themes across respondents. Figure 7 shows these common themes by certification (teachers with special education certification and teachers without, or general education teachers).

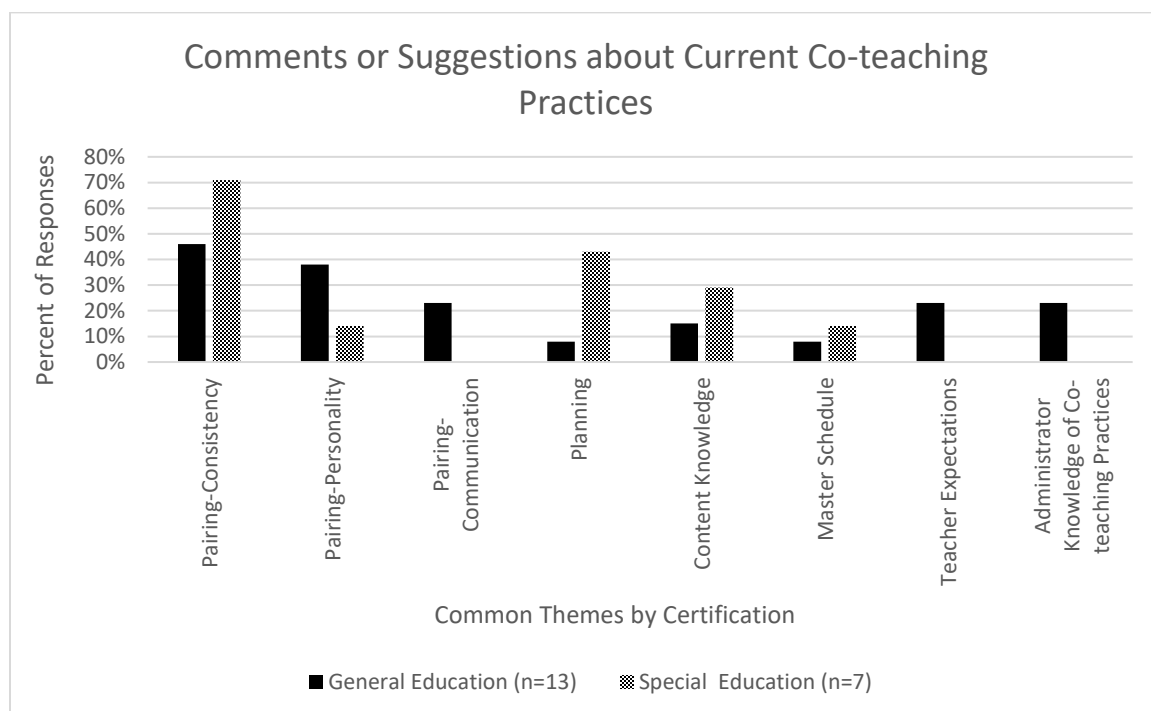


Figure 7. Current Co-Teaching Practices.

General education teachers commented on the state of co-teaching in their schools in the following areas: consistency in co-teacher pairing, co-teacher personalities, communication between co-teachers, planning, content knowledge, master schedule, co-teacher expectations, and administrator knowledge of co-teaching practices. Special education teachers commented on the state of co-teaching in their schools in the following areas: consistency in co-teacher pairing, co-teacher personalities, planning, content knowledge, and the master schedule. The consistency of co-teacher pairings was

mentioned by 55% of all teachers who responded to the second open response question. This highlights a concern within current co-teaching practices within District ABC.

Research Question 4 sought to identify secondary teacher and administrator perceptions, including perceived limitations of current co-teaching practices. This section provided data from the teacher perspective. Teachers consistently responded they feel support by colleagues, feel comfortable asking colleagues for help, and believe co-teaching can be effective. Teachers are split regarding all students benefiting from co-taught classrooms. In addition, the majority have had both positive and negative co-teaching experiences and little common planning time with co-teachers. Most teachers use the co-teaching model, One Teach, One Assist. Regarding administration, teachers feel administrators typically do not solicit feedback on co-teaching practices; and when they do, administrators do not use the feedback to improve co-teaching practices. However, teachers feel supported by administrators when problems arise or material is needed to provide accommodations to students.

Findings of Research Question 4 – Administrator Interviews

Data collection. The researcher included individual interviews with a district administrator and three high school curriculum and instruction administrators in this study to gather perceptions of district and school co-teaching practices from an administrator point of view. Participants were emailed by the researcher and asked if they would be willing to be interviewed for the study. All participants agreed and individual interviews were set up according to their schedules and conducted at their separate locations within the district. The individual interviews were conducted using a protocol and recorded as audio files (see Appendix B). Once all interviews were

conducted, the audio files were transcribed by a third party and verified by the researcher. The transcriptions were used to code and identify themes also related to the teacher survey and, ultimately, the research questions.

Results from Administrator Interviews

Interview question 1. Participants were asked to describe their understanding of co-teaching in high school inclusion classrooms. The probe for this question was, “What does it mean to co-teach?” The depth of descriptions varied across interviews.

Responses and key ideas are shown in Table 30.

Table 30

Interview Question 1

Participant	Example Interview Response	Key Ideas
Administrator 1	“Co-teaching is when a regular ed teacher and a special education teacher truly are supposed to co-teach together. They should plan together. They should take turns with instruction.”	<ul style="list-style-type: none"> • Take turns with instruction • Working together to assess students • Planning • Partnership
Administrator 2	<p>“There is a regular ed and special ed teacher in there to support, ideally, all students.”</p> <p>“I’ve seen some very effective models...and other less ideal models.”</p>	<ul style="list-style-type: none"> • Various co-teaching models • Co-teachers determined by master schedule
Administrator 3	“They are bouncing back and forth with students. They’re planning with each other and both know the content well enough to teach it.”	<ul style="list-style-type: none"> • Personalities compatible • Planning • Content knowledge
Administrator 4	<p>“Two teachers in the classroom who both are trying to serve the needs of all the students in the classroom.”</p> <p>“Establish and personal and professional relationship and develop roles.”</p>	<ul style="list-style-type: none"> • Use various co-teaching models • Purposeful planning

All administrators described co-teaching as a special education teacher and general education teacher paired in a general education classroom sharing the roles and responsibilities of the teacher. According to their responses, co-teachers should take

turns with instruction, assess students, plan together, and have an effective working relationship.

Interview question 2. Participants were asked to describe an ideal co-teaching arrangement regarding the delivery of instruction in a classroom with both a general education teacher and a special education teacher. The probe used for this question was, “What are the responsibilities of the teachers individually and as a partnership?”

Table 31

Interview Question 2

Participant	Example Interview Response	Key Ideas
Administrator 1	“Ideal would be that they are truly partners and truly co-teachers.”	<ul style="list-style-type: none"> • Partnership • Both teach
Administrator 2	<p>“Both teachers have to be willing to engage in that relationship.”</p> <p>“If you try to push this on certain teachers, you’re just going to get a lot of resistance. So, ideally, it’s definitely those teachers who want to work with more at-risk students and have a desire to be very collaborative in nature.”</p> <p>“It’s really both of their classroom.”</p>	<ul style="list-style-type: none"> • Willing • Collaborative • Personalities match well • Shared environment
Administrator 3	<p>“Co-teaching really exists, truly exists, as in they are going back and forth and both teaching in a classroom, both helping the students.”</p> <p>“Some of our matches have not been the best and what you do with that is you learn from it, and you move forward with a better pairing the next year.”</p>	<ul style="list-style-type: none"> • Equal partners • Shared instruction • Successful pairing
Administrator 4	<p>“A perfect relationship is first understanding our roles.”</p> <p>“We have to look at data. We have to talk. We have to meet. We have to be honest with each other.”</p> <p>“Teachers establishing that relationship and trust.”</p>	<ul style="list-style-type: none"> • Identified roles • Collaboration • Relationship • Trust

As shown by responses and key ideas in Table 31, the ideal co-teaching arrangement would have partners who take turns teaching, are willing to be in a co-taught setting, collaborate with their co-teachers, and can build a level of trust to form positive working relationships. Administrators envision an ideal classroom where students view

the general education teacher and special education teacher as equals because they are both contributing to the environment during instruction, assessment, and classroom routines.

Interview question 3. Participants were asked what types of training/ professional development have been provided in this school/district regarding co-teaching. The probe used for this question was, “Professional development in the form of a workshop? Guidance? Observations?”

Table 32

Interview Question 3

Participant	Example Interview Response	Key Ideas
Administrator 1	<p>“[College] has a co-teaching professional development and we have a partnership with them, since they’re in the community, and they’ll come...do their co-teaching professional development.”</p> <p>“Within our school...give them common planning time on professional development days.”</p>	<ul style="list-style-type: none"> •College lead professional development •Time to plan
Administrator 2	<p>“At the high school level, pretty minimal, quite honestly.”</p> <p>“That’s probably, definitely an area that we need to expand on.”</p>	<ul style="list-style-type: none"> •Minimal •Need to provide training
Administrator 3	<p>“I don’t know of any that has been offered.”</p> <p>“We have spoken about the fact that we would like to send ours out, even outside the district, to gain a better knowledge; the regular ed teachers as well as the special ed teachers, together, to see what that’s supposed to be like.”</p>	<ul style="list-style-type: none"> •None •Send teachers for professional development
Administrator 4	<p>“For a few years, we would bring [college professors] in during that first week back and we got the regular teachers and the special services teachers together and went through co-teaching training.”</p>	<ul style="list-style-type: none"> •College lead professional development

All four administrators did not have knowledge of school or district provided professional development for co-teaching other than college professors providing sessions in prior years. Two of the administrators previously had college professors come to their individual school locations and train special education teachers and general

education teachers in models and strategies for co-teaching. All administrators acknowledged professional development for co-teaching is important and needed within the schools.

Interview question 4. Participants were asked about plans for future co-teaching professional development at the school and/or district level. The probe used for this question was, “What are possible topics for the session?”

Table 33

Interview Question 4

Participant	Example Interview Response	Key Ideas
Administrator 1	“Give them time to work together. That’s a goal of mine to be able to do that in the future.”	<ul style="list-style-type: none"> • Time to plan
Administrator 2	“I would definitely say it’s always a possibility.” “I mean, I can definitely see the need to do inclusion training.”	<ul style="list-style-type: none"> • Need to provide training
Administrator 3	“For next year, we’ve looked at sending [teachers] outside of the district to get some training.” “They need to be able to see how it’s modeled in order to replicate it when they come back.”	<ul style="list-style-type: none"> • Send teachers for training • See it modeled
Administrator 4	“Make sure first there’s an awareness [of needs of students with disabilities]”	<ul style="list-style-type: none"> • Disability training

As shown in Table 33, the administrators recognized the need for training, but answers were varied. One administrator has considered sending teachers to go observe successful co-teaching outside the district. Other ideas for future professional development included allowing time to plan and training on disability awareness.

Interview question 5. Participants were asked about factors that are important for successful co-teaching at the high school level. The probe used for this question was, “Support? Volunteers? Planning?” Administrator responses and key ideas are organized in Table 34.

Table 34

Interview Question 5

Participant	Example Interview Response	Key Ideas
Administrator 1	<p>“I think planning is crucial, and I think trust between the two co-teachers is important.”</p> <p>“I think it’s important, as an administrator, to pick two people that you feel like can work together well...that know the content.”</p>	<ul style="list-style-type: none"> • Time to plan • Trust • Good pairing
Administrator 2	<p>“The willingness to be open to it.”</p> <p>“Time-It’s hard to form a relationship and plan if you don’t have joint planning.”</p>	<ul style="list-style-type: none"> • Willingness • Time to plan
Administrator 3	<p>“Send out a survey to our teachers...asking them what they would like to teach.”</p> <p>“The support...we have an open-door policy.”</p> <p>“Give them at least some time to plan with the regular ed teacher.”</p>	<ul style="list-style-type: none"> • Willingness • Master schedule • Support • Time to plan
Administrator 4	<p>“We’re not going to bring a new teacher in and say immediately the new teacher gets the co-taught class.”</p> <p>“Making sure you have common planning.”</p>	<ul style="list-style-type: none"> • Master schedule • Time to plan

All four administrators included the need for planning between co-teachers.

Other factors included are pairing, willingness to co-teach, support from administration, and a well-developed master schedule.

Interview question 6. Participants were asked about perceived limitations that might exist regarding the implementation and practice of co-teaching at the high school level. The probe for this question was, “Possible concerns from administrators or teachers?” Administrator responses and key ideas are organized in Table 35.

Table 35

Interview Question 6

Participant	Example Interview Response	Key Ideas
Administrator 1	<p>“The scheduling of it. Being able to give them time together to plan because that doesn’t happen often.”</p> <p>“The regular ed teacher being a little hesitant to turn things over.”</p> <p>“The co-teacher is sometimes not willing to be a true co-teacher.”</p>	<ul style="list-style-type: none"> • Time to plan • Trust • Good pairing
Administrator 2	“Stakes are high with SLOs [Student Learning Objectives] and everything.”	<ul style="list-style-type: none"> • Content knowledge
Administrator 3	<p>“It’s sometimes a struggle for us at the high school level because we are just super content specialists in our area, and we don’t necessarily want to give up that control.”</p> <p>“The master schedule, of course.”</p> <p>“That’s about it—I mean, as long as you’ve got a good pairing. If you don’t, it’s not great.”</p>	<ul style="list-style-type: none"> • Content knowledge • Master schedule • Good pairing
Administrator 4	“Content knowledge – we should be able to schedule [teachers] with what you are strong in.”	<ul style="list-style-type: none"> • Content knowledge

Possible limitations are lack of content knowledge, incompatible co-teachers, trust concerns, and an extensive master schedule to incorporate all needed courses in high school. Administrators stated many times that general education teachers are reluctant to allow another teacher to lead instruction because they are not sure if the co-teacher has adequate content knowledge.

Research Question 4 sought to identify secondary teacher and administrator perceptions, including perceived limitations of current co-teaching practices. This section provided data from the administrator perspective. Administrators agreed on a definition of co-teaching. They all described co-teaching as a general education teacher and a special education teacher collaborative working in the same classroom to provide instruction to all students. In an ideal co-taught classroom, administrators agreed the teachers should be seen as equals, and responsibilities should be evenly distributed.

When asked to discuss professional development for co-teaching, two administrators recalled a session from previous years led by a local university. There was no knowledge of recent or future professional development on co-teaching. Administrators felt there are a few factors of successful co-teaching at the high school level. These factors are the time to plan, trust between co-teachers, willingness to co-teach, support from the administration, and a master schedule conducive to co-teaching. Possible limitations regarding the implementation of co-teaching at the high school level are the lack of previously mentioned factors along with the successful pairing of teachers and special education teacher content knowledge of courses required for graduation.

Themes of Qualitative Data

Once all qualitative data were collected through the survey and interviews, the researcher grouped responses by question and coded the responses to draw out possible themes across research participants. Data were synthesized and organized into a table showing input from both teachers and administrators. Emerging themes from this study were collaboration/planning, administrative support, volunteer/willingness, training/professional development, and relationship/trust. Examples of responses from the interviews and surveys, which reflect common themes, are shown in Table 36.

Table 36

Themes of Qualitative Data

Theme	Example Interview Response	Example Survey Response
Collaboration/ Planning	“It’s very hard with the master schedule but we do try and give them at least some time to plan.”	“Many teachers do not have ANY planning time with their co-teacher, and this leads to 1 teaching and 1 assist.”
	“What does our planning look like? Are we using data during that planning? It’s got to be very specific and strategic for the two co-teachers.”	“We aren’t given adequate time to meet with our co-teachers; or, even encouraged to do so.”
Administrative Support	“They know they have the support from us, they know that they can talk to us, schedule time with us.”	“Allow sped teachers to teach in the area that they prefer and to master subjects instead of constantly changing the schedules each year.”
	“Making sure you know that you have common planning.”	“Administrators need to be hands-on.”
	“Schedule you with what you’re strong in.”	
Volunteer/ Willingness	“Asking them what they would like to teach giving us their top three choices...enjoy inclusion or I don’t feel like inclusion is the best for me to be successful with my students.”	“Select general education teachers who don’t mind embracing the inclusion co-teaching models within their classes.”
	“Both teachers have to be willing to engage in that relationship.”	
Training/ Professional Development	“Go and observe another co-taught class and then we come and sit down and talk about it afterwards.”	“General education teachers are placed in co-teaching situations, and they typically have no training on co-teaching and very little training in working with students who have IEPs.”
	“Training—I would say, yes, that’s probably an area that we need to expand on.”	“Allowing teachers to observe others authentically co-teaching and time for planning together is crucial to making it work.”
	“We’ve looked at sending them outside of the district to get some training. They need to be able to see how it’s modeled in order to replicate it.”	“General education teachers need more training on the characteristics of high prevalent disabilities.”

(continued)

Theme	Example Interview Response	Example Survey Response
Relationship/ Trust	“It can be something on either side of that partnership that’s holding it back from being a true co-teaching model.”	“Help build a better relationship so that general education teachers would give up “control” and try other co-teaching models that are more beneficial than teach/assist.”
	“It’s sometimes a struggle for us at the high school level because we are just super content specialists in our area, and we don’t necessarily want to give up that control.”	“There should be some way for successful co-teaching teams, who request to continue to be allowed to teach together, be allowed to do so.”
	“You are with a person in a classroom for 90 minutes a day. If your personalities don’t match well, then that doesn’t always work for the co-teaching experience.”	“Have input from the special ed teachers about their comfort level with subject areas so that they are able to effectively contribute (maintain relationships with co-teachers once established).”
	“It’s important; the first thing is giving co-teachers an opportunity to establish a sort of personal and professional relationship.”	

As shown in Table 36, administrators and teachers have common ideas about factors for successful co-teaching. The discrepancy comes in the current state of co-teaching at the high schools. Administrators tend to have a more positive outlook on current practices where teachers feel there are many weaknesses keeping them from reaching their full potential in co-taught classrooms. Teachers want to be paired with other teachers who have complementary personalities. Teachers want support and time to plan together. Teachers want their concerns to be heard and addressed. Teachers want training so they can be successful in reaching all students. Administrators acknowledge these factors and concerns, but more needs to be done in the way of training and support to make co-teaching cohesive across the district.

Conclusion

This study examined co-teaching practices in secondary math and English inclusion classrooms in a suburban school district. An electronic survey was used to

gather feedback and perceptions of current co-teaching practices from math, English, and special education teachers. In addition, individual interviews were conducted with four administrators within the district: three assistant principals and one district-level administrator. Both methods of data collection allowed the researcher to identify common perceptions and themes across the two stakeholder groups.

Demographic information was used to identify teacher preservice training and certification. Quantitative data analysis highlighted any significant differences between the opinions of general education and special education teachers. Qualitative data analysis allowed the researcher to identify connections between responses from teachers and administrators. Teachers and administrators in District ABC have favorable opinions about the possibilities of co-teaching in the high school setting. However, weaknesses emerged in the knowledge of effective co-teaching practices, organization of co-teaching partners, and support through professional development and administrators at the school level.

Chapter 5 interprets findings as they relate to research literature and the current study's research questions. Limitations, recommendations for further research, and implications for practice are explained.

Chapter 5: Discussion

Introduction

Many districts no longer use the traditional structure of separate classrooms for students with mild/moderate disabilities because these students are now taught in classrooms with their non-disabled peers for a majority of their time spent in school (Strawderman & Lindsey, 1995). A common strategy for working with students who have diverse learning needs and abilities is co-teaching (Graziano & Navarrete, 2012). General education teachers must be prepared to work with special needs students in the inclusion setting (Bowlin, 2012; Cook, 2002).

As shown in this study, teacher training programs are inconsistent in the amount of preparation given for working with students with special needs in the inclusion setting. McLeskey et al. (2017) identified “a focus on improving the effectiveness of teachers as the most direct approach to improving outcomes for low-achieving students” and “many effective practices that can substantially improve student achievement are not routinely used by teachers” (p. 7). In an effort to combat a lack of preservice training once teachers are employed, districts and schools must provide in-service training to improve areas not addressed or under addressed.

The purpose of this mixed methods study was to examine co-teaching practices in three high schools in District ABC. The researcher used the following questions to guide this study.

Research Questions

The researcher addressed four primary questions.

1. How do general education and special education teacher perceptions compare

regarding preservice training effectiveness for working in an inclusion, co-taught secondary classroom?

2. How do general education and special education teacher perceptions compare regarding in-service professional development effectiveness for working in an inclusion, co-taught secondary classroom?
3. What effect does preservice training have on the confidence level of teachers when working with special needs students in the secondary inclusion classroom?
4. What are secondary teacher perceptions, including perceived limitations, of co-teaching practices?

A two-stage approach was utilized to complete this study. The first stage of the study employed an electronic survey to collect data related to demographics, perceptions, and training. In the second stage of the study, the researcher interviewed a district administrator and the assistant principals over curriculum and instruction at each high school in the district. Six interview questions were written to correlate to possible themes by which the participant survey was analyzed. Interview questions addressed Research Question 4 from an administrator perspective.

Interpretation of Findings

Preservice training effectiveness. The first research question asked, “How do general education and special education teacher perceptions compare regarding preservice training effectiveness for working in an inclusion, co-taught secondary classroom?” This question was addressed using demographic data and two Likert scale survey questions. While the majority of the teachers indicated they feel prepared as a

result of their educational backgrounds to effectively teach students with delays and deficits, there are general education teachers who do not agree. Those with special education certifications are more likely to agree indicating their teacher preparation programs were successful in providing a foundation on teaching students with disabilities, while some general education teacher preparation programs did not have the same outcome. When asked about feeling prepared to co-teach as a result of teacher preparation programs, over half of the teachers in this survey disagreed. This result was not associated with a specific certification, as teachers from both the general education group and special education group shared the same sentiment.

In-service professional development. The second research question asked, “How do general education and special education teacher perceptions compare regarding in-service professional development effectiveness for working in an inclusion, co-taught secondary classroom?” This question was addressed using demographic data, quantitative survey questions, and qualitative open response survey questions. Teachers with special education certification were more likely to agree they are encouraged to attend conferences/workshops regarding students with special needs, and teachers without special education certification were more likely to disagree showing they are not encouraged to attend conferences/workshops on teaching students with special needs. Statistically, the answers for feeling encouraged to attend conferences/workshops were dependent upon teacher certification; however, the overall data show teachers are evenly split on this question.

In addition to encouragement to attend conferences or workshops, teachers had the opportunity to rate the sufficiency of in-service training within the district. The

majority of the teachers indicated they disagree with being provided sufficient district in-service training on working with students with an IEP. The results were not dependent upon teacher certifications. This shows teachers recognize a weakness within their classrooms and would like training to improve their practices for teaching students with disabilities.

The data for this research question clearly show a need for training, and teachers were asked to determine training delivery methods they felt would be most beneficial. The goal is to have training teachers see as valuable. The top three delivery methods for both special education teachers and general education teachers were the time for consultation with special education teachers, district-level training, and observation of successful co-taught classrooms. “Researchers argue that the most effective way to learn co-teaching is through hands-on experiences with a wide range of collaborative interactions” (Graziano & Navarrete, 2012, p. 112). When asked to provide possible questions or topics for training, special education teachers identified seeing a need for training on co-teaching models, common planning, and content knowledge. General education teachers see a need for training on co-teaching models, teacher expectations in a co-taught classroom, and disabilities and special education law.

Preservice training confidence. The third research question asked, “What effect does preservice training have on the confidence level of teachers when working with students with special needs in the secondary inclusion classroom?” The researcher sought to gain data pertaining to co-teacher confidence when working with students with special needs by using quantitative survey questions. For all pieces of data addressing Research Question 3, there was a significant difference shown by the chi-square analysis.

Special education teachers mostly agree they received sufficient preservice training to effectively teach students with an IEP, and they feel comfortable collaborating with other teachers regarding the needs of those students.

In contrast, general education teachers are divided regarding the training they received to prepare them to effectively teach students with an IEP. Approximately 40% do not feel the training through a teacher preparation course/program was sufficient. However, the majority of general education teachers do feel comfortable collaborating with colleagues/special education teachers regarding students with IEPs in their classrooms.

Perceptions of current co-teaching practices. The fourth research question in this study asked, “What are secondary teacher and administrator perceptions, including perceived limitations, of current co-teaching practices?” The researcher sought to gain data pertaining to perceptions of co-teaching practices currently used in District ABC’s three high schools by using quantitative survey questions and qualitative survey and interview questions. Both general education teachers and special education teachers indicated a majority feel they are supported by colleagues when working with students with special needs. Overall, 94.12% of teachers who answered this question feel they have support from their colleagues. When asked about the effectiveness of collaborative teaching of students with special needs when placed in a regular classroom, 97.92% of respondents indicated collaborative teaching could be effective.

Co-teaching practices in the district began to show weaknesses when teachers were asked about regular planning sessions, all students benefiting from co-teaching, and administrator support. The results indicated no significant difference between the two

groups. The majority of teachers (60.42%) disagreed with having regular, ongoing planning sessions with a co-teacher. Perceptions varied regarding students benefit from co-taught classrooms with 63.83% agreeing and 36.17% disagreeing. The majority feel it is of benefit, but there are 45% of general education teachers who disagree. A discrepancy in the perception of co-teaching benefits for all students can affect co-teaching partnerships and, ultimately, student outcomes.

Teachers were asked to assess administrative support. Seventy-five percent do not feel administrators solicit feedback of co-teaching practices, and 77.08% feel any feedback given to administrators is not used to make changes. Positive aspects related to administrator support is teachers feel supported when faced with challenges in a co-taught classroom and are mostly provided with sufficient materials to make appropriate accommodations for students with special needs in the classroom.

The remaining quantitative data for Research Question 4 addresses the co-teacher relationship. When asked if co-teachers have been a vital, contributing factor to the learning environment, 80.85% agreed. However, there was a significant difference between certification and response. Special education teachers were more likely to agree with this question. Teachers were also asked if the majority of their co-teaching experience has been where “one teacher leads instruction while the other teacher quietly assists students,” also known as One Teach, One Assist (McLeskey et al., 2019, p. 10). There was no statistical significance between certification and response, and 85.10% agreed to this being the model most used in their classrooms. Often, co-teachers fall into the routine of the general education teacher being the primary instructor due to content knowledge and the special education teacher playing a supportive role to assist the

students and provide accommodations. A classroom where both teachers have a more equal role such as team teaching increases the learning potential for students, has a higher incidence of on-task student behavior, and improves student self-esteem (Constantinescu & Samuels, 2016).

The final quantitative question asked teachers to respond to “I am satisfied with the co-teaching practices at my school.” According to the chi-square test of independence, there was no significant difference between general education and special education teacher responses. However, special education teacher responses indicate they are slightly more satisfied with current practices than general education teachers. Of all teachers participating in this study, 48.94% agreed to be satisfied with co-teaching practices, while 51.06% disagreed with being satisfied with co-teaching practices at their school. These results indicate there are weaknesses hindering the majority of teacher satisfaction with co-teaching practices within high school inclusion classrooms. Therefore, District ABC must address teacher areas of concern identified in the study to improve their perceptions.

Qualitative data were collected for Research Question 4 through interviews and an open response question at the end of the Perceptions of Co-Teaching Survey. The researcher analyzed these data for themes and found the following from both administrators and teachers: collaboration/planning, administrative support, volunteer/willingness, training/professional development, and relationship/trust.

Collaboration/planning. Collaboration/planning refers to having time for co-teachers to plan and understanding how to plan together. Administrators acknowledge the need for planning and state they try to build it into the master schedule so co-teachers

have the same planning time during the day. Administrator 4 discussed the importance of knowing how to plan and using data effectively. Teacher input also shows the desire for common planning, but they often do not have common planning with their co-teachers. Many times, the majority of the planning is done by the general education teacher, and the special education teacher becomes a part after planning is done. One teacher stated planning is often done “on the fly” since there is no common planning time.

Administrative support. Administrative support refers to developing a master schedule with common planning, placing special education teachers in subjects where they show strengths, and following up with co-teaching teams to make sure things are going well. Administrators shared teachers can come to them anytime with questions and concerns or to share positive experiences happening in the classroom. The administrators stated they try to consider the strengths of the teachers when developing the master schedule, but the complexity of a high school schedule can become an obstacle. Teachers shared they want to be in areas where they excel and would like for administrators to follow up with them. One teacher stated, “Administrators need to be hands-on.”

Volunteer/willingness. Volunteer/willingness refers to teachers wanting to be in a co-taught classroom. “Co-teaching may not be a choice made by individuals, and this can impact the efficacy and outcomes of co-teaching, depending on their perceptions” (Rexroat-Frazier & Chamberlin, 2019, p. 174). Most administrators spoke of asking teachers to provide their top three course preferences and trying to build a master schedule that will accommodate as many requests as possible. The administrators understand that teachers who do not enjoy co-teaching and are not willing to embrace it will not be successful as co-teachers, which will affect student success (Kadakia, 2017).

Teachers would like for administrators to “select teachers who don’t mind embracing the inclusion, co-teaching models within their classes.”

Training/professional development. Training/professional development encompasses methods to help teachers grow in their profession. Three of the four administrators who were interviewed recognized the need for training and the lack of training that has taken place within the district. A method identified by both administrators and teachers is the observation of a successful co-taught classroom. The idea is observing a successful model will be more effective than presenting the information in a typical training format where teachers are brought together and presented material on the subject of co-teaching.

Relationship/trust. Relationship/trust refers to the working relationship between the two co-teachers who are paired together. Both administrators and teachers recognize that at the high school level, content knowledge is a major concern. Some general education teachers are reluctant to give up control in the classroom because they are associated with the progress and success of the students on their rosters. Also, personality conflicts and strained relationships are a major concern (Solis et al., 2012). One administrator stated, “If your personalities don’t match ... that doesn’t always work for the co-teaching experience.” Several teachers shared a desire for successful co-teaching partnerships to be continued so they can build on the progress they have already made. One teacher shared, “I haven’t had the same co-teacher twice.”

This study reveals that administrators and teachers have a general knowledge of successful co-teaching practices and a desire for strong co-teaching practices in the district. There are discrepancies, however, in the perceptions of the administrators and

teachers involved.

Limitations of the Study

There are certain limitations involved with this study that could affect transference to other settings. First, the researcher was unable to control the number of surveys returned and the urgency with which they were completed. This can affect the sample size of participants. A sizeable group of teachers within the district was the target for this study in the hopes a significant amount would return the surveys to provide reliable data. There were a few teachers who started the survey but did not complete all parts, which affected the sample size from question to question. Overall, the researcher was successful in getting a response rate of 53.5%, which was larger than anticipated and sufficient for this study.

Second, the proportion of general education teachers to special education teachers participating in the study may be skewed according to who returns the survey. There was a total of 76 general education teachers who received the invitation to complete the survey, and the response rate was 49%. There was a total of 25 special education teachers who received the invitation to complete the survey, and the response rate was 68%. The proportion of general education teachers to special education teachers participating in the study was slightly skewed by the number of respondents. There was a higher percentage of special education teachers who responded (68%) compared to general education teachers (48.7%). Due to the nature of the subject relating to special education, teachers with special education certification may have been more inclined to participate.

Third, the researcher is an employee of District ABC. Teachers currently co-

teaching with the researcher were excluded from the study, and all data were anonymous; but working relationships with colleagues could hinder the honesty with which the surveys were completed.

Recommendations for Future Research

Based on the outcomes of this study, the researcher has suggestions for further study to continue to improve co-teaching practices in the secondary setting.

Recommendation 1: Examine student perceptions of co-teaching. This study incorporated teacher and administrator perceptions of co-teaching but did not address the students in the co-taught classroom. Co-teaching has been a more widely used practice, and studies have been done regarding the teaching and administrative aspect. There is room for further study to identify strengths and weaknesses from student perspectives.

Recommendation 2: Examine the effects of co-teaching on student progress. Friend et al. (2010) stated that most research conducted on co-teaching is focused on practices rather than student achievement. This study was conducted over the course of a few months and through interviews and surveys. The researcher suggests a longitudinal study of co-teaching to determine how it affects student progress at the high school level. Quantitative data collection involving pretest and posttest scores, or yearly end-of-course scores, along with qualitative data through interviews, surveys, and observations could provide a significant view of current co-teaching practices and its success.

Recommendation 3: Examine teacher preparation programs to identify areas of weakness related to concerns discovered within this study. Teachers expressed concern over a lack of knowledge for working with students with various disabilities. In addition, teachers shared perceived weaknesses in appropriate and effective co-teaching

models to be used in the classroom. The researcher suggests teacher preparation program evaluations in an effort to identify weaknesses and strengthen areas related to inclusion and co-teaching, providing a strong foundation and improved teacher confidence.

Implications for Practice

Training. Co-teacher training needs to begin at the preservice level. Teacher preparation programs must incorporate co-teaching strategies and models for all certification areas due to the increasing need for co-taught classrooms. This study identified a difference in special education preservice training and general education preservice training for working with students with disabilities and co-teaching in the inclusion classroom. In order to close the gap between programs, general education programs must increase the depth of material related to special education. One option would be general education majors and special education majors taking the same class to begin to build a relationship between the two groups. Drescher (2017) stated,

When people take classes and work together, and do so from the beginning of pre-service training, they may be more likely to foster a mutual respect and learn to draw on each other's strengths in a manner that would ideally continue into professional practice. (p. 2)

Preservice teachers should be given the opportunity to simulate a co-teaching partnership while highlighting purposeful planning, co-teaching models, teacher roles within lessons and the classroom, and reflection.

For both preservice and in-service training, teachers need to be provided the opportunity to observe successful co-teaching and time to discuss what was observed. Murawski (n.d.) described successful co-teaching as a marriage. In a successful co-

taught classroom, there are two teachers in the same classroom who have a good rapport with each other and the students, good communication, purposeful planning, and equally shared responsibilities in both instruction and classroom routines (Casale & Thomas, 2018; Murawski, n.d.). Data within this study indicated both general education and special education teachers would appreciate the opportunity to observe co-taught classrooms. Administrators also acknowledged the need for teachers to understand the dynamics of a successful co-teaching partnership. Many tools are available for use when observing a co-taught classroom. For example, Murawski and Lochner (2011) developed a co-teaching checklist to be used when observing a co-taught classroom (see Appendices F and G). The checklist is split between ask-for items and look-for items. The ask-for items are materials and information the observer must obtain from the teachers in order to accurately reflect upon co-planning and co-instructing (see Appendix F). Look-for items can be seen in the classroom by the observer (see Appendix G). This observation instrument is an example that can be used by administrators to evaluate performance and provide support as well as other co-teachers to gain insight from observing a co-teaching partnership already deemed successful by school and district administrators.

Many personalities like to have clear expectations for a co-taught classroom which might help foster trust between teachers. Professors and administrators should identify needs within the school and allow special education teachers and general education teachers to attend training together, not in isolation from one another. Attending training together helps build mutual trust and allows co-teachers to understand one another to be able to draw from each other's strengths (Drescher, 2017).

Planning. Schools need to make planning between co-teachers a priority.

Building a master schedule for a high school can be time consuming and involves many pieces. Pennell (2012) outlined steps for administrators to use when building a master schedule. The steps are as follows:

1. Create a matrix – A matrix is built listing the names of students requiring support through special education and the courses in which these students need support.
2. Use the matrix to determine staffing needs.
3. Determine the number of sections for each course required to accommodate students with disabilities. The percentage of special education students to general education students in each class should ideally reflect the school demographics. A class should have no more than 20% of its students requiring special education services.
4. Identify the general education teachers for inclusion classes.
5. Select the special education personnel who will be assigned to each inclusion class.
6. Designate common planning periods for the co-teachers.
7. Enter the courses/sections and common planning periods into the master schedule first.
8. Add other courses/sections to the master schedule in which special education students will be enrolled but do not require co-teaching.
9. Enter the rest of next year's courses/classes into the master schedule.
10. Hand schedule (by course/section/class) students with disabilities and input their schedules.

Administrators must take steps similar to these to provide the time for collaboration desperately requested by both general education and special education teachers. The results of this study showed teachers in District ABC do not feel they have adequate time to plan and collaborate with colleagues. If teachers do not have common planning during the school day, administrators could provide time by finding coverage for the teachers to allow 15-20 minutes of uninterrupted planning time. McLeskey et al. (2019) listed, “Collaborate with professionals to increase student success” as the first high-leverage practice (HLP) in their list of 22 HLPs for special education teachers (p. x).

Collaboration and planning are key to co-teaching success.

Once regular, ongoing planning time is scheduled, teachers need to understand how to plan for co-teaching. There are many planning templates available for co-teachers to use. These templates have all the typical lesson plan items (standards, materials, vocabulary, instruction, assessment) but incorporate the responsibilities of a second teacher in the classroom. An example of a co-taught lesson plan is provided in Figure 8.

School		Co-Teaching Planning Guide	
Subject:		Teacher:	
Grade Level:		Date(s):	
Essential Question(s)/I Can Statements/Learning Targets:		Technology:	
1. 2. 3. 4.			
Materials/Resources:		Vocabulary:	
Unit:	Duration (Days):	Lesson(s):	

MONDAY			Time
Standard and Objective:			
	General Education Teacher	Special Education Teacher	
Warm-Up			
Modeled (Teacher)			
Shared (Teacher with Students)			
Guided (Students with Teachers)			
Independent Student Work			
Wrap Up/Assessment:			
Co-Teaching Model Used:			
Interventions/ Strategies:			
Teacher Preparation Notes:			
Reflection:(worked well, suggestions for future lessons)			

Figure 8. Co-Teaching Planning Guide.

A co-teaching planning guide can help co-teachers have more meaningful

dialogue during their planning sessions. The planning guide in Figure 8 provides a place to make notes for each part of the lesson and divide responsibilities between the two teachers. An extended weekly planning form can be found in Appendix H. Other planning forms may begin with the general education teacher developing a lesson based on content which then will be passed along to the special education teacher to review and provide suggestions to help differentiate within the classroom. Once both teachers have reviewed the document, they come together during a planning session to finalize the plans. This method helps streamline the planning process and shorten the amount of co-planning time needed.

Administrative support. Administrators need to take a more active role in supporting co-taught classrooms during the school year (Sinclair et al., 2019). Teachers are looking for feedback and support. Often, administrators come into the classroom to observe one teacher but rarely observe the co-teachers as a team and follow up with strengths and weaknesses to help the partnership grow. The researcher suggests administrators continually follow-up with co-teachers through observation and feedback to help them grow as teams (Murawski, n.d.). A co-teaching observation tool, such as Murawski and Lochner's (2011) Co-Teaching Observation Checklist previously discussed, could assist with supporting the co-taught classroom. Many other observation tools are available so administrators can choose or develop one tailored to their needs.

Along with course preference surveys often done at the school level, administrators should include a place for teachers to identify co-teachers with whom they have taught and would like to continue the pairing. The data from this study indicate teachers are traditionally not able to continue successful pairings from 1 year to the next

in District ABC. Teachers who have developed a solid foundation for co-teaching are better able to focus on a new roster of students because they no longer need the transition time to get to know each other as co-teachers. Friend and Barron (2019) stated,

Co-teaching achieves its purpose when partners understand and practice collaboration. They have a strong commitment to their shared work; they communicate carefully; and they share resources, decision-making, and accountability. They interact using clear communication, problem solve, and ultimately create a true partnership that results in positive outcomes for students with disabilities. (p. 9)

These characteristics of successful co-teaching are strained unless teachers are able to build and grow their relationships from 1 semester or year to the next. Administrators have control over scheduling and should be sensitive to teacher requests to foster successful co-teaching practices in their schools.

Conclusion

Due to legislation passed over the past 20 years, the requirement for more inclusion of students with special needs has led to a growth of co-taught classrooms. Many teachers have not been trained in co-teaching at the preservice level, and schools are having to find a way to improve their co-taught classrooms. There tends to be a training discrepancy between special education teachers and general education teachers who are both equally certified and involved in co-teaching. Typically, the special education teacher is the strategies specialist, and the general education teacher is the content specialist; however, this alone is not enough to ensure a successful partnership.

This study highlighted co-teaching practices in three high schools within District

ABC. There were many positive aspects such as lower student-to-teacher ratio, successful teaming, and support from colleagues. It has also shown there are still areas for growth in the secondary inclusion classroom related to training, pairing, and administrative support. Data collected by the researcher reveal District ABC embraces the co-taught classroom. The high school administrators and teachers believe it can be effective for all students, with and without disabilities, to experience success. Thankfully, teachers welcome the opportunity for growth and development in order to have effective, co-taught classrooms at the secondary level.

References

- Bowlin, T. (2012). *Inclusion and collaboration: Impact of pre-service teachers' experiences on their knowledge, attitudes and perceived sense of efficacy* (Doctoral dissertation). Retrieved from Electronic Theses and Dissertations. http://trace.tennessee.edu/utk_graddiss/1272
- Brown v. Board of Education, 347 U.S. 483 (1954). Retrieved from the Library of Congress, <https://www.loc.gov/item/usrep347483/>
- Carroll, A., Forlin, C., & Jobling, A. (2003). The impact of teacher training in special education on the attitudes of Australian pre-service general educators towards people with disabilities. *Teacher Education Quarterly*, Summer 2003, 65-79.
- Casale, C., & Thomas, S. (2018). Interactive co-teaching strategies: developing effective partnerships. *On the Horizon*, 26(3), 260-269.
- Chen, G. (2016). Understanding self-contained classrooms in public schools. Retrieved from <http://www.publicschoolreview.com/blog/understanding-self-contained-classrooms-in-public-schools>
- Constantinescu, C., & Samuels, C. (2016). Studies flag potential downside to inclusion. *Education Week*, 36(3), 10-11.
- Cook, B. (2002). Inclusive attitudes, strengths, and weaknesses of pre-service general educators enrolled in a curriculum infusion teacher preparation program. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 25(3), 262-277.
doi:10.1177/088840640202500306

- Cook, L., & Friend, M. (1995). Co-teaching: Guidelines for creating effective practices. *Focus on Exceptional Children*, 28(3), 1-25.
- Cook, B., Semmel, M., & Gerber, M. (1999). Attitudes of principals and special education teachers toward the inclusion of students with mild disabilities: Critical differences of opinion. *Remedial and Special Education*, 20(4), 199-207.
Retrieved from <https://doi.org/10.1177/074193259902000403>
- Cooper, J., Kurtts, S., Baber, C., & Vallecorsa, A. (2008). A model for examining teacher preparation curricula for inclusion. *Teacher Education Quarterly*, 35(4), 155-176.
Retrieved from <https://files.eric.ed.gov/fulltext/EJ838706.pdf>
- Creswell, J. W. (2006). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: SAGE Publications.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 209–240). Thousand Oaks, CA: Sage.
- David, L. (2014). Social development theory (Vygotsky). *Learning Theories*. Retrieved March 17, 2020, from <https://www.learning-theories.com/vygotskys-social-learning-theory.html>

- DeSimone, J., & Parmar, R. (2006). Middle school mathematics teachers' beliefs about inclusion of students with learning disabilities. *Learning Disabilities Research & Practice, 21*(2), 98-110. Retrieved from <https://doi.org/10.1111/j.1540-5826.2006.00210.x>
- Drescher, T. (2017). The potential of modelling co-teaching in pre-service education. *Journal of University Teaching & Learning Practice, 14*(3), 1-17.
- Driscoll, A., & Nagel, N. (2010). Individuals with disabilities education act (IDEA). Retrieved July 18, 2016, from <http://www.education.com/reference/article/individuals-disabilities-education-act/>
- Esteves, K., & Rao, S. (2008). The evolution of special education. *Principal, 88*(2), 1-3. Retrieved from <http://works.bepress.com/kelli-esteves/5/>
- Friend, M. (2016). Co-teaching: Creating success for all learners. Supplemental materials for the workshop council for exceptional children and the San Mateo County Office of Education. Retrieved from <https://www.cec.sped.org/~media/Files/Professional%20Development/HTW/2016%20HTW/Handouts/MFriendPresentationSanMateo92416.pdf>
- Friend, M., & Barron, T. (2019). Collaborating with colleagues to increase student success. In J. McLeskey et al. (Ed.), *High leverage practices for inclusive classrooms* (pp. 3-14). New York, NY: Routledge.
- Friend, M., Cook, L., Chamberlain, D., Shamberger, C. (2010). Co-teaching: An illustration of the complexity of collaboration in special education. *Journal of Education and Psychological Consultation, 20*, 9-27.

Frontline. (2002). *The new rules*. Retrieved from

<https://www.pbs.org/wgbh/pages/frontline/shows/schools/nochild/nclb.html>

Gaines, T., & Barnes, M. (2017). Perceptions and attitudes about inclusion: Findings

across all grade levels and years of teaching experience. *Teacher Education &*

Development. Retrieved from <http://dx.doi.org/10.1080/2331186X.2017.1313561>

Gindis, B. (1999). Vygotsky's vision: Reshaping the practice of special education for the

21st century. *Remedial and Special Education*, 20(6), 333-340.

Graziano, K., & Navarrete, L. (2012). Co-teaching in a teacher education classroom:

Collaboration, compromise, and creativity. *Issues in Teacher Education*, 21(1),

109-126.

Great Schools Partnership. (2013). *Professional development definition*. Glossary of

Education Reform. Retrieved from [https://www.edglossary.org/professional-](https://www.edglossary.org/professional-development/)

[development/](https://www.edglossary.org/professional-development/)

Harvey, M., Yssel, N., Bauserman, A., & Merbler, J. (2008). Preservice teacher

preparation for inclusion: An exploration of higher education teacher-training

institutions. *Remedial and Special Education*, 31(1), 24-33. Retrieved from

<https://doi.org/10.1177%2F0741932508324397>

Hayes, A., & Bulat, J. (2017). *Disabilities inclusive education systems and policies guide*

for low- and middle-income countries. RTI Press Publication No. OP-0043-1707.

Research Triangle Park, NC: RTI Press.

<https://doi.org/10.3768/rtipress.2017.op.0043.1707>

Hernandez, S. J. (2013). Collaboration in special education: Its history, evolution, and critical factors necessary for successful implementation. *Online Submission*

Retrieved from <https://files.eric.ed.gov/fulltext/ED544122.pdf>

Idol, L. (2006). Toward inclusion of special education students in general education: A program evaluation of eight schools. *Remedial and Special Education*, 27(2), 77-94.

The Individualized Education Program Process in Special Education. (2013). Retrieved from <http://www.specialeducationguide.com/pre-k-12/individualized-education-programs-iep/the-iep-process-explained/>

Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004).

Individuals with Disabilities Education Act Regulations, 34 C.F.R. §300.1-300.589 (2004).

Jefferson-Jenkins, C., & Hill, M. H. (2011). Role of federal government in public education: Historical perspectives. Retrieved from <https://www.lwv.org/role-federal-government-public-education-historical-perspectives>

Johnson, D., & Homan, N. (n.d.) *Special education law and the general education teacher*. Colorado Department of Education. Retrieved from <https://www.d11.org/cms/lib/CO02201641/Centricity/Domain/547/Special Education Law and the General Education Teacher.docx>

Kadakia, G. G. (2017). *Elementary teachers' perceptions of the effectiveness of co-teaching*. Available from Walden Dissertations and Doctoral Studies. Retrieved from <https://scholarworks.waldenu.edu/dissertations/4068/>

- Keefe, E., & Moore, V. (2004). The challenge of co-teaching in inclusive classrooms at the high school level: What the teachers told us. *American Secondary Education*, 32(3), 77-88.
- Keene, M. E. (2018). *Co-teaching in inclusion classrooms: An investigation of secondary inclusion practices* (Order No. 10813459). Available from Dissertations & Theses @ Gardner-Webb. (2077034055). Retrieved from <http://ezproxy.gardner-webb.edu/login?url=https://search.proquest.com/docview/2077034055?accountid=11041>
- Kern, E. (2006). Survey of teacher attitude regarding inclusive education within an urban school district. Available from School Psychology Commons. Retrieved from http://digitalcommons.pcom.edu/psychology_dissertation
- Kim, J. (2011). Influence of teacher preparation programmes on preservice teachers' attitudes toward inclusion. *International Journal of Inclusive Education*, 15(3), 355-377. doi:10.1080/13603110903030097
- King-Sears, M., Carran, D., Dammann, S., & Arter, P. (2012). Multi-site analyses of special education and general education student teachers' skill ratings for working with students with disabilities. *Teacher Education Quarterly*, 39(2), 131-149. Retrieved March 18, 2020, from www.jstor.org/stable/23479676
- Klein, A. (2015). No child left behind overview: Definitions, requirements, criticisms, and more. Retrieved from <http://www.edweek.org/ew/section/multimedia/no-child-left-behind-overview-definition-summary.html>

- Kozik, P., Cooney, B., Vinciguerra, S., Gradel, K., & Black, J. (2009). Promoting inclusion in secondary schools through appreciative inquiry. *American Secondary Education*, 38(1), 77-91.
- Learning About IEPs. (2019). Retrieved from <https://www.understood.org/en/school-learning/special-services/ieps/what-is-an-iep>
- Magiera, K., Smith, C., Zigmond, N., & Gebauer, K. (2005). Benefits of co-teaching in secondary mathematics classes. *TEACHING Exceptional Children*, 37(3), 20–24. doi:10.1177/004005990503700303
- Mahat, M. (2008). The development of a psychometrically-sound instrument to measure teachers' multidimensional attitudes toward inclusive education. *International Journal of Special Education*, 23(1), 82-92.
- Mastropieri, M. A., & Scruggs, T. E. (2001). Promoting inclusion in secondary classrooms. *Learning Disabilities Quarterly*, 24(4), 265-274.
- Mastropieri, M. A., & Scruggs, T. E. (2017). Making inclusion work with co-teaching. *TEACHING Exceptional Children*, 49(4), 284-293.
- McCray, E. D., & McHatton, P. A. (2011). Less afraid to have them in my classroom: Understanding pre-service general educators' perceptions about inclusion. *Teacher Education Quarterly*, 38(4), 135-155.
- McLeod, S. (2016). Bandura – Social learning theory. Retrieved from www.simplypsychology.org/bandura.html
- McLeskey, J., Barringer, M., Billingsley, B., Brownell, M., Jackson, D., Kennedy, M., ... Ziegler, D. (2017). *High-leverage practices in special education*. Arlington, VA: Council for Exceptional Children & CEEDAR Center.

- McLeskey, J., Maheady, L., Billingsley, B., Brownell, M., & Lewis, T. (2019). *High leverage practices for inclusive classrooms*. New York, NY: Routledge.
- Merriam-Webster. (n.d.). Perception. In *Merriam-Webster.com dictionary*. Retrieved March 17, 2020, from <https://www.merriam-webster.com/dictionary/perception>
- Mills v. Board of Education of District of Columbia, 348 F.Supp. 866 (1972).
- Moody, J. (2018). A guide to different types of college degrees. Retrieved from <https://www.usnews.com/education/best-colleges/articles/a-guide-to-different-types-of-college-degrees>
- Murawski, W. (n.d.). Successful co-teaching. Retrieved from <https://www.cec.sped.org/News/Special-Education-Today/Need-to-Know/Need-to-Know-CoTeaching>
- Murawski, W., & Bernhardt, P. (2016). An administrator's guide to co-teaching. *Educational Leadership*, 73(4), 30–34. Retrieved from http://www.ascd.org/publications/educational_leadership/dec15/vol73/num04/An_Administrator's_Guide_to_Co-Teaching.aspx
- Murawski, W., & Dieker, L. (2004). Tips and strategies for co-teaching at the secondary level. *TEACHING Exceptional Children*, 36(5), 52-58. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.453.3368&rep=rep1&type=pdf>
- Murawski, W., & Lochner, W. (2011). Observing co-teaching: What to ask for, look for, and listen for. *Intervention in School and Clinic*, 46(3), 174-183.
doi:10.1177/1053451210378165

- National Center for Learning Disabilities. (2019). Highlights of key provisions and important changes in the final regulations for IDEA 2004. *LD Online*. Retrieved from <http://www.ldonline.org/article/11201/>
- National Center for Postsecondary Improvement. (2003). *New NCPI Products*. Retrieved from <https://web.stanford.edu/group/ncpi/unspecified/toolkits.shtml#toolkitseries>
- National Education Association. (2019). *Who are paraeducators?* Retrieved from <http://www.nea.org/home/67057.htm>
- National Research Council. (2000). *Educating teachers of science, mathematics, and technology: New practices for the new millennium*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/9832>
- Olinger, B. L. (2013). *Elementary teachers' perspectives of inclusion in the regular education classroom* (Doctoral dissertation). Retrieved from Electronic Theses and Dissertations. <http://dc.etsu.edu/etd/1179>
- PACER Center (2020). *Early childhood family information and resources*. Retrieved from <https://www.pacer.org/ec/early-intervention/least-restrictive-environments.asp>
- Pennell, D. (2012). Creating a master schedule that supports inclusive practices. William & Mary School of Education. Retrieved from <https://education.wm.edu/centers/ttac/resources/articles/inclusion/creatingmasterschedule/index.php>
- Pennsylvania Association for Retarded Children (P.A.R.C.) v. Commonwealth of Pennsylvania, 344 F. Supp. 297 (E.D. PA 1972).

Pratt, S., Imbody, S., Wolf, L., & Patterson, A. (2017). Co-planning in co-teaching: A practical solution. *Intervention in School and Clinic*, 52(4), 243-249.

doi:10.1177/1053451216659474

Qualtrics XM. (n.d.). Retrieved March 6, 2020, from Qualtrics XM website:

<https://www.qualtrics.com/core-xm/survey-software/>

Rehabilitation Act of 1973. (n.d.). Retrieved from

<https://www.disability.gov/rehabilitation-act-1973>

Rexroat-Frazier, N., & Chamberlin, S. (2019). Best practices in co-teaching mathematics with special needs students. *Journal of Research in Special Education Needs*

19(3), 173-183. doi:10.1111/1471-3802.12439

The Right to Education. (2016). Retrieved from [http://disabilityjustice.org/right-to-](http://disabilityjustice.org/right-to-education/)

[education/](http://disabilityjustice.org/right-to-education/)

Shippen, M. E., Crites, S. A., Houchins, D. E., Ramsey, M. L., & Simon, M. (2005). Pre-service teachers' perceptions of including students with disabilities. *Teacher Education and Special Education*, 28(2), 92-99.

Shippen, M. E., Flores, M. M., Crites, S. A., Patterson, D., Ramsey, M. L., Houchins, D.

E., & Jolivette, K. (2011). Classroom structure and teacher efficacy in serving students with disabilities: Differences in elementary and secondary teachers. *International Journal of Special Education*, 26(3), 36-44.

Sinclair, A. C., Bray, L. E., Wei, Y., Clancy, E. E., Wexler, J., Kearns, D. M., & Lemons, C. J. (2019). Co-teaching in content area classrooms: Lessons and guiding questions for administrators. *NASSP Bulletin*, 102(4), 303-322.

- Solis, M., Vaughn, S., Swanson, E., & McCulley, L. (2012). Collaborative models of instruction: The empirical foundations of inclusion and co-teaching. *Psychology in the Schools*, 49(5), 498–510. doi:10.1002/pits.21606
- South Carolina Department of Education. (2020). *About the South Carolina educator certification*. Retrieved from <http://ed.sc.gov/educators/teaching-in-south-carolina/aspiring-educators>
- South Carolina Special Education Certification & Requirements. (2020). Retrieved March 18, 2020, from <https://www.specialeducationguide.com/teacher-certification/south-carolina/>
- Special Education Teachers: Occupational Outlook Handbook. (2019). Retrieved from <https://www.bls.gov/ooh/education-training-and-library/special-education-teachers.htm>
- Steckler, A., McLeroy, K. R., Goodman, R. M., Bird, S. T., & McCormick, L. (1992). Toward integrating qualitative and quantitative methods: An introduction. *Health Education Quarterly*, 19(1), 1–8.
- Stefanidis, A., King-Sears, M., & Brawand, A. (2018). Benefits for coteachers of students with disabilities: Do contextual factors matter? *Psychology in the Schools* 56(4), 539-553. Retrieved from <https://doi.org/10.1002/pits.22207>
- Strawderman, C., & Lindsey, P. (1995). Keeping up with the times: Reform in teacher education. *Journal of Teacher Education*, 46(2), 95-100.
doi:10.1177/0022487195046002003

- Sullivan, G., & Artino, A. (2013). Analyzing and interpreting data from Likert-type scales. *Journal of Graduate Medical Education*, December, 541-542.
doi:<http://dx.doi.org/10.4300/JGME-5-4-18>
- Thirty-Five Years of Progress in Educating Children with Disabilities Through IDEA (2010). Retrieved from
http://www2.ed.gov/about/offices/list/osers/idea35/history/index_pg10.html
- Thomas, D. (2003). A general inductive approach for qualitative data analysis. *The American Journal of Evaluation*, 27, 1-11.
- Thompkins, R., & Deloney, P. (1995). Inclusion: The pros and cons. *Educational Leadership*, 4(3). Retrieved from
https://pdfs.semanticscholar.org/1c24/a606d25b12b61009745c7b887a0cba1deec7.pdf?_ga=2.179363872.580830327.1584490411-1281302327.1584490411
- Trochim, W. M. K. (2006). Likert scaling. Retrieved from
<https://socialresearchmethods.net/kb/scallik.php>
- Trochim, W. M. K. (2020). Descriptive statistics. Retrieved March 9, 2020, from
<https://socialresearchmethods.net/kb/descriptive-statistics/>
- United States Department of Education. (2005). *New no child left behind flexibility: Highly qualified teachers*. Retrieved from
<https://www2.ed.gov/nclb/methods/teachers/hqtflexibility.html>
- United States Department of Education, National Center for Education Statistics. (2019). *The Digest of Education Statistics, 2017* (NCES 2018-070). Table 204.60.
- University of Arkansas. (2016). *What is the range of special education students' disabilities?* Retrieved from <https://degree.astate.edu/articles/k-12-education>

- University of Kansas School of Education. (2020). Timeline of the individuals with disabilities education act (IDEA). Retrieved from <https://educationonline.ku.edu/community/idea-timeline>
- Urdan, T. C. (2010). *Statistics in plain English* (3rd ed.). New York, NY: Taylor and Francis Group, LLC.
- Van Laarhoven, T. R., Munk, D. D., Lynch, K., Bosma, J., & Rouse, J. (2007). A model for preparing special and general education pre-service teachers for inclusive education. *Journal of Teacher Education*, 58(5), 440-455.
- Vannette, D. (2019). *Rating scales vs ranking scales: Which survey question to use?* Retrieved from <https://www.qualtrics.com/blog/rating-or-ranking-choosing-the-best-question-type-for-your-data/>
- Vygotskaya, G. (1999). Vygotsky and problems of special education. *Remedial and Special Education*, 20(6), 330-332.
- Wade, E., Welch, M., & Jensen, J. (1994). Teacher receptivity to collaboration: Levels of interest, types of concern, and school characteristics as variables contributing to successful implementation. *Journal of Educational and Psychological Consultation*, 5(3), 177-209.
- Weiss, M., & Lloyd, J. (2002). Congruence between roles and actions of secondary special educators in co-taught and special education settings. *The Journal of Special Education*, 36(2), 58-68.
- What do General Education Teachers Need to Know about Special Education? (2019). Retrieved from <https://schoolpsychologistfiles.com/what-do-general-education-teachers-need-to-know-about-special-education/>

- Whisnant, R. (2015). *Practices and perceptions of regular and special educators co-teaching in the middle and secondary inclusion classrooms* (Order No. 10023690). Available from Dissertations & Theses @ Gardner-Webb. (1769818924). Retrieved from <http://ezproxy.gardnerwebb.edu/login?url=https://search.proquest.com/docview/1769818924?accountid=11041>
- Whitaker, K. L. (2011). *General education teachers' perceptions regarding inclusion in Northeast Georgia middle schools* (Doctoral dissertation). Retrieved from Electronic Theses and Dissertations. <http://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1499&context=doctoral>
- Whitbread, K. (n.d.). *What does the research say about inclusive education?* Wrightslaw. Retrieved October 30, 2016, from <http://www.wrightslaw.com/info/lre.incls.rsrch.whitbread.htm>
- White, N. (2018). *Accommodations for students with dyslexia*. Retrieved from <https://dyslexiaida.org/accommodations-for-students-with-dyslexia/>
- Wiggins, C. C. (2012). *High school teachers' perceptions of inclusion* (Doctoral dissertation). Retrieved from Electronic Theses and Dissertations. <http://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1644&context=doctoral>

- Witcher, M., & Feng, J. (2010). Co-teaching vs. Solo teaching: comparative effects on fifth graders' math achievement. *Mid-South Educational Research Association Annual Conference*. Mobile. Retrieved from <https://files.eric.ed.gov/fulltext/ED533754.pdf>
- Wright, P. (2010). *The history of special education law*. Wrightslaw. Retrieved July 16, 2016, from <http://www.wrightslaw.com/law/art/history.spec.ed.law.htm>
- Yi, E. (2018). Themes don't just emerge: Coding the qualitative data. Retrieved from <https://medium.com/@projectux/themes-dont-just-emerge-coding-the-qualitative-data-95aff874fdce>

Appendix A

Teacher Perceptions of Co-Teaching Survey

Demographic Information

1. Gender: Male Female
2. Age range: Below 25 25-35 36-45 46-55 55+
3. Educational level: Bachelor's Bachelor's+18 Master's
 Master's+30 Doctoral
4. Path to teaching certificate: Traditional College Online College Alternative (career change)
5. Subject area(s) on teaching certificate: _____
6. Number of years teaching at the high school level: _____
7. Number of years teaching in total: _____
8. Number of undergraduate or graduate education courses taken regarding teaching
 students with special needs (with Individual Education Plans - IEPs) and/or co-teaching:

9. Number of school or district-led professional development courses taken regarding
 teaching students with special needs (with Individual Education Plans - IEPs) and/or co-
 teaching: _____
10. Years of experience co-teaching: _____

1	My educational background has prepared me to effectively teach students with mild/moderate cognitive delays and deficits.	SD	D	A	SA
2	I received sufficient training in order to effectively teach students with an IEP through a pre-service teacher preparation course/program.	SD	D	A	SA
3	I am encouraged by my administrators to attend conferences/workshops on teaching students with special needs.	SD	D	A	SA
4	My colleagues (teachers) are willing to help me with issues which may arise when I have students with an IEP in my classroom.	SD	D	A	SA
5	I feel comfortable working collaboratively with special education teachers when students with an IEP are in my classroom.	SD	D	A	SA
6	Collaborative teaching of students with special needs can be effective particularly when students with an IEP are placed in a regular classroom.	SD	D	A	SA
7	I have had positive, effective co-teaching relationships in my classroom.	SD	D	A	SA
8	I have had negative, ineffective co-teaching relationships in my classroom.	SD	D	A	SA
9	When co-teaching, I have had regular, ongoing planning sessions with my co-teacher.	SD	D	A	SA
10	All students benefit from being placed in a co-taught classroom setting.	SD	D	A	SA
11	I received training in successful co-teaching practices through a pre-service teacher preparation course/program.	SD	D	A	SA
12	Administrators solicit feedback of co-teaching practices from general and special education teachers.	SD	D	A	SA
13	Feedback provided to administrators is used to make changes in the school's co-teaching practices.	SD	D	A	SA
14	I am provided with sufficient in-service training through my school district which allows me the ability to teach students with an IEP.	SD	D	A	SA
15	I feel supported by my administrators when faced with challenges in a co-taught classroom.	SD	D	A	SA
16	I am provided with sufficient materials in order to make appropriate accommodations for students with special needs.	SD	D	A	SA
17	My co-teachers have been a vital, contributing factor to the learning environment.	SD	D	A	SA
18	My co-teaching experience has involved both the general education teacher and special education teacher providing instruction in the classroom.	SD	D	A	SA

19	The majority of my co-teaching experience has been the model “One teach, One assist.”	SD	D	A	SA
20	I am satisfied with the co-teaching practices at my school.	SD	D	A	SA

What type of delivery method would be most beneficial to receive training regarding co-teaching to serve students with Individual Education Plans in your classroom?

Please rank from 1 (most beneficial) to 7 (least beneficial).

- _____ District level in-service training
- _____ Out of district training
- _____ Coursework at college/university
- _____ School building level training
- _____ Article(s) provided to you
- _____ Time for consultation with special education teachers
- _____ Observation of successful co-taught classrooms

- 1) Please list questions or topics related to inclusive education and co-teaching for which you feel training would be beneficial:

- 2) Please list any comments or suggestions you would like to share regarding co-teaching in your school:

Thank you for your time and input.

Appendix B

Administrator Interview Protocol Form

(Adapted from NCPI, 2003)

Institutions:

Interviewee (Title and Name):

Interviewer:

Other Topics Discussed:

Post Interview Comments or Leads:

Co-Teaching Interviews

Introductory Protocol

To facilitate our notetaking, I would like to audio tape our conversations today. Please sign the release form. For your information, only myself, as the researcher on the project, will have access to the tapes which will be eventually destroyed after they are transcribed. In addition, you must sign a form devised to meet our human subject requirements. Essentially, this document states that: (1) all information will be held confidential, (2) your participation is voluntary and you may stop at any time if you feel uncomfortable, and (3) we do not intend to inflict any harm. Thank you for your agreeing to participate.

We have planned this interview to last no longer than fifteen minutes. During this time, we have several questions that we would like to cover. If time begins to run short, it may be necessary to interrupt you in order to push ahead and complete this line of questioning.

Introduction

You have been selected to speak with me today because you have been identified as someone who has a great deal to share about instruction and co-teaching practices in our school(s). This research project focuses on the assessment of co-teaching at the high school level, with particular interest in understanding how teacher and administrator training effects perceptions of current co-teaching practices. Our study does not aim to evaluate your techniques or experiences. Rather, an effort to learn more about perceptions, strengths, and possible weaknesses of co-teaching in our district at the high school level.

A. Interviewee Background

What is your role in the district?

How long have you been ...?

_____ in your present position?

_____ at this institution?

Interesting background information on interviewee:

What is your highest degree? _____

What is your field of study? _____

1. Briefly describe your understanding of co-teaching in high school inclusion classrooms.

Probe: What does it mean to co-teach?

2. What do you consider an ideal co-teaching arrangement regarding the delivery of instruction in a classroom with both a general education teacher and a special education teacher?

Probe: What are the responsibilities of the teachers individually and as a partnership?

3. What types of training/professional development has been provided in this school/district regarding co-teaching?

Probes: Workshops? Guidance? Observations?

3. Are there plans for future co-teaching professional development at the school and/or district level?

Probe: What are possible topics for the sessions?

4. What factors are important for successful co-teaching in high schools?

Probe: Support? Volunteers? Planning?

5. What perceived limitations might exist regarding the implementation and practice of co-teaching at the high school level?

Probe: Possible concerns from administrators or teachers?

Post Interview Comments and/or Observations:

Appendix C

Survey Participant Email #1

Tori Hill

Fri 2/7/2020 9:58 AM



Good afternoon!

Through collaboration with our district office, I am currently working on a research study that focuses on co-teaching practices at the secondary level. Based on your role in the secondary setting, your experience and knowledge of co-teaching would be beneficial to the study.

The survey should take about 10 minutes of your time. No identifying information will be collected making your responses voluntary and confidential. Responses from all participants will be compiled and analyzed as a group. Neither your choice to participate nor your responses to this survey have any impact on you as a teacher and employee of [REDACTED] District or your individual school. The survey can be accessed by following the link. The informed consent for participation is located on the first page of the survey.

The survey window will be open through February 21, 2020. We appreciate your participation as the greater number of respondents allows for a more clear picture of practices in our district. If you are ready to take the survey, click the following link: [Perceptions of Co-Teaching](#) (opens in new window).

Thank you!

Tori Hill

Mrs. Tori Hill, M.Ed., NBCT

[REDACTED]
[REDACTED]

Appendix D

Survey Participant Email #2

Tori Hill

Fri 2/14/2020 11:55 AM



Good afternoon!

We would like to send a huge THANK YOU to those who have already completed the [Perceptions of Co-Teaching](#) survey. Your responses have been very insightful and will greatly contribute to our study of co-teaching at the high school level. The survey will remain open until the end of the day on Friday, February 21, 2020.

The average response time for the survey is about 10 minutes. No identifying information will be collected, making your responses voluntary and confidential. Responses from all participants will be compiled and analyzed as a group. Neither your choice to participate nor your responses to this survey have any impact on you as a teacher and employee of the [REDACTED] District or your individual school. The survey can be accessed below and the informed consent for participation is located on the first page of the survey.

We appreciate your participation as the greater number of respondents allows for a more clear picture of practices in our district. To access the survey, click the following link: [Perceptions of Co-Teaching](#) (opens in new window).

Thank you!

Tori Hill

Mrs. Tori Hill, M.Ed., NBCT

[REDACTED]
[REDACTED]

Appendix E

Survey Participant Email #3

Tori Hill
Fri 2/21/2020 12:37 PM



Good afternoon!

We would like to send a final THANK YOU to everyone who has completed the [Perceptions of Co-Teaching](#) survey. Your responses have been very insightful and will greatly contribute to our study of co-teaching at the high school level. If you have not yet completed the survey, there is still time. The link will remain active until 11:59pm today, Friday, February 21, 2020.

The average response time for the survey is about 10 minutes. No identifying information will be collected, making your responses voluntary and confidential. Responses from all participants will be compiled and analyzed as a group. Neither your choice to participate nor your responses to this survey have any impact on you as a teacher and employee of the [REDACTED] District or your individual school. The survey can be accessed below and the informed consent for participation is located on the first page of the survey.

We appreciate your participation as the greater number of respondents allows for a more clear picture of practices in our district. To access the survey, click the following link: [Perceptions of Co-Teaching](#) (opens in new window).

Thank you!

Tori Hill

Mrs. Tori Hill, M.Ed., NBCT

Appendix F

Co-Teaching Observation Checklist Part 1

Murawski and Lochner (2011)

To demonstrate the following aspects of Co-Teaching		Ask-For Items	0 - Didn't See It 1-Saw an attempt 2-Saw It Done Well			
CO-PLANNING	What to Look For					
Lesson Plans	Murawski's (2007) CTSS Teachers' Toolbox Lesson Maker and Dieker's (2006) Co-Teaching Lesson Plan Book are excellent resource. Lesson Plans should demonstrate that both teachers have had input and will be actively engaged with all students.	0	1	2		
Modified Materials/Videos	Co-teachers who have planned together proactively will have materials ready prior to the lesson. These may include books on tape, modified assignments, close-captioned video, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Letters Home/Syllabi	All materials that are sent home to parents/guardians can help demonstrate that co-teachers are engaged in co-planning. They should be co-signed and indicate a parity between teachers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
SHARE Worksheets	Co-teachers should have completed the SHARE worksheets recommended by Murawski and Dieker (2004)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Problem Solving Worksheet	Co-teachers should be able to provide evidence of problem-solving. They can use Murawski's (2005) Problem Solving Worksheet or similar formats to work through major problems together.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
CO-INSTRUCTION		0			1	2
Behavior Documentation	Co-teachers should be able to produce documentation of data they collect while co-teaching. This documentation could include behaviors, homework, tardiness, social skills, classwork and/or participation. It should be evident that both teachers have participated in data collection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Tiered Lessons	Co-teachers should be able to demonstrate how lessons are tiered to provide differentiated instruction to a variety of individual learners. Lessons should address the high achievers(H), average achievers(A), low achievers(L), and others(O) - in essence, the lesson provides an opportunity to address the teachers' HALO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Class Notes	Class notes indicate what was taught during the class and specifically, what was emphasized. They also include mnemonics taught, and in some cases, modifications made. Co-teachers should not be taking notes on one another; that would be a waste of adult time. However, carbon paper can be given to a student who takes exemplary notes and copies can be retained for those who need them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
CO-ASSESSING		0			1	2
Grade Book	Administrators can ask co-teachers to provide a copy of their gradebooks. Even if one teacher does the actual recording of grades, it should be evident that both teachers had a hand in grading and communicating about assessments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Modified Assignments	Assignments and assessments need to be tailored to individual needs. Co-teachers should be able to provide copies of modified tests, examples of accommodations given to students with special needs, and lists of IEP requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Description of how students are individually graded	Co-teachers should have proactively discussed grading and how they will accommodate different learners. They may choose from a variety of different grading options (e.g. Struyk et al); however it is critical that they have discussed grading proactively. Co-teachers should be able to provide a list, description or contract to demonstrate how students with special needs will be graded in the inclusive classroom. They may even have documentation of when they called or wrote parents to inform them of how the student with special needs would be graded in class.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Appendix G

Co-Teaching Observation Checklist Part 2

Murawski and Lochner (2011)

LOOK FORS	Rating Scale		
	0 - Didn't See It	1- Saw an Attempt	2- Saw it Done Well
Two or more professionals working together in the same physical space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Class environment demonstrates parity and collaboration (both names on board, sharing materials and space)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Both teachers begin and end class together and remain in room entire time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
During instruction, both teachers assist students with and without disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The class moves smoothly with evidence of co-planning and communication between co-teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Differentiated strategies, to include technology, are used to meet the range of learning needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A variety of instructional approaches (5 co-teaching approaches) are used, include regrouping students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Both teachers engage in appropriate behavior management strategies as needed and are consistent in their approach to behavior management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is difficult to tell the special educator from the general educator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is difficult to tell the special education students from the general education students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LISTEN FORS			
Co-teachers use of language ("we";"our") demonstrates true collaboration and shared responsibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-teachers phrase questions and statements so that it is obvious that all students in the class are included	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Students' conversations evidence a sense of community (including peers with and without disabilities)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-teachers ask questions at a variety of levels to meet all students' needs (basic recall to higher order thinking)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix H
Co-Teaching Planning Guide

School

Co-Teaching Planning Guide

Subject:		Teacher:	
Grade Level:		Date(s):	
Essential Question(s)/I Can Statements/Learning Targets:		Technology:	
1. 2. 3. 4.			
Materials/Resources:		Vocabulary:	
Unit:	Duration (Days):	Lesson(s):	

MONDAY			Time
Standard and Objective:			
	General Education Teacher	Special Education Teacher	
Warm-Up			
Modeled (Teacher)			
Shared (Teacher with Students)			
Guided (Students with Teachers)			
Independent Student Work			
Wrap Up/Assessment:			
Co-Teaching Model Used:			
Interventions/ Strategies:			
Teacher Preparation Notes:			
Reflection:(worked well, suggestions for future lessons)			

School

Co-Teaching Planning Guide

TUESDAY			Time
Standard and Objective:			
	General Education Teacher	Special Education Teacher	
Warm-Up			
Modeled (Teacher)			
Shared (Teacher with Students)			
Guided (Students with Teachers)			
Independent Student Work			
Wrap Up/Assessment:			
Co-Teaching Model Used:			
Interventions/ Strategies:			
Teacher Preparation Notes:			
Reflection:(worked well, suggestions for future lessons)			
WEDNESDAY			Time
Standard and Objective:			
	General Education Teacher	Special Education Teacher	
Warm-Up			
Modeled (Teacher)			
Shared (Teacher with Students)			
Guided (Students with Teachers)			
Independent Student Work			
Wrap Up/Assessment:			
Co-Teaching Model Used:			
Interventions/ Strategies:			
Teacher Preparation Notes:			
Reflection:(worked well, suggestions for future lessons)			

School

Co-Teaching Planning Guide

THURSDAY			Time
Standard and Objective:			
	General Education Teacher	Special Education Teacher	
Warm-Up			
Modeled (Teacher)			
Shared (Teacher with Students)			
Guided (Students with Teachers)			
Independent Student Work			
Wrap Up/Assessment:			
Co-Teaching Model Used:			
Interventions/ Strategies:			
Teacher Preparation Notes:			
Reflection:(worked well, suggestions for future lessons)			
FRIDAY			Time
Standard and Objective:			
	General Education Teacher	Special Education Teacher	
Warm-Up			
Modeled (Teacher)			
Shared (Teacher with Students)			
Guided (Students with Teachers)			
Independent Student Work			
Wrap Up/Assessment:			
Co-Teaching Model Used:			
Interventions/ Strategies:			
Teacher Preparation Notes:			
Reflection:(worked well, suggestions for future lessons)			