A CASE STUDY EXAMINING THE SECONDARY CO-TEACHING PROGRAM AT
A SOUTH JERSEY HIGH SCHOOL

By

KAREN R. LEDERLE FOGLIA

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Approved by

_____
Dr. Dan Battey, Chair

_____
Dr. Edith Ferris, Committee

_____
Dr. Anne Gunteski, Committee

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Abstract

A review of secondary co-teaching literature investigated the relationship between general and special educators in the high school inclusive classroom. The studies, using qualitative methods, examined the construction of co-teaching and identified characteristics of, preparation for, and factors such as professional development associated with secondary co-teaching teams. These studies have focused on the elements that help to ensure successful secondary co-teaching. Co-teachers at the secondary level, however, face obstacles in the implementation of the co-teaching program. This research provided a background for studying the several characteristics and actions of co-teaching to determine how special and general educators implement a south Jersey high school co-teaching program. In addition, data collected during this study generated a clearer understanding of co-teachers' needs for resources and training. Co-teachers' expressed that planning time and professional development can assist them in further development of their co-teaching knowledge and skills and improve their instruction in their inclusive classrooms. The results will benefit many groups of program stakeholders in the high school district including administrators, all students in inclusive general education classrooms, and especially co-teachers.

This study utilized surveys, co-teacher classroom observations, semi-structured interviews, and co-teaching documents such as lessons and assessments. Survey participants included all high school co-teaching teams and four teams from the various content areas and backgrounds to participate in two sets of classroom observations and semi-structured interviews. Participants in the survey rated co-teaching characteristics and offered anecdotal comment about the co-teaching program. Co-teaching observations were made using a structured observation form and semi-structured interviews were audio-recorded. Field notes were taken during the

observation and interview phases. All participant responses are confidential and reported as group analysis only.

Four major themes emerged from this research: (1) how co-teaching teams are assigned – special education co-teachers are scheduled into the general education inclusive classroom, there is little to no teacher input and often the special educator works with many co-teachers daily generating complications and inconsistencies in the co-taught classroom. In addition, co-teaching teams change from year to year which is disruptive to co-teaching team relationships; (2) what the secondary co-taught classroom looks like – there are many interpretations with limited consistency between co-taught classrooms; (3) planning time – there is very limited planning time and in many cases no planning time which impacts effective instruction; (4) co-teacher training – co-teachers expressed a need for co-teaching guidelines and district support that provides assistance to co-teachers for improvement of co-teaching skills. Training and support is especially needed for new co-teaching teams. Across these themes it was the assignment of co-teaching teams that constrained each of the other factors. Co-teaching partnerships were affected by unfamiliarity with the co-teacher and working with many co-teachers daily. These conditions impacted co-planning, the structure of the co-taught classroom, and co-teacher instructional roles.

The aim of this study is to use findings to inform the instructional decisions by administrators and co-teachers. This case study demonstrated the importance of talking with special and general education co-teachers to understand how co-teaching is implemented and, more importantly, to understand the needs of co-teachers. The ability of special and general educators to work together collaboratively to deliver effective instruction to students in the inclusive classroom will strengthen the capacity of the district co-teaching program.

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I have always been an advocate for learning. Throughout my thirty-eight year career as a special educator I have continually endeavored to improve my abilities to effectively work with colleagues and provide the best instruction possible for my students. Completing my doctorate was always one of my goals. As life happened, that goal was put on the back burner. Other more immediate challenges had to be faced and overcome. Now, here I am realizing that dream. This achievement did not happen by itself. There are many people who assisted me through this, yes, adventure. It is fitting at this time to acknowledge my appreciation for their tutelage, expertise, and support.

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Dedication

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CHAPTER 1: INTRODUCTION

The passing of the Federal Individuals with Disabilities in Education Act in 1990 set the stage for increasing numbers of students with disabilities to have access to and participate in the general education curriculum. Reauthorization of IDEA in 1997 and 2004 further required that, to the maximum extent appropriate, students with disabilities should be educated with students who are not disabled in the general education classroom. Adding to the demand for knowledgeable teachers of students with disabilities, No Child Left Behind (NCLB, 2004) requires that all students have access to highly qualified teachers. A highly qualified teacher must meet federal and state standards of proficiency for certification in their content area. Due both to the inclusion of students with disabilities in general education classes and definitions of highly qualified, co-teaching has developed as an increasingly needed and feasible service delivery option for schools (Murawski & Dieker, 2004).

Under NCLB, students with disabilities in the secondary general education classroom are expected to meet the same academic standards as their non-disabled peers. To meet content standards co-teaching models have been employed where it is assumed that the general and special educator work together to facilitate instruction to meet the needs of both general and special education student populations. In a co-teaching model, both educators should deliver and reinforce content taking a co-active and coordinated approach to jointly teaching academically diverse students; instruction becomes accessible, meaningful and useful (Friend, 2008). Vaughn, Bos, and Schumm (2011) suggest that both general and special educators in the high school core content classroom work together to ensure students with disabilities have access to the general education curriculum. Both teachers should plan lessons using appropriate aids and modifications, assist students with disabilities in meeting the core content standards and work

with all students in the mainstream. In this manner, the special education staff will work with

general education students and the general education staff will work with special education

students, be a part of the IEP team and assist in the development and implementation of the IEP.

In addition to providing a model for delivering instruction, co-teaching researchers

suggest that a number of conditions and strategies are needed to meet the needs of students in a

co-taught classroom (Davis, Dieker, Pearl, & Kirkpatrick, 2012; Villa, Thousand, Nevin, &

Liston, 2005). Conditions include time for preparation and planning, co-teacher compatibility,

and effective collaboration and content area skills. Strategies needed include reinforcement of

content through clarification, questioning, providing feedback, assistance with material and

content modifications, and cross-curricular strategies that emphasize common themes. However,

educators can struggle with content strategies and curricular adaptations. They express a desire

for training that will provide them with effective instructional skills to teach the diversity of

students in the general education classroom (van Hover & Yeager, 2003; Weiss & Lloyd, 2003).

A lack of clear definition of co-teacher classroom roles impacts a co-teaching program

(Keefe & Moore, 2004; Dieker & Murawski, 2003). The secondary curriculum has a wide

range of complexities: pace of instruction to meet content standards, district and state testing,

class scheduling and student caseload is not always taken into consideration (Keefe & Moore,

2004). For special education students in the general education classroom, delivery of instruction

may be high quality but general educators do not always have a clear understanding of the

Individualized Education Plan (IEP) goals and objectives and how they link to the content. If

secondary general education teachers do not understand the accommodations needed for special

education students, the idea behind co-teaching is that they can co-plan and rely on the

knowledge of special education teachers. General educators indicate little preparation regarding

students with disabilities and as a result co-teaching is not always embraced by the general

educator (Keefe & Moore, 2004).

Dieker and Murawski (2003) have offered suggestions from the field that can enhance the

effectiveness of co-teachers. They acknowledge the variables that impact secondary education

and indicate that an important "key to success is to start early and clearly identify how the [co-

teaching] process will be implemented" (p. 11). For this to occur, educators must be prepared

for the demands of co-teaching. Skills in collaboration, content knowledge and teaching

strategies, content modifications, and student accommodations should be addressed through

continued professional development (Keefe & Moore, 2004; Scruggs, Mastropieri, & Okolo,

2008; van Hover & Yeager, 2003).

Statement of the Problem

Considering the legislative criteria addressing the inclusion of students with disabilities in

the general education curriculum over the last twenty years, a south Jersey high school (SJHSD)

district began planning for its initial high school co-teaching program in 1992. This method had

the goal of providing meaningful instruction for students with disabilities in the general

education classroom. Implementation took place the following school year. The establishment

of co-teaching teams followed research recommendations as well as federal and state legislative

guidelines. General and special education staff were asked if they would like to participate as

part of a co-teaching team and interested teachers were able to pair with a co-teaching partner

they knew and worked well with. Administration supported the implementation of the co-

teaching program placing emphasis on professional development in content knowledge skills

special education modifications and instructional strategies. Pre-implementation professional

development and summer co-teaching curriculum planning were provided and co-teaching teams

were paired so that each worked with the same person in the same content area, having similar schedules. This type of structure provided ample time to discuss lesson instruction, content modifications, instructional strategies, classroom set-up, teacher roles, delivery of content, and student progress.

Co-teaching teams were encouraged by administration to visit colleagues' classrooms to observe each co-teaching team's instructional approaches and strategies. Opportunity was provided at monthly department meetings for co-teachers to discuss professional training, classroom visits, and share instructional strategies that were successful in meeting the needs of all students. The modeling of co-teaching skills, instructional strategies, and content modifications in co-taught classrooms was also encouraged. This innovative practice continued for several years but ended when the district began to experience a huge growth in student population. Budget re-allocation and scheduling constraints limited co-teaching supports and resources.

The high school district began facilities expansion in 1994 with a building project that was completed in 1998. Additional staff were hired to meet growing student population; special education staff tripled to over forty teachers, seventeen instructional aides and two full time Child Study Teams. The initial co-teaching teams in the core content areas of English, Social Studies, Science, and Mathematics were expanded across all grade level content area subjects. Teachers were assigned to co-teaching teams without input, professional development, or the opportunity to visit other co-taught classes as was in past practice. With this growth, co-teaching teams interpreted definitions of co-teaching and instructional service delivery differently. Original teaching teams were split with the special educator often assigned to several general educators in different content areas. This assignment, in most cases, eliminated common

preparation time and co-teachers found the logistics to schedule planning time was difficult. While the initial implementation of co-teaching in the early to mid nineties was outstanding, the quality of the reform was slowly degraded by restructuring of co-teaching teams, less time for collaboration, and the reallocation of resources away from the reform.

The high school district presently has an enrollment of about two thousand one hundred students in grades nine through twelve. About six hundred students are eligible for special education and related services. More than two-thirds of the special education population is receiving instruction in the general education classroom. Presently, there are forty four co-teaching teams in the high school consisting of fourteen special educators and twenty eight general educators. This represents a reduction in co-teaching teams from the previous 2012-2013 school year. Twelve of the fourteen special educators are assigned to co-teach with two or more general educators. This situation limits planning time. About one third of the general educators have little or no experience with co-teaching. Student class scheduling this year has resulted in increased class size and student caseloads, co-teaching resources have dwindled, and co-teaching professional development is no longer provided by the district as part of the co-teaching program. This current model of co-teaching within the district contradicts the research that supports co-teachers volunteering to work with one another (Dieker & Murawski, 2003; Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010; Mastropieri, Scruggs, Graetz, Norland, Gardizi, & McDuffie, 2005), co-teacher planning time and thoughtful scheduling is essential for effective content delivery and curriculum modification (Villa, Thousand, Nevin, & Liston, 2005; Weiss & Lloyd, 2003), and resources such as professional development assist in improving co-teaching knowledge and skills (Leko & Brownell, 2009; Kosko & Wilkins, 2009; Villa, Thousand, Nevin, & Liston, 2005). The SJHSD co-teaching model that was initially so

successful in which general and special educators planned, trained, and worked collaboratively to

teach students with disabilities in the general education classroom no longer has the resources or

support for continued success.

Purpose of the Study

Given the changes that have occurred in the district co-teaching program and the

increased focus on student achievement, teacher quality, and accountability, the purpose of this

research study was to identify how co-teaching is implemented and to examine the effect that

professional development has on the needs of the high school co-teaching program. I

investigated, through this case study, the characteristics of co-teaching and co-teacher roles and

actions that impact the implementation of the co-teaching program. The roles and actions were

measured through surveys, observation, interviews, and co-teacher documents. Co-teachers must

work together, collaboratively, using evidence based practice to provide effective instruction for

the diverse needs of students in their classroom. The initial intent of this case study was to also

measure the impact that professional development has, the meaning co-teachers give to

knowledge and skills acquired from in-service training opportunities, and how they use those

skills. However, planned district level co-teaching professional development was rescheduled

due to district constraints and a focus on preparing for SGO assessments and the new statewide

high stakes testing that replace the High School Proficiency Assessment, the PARCC. As a

result of the shift in district in-service and department meetings, co-teaching professional

development was limited. Participants in the district co-teaching case study emphasized a need

for professional development rather than how they used co-teaching knowledge and skills in

their classroom. Given this situation, there was a re-thinking of and change to the research

questions. To question 1 an additional sub-question was added, "How do co-teachers, from the

various content areas and experience, make use of co-teaching knowledge and skills while implementing the current co-teaching model?" Research Question 2 was changed from the original question of "How do co-teachers from the various content areas and experience make use of co-teaching knowledge and skills while engaged in district co-teaching professional development?" to "What are the professional development needs of co-teachers from the various content areas and experiences?" Sub-question 2 was changed from "How do co-teachers use professional development knowledge and skills in their classroom?" to "How can co-teachers use professional development knowledge and skills in their classroom?"

It was anticipated, even with the change in planned professional development, that this investigation would identify characteristics and qualities that inform and guide co-teaching practice and lead to improvements in the district co-teaching program.

Research Questions

The main research questions that will guide this study are:

1. What are the characteristics of the south Jersey high school district co-teaching model?
   a) How is the high school co-teaching program implemented?
   b) How do co-teachers, from the various content areas and experience, make use of co-teaching knowledge and skills while implementing the current co-teaching model?

2. What are the professional development needs of co-teachers from the various content areas and experience?
   a) How can co-teachers use professional development knowledge and skills in their classroom?

CHAPTER 2: LITERATURE REVIEW

General and special education teachers working together in a single classroom is important as more students with disabilities are gaining access to the general education curriculum (Bouck, 2007). Co-teaching is a practice many schools are using to deliver content instruction as a service delivery option for students with disabilities in the general education classroom. This practice is increasing at the secondary level to address the inclusion movement (Dieker & Murawski, 2003).

According to Keefe and Moore (2004), co-teaching practices at the elementary level, identifying the benefits and challenges, are relatively well documented. Research at the secondary level is generally limited (Dieker, 2001) and in a review of secondary programs for students with disabilities in the general education curriculum, relevant research on the secondary level was problematic (Mastropieri & Scruggs, 2001). Mastropieri and colleagues (2005) elaborated on secondary co-teaching research indicating that literature provides limited support for co-teaching and there are problems with reporting co-teaching research. Problems such as interviewing only successful co-teaching teams, omitting information about measures, and stating outcomes subjectively were identified. Few studies are available that report on what co-teachers actually did in their classroom. Secondary co-teaching scholarship seems to focus on developing definitions and the identification of the characteristics of co-teaching (Cook & Friend, 1995; Dieker & Murawski, 2003; Bouck, 2007; Rice, Drame, Owens, & Frattura, 2007). Bouck (2007) attempted to further describe the co-teaching model by using definitions developed in previous studies (Cook & Friend, 2000; Dieker & Murawski, 2003). Each definition Bouck looked at used actions of co-teachers; one described who co-taught and where this action took place. The other definition described models of co-teaching that could provide a framework for

other secondary co-teaching teams to use (Dieker, 2001). Results of Bouck's study showed the

complexity of the co-teaching relationship in which each teacher's role was negotiated. Co-

teachers constructed their interaction in a single classroom while addressing barriers and

tensions. Bouck's work, as well as Rice, Drame, Owens, and Frattura (2007) took the

description of co-teaching a step further by identifying factors that influence and affect co-

teaching. Those factors could be viewed by co-teachers as opportunities or constraints. Dieker

and Murawski (2003) emphasized a need for a clear definition of co-teacher roles. Without one,

constraints that exist at the secondary level can significantly impact a co-teaching program.

In a 1997 study, Christine Walther-Thomas found indications that co-teaching in middle

school as compared to elementary school called for differences of approach. The differences in

middle school as compared to elementary school result from older students, more complex

scheduling restrictions, and variability in resources. Those findings raised a question for Rice

and Zigmond (2000): are further adaptations required for co-teachers at the secondary level? In

comparing the elementary and secondary setting, they state that elementary general education

curriculum is dominated by the learning of basic skills in literacy and mathematics and there are

many opportunities for special educators to take on a substantive role. The high school

curriculum is driven by content with educators being subject area specialists. There are tighter

organizational constraints (e.g. course scheduling and sequence) and great pressure on teachers

to prepare students for high stakes testing. Rice and Zigmond (2000) found that implementing

co-teaching at the secondary level is more complex and professionally demanding then at the

elementary level. The reality of operationalizing secondary co-teaching requires thought,

planning, and a work environment that accepts collaborative teaching teams. Mastropieri and

Scruggs (2001) observed successful inclusive co-teaching across elementary grade levels for

several years. They identified variables associated with successful practice that include support

from administration and special education personnel, a positive classroom atmosphere, curricula

offering appropriate accommodations and modifications, effective teaching skills (including

knowledge of content and disabilities), and peer assistance. Similar variables, they report, are

also needed for successful secondary co-taught classrooms, but there are academic situations that

hinder co-teaching at the secondary level that do not exist at the elementary. In responding to the

needs of students with disabilities, the high school setting is more complex for co-teachers. The

emphasis on higher level content knowledge and instruction, the need for independent study

skills, the pace of general education instruction to meet core curriculum standards, course

scheduling, and understanding of the Individualized Education Plan (IEP) can influence co-

teaching (Keefe & Moore, 2004; Mastropieri & Scruggs, 2001; Nierengarten & Hughes, 2010).

Recently, research has turned its attention to co-teaching at the secondary level because of its

unique challenges.

Because of the difficulties mentioned above, co-teaching does not always come naturally

in secondary schools. Educators need to be prepared to co-teach. It requires a set of skills that

are not used when teaching alone. The contribution each educator makes creates a learning

environment that cannot be produced by one teacher (Friend, 2008; Ploessl, Rock, Schoenfeld, &

Blanks, 2010). A co-teaching program that is not carefully planned can prevent educators from

developing skills crucial to a co-teaching relationship. A lack of preparedness can lead to

communication problems, misunderstandings, and difficulties between the teachers that can

negatively affect students in the co-taught classroom (Sileo, 2011). The key is for general and

special educators to work together, collaboratively, providing opportunity for students with

disabilities to experience success in the general education classroom.

Co-teaching programs that are not well planned impact the success of the inclusive classroom. District and school policy to implement co-teaching without clear expectations and guidelines can have a negative impact on programs (Weiss & Lloyd, 2003). High Schools face increasing demands for all students to meet content standards. The lack of planning and preparation, and few opportunities for professional development are barriers to the success of co-teaching (Keefe & Moore, 2004); Murawski & Lochner, 2011; van Hover & Yeager, 2003).

Although secondary co-teaching research is limited there are indications that for programs to be successful several components need to be in place. Steps toward acceptance, implementation, and sustainability of a secondary co-teaching program begin with an understanding of the components and the characteristics of successful co-teaching (Dieker & Murawski, 2003; Friend, 2008; Gately & Gately, 2001; Moin, Magiera, & Zigmond, 2009). An understanding of successful high school co-teaching can inform administration, general and special educators, and can assist in making decisions about co-teaching programs.

This review will focus on three elements associated with co-teaching practice. These areas, described in the literature as being important for successful co-teaching, are common themes across the many secondary co-teaching research articles reviewed. The three elements are co-teacher knowledge and preparation, strategies and instructional approaches, and professional development. Both the positive aspects of co-teaching and its challenges are identified along with what is not addressed in literature.

Knowledge and Preparation

Inclusive education brings students with disabilities into the general education classroom; students with and without disabilities are being taught together. Both general and special educators are working to ensure that the general education curriculum is accessible, is mastered,

and students are able to pass required high stakes testing. Responding to the responsibility to

educate all students in the secondary general education classroom, schools have implemented co-

teaching (Murawski & Dieker 2004; Salend, 2011). However, educators entering the teaching

field and seasoned professionals may not be fully prepared for a co-teaching assignment.

Program guidelines with an emphasis on a description of what co-teaching is, structured co-

planning that promotes collaboration, and co-teacher preparation are several supports that can be

provided to assist the general and special educator is a co-teaching program.

        The logistics of implementing a secondary co-teaching program can also make it difficult

for co-teaching success. Orr (2009) discovered, through her study of the practices that support

inclusion for students with disabilities in the general education classroom, there is no "one way"

that inclusion and co-teaching has been implemented. Different schools and even educators

within the same schools "operate under different philosophies and practices" when it comes to

co-teaching (p. 236). Part of this issue may stem from no clear definition of co-teaching that can

guide co-teachers in understanding the role each educator will take. In examining the co-

teaching model, Cook and Friend (1995) intended to "guide the thinking and practice of

professionals" as they develop their co-teaching program (p.2). Their intent was not to establish

a fixed structure, but to provide guidelines so co-teaching professionals could make effective

choices about this special education delivery option. Other investigators further informed co-

teaching practice by building upon the guidelines and adding more definitive and descriptive

wording. Dieker and Murawski (2003) identified constraints at the secondary level that impact

collaboration between the special and general educator. They stated that by recognizing the

constraints, strategies can be implemented to ensure successful co-taught classrooms. Bouck

(2007) discussed the complex nature of co-teaching which involves changing roles in the

classroom, the physical space of the classroom, and how co-teaching created constraints as well as freedoms. It was found that certain actions taking place before and during the co-teaching partnership positively influenced the relationship. This includes both co-teachers choosing to co-teach together and shared planning time. These descriptions can assist general and special education co-teachers in developing a similar understanding of the concept of co-teaching and can inform their decision making about co-teaching. The definitions provide a framework for practice and much can be open to interpretation. Whether or not schools base their co-teaching model on the definitions significantly impacts the logistics of the program. General and special education co-teaching teams can have difficulty preparing for and acquiring knowledge about co-teaching as a special education service delivery option without clear descriptions and the space to plan together. The basis of co-teaching is collaboration and even though special education co-teaching is appealing it does not transform into effective practice without structured time allotted to the program. Attention to the components of co-teaching is necessary but not enough to sustain co-teaching in the long term (Muller, Friend, & Hurley-Chamberlain, 2009).

Understanding the several definitions and descriptions of co-teaching influences acceptance of the program. Professional acceptance of a secondary co-teaching program increases its success (Little & Dieker, 2009). There can be difficulty if the general educator is not willing to work with students with disabilities and if the special educator works with several different general education teachers during the day (Murawski & Dieker, 2004; Orr, 2009). The key, according to Friend, Cook, Hurley-Chamberlain, and Shamberger (2010), is to be better prepared for implementing a co-teaching program. Time needs to be taken to discuss what each educator can do to provide effective instruction in the co-taught classroom. Special educators have specialized instructional training, general educators have specialized content area training.

A co-teaching arrangement is significantly different from the one teacher classroom and those who co-teach should receive necessary knowledge and skills in how to combine respective talents. In their study on the roles and actions of special educators in a co-taught verses resource class setting, Weiss and Lloyd (2002) observed the special educator using more specialized instruction in the resource class than in the co-taught class. They purposefully chose teachers who did not receive training and concluded that consideration must be given to preparing teachers for successful co-teaching implementation. When teachers are not prepared for co-teaching it is hard to build acceptance for co-teaching practice.

Teacher preparation, especially the general educator's ability to work with students with disabilities, is important for co-teaching success and many general educators do not feel prepared to work with students with disabilities. General educators express that in their pre-service training they did not have the opportunity to take classes about students with disabilities or classes on co-teaching. They were not familiar with meeting the individual needs of students or familiar with differentiating instruction (Orr, 2009; van Hover & Yeager, 2003). General educators, besides indicating they did not have skills to teach students with disabilities, stated they did not have skills to successfully work with special educators to meet the legal requirements of inclusion. General education teachers, even recently licensed teachers, lack an understanding of disabilities (Grskovic & Trzcinka, 2011; McHatton & McCray, 2007). Grskovic and Trzcinka (2011) stressed that teachers need more "pedagogical training than ever before" to successfully educate the needs of students with disabilities in general education classrooms (p. 105).

To further the pedagogical training concerns, Murawski and Dieker (2004) state, in many cases co-teaching programs are put into place without allowing educators opportunity and time

to prepare. Often class schedules are created and then co-teachers are assigned. This change in

educational service delivery can be a "ready, fire, and aim approach" (p. 53). Obstacles

educators face in implementing co-teaching in this manner create a lack of clear understanding of

what co-teaching is, professional acceptance of co-teaching, the inability to work with subject

matter content and students with disabilities, and less time to determine instructional techniques

that will help students meet content standards.

For general and special educators to develop a similar understanding and identify what

co-teaching is, the secondary co-teaching literature indicates educators' desire regular and

scheduled mutual planning time. This provides opportunity for co-teachers to collaborate on an

ongoing basis for the complex demands of co-teaching (Austin, 2001; Keefe & Moore, 2004;

Mastropieri et al., 2005). Murawski and Lochner (2011), in their review of the co-teaching

literature, indicate a lack of co-planning time is a significant barrier to effective co-teaching

programs. Without it, educators work in a reactive manner. Co-planning allows the special

educator to take a more central role with instruction and promotes dialogue where the co-

teachers can discuss elements of instruction. For co-teachers to develop consensus and agree on

meaningful instruction, Dieker and Murawski (2003) have recommended that co-teachers engage

in proactive discussion. Regular collaboration and planning prior to co-teaching can ensure that

appropriate curriculum, instructional accommodations, and instructional strategies and practices

are in place (Ploessl, Rock, Schoenfeld, & Blanks, 2010). Working together, the general and

special educator can create lessons that provide access for students to learn the curriculum

(Moin, Magiera, & Zigmond, 2009).

Co-teaching success rests on preparation because this will build pedagogical knowledge,

instructional coherence across co-teaching teams, and ultimately buy-in for the co-teaching

model. The opportunity for co-teachers to collaborate supports effective co-teaching programs (Moin, Magiera, & Zigmond, 2009; Muller, Friend, Hurley-Chamberlain, 2009). There are many demands at the secondary level. The pace of instruction is faster in order to cover the content necessary to address core content standards and state mandated testing. With a curriculum that contains higher content levels and abstractions sometimes there is less differentiation on instruction to meet individual needs (Friend, Hurley-Chamberlain, & Shamberger, 2010; Mastropieri, et al., 2005). Time during the scheduled school day is limited and this leaves little time for co-teachers to collaborate. In their study of co-teaching in high schools, Nierengarten and Hughes (2010) stated that effective co-teaching cannot be fully accomplished without mutual planning time. Co-planning time allows opportunity for general and special educators to prepare for the complex demands of co-teaching. Some co-teaching teams squeezed in time, even though not ideal, these teams were able to plan and find success. Research has identified the importance and need for co-planning time, but how it is accomplished is not so clearly identified. Are co-teaching teams who go beyond their contracted and scheduled school day more successful in implementing effective co-teaching practice? Ingredients needed for successful co-teaching include quality preparation which allows for different strategies and roles to be taken up by co-teachers. The next section addresses what research identifies as successful co-teaching strategies.

Strategies, Instructional Approaches, and the Co-Taught Classroom

The intent of inclusive co-teaching programs is to support students with disabilities in the general education setting. However, this places more importance on instructional approaches that differentiate content for different learners. Educators that teach diverse students need to facilitate instruction, making it meaningful and useable for all students. They must also develop

content that is accessible, the what, when, and how content is taught, and determine how students will demonstrate learning (Salend, 2011; Villa, Thousand, Nevin, & Liston, 2005). Co-teaching teams that practice effective teaching approaches such as structured curriculum with clear expectations and instructional strategies that engage students have been found to be successful (Mastropieri, et. al., 2005).

Strategies such as text comprehension, hands on activities, and peer tutoring emerge as prominent methods implemented to meet the needs of students in the co-taught classroom. At the core of secondary co-teaching is determining and incorporating instructional strategies and techniques that will be efficient and effective in helping students with disabilities meet core curriculum standards (Mastropieri & Scruggs, 2001; Murawski & Dieker, 2004; Scruggs, Mastropieri, & Okolo, 2008). Strategies, such as mentioned above, should be part of curriculum and originate from effective teaching skills, which include structure, clarity, repetition, teacher interest, and appropriate instructional pace (Mastropieri & Scruggs, 2001; Murawski & Dieker, 2004; Scruggs, Mastropieri, & Okolo, 2008; Villa, Thousand, Nevin, & Liston, 2005). The goal of effective instructional strategies is to help students realize their highest potential. Teachers that engage in responsive discussion can be important in shaping and advancing the understanding students with disabilities have of their subject matter (Murawski & Dieker, 2004; Scruggs, Mastropieri, & Okolo, 2008).

In order to promote a clearer understanding of content, text comprehension and organization are central in assisting students with identifying main ideas, examples, and sequencing of events. There are several approaches to promote text comprehension. The utilization of graphic organizers is an aid that can enhance understanding of written content (Scruggs, Mastropieri, & Okolo, 2008; Villa, Thousand, Nevin, & Liston, 2005). Also

beneficial, is employing structured, guided inquiry. This aids a student's ability in the recall of facts and can promote more general understanding of what a student reads in class. To emphasize and highlight key areas of content, mnemonic instruction can assist students with higher levels of recall. The use of key words and acronyms has been very effective for enhancing content knowledge in the core subject areas.

In a study on the characteristics of effective middle and high school co-teaching teams, it was found that a common practice among co-teaching teams was active learning. These teams used less lecture and paper and pencil instruction which is usually found at the secondary level (Dieker, 2001). Active learning involves hands-on investigation. Hands-on investigative learning is very beneficial for students with high incidence disabilities. They can benefit from concrete representation by working with materials; students learn by doing. Teachers who implemented more student centered and inquiry based instruction had more positive attitudes towards accommodating instruction for students with disabilities (Moin, Magiera, & Zigmond, 2009; Rice & Zigmond, 2000).

Peer tutoring is an effective way to reinforce learning. Students can offer additional explanations and discuss content from a different perspective and this has the potential to assist classmates' learning and reinforce teacher instruction. Peer tutoring strategies for high school classrooms that facilitate student learning are drill and practice and strategy based tutoring. With these strategies students use study guides, guided notes, and cue cards that include questions for quizzing each other (Scruggs, Mastropieri, & Okolo, 2008; Villa, Thousand, Nevin, & Liston, 2005).

The literature reviewed described what researchers identified as successful instructional strategies for students with disabilities in the secondary general education classroom. The

studies discussed each strategy in isolation and little was mentioned as to how the various instructional strategies could be applied and connected in classroom practice. In their paper about strategies students can use to attain content skills, Scruggs and colleagues (2008) stated that information about instructional strategies for students with cognitive disabilities is lacking and researchers still need to determine the sustainability of these instructional strategies. Murawski and Dieker (2004), when discussing the unique issues facing secondary co-teaching practice, recommended that educators vary instruction. They stated, direct instruction is appropriate at times, but the flexibility that is provided by having two teachers in the classroom allows for the creativity to vary instructional strategies that can assist in student learning. They did not discuss, however, the what, when, and how to vary those strategies in the classroom. Another weakness in reporting the different instructional strategies in the secondary co-taught classroom is that mainly teacher interviews were the method used to provide a description of what effective strategies looked like. There were few instances of what secondary special and general education co-teachers actually did in their classrooms. Murawski and Lochner (2010) indicated that co-teachers should engage in responsive discussion about instruction that shapes student understanding. Without specific information about how instructional approaches assist student learning and how those approaches can be utilized in the high school co-taught classroom, co-teachers are less likely to be fully informed. Co-teachers will be unable to engage in proactive discussion about how they can incorporate instructional strategies into their classroom.

The studies reviewed described what researchers identified as successful instructional practices for students with disabilities in secondary general education classroom practice. It was also emphasized that there is need for training to deliver effective instructional strategies.

However, many co-teachers are not aware of or trained in these specific instructional strategies.

Better training programs would aid educators in improving co-teaching instructional delivery.

Both general and special educators need support with implementing co-teaching. They key to

this is teacher education and professional development (Murawski & Dieker, 2003; Scruggs,

Mastropieri, & Okolo, 2008).

Professional Development

As mentioned earlier, a barrier to successful co-teaching is a lack of preparedness. Co-

teaching success requires opportunities for collaborative skill development. Studies have

indicated that even teachers who are willing to enter into co-teaching partnerships, they hesitate

to do so without opportunity to develop co-teaching skills (Rice & Zigmond, 2000; van Hover &

Yeager, 2003; Villa, Thousand, Nevin, & Liston, 2005). In their metasynthesis of qualitative co-

teaching research, Scruggs, Mastropieri, and McDuffie (2007) identified the need for co-teacher

training as a common theme. Teachers felt unprepared and expressed a desire for training that

promotes strategies, skill development, understanding of co-teaching models, and interpersonal

and communication skills. They also found that district co-teaching in-service may have

provided resources and information, but knowing how to implement strategies and co-teaching

practice was not part of co-teacher training. For co-teachers to reach their full potential the

preparation and training for co-teaching should also include skills for teaching students with

disabilities, especially for general educators.

To illustrate this need for in-service training, McHatton and McCray (2007) conducted a

study to identify the perceptions pre-service general educators had about students with

disabilities. These education majors were enrolled in the only required university course

addressing inclusive teaching. The investigators wanted to understand teacher candidates'

perceptions about teaching students with disabilities in general education classrooms. They also

interviewed special education teacher candidates, asking the same questions. The researchers

wanted to find out if there was a difference in perceptions between general and special education

majors. Interestingly enough, a majority of responses indicated that both special and general

education majors were not sure students with disabilities could be educated in the general

education classroom. McHatton and McCray (2007) stated that their results reveal, at least

within one particular institution, a need to address perceptions, especially general educators'

perceptions, about students with disabilities throughout a program of teacher education study.

Education majors should take more than just one or two courses that focus on students with

disabilities. They recommend that teacher prep programs develop cross discipline relationships

where special and general education major's work together to develop skills and collaborative

practice.

      While the prior study focused on pre-service teachers, Grskovic and Trzcinka (2011)

found similar results with practicing teachers. Their study surveyed secondary special educators

who were members of the Council for Exceptional Children (CEC) about knowledge and skills

they thought general education teachers should have. The results showed general educators need

better pre-service training and more experiences with students with disabilities. They concluded

that in teacher training programs content knowledge is taking a higher precedence than

pedagogy. Not only do educators need content knowledge but they also need knowledge about

instructional strategies and how to use them in their curriculum. These skills are necessary for

teachers to be successful in educating all students, including students with disabilities in their

general education classrooms. The article also notes that many general educators feel ill

prepared to teach students with disabilities and recognizes that many general educators in the

work force today received their education training prior to the 1990's when implementation of

inclusion began. In addition, general educators may not have had adequate professional

development specific to instructing students with disabilities in the general education classroom.

Friend and colleagues (2010) identified similar findings in that the current education workforce

has had little preparation for their co-teaching assignments. Special education teacher

preparation programs address co-teaching; it is equally important for general education teachers

to receive co-teaching preparation. The co-teaching model is different from the one-teacher

classroom and specific instruction in co-teaching knowledge and skills is necessary. The

teaching workforce needs more preparation for co-teaching and there is a need for quality

professional development with specific instruction to build co-teaching skills.

Individual's beliefs about what they are capable of and what their abilities are help define

their actions – people will do something if they feel they are capable of doing it. This premise

was the basis for studying the relationship between educators' level of training on students with

disabilities and their ability to teach students with disabilities in the general education classroom

(Kosko & Wilkins, 2009). In introducing their study, Kosko and Wilkins (2009) identified

research suggesting general education teacher education programs do not help with development

of skills to teach students with disabilities. General educators learn about characteristics of

students with disabilities but do not believe they learn how to teach students with disabilities.

Few courses specific to teaching students with disabilities are taken by general educators. Kosko

and Wilkins (2009) also noted that research found teacher in-service that focused on disability

specific instructional strategies increased the general educator's perception of their ability to

teach students with disabilities. Professional development can impact teachers' beliefs about

instructing students with disabilities in the general education classroom; the lack of substantive in-service limits effectiveness of instruction.

The focus of the Kosko and Wilkins (2009) study was to investigate the relationship between teacher professional development hours, years teaching students with disabilities, and their perceived ability to adapt instruction for students with disabilities. The results indicated that the more professional development hours teachers had the more they reported they were able to provide appropriate and effective instruction for students with disabilities. These results support previous studies' findings that professional development has a positive impact on instructing students with disabilities (Rice & Zigmond, 2000; van Hover & Yeager, 2003; Villa, Thousand, Nevin, & Liston, 2005). Kosko and Wilkins (2009) went a step further in their research and identified that professional development training is worthwhile if educators are provided with opportunities to develop curriculum material, that professional development should be conducted periodically, more than once a year, and teachers should be able to provide feedback about the training to evaluate its effectiveness. They indicate that this type of professional development is, unfortunately, not often provided for educators.

The idea that professional development should be coherent and engage educators is also supported by Leko and Brownell (2009). They found that co-teachers need to improve their practice in content area and pedagogical knowledge. Professional development in these areas should also be situated in classroom settings where educators can collaborate and use student data to improve student achievement. Both co-teachers should be able to plan, deliver, and assess instruction. Professional development should be offered regularly and focused on content knowledge, instructional strategies, and collaborative practice. It should also provide opportunity for co-teachers to work together (Friend, Cook, Hurley-Chamberlain, & Shamberger,

2010). When special and general education co-teachers reflect on and evaluate their practice it can contribute to successful co-teaching and provide effective instruction for all students in the inclusive classroom, especially students with disabilities (Davis, Dieker, Pearl, & Kirkpatrick, 2013; Kosko & Wilkins, 2009; Leko & Brownell, 2009).

Collaborative teacher training and professional development that is thoughtfully planned and focused on teacher needs can foster knowledge of best practices (Orr, 2009). Continued professional development assists co-teachers in refining and reinforcing skills. Providing ongoing professional development as part of co-teaching practice increases knowledge and skills, positively impacts teachers' perceived ability to teach students with disabilities in the general education classroom, and gives co-teachers the ability to make program improvements for themselves (McLeskey & Waldron, 2006). Given the limited knowledge, preparation, and instructional strategies noted in the previous sections, professional development is critical to support co-teachers in meeting the needs of students with disabilities in the inclusive classroom.

Conceptual Framework

The implementation of a co-teaching program rests on a philosophical foundation based on special education legislation requiring the education of students with disabilities in the least restrictive environment (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). Co-teaching can also be described as two or more people who agree to achieve a common, publicly agreed on goal, share a common belief system, demonstrate parity, use distributed leadership, and engage in cooperative process (Villa, Thousand, & Nevin, 2013). This action of role redistribution in which the function of the individual teacher is divided between a co-teaching team is known as "distributed functions theory of leadership" (Johnson & Johnson, 1999, 2009 as cited in Villa, Thousand, & Nevin, 2013, p. 8). The distributive functions theory of leadership stems from

social interdependence theory where the actions of individuals promote (or can obstruct)

achievement of goals (Johnson & Johnson, 2009). Operational procedure derived from social

interdependence is applied to collegial teaching teams. The purpose is to "increase teachers'

instructional expertise and success…with a focus on improving learning" (p. 374).

In a collegial team relationship there are functions that occur before, during, and after

lessons. These functions are conducted in order to meet students' needs. The same applies to a

co-teaching relationship. Co-teachers must decide how these jobs will be divided. Some

responsibilities happen on a daily basis, others weekly or periodically, some only annually.

Decisions, such as these, are made by co-teachers using a cooperative process. When this

process is used, co-teachers can experience more success (Villa, Thousand, & Nevin, 2013).

There are five elements that facilitate the cooperative process: face-to-face interactions,

positive interdependence, interpersonal skills, monitoring progress, and individual

accountability. Face-to-face interactions are important to decision making. Co-teachers need to,

among other things, decide when to meet, when to involve others, and how to communicate

information. Positive interdependence recognizes that no one co-teacher can effectively respond

to the diverse needs of students. Each teacher is equally responsible. Interpersonal skills include

verbal and nonverbal aspects of trust, conflict management, and problem solving. By giving

feedback and encouragement to each other co-teachers can build strong partnerships.

Monitoring progress refers to co-teachers debriefing each other about the successes and

challenges of lessons and actions in the classroom. Individual accountability is a form of

acknowledging each of the co-teachers actions and taking time to assess the performance of each

co-teacher. When co-teachers are actively involved in providing instruction to all students,

especially students with disabilities, in the general education classroom these elements are

utilized (Villa, Thousand, & Nevin, 2013).

The distributed functions theory of leadership and the five elements of the cooperative

process will guide this research study in understanding the collegial practice between general and

special educators in a co-teaching relationship. The relationship between what is observed in the

co-taught classroom and what is reported by co-teaching teams during interviews will provide

evidence to describe what the district co-teaching model looks like and how co-teachers make

use of co-teaching knowledge and skills. The chart below shows how the theory is linked to data

collection.

Distributive Function Theory of Leadership	Five Elements Facilitating Cooperative Process	Co-Teaching Classroom Observation Guide	Co-Teaching Interview Guide
Functions that occur before lessons	Face to Face Interaction Positive Interdependence Interpersonal Skills Individual Accountability Monitoring Progress	Have planned together. Teachers share in classroom and instructional responsibility. Level of collaborative and effective teacher communication/interaction. Co-teaching arrangement. Students' instructional grouping pattern.	How was the co-teaching team developed? How do you collaborate about course instruction? Who is responsible for procedural elements of the classroom? • HW collection • Attendance • Lesson accommodations/ modifications • Creating lessons
Functions that occur during lessons	Face to Face Interaction Positive Interdependence Interpersonal Skills Individual Accountability Monitoring Progress	Use of research based instructional strategies. Differentiated lessons. Parity between teachers. Both teachers actively involved. Student engagement. Both teachers work with all students. Teachers share in classroom and instructional responsibility. Routines and procedures are evident. Level of collaborative and effective teacher communication. Co-teacher arrangements. Student instructional grouping pattern.	Describe role in co-taught classroom. Who is responsible for procedural elements of the classroom? • Student requests /discipline • Collecting HW • Taking attendance • Assigning student groups What does instruction look like? How are lessons structured? What type of student grouping is used? What types of assessments are used? What aspects of the curriculum are you most/least comfortable teaching?

| Functions that occur after lessons | Face to Face Interaction
Positive Interdependence
Interpersonal Skills
Individual Accountability
Monitoring Progress | | Who is responsible for procedural elements of the classroom?
• Grading tests/assignments
• Recording grades
• Contacting parents/CST
• Writing referrals
What does instruction look like? Is there room for improvement?
What training or expertise would you like to gain? |

Building on this theory, this study of secondary co-teaching used a survey, interviews, and observations to examine the five elements of the collaborative process before, during, and after lessons. The data collected provided a picture of observed behaviors and the ways in which special and general educators interpret the elements of the co-taught classroom. At the heart of this study, then, is to document the distribution of leadership and the quality of collaboration across co-teaching in the district.

CHAPTER 3: METHODS

This high school co-teaching research study is a qualitative case study. Qualitative

research is a way to look at and understand the meaning individuals or groups give to a social or

human setting (Creswell, 2009, p. 4). Research data for this case study was collected through

survey, direct co-taught classroom observations, and fact-to-face interviews with co-teaching

teams. Yin (2009) states the importance of using many sources of evidence, "a good case study

will use as many sources as possible" (p. 101) and "any case study finding or conclusion is likely

to be more convincing and accurate if it is based on several different sources of information" (p.

116). Using the three sources of information along with field notes provided me with the

opportunity to look at each of the sources and compare data. This assisted with more accurate

analysis of data and clearer understanding of the co-teaching program. The case study allowed,

using a variety of measures, for the collection of detailed information during the regular school

year documenting real-life phenomenon of the co-taught classroom (Creswell, 2009; Yin, 2009).

The original focus of this study was on how co-teachers use professional development in

their classroom practice, however professional development emphasis shifted due to changes in

district in-service and department meeting agendas. Focus of the study modifies to current

practices, the state of the co-teaching program in the high school, and professional development

needs. Surveys, observations, interviews, and a sampling of co-teaching documents was

collected that helped to describe co-teaching characteristics and the need for professional

development from the teachers' perspective. The survey allowed for the purposeful selection of

a sample of four co-teaching teams to participate in two sets of observations and interviews.

These teams represented a cross section of co-teaching experience to examine the current co-

teaching program in more depth. The first set of observations and interviews identified

characteristics of the district co-teaching program and how the program is implemented. The

second set of observations and interviews were used to identify changes in the characteristics of

co-teaching teams over the year and to ask about the need for regular and ongoing co-teacher

professional development.

Setting

This high school district is located in a southeastern municipality of New Jersey. The

municipality is a gateway community for a barrier island resort area. It is approximately spread

across fifty-nine miles square with a population of 26,535. This figure reflects an increase of

13,210 since 1990. Ninety-five percent of the residents are predominately white non-Hispanic.

The balance of the residents, about 4.2%, are comprised of other races with Hispanic-Latino

being over half of that percentage. The median household income of residents is $68, 250 and

four percent of the residents live below the poverty line.

As part of the school district, SJHSD has a regional public high school serving students in

grades 9-12. The district serves two mainland and six barrier island municipalities. The student

population is a little over 2100 of which about 600 students are receiving special education

services. The district offers over two hundred academic and elective courses from which

students can select. Within that general education setting the individual needs of students with

disabilities are addressed. The special settings encompass the full continuum of services ranging

from district based alternative placement to in-class support general education classes where a

majority of students with disabilities receive their education.

This high school has grown significantly over the past twenty years. There has been an

increase in the number of students with disabilities served in the general education curriculum

and the district co-teaching program has expanded to meet those needs. SJHSD was chosen for

this study as I have been a special educator in the district for over thirty-five years and a co-teacher for twenty-two years. Given co-teaching program changes this was an excellent opportunity to study the co-teaching program in order to explore co-teachers' perceptions and the meaning they give to their roles and actions and identify qualities of the program. This study will inform stakeholders about their instruction and contribute to an improved and more effective co-teaching program.

Study Context

When the co-teaching program was first implemented at SJHSD (1992-1993) the district provided professional development opportunities both in and out of district for all special and general education co-teachers. Professional development has not been a part of the co-teaching program for many years. Based upon the revised IDEA, NCLB, and the new teacher evaluation process, this is an excellent opportunity to introduce and refresh co-teaching team skills. It was planned that topics for co-teaching professional development were to be determined by a questionnaire given to co-teachers by the supervisor of special education in September of 2013. Additional professional development needs would be gathered from the Secondary Co-Teaching Survey participant responses. The survey is part of the research design and survey questions ask for more specifics regarding co-teacher training needs.

Prior to the start of the 2013-14 school year A1 (district administrator) and I had discussed the scheduling of a series of co-teaching professional development sessions. Opportunities for programs to be offered were during the regularly scheduled district in-service days and could potentially occur during department meetings. For a number of reasons, these professional development opportunities did not come to fruition.

The one exception was the October in-service day. It was utilized for co-teaching professional development, however, only the high school was involved and about half of the co-teaching teams were present. A1 invited all high school general and special education co-teachers, with only a few general educators attending as many had regular department meeting obligations to fulfill. The structure of this in-service involved the co-teachers forming two groups, one to discuss instructional strategies and the other how to apply modifications and accommodations as required by the IEP. Half way through the forty-five minute session groups would switch topics. However, the discussion quickly moved from the planned topics to how teams are assigned and the need for co-planning time. Co-teachers at the in-service expressed positive comments about having the time to meet together. The in-service, even though it did not go as planned, provided for the first time in a long time an opportunity for attendees to voice concerns about their practice.

The phases of data collection shed light on many of the needs of co-teachers. Prior to beginning data collection, I spoke with A1 and indicated that I would keep them informed about the study. On several occasions during my data collection, we discussed what was beginning to emerge about co-teaching characteristics and needs. A dialogue began during data collection between several district administrators (A1 and A2) and me to discuss co-teaching needs and the possibility of planning and implementing structured professional development related to co-teachers practice.

These discussions resulted in several department administrators, including A1, sending a scheduling survey to each of their teachers. This was the first time a survey such as this had been sent to staff. The survey sent to special educators (Figure 1) asked staff to list courses they wanted to teach, have taught, and do not wish to teach. For ICS teachers (co-teachers) the

question was posed, would you rather teach the same course all day with two or three different

teachers or two or three different courses with the same general education co-teacher? A1 also

asked for input about how department scheduling could be improved.

Figure 1: Special Education Scheduling Survey of March 24, 2014

List the courses that you **would like to teach**.	List the courses that **you have taught**.	List the **ONE** course that you **DO NOT** wish to teach.	Tell me one way in which I could **improve** scheduling for our department next year?	For ICS Teachers only: Would you rather teach the **same course** all day with maybe 2 or 3 different teachers or **2/3 different courses** with the same regular education teacher?

Sample

Participants in this study were current (2013-2014) high school co-teaching teams. For

the 2013-2014 school year, there were thirty-four co-teaching teams consisting of thirteen special

educators and twenty-six general educators. This study used purposeful sampling as co-teachers

can provide "information rich cases" which "yield insight and in depth understanding" (Patton,

2002, p. 230). All together thirty-seven surveys were sent out to the high school co-teachers.

Eighty-six percent of co-teachers returned completed surveys. Ninety-two percent of special

educators and eighty-three percent of general educators participated. Co-teaching team

experiences ranged from one to twenty-two years. Over half of the current co-teaching teams

have been working in the program for over twelve years. The collective experience of this

sample assisted me in learning a great deal about the characteristics of the district co-teaching

program and identifying the professional development needs of co-teachers. Studying these

cases supplied greater insights and understanding of the district co-teaching program especially

in identifying strengths, weaknesses, and merits of the program.

All current high school co-teaching teams (with the exception of my co-teachers and me) were invited to participate in a co-teaching survey. Based upon survey responses, a cross section of co-teaching teams was selected for participation in the observation and interview phases of this study. The surveys were used to identify co-teaching teams who could speak in more detail about the characteristics and actions of their practice. A cross section of co-teaching teams was identified. Criteria used in determining teams included experience co-teaching, teams having planning time and not having planning time, co-teachers not familiar with the scope and sequence of the content (mismatched content)), and co-teachers having experience with the content (matched content), and co-teachers working with multiple teachers daily. Table 1 below identifies each team. A brief description of each team is included.

Table 1: Observation and Interview Participants

	No Common Planning Assigned	**No Common Planning Assigned/Find Time**
Mismatch Content	S3 and G9	
Matched Content/Multiple Co-Teachers	S9 and G13	
Matched Content	S1 and G3	S12 and G23

S3 and G9 are considered to be mismatched as S3 has little experience with the scope and sequence of the course and is highly qualified in a different subject. S3 has co-taught for almost ten years but has had different general education co-teachers each year. This year S3 works with three different co-teachers in two different content areas. G9, co-teaching for less than six years, has worked with different special educators each year. G9 does not seem prepared for co-teaching and has indicated on the survey that they do not know how to apply modifications and accommodations. G9 also has a tech based

approach to instruction. S3 expresses that they are not familiar with the approach and is not able to discuss or help in planning lessons as they have no common planning time.

S9 and G13 are a new co-teaching team. S9 has been co-teaching for about twenty years, in the same content area, and is highly qualified in that content. G13 is new to the district and has only co-taught with S9. G13's only co-teaching experience was during student teaching. G13 indicates they have some planning time with their co-teacher but has few resources. S9 works with four different co-teachers in the same content area but different subjects. In the past, S9 had worked with only one or two co-teachers during the day.

S1 and G3 are considered to be matched content as S1 and G3 are both certified in the *s*ubject area, however, S1 finds it difficult in the co-teaching arrangement due to the fact that G3's instruction is technology based. S1 has little understanding of the methods G3 uses and this team has no common time to plan and no opportunity was provided for S1 to become familiar with and understand the technology used in class. In addition, S1 co-teaches with three co-teachers daily. S1 has co-taught for about twenty years and G3 has co-taught with different teachers for each of their five year co-teaching experience. S1 indicates on the survey that there needs to be guidelines provided with clear definition of what co-teaching is or time for teachers to establish their guidelines. There are inconsistencies with special education teachers from year to year with teachers teaching in different content and grade levels. There should be parity between both co-teachers.

S12 and G23 have experience co-teaching together for over five years. With S12

being a veteran co-teacher of over ten years. S12 and G23 co-teach all five class periods

together. They have co-taught before with common planning time but this school year's

schedule did not provide them common planning time. However when looking at their

schedule and considering they co-teach with each other all day, they found a way to

"flip" a class to make a common planning time.

Participation in the study was voluntary and written consent was obtained from each

member of the four teams for their continued participation in the co-teaching study. Each

participant had the option to withdraw from the research at any time. Efforts were made through

personal contact to recruit desired participants. All co-teaching teams were made aware that

their participation in the study posed no risk to them professionally. Participant identities have

been kept confidential. Pseudonyms were used in place of actual names for survey results,

observations, and interview transcriptions. Each special educator was assigned a letter and

number (S1, S2, S3… S13) and general educators assigned similarly (G1, G2, G3… G26). All

attempts were made to accomplish this study during the routine performance of the participants'

daily co-teaching schedule. Participants were reminded that the purpose of this study was to

inform and strengthen their practice and support them as co-teachers.

Data Collection

A sequential design where the survey informed the selection and collection of

observation and interview data allowed the participants opportunities to share experiences with

the implementation and organization of their high school co-teaching teams. The sharing of

these experiences enabled the researcher to make meaning and learn about a phenomenon as described by participants (Creswell, 2009; Seidman, 2006). As the principal investigator and a stakeholder in the co-teaching program at SJHSD, I wanted to better understand co-teachers' experiences, their need for professional development, and how they could use that knowledge in their classrooms. The aim of this study is to improve the co-teaching program by identifying strengths, weaknesses, and specific needs of co-teachers. Based on the findings, the district may be in a better position to provide relevant professional development and support that will allow co-teachers to implement strategies for more effective co-teaching. Qualitative methods such as surveys, observations, semi-structured interviews, and documents were used and helped to describe and assist in the understanding of what is occurring in the classroom from co-teachers' perspectives (Appendix A). Data was collected during the regular school year and these varied methods allowed me to triangulate the data and strengthen the study (Patton, 2002). The phases of the data collection process are depicted below (Figure 2).
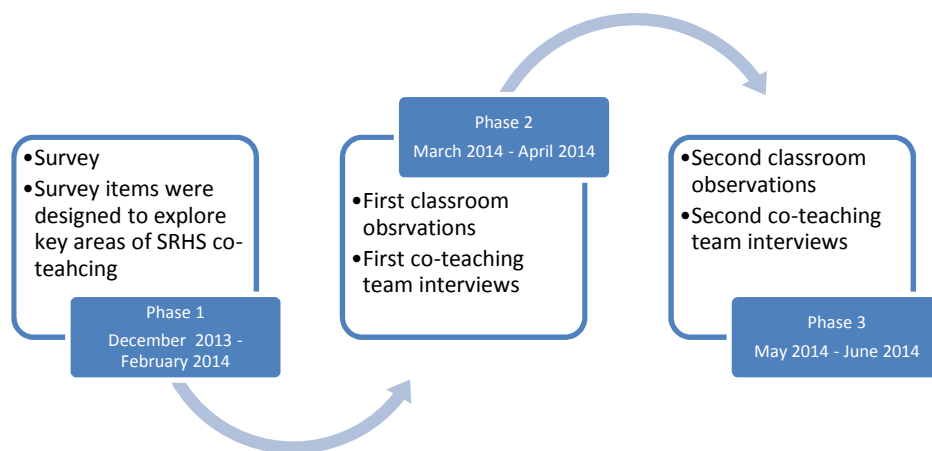
Figure 2: The Process of Data Collection and Timeframe.

The surveys began the initial phase of data collection. After surveys were returned and reviewed, four co-teaching teams were chosen to participate in two observations and interviews. The observed actions of each teacher and the interactions between co-teachers were used to

support interview data. Observation and interview data were gathered using a combination of

field notes and digital audio recording. A calendar of observations and interviews was created.

Observations were scheduled at the convenience of each co-teaching team. Observations took

place on the same day prior to team interviews. Co-teaching teams determined which class to

observe. In two cases, one class was the only option for the observation as that was the only

class co-taught by those particular general and special education co-teachers.

Surveys

Fowler (2009), states participants in the survey research process can provide answers that

will be used to describe characteristics of the respondents and provide a description of trends,

attitudes, or opinions about the co-teaching program. The first phase of this case study's data

collection began with surveys. Surveys were emailed to all general and special education co-

teachers along with a cover letter introducing the co-teaching study. The process of data analysis

began as soon as each participant's responses were received with the conversion of raw data into

a form useful to analyze and address each of the research questions.

All special and general education co-teachers were asked to respond to a thirty-four item

survey (Appendix B). Twelve of the thirteen special education co-teachers and twenty of the

twenty-four general education co-teachers returned surveys. Respondents provided information

about teacher status: general or special educator, number of years teaching, and number of years

co-teaching. The balance of the items measured co-teacher communication, knowledge of

curriculum and instruction, and attitudes towards and perceptions about co-teaching practice.

Participants chose from a five-point Likert type scale ranging from 1 to 5 with 1, "not at all"; 3,

"somewhat"; 5, "completely". The survey instrument used for this case study was adapted from

the Co-teacher Rating Scale (CtRS) developed by Gately and Gately (2001). The CtRS is

described as "an informal instrument that co-teachers can use to examine the effectiveness of

their co-taught classrooms" (Gately & Gately, 2001). The CtRS has been utilized in several

studies (Mawhinney, 2010; Noonan, McCormick, & Heck, 2003; Ploessl, Rock, Schoenfeld, &

Blanks, 2010; Sims, 2010; Thielemann, 2010) to understand the views of co-teachers'

experiences in the areas of interpersonal communication, knowledge of curriculum, classroom

management, the physical classroom, instructional planning and strategies, and content goals and

modifications.

Thirty-two completed surveys were tallied (Appendix C). Results were reviewed to

identify how co-teachers understand their actions and experiences. The Secondary Co-Teaching

Survey assisted me in identifying from a broad perspective the co-teaching program strengths,

weaknesses, and areas in need of improvement. Findings from the surveys were used in

identifying four teams representing a cross-section of co-teaching at SJHSD. These teams

participated in the two phases of classroom observations and interviews.

Observations

Four co-teaching teams were observed prior to a professional development in-service on

April 8, 2014 and then again after. The observation protocol was developed for recording

information while I observed each co-teaching team during their regularly scheduled class. The

observation was one of everyday practice and situated where co-teaching occurs (Stake, 1995).

The SJHSD Co-Teaching Observation Guide has been adapted from a co-teaching

observation checklist used in the Rock Hill (SC) School District (Appendix D). It is a four page

guide with sections for demographic information, descriptive notes relative to the class and

lesson activities, what co-teaching actions were observed, and a section for additional notes and

reflective comments. The observable co-teaching actions included categories addressing

planning, instructional strategies, evidence of accommodations and modifications, co-teacher parity, instructional responsibilities, co-teaching arrangements, and how students are grouped. These categories of co-teacher actions were rated on the following basis: 0 = Should be there and is not, 1 = Saw an attempt (somewhat evident), 2 = Saw well done (clearly evident), and N/A = Action not applicable. As actions were observed and rated, I included comments about the actions and questions to ask the co-teaching team during the interview. The purpose of the classroom observations was to document the behaviors of co-teachers and identify characteristics of the co-taught classroom. I gathered the observational field notes only as an observer and did not participate in the classroom activities (Creswell, 2009). The observations took place in the co-teachers' classroom during their regularly scheduled class time and prior to interviews.

The advantage of observing each co-teaching team's interactions is that it gave me firsthand experience with the participants. I was able to record co-teaching team actions and related information as it occurred (Creswell, 2009). Following each observation I systematically and analytically reviewed my observation notes in order to understand the activities that take place and the roles the general and special educators assume in the co-taught classroom (Cohen, Manion, & Morrison, 2007). Co-teaching team observations and notes were transcribed into word document format making them readily available for reference. The review of each observation began to further develop my insight into the characteristics of co-teachers. The observations also provided me with the opportunity to begin making comparisons to survey responses.

Interviews

An interview guide (Appendix E) was developed to clarify co-teaching roles, responsibilities, instructional strategies, preparation, and planning to further understand the

characteristics of the district co-teaching program. Several questions addressed curriculum

expertise and training. Responses to those questions assisted me in learning more about how

teachers can benefit from relevant professional development. The interviews were scheduled at

the convenience of the co-teaching teams. Interviews were conducted during co-teacher lunches

and after school. Classrooms and available conference rooms were reserved and used for

interviews. Several interviews began during a lunch period and continued after school. One

interview needed to be conducted over a two day period after school.

Two semi-structured face-to-face interviews were conducted with each of the four co-

teaching teams. The first interview took place after the initial observation and before the April 8,

2014 in-service. The second interview was conducted after the April in-service and after the

second classroom observation. The intent of interviewing is to gain an understanding of the

experiences co-teachers have, what they mean their experiences to be, and it provides access to

the context of co-teachers' behavior (Seidman, 2006). The first interview gave me an

opportunity to clarify what was observed in the classroom and to gain a better understanding of

the actions that occurred in the co-taught classroom. Initially, the second observation was to

identify if and how co-teachers used knowledge and skills gained through the district co-teaching

professional development. As this professional development experience was very limited, I used

the second interview to further clarify co-teacher roles and actions and inquire more specifically

about their needs and what the district can do to support co-teachers. Comments made at the

October 25, 2013 co-teacher in-service prompted me to focus on the question, "For a better co-

teaching program, what training or expertise would you like to gain (question 13 of the Co-

Teaching Interview Guide)?" Since the professional development did not include all general and

special education co-teachers, I also asked, "How useful was the professional development?" and

"How would you as a co-teacher benefit from ongoing professional development?"

Each interview was digitally recorded. Audio-taping each interview assisted me in the

transcribing of participant responses. Transcription took place at the conclusion of each

interview and each co-teaching team interview transcription was offered to the respective

participants for member-checking. This review allowed participants opportunity to correct errors

and address any mistakes that took place in the transcription process. It also gave them the

opportunity to volunteer additional information.

Documents

According to Merriam (1998) "data found in documents can be used in the same manner

as data from interviews and observations, are an objective source of data, good sources for

qualitative case studies, grounding an investigation in the context of the problem" (p. 126).

Documents can also serve as additional insight to activities the researcher could not directly

observe (Stake, 1995, p. 68). Documents such as co-teacher lesson plans and collaboratively

generated student activities or projects can provide additional descriptive information about co-

teaching practice and inform the research about how teachers apply knowledge.

Participants and I discussed how documents can help answer the research questions and

illustrate their co-teaching. I asked co-teachers to volunteer collaboratively developed lessons or

activities. For the most part, hard copy, collaboratively generated documents were limited as

most co-teachers indicated they did not have the common time to create co-planned lessons and

activities. One co-teaching team, however, described how they share in the construction of

subject area tests and quarterly assessments. The same co-teachers also described in detail how

they work with students, using mnemonic devices they created, to assist them in remembering

the content. Another team discussed how they were able to find a few minutes during class time

and collaborated to create a rubric for an assignment.

In addition, teacher schedules were reviewed to identify the impact that had on co-teacher

preparation and planning. Co-teacher schedules were obtained from the Special Education

Office. The co-teachers' schedules revealed the complexity of the co-teaching program. Seven

of the thirteen co-teaching teams work with two or more co-teachers daily. Special and general

educators who work with more than two co-teachers daily move from one class to the next

leaving very little time to work collaboratively with their co-teacher.

Researcher Role

My personal experience as a special educator and co-teacher shape my perspective on

this study. I am familiar with co-teaching strategies, collaboration, and the need for knowledge

and preparation that supports effective co-teaching. Recognizing the need for professional

development opportunity that can assist co-teachers in honing their skills, I constructed this study

of the district co-teaching program. This qualitative case study is ideal for understanding the

characteristics of the co-teaching program and how co-teachers can benefit professional

development knowledge in their classroom.

Based upon what I stated above, I did not use this case study to substantiate a

preconceived position (Yin, 2009). I made every attempt to keep in mind how my background

could influence this study as this could be viewed as researcher bias. In reviewing the data I

made sure to look at and search for alternate themes, divergent patterns, and rival explanations to

enhance this case study's credibility (Patton, 2002). A method I used to accomplish this was to

share findings with non-co-teaching colleagues at school and with my dissertation study group.

They were able to offer other explanations or additional suggestions about the data (Yin, 2009).

I also provided portions of the data to my dissertation study group to check the reliability of codes.

Data Analysis

The data analysis strategies I used in my qualitative case study of secondary co-teaching are described below.

Surveys

There were three phases to the survey analysis process; the first began with a general overview of co-teachers responses. As participants returned their surveys, time was taken to read through each survey at least once and responses were pasted into a document. After I compiled the survey responses and anecdotal comments included by many co-teachers I looked across the data which was coded for co-teaching characteristics and demographics. Examples of codes were experience, instructional strategies, communication, planning time, and training.

Next, I looked specifically at all special educators' responses and then all general educators' responses for additional relevant data and coded in a similar fashion. Finally, I reviewed responses provided by general and special education co-teaching teams. In looking across the data from each team, I referred back to the coding decisions made during the first phase of survey analysis. This was to make sure that my coding was consistent. The analysis of co-teaching team data focused on discrepant and negative cases as well as positive and concordant cases. Means and standard deviations were calculated for responses to survey items. Doing this provided an overall description of co-teacher knowledge, skills, instructional strategies and resources.

Four co-teaching teams, representing the various content areas and expertise were then asked to participate in the classroom observation and interview phases of this case study.

Observations and Interviews

For analysis all observations and interviews were transcribed into word document form. Additional notes in the form of memos, follow-up questions, and conclusions I drew as a result of observing co-teaching instruction were included as I re-read each set of observation notes. In the initial review of observation data I began to look for broad trends and patterns as well as actions that were contradictory; co-teaching patterns that supported effective co-teaching and patterns that did not based on research in the literature review. As I was interested in the characteristics of the district co-teaching model I focused on actions that describe how co-teachers work together. Next I looked across each team to compare the similarities and differences of how co-teaching teams implemented instruction.

The observations provided only a snap shot of how co-teachers work together. It was the interviews that provided deeper description about how co-teaching teams are assigned and how the general and special educator work together. The interviews were crucial in identifying characteristics and needs of the co-teachers. Each interview was audio-recorded and field notes were taken. After each interview I reviewed the recording, checking my notes and adding additional comments and questions for further clarification. The recorded interviews were then transcribed into word documents. I reviewed each transcript while listening to the audio file, made corrections as needed, and wrote memos about patterns and themes that I saw beginning to appear.

In that I was seeking to understand co-teaching team characteristics and needs, I took an inductive approach in this initial phase of data analysis. Beginning with my observations, and then the interviews, I took a broad look at the data to identify general patterns. All sources of data were hand coded and a system of coding based on key words, phrases, and whole statements

was developed. After reviewing the interviews, I went back to the observations to identify

similar themes those which was emerging from the interviews. Completed surveys of each of the

four co-teaching team participants were also referenced to look for consistencies and

inconsistencies across data sources. Examples of patterns that emerged from the first analysis

are: arrangement of co-teaching teams, co-teaching definition and expectations, how co-teachers

plan, and co-teaching resources and support.

For the next step of my data analysis I identified themes and organized the themes into

categories based upon the patterns identified in the initial review. I read and re-read each

transcript. This recursive fashion allowed me to look for additional themes, make notes of the

number of times participants mentioned themes, and begin to conjecture about co-teaching

practice. This method assisted me in identifying confirming and disconfirming evidence that

speaks to the research questions about the characteristics and needs of co-teachers. After

refining themes, a table (Appendix G) containing the four categories and their related themes and

descriptions, was developed (Erickson, 1998).

It was this step of data analysis that structured the second set of interviews, allowing for

validation of the emergent themes. More specific questions about co-teaching practice and needs

were developed and asked of each co-teaching team. A few examples of questions asked in the

second interviews are:

- What do you mean by your co-teaching team "was assigned"? Describe how you felt
  about being assigned as a co-teaching team.

- You stated that you have no planning time. Describe how that affects your co-teaching
  arrangement.

- What is it like working with 3 (or 4) co-teachers daily?

After reading, re-reading, and identifying categories and themes, and assigning descriptive codes, transcripts were printed and placed into a notebook organized by co-teaching teams. Contained in that notebook is the table of categories and themes, a description of the themes, and the number of times each theme was mentioned. Comments and notes specific to each theme are also included in the table. After each category and its related themes were organized, I referred back to the literature on the high school co-teaching model that describes components needed for successful co-teaching. I also considered the conceptual framework and the elements of the cooperative process when identifying themes. Notes were made by themes that either confirmed or disconfirmed use of those actions. I included these criteria as a separate section at the end of each category. I highlighted particularly relevant excerpts and made notes respective to co-teaching teams. This physical notebook of categories and themes organized by co-teaching team assisted me in identifying themes across cases. From the themes, codes were established inductively. Examples of a few of the codes are communication, experience, classroom roles, planning time, working with different co-teachers, and co-teacher training.

Validity

There was a focus on validating the qualitative responses. Proof must be provided to support results that are accurate and credible. Triangulation was used to cross check data from the several data collection sources (Patton, 2002). I compared observations made about classroom co-teaching practice to the participant responses to interview questions. Observations and interviews were checked with available co-teaching documents and the broader responses of what co-teachers had to say on the survey. This data was brought together to shed light on the many characteristics of the high school co-teaching program and to identify what co-teachers need to better implement their program.

Member checking was a valuable tool that assisted me in the data analysis process. Two strategies, face to face meetings and participant review of transcripts, were used to aid in improving the accuracy if data collected. Many survey participants included anecdotal comments and expressed a desire for further discussion about their responses. Follow-up meetings were arranged and during those conversations statements were clarified and questions answered. Meeting notes were entered into my journal. Participants in reviewing their documented words and actions were able to make sure my findings were an accurate reflection of their experiences as co-teachers (Creswell, 2009).

It was my responsibility to do my best to make sense of the data collected for this case study. The importance of returning to the data many times was essential in order to see if the interpretations reflected the nature of district co-teaching.

CHAPTER 4: FINDINGS

By surveying all high school co-teachers and observing and interviewing four co-teaching teams from the various content areas and expertise, the first layer of findings tell the story of who co-teaches, how they co-teach, and what is needed for effective co-teaching. I debrief the survey giving a broad program perspective. The findings then shift to focus on the four selected co-teaching teams to examine in more depth the characteristics of the co-taught classroom and what co-teachers say they need in order to successfully implement co-teaching.

The Co-Teaching Survey

Looking at the district co-teaching program from a broad perspective indicates that this special education service delivery is well run and effectively implemented. When the general and special education co-teaching teams were surveyed, their responses at first glance revealed a positive opinion about co-teaching. The results of the survey show a vast majority of participants rated item numbers 1-33 as a 4, ("almost completely") or a 5 ("completely") (see Appendix C) . Almost all teams indicated they have understanding of the curriculum, methods, and materials to teach content in the inclusive general education classroom (see Table 2, survey items 4, 5, 8, 10), and vary classroom techniques for all students to learn (7). Teams share common views on student progress, individual student needs, and parental involvement (12, 14, and 15). Co-teachers state they are flexible (29) and work with all students (31).

Table 2: *Characteristics and Implementation of Co-Teaching – Mean and Standard Deviation*

Survey Item #	# Responding	Mean	Standard Deviation
4. Understanding of curriculum standards in co-taught classroom.	29	4.6	.6
5. Familiarity with methods and materials.	29	4.8	.4
7. Vary classroom management techniques to enhance learning.	28	4.4	.7
8. Confidence in knowledge and	28	4.7	.5

curriculum.			
10. Activities are structured for student understanding.	29	4.3	.9
12. Prepared to discuss student progress with parents.	29	4.7	.5
14. Familiar with individual student needs and plan accordingly.	29	4.3	.6
15. Confidence in dealing with parental concerns and challenges.	29	4.6	.7
29. Co-teachers are flexible in dealing with unexpected events.	29	4.7	.5
31. Co-teachers consistently work with all students in class.	29	4.7	.5

It is interesting to note that with survey item number 10 there appears to be more deviation from the average response. This is due to one special educator's (S11) response as 1 ("Not at all"). S11 qualified their response by stating that they only structure activities for student understanding if they provide direct instruction, which is not often. There was a follow-up meeting with S11 to clarify the responses. S11 indicated that they do not have a clear understanding of what co-teaching is. S11 stated, "There needs to be guidelines of what the co-teaching model looks like; what are our roles; how do we do lesson plans. We need time to meet; [I] never have time to meet with my co-teacher." S11 expresses, on their survey and in face-to-face conversation, what they identify as weaknesses in the co-teaching program.

When digging deeper into survey responses and comments, the broad picture of co-teaching that is initially painted does reveal difficulties. Well over three quarters of the co-teachers responding to the survey stated they have no common planning time to communicate and collaborate about content lessons (see Table 3). When responding to survey item 22 – I often present lessons in the co-taught classroom – five out of the eleven special educators'

responses indicated they do not or only sometimes present lessons. Well over three quarters of

the general education responses were a 4 or 5.

Table 3: Comparing Planning Time and Class Instruction (SE = Special Educator /GE = General Educator)

Question	1-Not at all	2	3 - Sometimes	4	5-Completely
17. My co-teacher and I have common planning time to communicate and collaborate about content lessons.	55% SE 44% GE	18% 17%	9% 28%	18% 6%	0% 6%
22. I often present lessons in the co-taught classroom.	18% 0%	9% 0%	18% 0%	27% 17%	27% 83%

It is evident that the general educators are the primary instructors. This raises the possibility that

a lack of joint planning time could be the reason that special education co-teachers are not

presenting lessons. Perhaps another reason could be that ten out of the thirteen special education

co-teachers work with two or more co-teachers daily; seven special education co-teachers work

with three different co-teachers daily and as indicated in several comments, co-teaching

assignments change from year to year.

Most co-teachers indicate they agree on the goals of the co-taught classroom (see Table

4, item 20). Items asking about confidence in working in the inclusive classroom, using a variety

of measures for grading, and sharing common views on behavior management and parental

involvement (16, 24, 27, and 28), were rated as "completely" (5) or "mostly" (4). There seems

to be a gap between agreeing on co-taught classroom goals and confidence with co-teaching

when about ninety percent of the respondents indicated they have little or no planning time and

well over half of the general educators indicated they have not received training to successfully

use co-teaching strategies (32). Many also feel they do not have sufficient resources to

implement co-teaching practice (33). If co-teachers have few resources, little training, and little

to no planning time then co-teachers are not able to agree on goals, share views, and have full

confidence in the inclusive co-taught classroom.

Table 4: Comparing Implementation and Training (SE = *Special Educator / GE = General Educator*)

Question	1-Not at all	2	3-Sometimes	4	5-Completely
16. I am confident as an educator working in the inclusive classroom.	0% SE 0% GE	0% 0%	0% 17%	27% 27%	73% 56%
20. My co-teacher and I agree on the goals of the co-taught classroom.	9% 0%	0% 6%	0% 17%	18% 44%	73% 33%
24. My co-teacher and I use a variety of measures for grading.	9% 0%	0% 6%	9% 17%	18% 22%	64% 55%
27. My co-teacher and I share common views on how to manage inappropriate behavior.	9% 5%	0% 0%	0% 5%	45% 40%	45% 50%
28. My co-teacher and I share views about parent involvement.	9% 5%	0% 0%	0% 11%	36% 28%	55% 56%
32. I have received the training I need to successfully use co-teaching strategies.	0% 6%	20% 39%	20% 33%	40% 16%	20% 6%
33. I have sufficient resources to implement successful co-teaching practices.	10% 16%	0% 28%	30% 22%	20% 28%	40% 6%

Another area of contradiction is with familiarity of individual student needs and planning

accordingly (item 14). All respondents indicated either a 3, 4, or 5 ("sometimes" to

"completely") (see Table 5).

Table 5: *Familiarity with Student Needs* (SE=*Special Educator /GE=General Educator*)

Question	1-Not at all	2	3-Sometimes	4	5-Completely
14. I am familiar with individual student needs and can plan accordingly.	0% SE 0% GE	0% 0%	9% 11%	18% 72%	73% 17%

Co-Teaching Structure

More specific difficulties are noted in the comments provided by survey respondents.

Several co-teachers indicated that there are limited placement options for special education

students. In some content areas there is no "average level" only "basic level" and in those

classes there are too many special education students. In one class of thirty students twenty-five

had IEP's. Several co-teachers wrote about their concern that the ICS class size has increased

with one general educator asking the question, "How do we address all the IEP modifications in

a classroom size of thirty? A greater number of students have difficulty in this large classroom

environment." Others stated that more planning time is needed. Eighty-six percent of the co-

teaching teams indicated they do not have common planning time and need more "than the five

minutes before the bell" to plan lessons that meet individual student needs. A "common prep is

crucial for collaborative lesson planning".

It is the rare case where the special educator is with one (or even two) co-teacher(s) in the

same content or subject. Most special educators teach in the same content but have several

different subjects and others teach in several different content areas altogether. One general

educator, G11, stated that "it is very difficult for co-teachers to flourish in the present format

since many of them [special educators] are responsible for multiple subject areas; there is very

little opportunity for them to specialize in the content and truly play a part in the teaching

process".

Co-teaching with many teachers appears to be problematic. G19 stated, "General and

special educators should not be with many co-teachers, two at the most is more effective". A

special educator who co-teaches with four general educators in the same content but different

subjects (and levels) stated it is very difficult. They move from one class and subject to the next

with only a few minutes to regroup. They note that it is impossible to have planning time with

all four co-teachers. Working with many teachers daily significantly impacts the opportunity to

co-plan.

Just as working with many co-teachers during the regular school day is difficult another frustrating situation occurs when co-teaching assignments change year to year. A few general and special education co-teachers stated that their survey responses were based on "being with the same co-teacher for five years….if [I was] with a new co-teacher [my] answers would be different." Many teachers become frustrated when their co-teaching partner "changes from year to year." The feeling is that it takes the school year to get to know your co-teacher and when assigned a new co-teacher the next year it's like starting all over again G4 stated, "[an] imperative part of co-teaching is chemistry; allow teams to stay together for consecutive years to build rapport."

Professional Development Needs

In the area of professional development a message that emerged from open ended comments is the importance of getting to know your co-teachers. Several co-teachers indicated that they are not sure if they share common views. G15 stated that "it takes time to develop that working relationship…a good rapport between teachers that are co-teaching is essential". This condition cannot be met especially when co-teaching teams on a six to one basis indicate they have no common planning time to communicate and collaborate about lessons. What also makes this difficult is that about half of the respondents indicated they have had no training or support. Two co-teachers, G16 and S11 who do not co-teach together, separately noted in their comments that professional development would not be helpful. Wanting clarification about this I met with both teachers. The consensus was that co-teaching teams are often changed. S11 said, "Co-teachers are different from year to year, we're trained, maybe, with one teacher, but then [you] change co-teachers and not trained. We want it, but not getting it." Table 6 illustrates this point. Many co-teachers are willing to learn new strategies but they are not provided with the training.

Table 6: *Willingness to Learn, Training, and Resources* (SE = Special Educator /GE = General Educator)

Question	1-Not at all	2	3-Sometimes	4	5-Completely
13. I am willing to learn new teaching strategies related to content instruction.	0% SE 0% GE	0% 0%	0% 0%	9% 6%	91% 94%
32. I have received the training I need to successfully use co-teaching strategies.	0% 6%	20% 39%	20% 33%	40% 16%	20% 6%
33. I have sufficient resources to implement successful co-teaching practices.	10% 17%	0% 28%	30% 22%	20% 28%	40% 5%

G16 indicated that it has been their experience that the special education co-teacher does not always have the content knowledge. G16 also expressed having less than positive experiences with co-teachers. Those bad experiences influence desire to co-teach, "There should be thoughtful planning of teams…need teacher input." S11 added to that stating, "There is no consistency with co-teaching teams, even with training if co-teachers don't have the same philosophy they'll bang heads; [co-teachers] need support from administration." In a related comment, S6 indicated that "in-service would be helpful to go [to] with new educators…when you are working with someone new or a new teacher you should attend a training session or in-service of some sort".

Responses to survey items (#34 a-g) asking about skills needed for better co-teaching appear to be across the board; not one area stands out as being more important than another. Table 7 shows how diverse the responses were illustrating how general and special educators rated the importance of professional development.

Table 7: Importance of Professional Development (SE = Special Educator / GE = General Educator)

34. To improve my skills for a better co-teaching program, professional development in the following areas would be beneficial:	1-Not Important	2	3-Somewhat	4	5- Very Important
• Content knowledge/Lesson planning	9% SE 28% GE	18% 17%	18% 11%	18% 33%	36% 11%
• Instructional strategies/Behavioral management	18% 6%	9% 16%	18% 39%	36% 33%	18% 6%
• Communication/collaborative skills	9%	0%	27%	18%	45%

	11%	5%	50%	17%	17%
• Parental rights in special education	9%	27%	9%	36%	18%
	11%	22%	6%	28%	33%
• The IEP/PLEP/writing goals and objectives	45%	27%	9%	18%	0%
	17%	6%	28%	28%	22%
• Accommodations/modifications	27%	27%	9%	27%	9%
	6%	11%	17%	28%	38%

Content knowledge and instructional strategies appear to have an almost even response. Almost an equal number of general educators rated content knowledge "not important" (1) or a "little important" (2) as they did with content knowledge being "important" (4) or "very important" (5). Instructional strategies and behavioral management received some higher scores. General educators, especially, look at this type of training as being somewhat more important.

In the areas of parental rights in special education, IEP/PLEP/ and writing goals and objectives, and accommodations/modifications, general educators rated this more important than special educators. Perhaps it may be due to little or no experience with these matters. Special educators receive training in these areas as part of their teacher preparation and the district provides refresher sessions each year. One general educator commented that the writing of the IEP goals and objectives and the PLEP pertains to the special educator. It seems as a co-teacher this general educator relies on their special education co-teacher to be the one exclusively responsible for that aspect of their classroom. Perhaps the general educator's lack of training in this area is the reason they rely on their co-teacher to complete those tasks.

Of the six co-teaching skill areas between special and general educator responses only four co-teachers indicated that communication and collaborative skills was not or of little importance (1 or 2). G8 addressed this, "[We] need more time to communicate than the few minutes before the class." G9 stated, "[I] don't know if [I] share common views with [my] co-teacher". In these two examples, co-teachers state the need to be able to communicate in more

detail so they get to know each other and talk about their co-taught classroom. Included in the written comments, general educators and quite a few special educators stated that there is little time to communicate which leads to not knowing what will happen during classes. This was especially evident in the cases where the special educator worked with many co-teachers daily.

When and how co-teachers are actively involved with the functions of their co-taught classroom is a question the survey alone did not determine. The survey only provides an overview of how actively involved co-teachers are with each other. Co-teachers indicate they have little or no common planning time to communicate or collaborate about lessons which may be the reason co-teachers are less likely to share in lesson planning and classroom responsibilities. On the surface this can be interpreted as co-teachers are not actively involved in providing instruction because time to communicate and collaborate is very limited and in some cases non-existent. In addition, co-teaching teams change from year to year and special educators can be assigned to different subjects each year which impacts their ability to develop expertise in a subject.

To find out more about co-teachers' actions a closer look was taken through classroom observations and interviews. This layer of analysis exposed the difficulties that exist in the district co-teaching program. The nuts and bolts of how the district co-teaching program is implemented and what co-teaching teams look like were revealed during the observation and interview process of the four co-teaching teams.

Co-Teaching Practice

Findings presented in this section represent what four general and special education co-teaching teams in the district have to say about their practice. This section will address four themes of this special education service delivery: the arrangement of co-teaching teams,

characteristics of co-teaching teams, planning time, and co-teacher training and professional

development. Providing findings across these themes is appropriate as these are areas in which

co-teachers reported their concerns and needs most consistently and are considered by co-

teachers to be essential when planning and implementing the co-teaching program. Co-teachers

participating in the inclusive general education classroom want to know what to expect and

desire opportunity to develop, implement, and assess their practice.

How Co-Teaching Teams are Arranged

Literature states that implementing co-teaching at the high school level is more complex

and professionally demanding. The scheduling of co-teachers has an impact on its success. Co-

teaching programs that are not well planned can lead to misunderstandings and difficulties

between general and special educators (Rice & Zigmond, 2000; Sileo, 2011; Weiss & Lloyd,

2003). All four teams reported similar issues surrounding the assignment of their teams.

According to the teams, communication, familiarity, working with many co-teachers, who

should co-teach, and the importance of keeping teams together are all significant aspects of

successful co-teaching practice. Table 8 sums up the arrangement of the four district co-teaching

teams that participated in the class observation and interview phases of this study. All teams

were assigned to co-teach together and no team received any communication about their

assignment from administration; it was the co-teachers that initiated communication about their

partnership. S3 and G9 and S1 and G3 have never co-taught together, but S1 and G3 know each

other as they are members of the same department. S9 and G13 co-taught the previous school

year and S12 and G23 for the past six years.

Table 8: How Co-Teaching Teams are Arranged

Co-Teaching Team	Communication: Administration	Communication: Teacher Initiated	Familiarity with Each Other	Work with Many Co-teachers
S3 & G9	No	Yes	No	S3 – 3 different co-teachers/2 different

				subjects - daily
S1 & G3	No	Yes	Yes, department only	S1 – 3 different co-teachers/same content - daily
S9 & G13	No	Yes	Yes – co-taught previous school year	S9 – 4 different co-teachers/same content/different levels – daily G13 – 2 different co-teachers/same content - daily
S12 & G23	No	Yes	Yes – co-taught for 6 years	S12 and G23 co-teach with each other all day

S3 and G9. Both of these educators have been teaching for over ten years with at least

five years of co-teaching experience, but not as a team. This is the first year of their co-teaching

partnership. S3 and G9 have co-taught with different teachers each year and S3 co-teaches with

three different teachers in two different content areas (in this district co-taught classes are

referred to as In-Class-Support, ICS). During the first interview, when asked how their co-

teaching team was arranged neither S3 nor G9 knew any of the details.

> G9: I have no idea.
> S3: I was under the impression I was teaching all resource center (RC) classes. I checked the schedule in August but on the first day of school [September teacher orientation] I found out…one of the RC [classes] was taken away and I saw I had a basic class.
> G9: On the first day school, right, we ran into each other and I said to S3 I think we are teaching together.

It seems apparent from these statements that this co-teaching team had no previous knowledge

about their co-teaching assignment. If it were not for comparing their daily schedules these co-

teachers would not have known they were a team until the first day of class. These educators

were the ones to communicate with each other. Neither S3 nor G9 indicated that their

supervisors communicated with them about their schedule.

In the second interview with S3 and G9 more detail surfaced about the assignment of

their team.

> S3: I had never worked with G9 before. I knew about G9 from just seeing G9 around school for a number of years.
> G9: We just knew each other from starting here.

S3 and G9 spoke about how their team was assigned to co-teach without any administrative communication or even opportunity to get to know each other. S3 described how this was not the first time they were assigned like this and felt that special educators are arbitrarily assigned as needed. S3's comments reflect what occurs during the scheduling of ICS classes. Each department supervisor schedules their subject classes. Those schedules are utilized to create ICS pairs. As will be discussed later, assigning co-teachers as needed does not contribute to forming a positive co-teaching relationship. As an example, during both classroom observations, G9 was the primary instructor; S3 did not contribute to the lesson. S9 stayed to the side of the class and occasionally asked students if they needed help.

> S3: …years ago I was kind of thrown into it. I didn't feel real comfortable for the first year.
> G9: I don't think it (the co-teaching assignment) was systematic at all.
> S3: I have no idea how they go about it. I'm highly qualified in [subject] and [another subject] so I guess maybe it's who's available and as a need.

S3 and G9 are not the only co-teaching team that has experienced this type of scheduling. S1 and G3 and S9 and G13 were scheduled without knowing who they would be working with. The only team to have had some form of introduction was S12 and G23. That was about six years ago when S12 and G23 started their co-teaching partnership.

S1 and G3. G3 received their 2013-14 schedule at the end of the previous school year and noticed there was an ICS class scheduled but no administrator spoke with them about the assignment. S1 and G3 expressed similar sentiments to that of S3 and G9.

> G3: I knew I would have an ICS but I didn't know who would be with me. It was more like the grapevine. We really didn't know until day one in September.
> S1: …nothing addressed, nothing given to [us], nothing, can you come in for a workshop together.

G3: The only way I knew was that on Genesis (teacher's web-based gradebook) it said ICS and it wasn't until the start of school that I actually knew who the person was that was assigned to me. I was, I guess, told by the computer, but then it wasn't until you [S1] showed up at the door. Nobody ever came up to me and said, "You're working with S1". It was assigned when? I don't know. Scheduled, yes. We just figured it out because the schedules coincided.

S1: I assume I'm going to be doing ICS. It's almost like the computer generates who is teaching an ICS subject and then the computer assigns me. It's never like; do you want to work with G3? Do you think you can work with G3? How do you think G3 would be with the kids? It's none of that. It's like, you're working with G3.

There is a sense of frustration when this co-teaching team discusses how their partnership began. In this case, as well as with S3 and G9, it was the teachers who compared schedules and found out who their co-teacher would be. S1 and G3 have not co-taught together but they have an advantage over S3 and G9 in that S1 and G3 are familiar with each other. They are both certified in the same content and have associated with each other over the years through department functions. Having familiarity seems to be a factor in creating a more positive co-teaching relationship. S1 and G3 expressed confidence in each other. This was somewhat evident during the first classroom observation and even more in the second observation where S1 was more involved in direct instruction. Both S1 and G3 appeared to have defined roles. G3 indicated that S1 is vital for educational modifications and accommodations as G3 has no special education experience.

Another similarity between S1 and G3 and S3 and G9 which puts additional strain on these co-teaching teams is both special educators co-teach with two additional teachers, but that is where the similarity ends. While S1 co-teaches in the same content and grade level, S3 co-teaches with three general educators in two different content areas and grade levels. S3 also teaches two RC classes and travels between two buildings (see Tables 9 and 10).

Table 9: S1's Daily Schedule

Class	Teacher	Subject and Grade Level
ICS	Co-teacher G1 – Building A-Rm. 1	Content A-9
ICS	Co-teacher G1 – Building A-Rm. 1	Content A-9

ICS	Co-teacher G2 – Building A-Rm. 2	Content A-9
ICS	Co-teacher G3 – Building A-Rm. 3	Content A-9
ICS	Co-teacher G2 – Building A-Rm. 2	Content A-9

Table 10: S3's Daily Schedule

Class	Teacher	Subject and Grade Level
ICS	Co-teacher G8 – Building B-Rm. 1	Content A-11
RC	S3 – Building A-Rm. 2	Content A-9
RC	S3 – Building A-Rm. 2	Content A-9
ICS	Co-teacher G9 – Building B-Rm. 3	Content B-11
ICS	Co-teacher G7 – Building B-Rm. 4	Content A-11

S1 said it is difficult working with many co-teachers daily. This is an experience that S1 seems to have each school year. In one school year S1 even had several different co-teachers for one subject.

> S1: …every year, I've been with 2, 3, or 4 co-teachers. [But] can't tell you how many medical and maternity leave switches I had in one class as the ICS teacher that year. That causes an entirely different dynamic in the classroom. It was like having a September three times in one year. This year with three different teachers, I'm doing three different [class activities], three different [class readings], I'm doing three different [other class readings] and sometimes I forget who is in which place in the [class activity]. Grading is different between the levels taught and each teacher has different classroom expectations. I really like all three of the people I teach with but sometimes it may trip me up.

Literature states that secondary co-teaching has its complexities (Keefe & Moore, 2004; Mastropieri & Scruggs, 2001; Nierengarten & Hughes; 2010). It is difficult to work with many co-teachers daily and several changes of a co-teacher in a single class further complicate the co-teaching relationship. S1 described how expectations, roles, and organization are all affected.

In the passage below, S3 described their experiences with three different co-teachers this year. There are similarities between what S3 describes and S1 describes. S1 had to reorient to new co-teachers throughout the year, S3 does this with each class.

> S3: The only barrier is that I am with three different teachers. If I was with the same teacher three times, I would know better what their style of teaching is, the way they interact with students and what they expect of me instead of trying to fit into three different roles…if I could spend my time focusing on the way one teaches…maybe I

can't perform my very best because of being spread out like that with three different styles and a couple of different subjects.

It is not only the special educator that works with many teachers. G3 and G9 only teach one ICS class daily, but they have had different co-teachers each year. In the passage below, G3 describes how it was to work with a co-teacher who was assigned to co-teach with several general educators in different content. This can affect instruction. In this case G3 was unable to work with their co-teacher to provide the appropriate academic support.

> G3: My co-teachers were less experienced, were not content certified, didn't have [content] background and they were spread among other subject areas and grades. With them it became about help me with crowd control, help me with behavior, here's the answer key, can you grade this…I couldn't rely on them [to assist with instruction].

G3 discussed how having different co-teachers changes the dynamics, especially special educators who are with them for one class and then work in other content areas. What G3 describes is not co-teaching. The special educator takes on a role as an aide instead of special educator delivering special education instruction related to the content. G9, on the other hand, does not have much to say about their co-teachers changing year to year. G9 seems a bit more fatalistic, being assigned a special education co-teacher will happen no matter what. The pattern of being assigned a co-teacher, according to G9, is established. G9 gives the impression that no matter which special educator is assigned to the class, G9 will continue to instruct as they do with their non-ICS classes. What G9 describes is not co-teaching either.

> G9: I don't really think all that much of it. I had one co-teacher one year, another for other years so I just kind of figured I would be working with someone new.

S9 and G13. This is S9 and G13's second year co-teaching, however, for both years, no administrator had communicated with S9 and G13 about their assignment. When asked how

their co-teaching team was arranged, referring to the first year they co-taught, S9 stated, "We

saw it on a piece of paper".

> S9: I found out that I was teaching with G13, brand new, just graduated out of college, so I went to G13 immediately.
>
> G13: [when I first began] they told me in my interview that I would be teaching ICS. I knew the content, I got all the materials but I was never told who I would be working with until S9 reached out to me. Then this year we found out by comparing schedules.
>
> S9: That's what they do; the regular ed teachers come in and compare their schedules with the special ed teachers and we find out, oh, look, we're together.
>
> G13: That's exactly what we get.
>
> S9: No communication from a boss, no communication verbally of anything that has to do with in-class-support and the regular ed teachers; very much assigned.

S9 and G13 continued to speak about how important it is to know who you are working

with; it is important to be able to get to know your co-teacher.

> G13: I remember we were waiting for the schedule of who's teaching what, not because I wanted to know what I was teaching but also who I was going to be working with.
>
> S9: Now in the old days, because Karen and I are old and G13 is young. When Karen and I [were] first assigned this job, when it [co-teaching] was new across the country, we never had that problem. We were brought together. These two people, you guys are going to work together. Let's do a little boundary breaking. Let's do a little get to know you. My goodness, I wouldn't care if you invited me after school to the Captain's Inn to say let's sit down and get to know each other. It doesn't have to be about [subject]. I'm just saying get the two people together. It makes a difference and I think that why can't every adult professional have a conversation with their adult supervisor [about their co-teacher].

S9 stresses the importance of communication regarding the co-teaching team. Often co-teaching

programs are put into place without the general and special educator having the opportunity to

meet and discuss how their co-teaching will be implemented. Murawski and Dieker (2000) call

this the "ready, fire, and aim approach" as schedules are created and then co-teachers are

assigned. That is how the co-teachers described the assignment of co-taught classes in the

district. This method of scheduling classes and then assigning co-teachers was confirmed by A1

during a special education in-service. According to A1, that method of scheduling is what they

have to work with (Co-Teaching Journal notes, April 8, 2014).

S9 and G13 experience working with many co-teachers daily, too. G13 works with one

other co-teacher now, but started the year with three different special educators. A schedule

change required the third special educator to be in a different class and S9 was moved to G13's

afternoon class.

> G13: S9 and I have two classes this year, together, but that wasn't originally the case. I
> actually had three people originally. I had S8 with me *th period (who's schedule
> was changed), I have S6 with me *th period who I taught with last year, so same
> thing and then *th period I have S9 and the only reason why S9's with me twice was
> because I needed an ICS in [another class] period.

G13 said that working with two co-teachers is not too difficult; S9 and G13 teach together for

two classes in a row later in the day.

> G13: …it's good for consistency that at least I have S9 for *th and *th periods together. I
> think that I'm so happy it's down to two people and it works with those two people
> because I also worked with both of them last year.

G13 brings up the point, similar to S1 and G3, that they are familiar with their co-teachers.

Knowing their co-teacher seems to be an important benefit.

While G13 teaches with two co-teachers daily, S9 co-teaches with four different general

educators daily. S9 describes how complicated this schedule is. Table 11 summarizes S9's

schedule.

> S9: Yeah, four, they're all different rooms so that's another thing; they're all different
> levels, too. It just makes it more difficult than it needs to be and since I've done both
> I know how good it can be and how crappy this is. I was in an in-class-support
> situation where I was only with one or two teachers each year and I was in one or two
> rooms. I feel that I was more effective because I wasn't carrying a classroom on my
> back, I wasn't running to the faculty room because I forgot my papers in there
> because that's where my classroom is and I wasn't … okay, G13, what was the
> homework for last night or so and so asked me this and I forget is that [different
> class]? Oh, no, that's [one subject], okay, so I always feel this year I need to keep

ahead a little bit because I always feel I'm behind because I'm not consistent. Nothing is consistent, nothing flows well this year. It's a nightmare. Not because of the people, just because I'm always spinning. I'm always like, wait a minute now, we didn't do the [activity] in this class. G16 doesn't do it that way. G19 does it this way. G13 has this. G18 has this. When I walk in a room, I'm always like, what page am I on? Which subject is it?

Table 11: S9's Daily Schedule

Class	Teacher	Subject and Grade Level
ICS	Co-teacher G16 – Building A-Rm. 1	Content A-9+
ICS	Co-teacher G18 – Building A-Rm. 2	Content B-9+
ICS	Co-teacher G13 – Building A-Rm. 3	Content B-9+
ICS	Co-teacher G13 – Building A-Rm. 4	Content C-9+
ICS	Co-teacher G19 – Building A-Rm. 5	Content A-9+

S9 points out many of the same issues that S3 and S1 talked about. Working with many co-teachers daily makes it difficult to organize and prepare for instruction which can impact the delivery of special education modifications and accommodations. S3 stated they cannot perform their best being spread out between three different co-teachers. Each co-teacher's expectations are different; in one class S3 spends half their time "running to the copy machine making copies". S3 adds to this by saying, "difficulty in working with three or more co-teachers is especially felt when you are the special educator co-teaching in a content area that is not your expertise". Under these conditions co-teachers cannot perform to their full potential.

How co-teaching teams are assigned impacts co-teacher practice which can impede special education service delivery. There was at least one co-teaching team in the district that experienced fewer obstacles in implementing their practice, to a large extent, as a result of their daily schedule and experience together. This team was the only pair of co-teachers together for all classes. They represent only one out of thirteen teams that teach together all day.   This means that only seven percent of co-teaching teams have that schedule.

S12 and G23. This special and general education co-teaching team has taught together in same content and subject for about six years. When they first started working together G23 was introduced to S12 by the department supervisor.

> G23: I had been told by the supervisor S12's name and that S12 taught the class before, had been in the class with four other teachers so S12 knew the material. S12 actually came and met me and introduced their self on the in-service day before school started.
> S12: …so then I addressed (introduced) G23 to the curriculum, what needed to be done.
> G23: S12 shared manuals and notebooks they had created in the past; gave me a feel for the curriculum.

Because of S12's experience with the content, S12 was the content expert when first meeting with G23. That introduction provided opportunity to discuss G23's approach to the content and roles each co-teacher assumed in class. Since that initial introduction, S12 and G23 have co-taught together at least one class for each of the past six years. This year they co-teach all five teaching periods daily. Having that familiarity has been significant in assisting S12 and G23 with the new course they are co-teaching this year.

> G23: Knowing who you're working with and what to expect from them, I know what S12 will do and what to expect.
> S12: It's the same for me. We both know the classroom routine.
> G23: That consistency for us helps with this first year teaching [new subject].
> S12: It's kind of nice to know how your day is going to go. It's two different classes, two preps, but it's the same person, so your routine is the same. G23 knows what's expected of me, I know what's expected of G23.
> G23: You don't have to worry about changing gears in the middle of the day because you're working with a different person or personality or teaching style. It would be very stressful for me because that would mean I would be with other teachers. It gets very frustrating and you're not on top of your game. It's easier to keep track of what's going on when you are with one person…you're consistent.
> S12: We have the whole routine.
> G23: Having taught for a little bit now we've gotten to know each other's strengths, we'll play off each other. We've even gotten to know each other outside the classroom.

It is evident from the comments, S12 and G23 made about the arrangement of their co-teaching team that they are comfortable in their co-teaching partnership. Co-teaching success rests on preparation and the opportunity for general and special educators to collaborate supports

effective co-teaching (Moin, Magiera, and Zigmond, 2009; Muller, Friend, Hurley-Chamberlain, 2009). S12 and G23, more than the other teams interviewed, have had time together to get to know each other which had helped them to create a positive co-teaching partnership.

The problems and difficulties that district co-teachers experience as a result of the assignment of their teams have been described. There is evidence of inconsistency with teams, frustration when working with many co-teachers, and a lack of communication with respect to co-teacher scheduling. Three out of the four teams expressed these negative aspects and one team was able to give a glimpse of how thoughtful arrangement of co-teaching teams can provide special and general educators with more positive experiences and support the delivery of special education services. These co-teachers not only voiced their concerns but also offered suggestions that would support successful co-teaching.

The interview participants offered several suggestions they feel administrators should consider when assigning or arranging co-teaching teams. The teams feel consideration should be given to who should co-teach emphasizing the importance of teacher input and the importance of keeping co-teaching teams together.

Who Should Co-Teach? Ask the Teacher. First, and most important, is for teachers to be open to co-teaching; teachers should want to co-teach. All interview participants emphasized the importance of this. In addition, teachers desire a say in with whom they would like to co-teach.

The general and special education co-teacher stated that experience with the content is also essential. It is important to be certified or highly qualified in the content area in which you are co-teaching. General educators are content certified; it is not always the case with special educators as they can be assigned to co-teach in content different from their expertise.

G3: We've never been asked, do you like to teach with someone else? It's just; you're going to have to teach with someone else. When I was new in my career I didn't think I could be good at co-teaching. I didn't have the training on the special ed side and I was very uncomfortable; I was barely getting my act together as a content teacher.

S1: I think it could be hard for a regular ed teacher if they are not open to it. Suddenly another teacher is in your room and they're going to make commentary about some of your students.

G13: I think that for any subject we should be asking the teacher whether they want ICS.

S9: I think rather that throwing it together on a piece of paper we [administration] should be talking to the people. There are people who say, oh, yeah, it's great and others who say no. If you ask a content teacher, you ok with having ICS and the teacher says absolutely not then it's the job of the supervisor to address why the answer is no. Again, you've got to have a conversation. Just say to us here's the situation. To just be thrown in [to co-teaching] is rude.

To be "thrown in" to a co-teaching partnership does not constitute thoughtful arrangement of co-teaching teams. Certainly, when a special educator is assigned to a content area in which they have no knowledge or experience, the special educator is not fully prepared to offer effective instruction. S3 gave an example of one of their past experiences.

S3: One year I did ICS for [subject not S3's strength or certification]. I don't know who thought up that one. I did it, I don't want to say I was more of a hindrance than I was help, but I wasn't much of a help because they [administration] totally took me out of the ballpark on that one. I was a fish out of water. I was trying to learn the day ahead of students and it just wasn't working. If they could support us, concentrate us into one area maybe, an area we're comfortable [knowledgeable] with.

S3 indicated that they were assigned to co-teach in a classroom that was not their expertise. S3 attempted to stay on top of the content but it just was not working. In addition it is not evident that support was available or even time provided for S3 and their co-teacher to discuss what role each will assume in the co-taught classroom. Co-teachers need to be prepared for implementing instruction so the general and special educators can best combine their respective talents (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010; Weiss & Lloyd, 2002). If each co-teacher is able to discuss expectations and delineate roles based on each other's strengths it sets a foundation for more effective instruction. When co-teachers are

assigned without communication or input it does not offer the opportunity for co-teachers to

prepare.

> G23: I think it would be nice if we had more of an option in who we get to work with because I think it benefits the students if you're able to co-teach and work out the assignments and your roles in the room and it meshes. It's a better experience overall, for all the students, not just the special education student.

When arranging co-teaching teams, one additional suggestion was made by all eight

interview participants, keep teams together. Co-teaching teams in the district are assigned, in

many cases general and special education teachers work with several co-teachers daily. The co-

teachers have identified the difficulties of both those conditions. What they also say is, after

working together for an entire school year and developing rapport and instructional approaches it

almost seems as though they have worked hard for nothing if they are re-assigned to a different

co-teacher the next school year. S1 and G3 and S3 and G9 are teaching together for the first

time, had no pre-co-teaching preparation time, but as the school year progressed they got to

know each other and developed their working relationship. If assigned to a new co-teacher in the

next school year they have lost all their momentum as co-teachers.

> S1: Another part, too, I think it's really good to do an ICS setting, to say to G3 that I will be placed with G3 next year. If they place me with G3 one year, give it a second year.
> G3: Please yes, it's continuity.
> S1: Don't throw in Joe Schmoe with G3 next year.
> G3: Yeah, that's very frustrating.
> S1: I know situations like that have happened on occasion, but you get the groove of each other.
> G3: I just think we've done well this year. Imagine next year how much better we could be. It would be even greater.
> S3: In my past experiences of co-teaching the second year was a heck of a lot easier than the first year. I have an idea of what's going to be coming up and the material that's going to be taught. If you could pair people for more than a year I think that would be a big positive, it would make it easier for me and my co-teacher. It probably would be better for the kids; they would be getting something more coordinated coming from both of us.

> G9: I like want you said and you made me think about how I can just improve with consistency.
>
> S3: I think that if you're going to pair up somebody, it does take a little while to get to know how they work. Next year, if I was in the class again I'd know what we're going to be covering over the year; I know how G9 teaches.

S9 and G13 are co-teaching for the second year in a row. Speaking specifically to that team relationship, here's what they have to say.

> G13: …last year was our first year working together, it was my first year teaching, and so we were able to this year flow right back into what we were doing last year. It was a lot easier to transition.
>
> S9: One of the complaints about in class support is that you're not with the same person and when you are with the same person you create a more co-teaching environment then the special ed teacher is [not] an aid in the room. You are more co-teaching because you're with the person again, you know … like G13 just said it's a back and forth. You saw how we teach, that's how we teach every day. I see something, I say it. If G13 sees something they say it, especially when I'm at the board, if I'm making a mistake G13 lets me know, that kind of thing. Me and G19, [do the] same thing; constant back and forth, back and forth. When you're brand new and you're just put together and you're new this year and you're new again next year, you're new again the following year, you never get that.

S12 and G23 are six years together as a co-teaching team. S12 begins to speak generally about working with the same co-teacher in subsequent school years. S12 indicates it takes time to establish the co-teaching relationship. Keeping teams together contributes to the co-teaching collaborative process.

> S12: If I was with that person the next year I would probably be able to pick up on it a little quicker, having one year under my belt with that person – oh, ok, I know how it's done…that first year together, that's tough, but by the second year you feel a little bit more comfortable in taking over. Now you know the material, you know that teacher, how's it going and the you establish a relationship. You say, you know what, OK. I could take over this content material and we can look at that and redesign it or hey, maybe that didn't work out.

In responding to the question about working together for six years, G23 stated, "It's comfortable. It's reassuring, less stressful". S12 also feels assured in their co-teaching relationship.

> S12: We'll add our little do da's here and there as a new year comes along, but we pretty much have the consistency of the flow of it.
> G23: It's nice, like S12 said, I'll say, oh, we did that last year, that really worked; we did that, it really didn't work. Let's try something else.

What has emerged from what co-teachers say about how their co-teaching teams are arranged is the need for communication from administration about team assignments, the need to limit the number of co-teachers a special and general educator works with daily, and the importance of keeping teams together (see Appendix G). Co-teachers say knowing who they will be teaching with, having a say, and working with only one or two co-teachers daily can contribute to an opportunity to prepare for their co-taught classroom and can reduce the complexity of their daily schedule.

What the District Co-Taught Classroom Looks Like

According to Friend, Cook, Hurley-Chamberlain, & Shamberger (2010) a key aspect of co-teaching is to be prepared for implementing instruction. The educators must take time to discuss what each can do to provide effective instruction. Co-teaching is different form a one-teacher classroom and general educators have stated they do not always know how to work with their special education co-teacher. Even though co-teaching may appeal to educators, without structured time to define roles within the program effective practice is not always attained (Grskovic & Trzcinka, 2011; McHatton & McCray, 2007). Each of the districts' co-teaching teams differ in their roles and experiences as co-teachers which has an influence on how teams structure and implement their practice (Table 12).

Table 12: Co-Teaching Team Characteristics

Co-Teaching Team	Co-teaching Instructional Arrangement	Parity – Both Co-teachers Actively Involved	Preparation Prior to Start of Course	Familiarity with Each Other	Work with Many Co-teachers
S3 & G9	G9 instructs/S3 observes-supports	No – G9 instructs, S3 back of class	No	No	S3 – 3 different co-teachers/2 different subjects - daily
S1 & G3	G3 instructs/S1 supports and alternatively teaches	Yes – G3 instructs, S1 actively supports and interjects	No	Yes, department only	S1 – 3 different co-teachers/same content - daily
S9 & G13	Team	Yes – G13 and S9 actively involved in instruction	Yes – taught course together before	Yes – same department/co-taught previous school year	S9 – 4 different co-teachers/same content/different levels – daily G13 – 2 different co-teachers/same content - daily
S12 & G23	Team	Yes – G23 and S12 actively involved in instruction	Yes – taught course together before/co-teach together all day	Yes – same department/co-taught for 5 years	S12 and G23 co-teach with each other all day

During the classroom observation, S3 and G9 demonstrated little interaction with each

other during instruction; S3 indicated that they are not familiar with the technology used to

deliver content. G9 stated during the interview they wished they had the opportunity to discuss

expectations with S3 but was not sure how to communicate that. In a different team observation

S1 and G3 were observed working together to provide instruction, both co-teachers were directly

involved with instruction as both teachers are content certified. However, limitations also

existed on the part of the S1 due to lack of experience with the technology used in class. These

two teams had never co-taught together and were assigned to co-teach without benefit of time to

prepare for the methods of content instruction. The other two teams, S9 and G13 and S12 and

G23, had the benefit of working together in the past and were able to draw on that experience.

They designed lessons in which both co-teachers interacted to present instruction. The co-

teachers that were experienced with the content and familiar with each other were secure in their

instructional roles and indicated they were better able to work with all students to meet their

academic needs. No co-teaching team that was interviewed had time prior to the start of classes

to work together to prepare for their co-taught classroom. This lack of preparation time

especially put S3 and S1 at a disadvantage. There was no time provided prior to their initial class

meeting to be introduced to and work with the technology used to deliver their content area

instruction.

S3 and G9. The first classroom observation produced some insight into this co-teaching

team's actions. Both teachers were present in the classroom, but G9 was the only teacher

engaged in lesson instruction. S3 often stayed to the side of the class, walking around

occasionally asking students if they needed help. This action was observed to be no different

during the second classroom observation. S3 in speaking about their co-taught classroom

explains their role.

> S3: I don't think it [our co-teaching] was really planned; G9 is by far the content teacher.
> Okay. I wouldn't try to challenge G9's knowledge of [content] or whatever. I try to
> keep the kids on track, ask if them if they need help, or with the materials, or
> organization, but the way I look at it, G9 is the [content] teacher…I would not try to
> for a minute think that I could teach more [subject] than G9. I wouldn't even come
> close to thinking I could. I try to help out the individuals [students] the best I can…As
> for parameters, I think it's understood with us that G9's the content teacher and, like I
> said, I wouldn't try to teach what G9 teaches. I try to be the supporting teacher,
> maybe, as a way to put it. I have worked with other teachers in the past where they
> expect me to teach. They teach one period, I teach the next period. That's been a
> while since I've done that.

S3 implied that their role in the co-taught classroom was less planned and more understood;

understood being the general education teacher delivers instruction and the special educator

provides support. G9 expressed the same sentiments as they stated, "That's how I interpreted it".

This indicates there was little or no time taken to identify how each of the co-teachers could

capitalize on their strengths. S3 and G9 indicated this when speaking about how their team was

arranged. For both special and general educator to deliver instruction to all students in their

inclusive classroom requires a coordinated effort and S3 and G9 did not have that opportunity

prior to beginning their class.

S3 also stressed how they are unfamiliar with the instructional methods G9 uses. G9's

methods combine technology and student centered activities to deliver instruction. Students

research, collaborate, and write responses using the computer and send documents to G9 for

feedback. It is not evident that S3 is part of that process. In fact, S3 admits they are weak in this

area.

> S3: Technology, I have to go a ways. I'm going to try to sign up for a couple of PD
> hours. I've got to get in line with it a little bit more, so I can see maybe more what
> some of the kids are doing. This is the first year I've been involved in so much
> technology.

In explaining how their course is structured G9 spoke about a very organized manner in

which they conduct the course. At the beginning of the school year, students were not used to

the instructional approaches used in the course. S3 said, though, that as the year progressed the

students became more receptive to the format.

> G9: I have high expectations of what [students] have to do. We're either using our skills
> of reading, writing, speaking, listening or interpreting. We have about eight units and
> every unit has a cycle to it. It will be lecture, essay, lecture, presentation of some sort,
> which is the debate that we're doing Thursday and then the finale thing is the
> reflection on the entire unit. I just [think] of the technology as a different type of
> notebook. A different type of binder, because that's where they're doing all their
> work, but it is a heavy emphasis's on the kids doing, they're not passive at all.

There was apprehension when S3 discussed their role in classroom instruction as S3 was

not used to G9's teaching style. S3 offered compliments to G9 about the course structure but

gave no indication that they were involved in the instructional process.

> S3: I have knowledge of the subject we're teaching but not knowing exactly how it's
> going to be taught… That's something I had to get used to. I have to admit, I was
> skeptical the way that they worked in groups, because usually when I deal with the

type of kids that I deal with, they are not always able to work in a groups like that.
Okay. But in this, it's worked, okay. G9 has switched up the pairings of the
groupings, several times and it's usually always worked.

There was additional evidence that S3 was less comfortable in the co-teaching situation.

S3 spoke about their resource classes and how a smaller group setting is more to their liking.

This could be why S3 took a support role in the co-taught classroom. S3 stated they feel more

comfortable with small group instruction.

> S3: In a small class room like [the resource class] I can adapt easier than in a [big]
> classroom. It's hard … the bigger the class to try to get one thing to fit all of it. I felt
> very confident, more confident probably doing that resource room class, only because
> I knew my audience better. I feel comfortable with [ICS class], but I don't know as
> much as G9 does when it comes to the content. As long as what I try to do is okay
> with what G9 is trying to do as G9 teaches because, again, G9 is the one who
> [teaches] the content. Maybe I'm reinforcing it, like if I'm sitting along aside
> somebody or leaning up back here talking to somebody, "Hey, how you doing? You
> need to help with this?" Try to address one or two little questions while G9's covering
> much more material. I'm usually in this area here, towards the back of the room, and
> kind of rotating among the students. I try to stay away from the front. That's G9's.
> G9's doing the lecturing. I admire what you do, I really do. When G9 lectures, it's
> very organized, more organized than I could ever be. When G9's lecturing and there's
> a series of videos, they're all lined up and G9 just seamlessly transition from one
> thing to another, which is very admirable. It's a very good style. I don't think I'd be
> able to ever do that. I usually deal with a different style of students, but I really
> admire the way you do that. I try to just stay in the background and support where I
> can. I'm sorry, I've missed many things, I'm sure, but I try just to circulate.

G9 concurred with S3's description of their classroom role, "That's my interpretation; everything

S3 described is what happens". G9 seemed resigned to the fact that this was the only way their

co-taught class would be structured. G9 also left the impression, that they wished it could be

different. After their second interview G9 asked me, privately, if we could meet individually to

discuss their concerns about the co-taught class.

G9 said they had assumptions about co-teaching based on past experiences but other co-

teachers did more together than what they experienced with S3. G9's concern stemmed from

little opportunity to meet individually with S3 and difficulty communicating with S3. G9 did not

know what they could do to facilitate a co-teaching partnership. G9 wants to improve classroom

co-instruction and support but does not feel they have the skills or resources to communicate

their "hopes and dreams".

      S1 and G3. What is interesting about this co-teaching team is even though S1 professes

to be unfamiliar and uncomfortable with G3's instructional methods, S1 did not allow that to

impede their role as a co-teacher. In the first interview S1 indicated that one improvement they

could make would be with gaining a better understanding of the computer programs used to

instruct the content. S1 discussed the importance of understanding and applying the technology

applications for the content. G3 spoke about how time needs to be taken to do those things but

time was not available.

> S1: If I could sit with G3 and G3 could go, "You want to see this? You want to see that?"
> But we can't do it in the classroom because we're administering to the children.
> G3: That takes time to do it. That's our biggest impediment, time.

      As the year progressed it seemed that S1 became more confident in working with the

technology G3 uses as part of their instructional methods. This was evident during the second

observation. G3 had to step out of the room and S1 assisted students with logging on to their

activity and guiding them through the lesson. The longer S1 and G3 co-taught, the more

exposure S1 had to the technology and instructional strategies, but this took the greater part of

the school year. S1, being content certified and familiar with the scope and sequence of the

course, used their knowledge to instruct and support students while G3 focused on the

instructional technology aspects of the lesson.

      It is evident from the classroom observations and interviews that S1 and G3 understand

each other's strengths and utilize their talents to create a positive co-taught classroom. Part of

this may be due to their familiarity with each other and common educational goals.

> G3: I already know S1. It's familiar and while we have not taught together, I know what S1's temperament is like, personality is like, and so I knew we would jive well. S1's a great person to be with and S1's very personable and friendly. That's a big piece of it. We know each other in and out of the classroom, so that's being comfortable. We're comfortable. I figured that being comfortable with S1 outside the classroom I could transfer that into the classroom.
>
> S1: We have the common thread that we love these kids and we want them to be successful. What we really want out of [class activity] is for them to learn it, to learn it and enjoy it.
>
> G3: The most important thing is your students ultimately. That's the most important thing so you do whatever works between the two of you to take care of your kids.
>
> S1: That's very easy for me to work with because my goal is to have the kids learn.

This team also sees each other as equals. G3 stated that they did not have to guide or train each other. They each take part in the lesson; both directly instruct students and both are responsible for sharing the grading of class work and assessments.

> S1: We have a good yin and yang. G3 doesn't care if I interject. I don't care if G3 interjects. Sometimes it's something that somebody was going to say next or something that somebody forgot, but it doesn't [matter]. We're not being bossy over another person.
>
> G3: [It's] not just the interjecting, I'll teach this part of the lesson; you teach that part of the lesson.

This was evident in both classroom observations. Both teachers began the lesson together with commentary back and forth, interjecting ideas for clarification of lesson content, and both S1 and G3 facilitated smooth transitions between activities. The actions of S1 and G3 were quite the opposite of S3 and G9. This cooperative interaction on the part of S1 and G3 seems to be due to their knowing and trusting each other.

> G3: I hold you in high regard…S1's a great person…I figured being comfortable with S1 outside of the classroom could transfer into the classroom...I know S1's temperament so I knew we would jive…I trust you, that's the big thing, I know you know it [the content] so I don't have to worry…there's unbelievable trust there.

G3 makes that very point, knowing and trusting each other contributed to their ability to define their co-teaching roles. G3 attributed that to S1's experience with the content and their understanding of S1's contribution to the ICS classroom.

G3: I already know you know the content so it's not like I have to teach you the content. My impression is as I do the activities, you step in for [support]. When we're implementing the activities in action, you [S1] adjust for students on the special ed side of things, catching [me]…maybe you should make that thought bigger or space this stuff out, catch that stuff for me.

S1: I do that a lot because I try to look at it from the special ed side. It's not that G3 doesn't take that into an account, while G3's teaching sometimes I'm seeing the deer in the headlights look on some of them [students] then that's when I'll ask the question as if I don't know it.

G3: … it's a good checkpoint for me…. It's really good when S1 reminds me of [student needs].

S1 and G3 described how lessons and materials were modified to meet individual needs.

Both teachers are involved with this but it seems that G3 relies on S1 for specific modifications

and strategies.

G3: There was the one quiz and I'm always mindful, okay, how can I save paper? The 'one through four' quiz was, when I made it, I purposely [used] clear font but it's going to be condensed on to one piece of paper front and back. But then, for some of our students with perceptual-impairments, just in general for the special ed side of it, making the font bigger and spacing things out more. What did that end up being three pages or…

S1: It ended up being three pages and for G3's one class that wasn't in-class-support, I copied them front to back. For our ICS class, I copied them front to front to front because that's too much with getting lost on the back of the page and G3's like, "Oh my gosh! I never would have thought of that."

S1 and G3 spoke about another key aspect of their co-teaching relationship,

communication. S1 thought of G3 as being open and honest with communication and G3

provided information about their co-taught class in a professional and non-imposing way.

S1: I think that G3 is an excellent communicator. G3 makes sure everybody is on the same page…in an informative way. G3's a great share-er of materials. The communication is the key. I knew G3 would never make me feel stupid if I didn't know something [like how do I log on to this?]. G3 doesn't say we have to do this. I never feel like G3's the boss of me.

Both S1 and G3 were able to speak with each other about content issues, student

progress, and parental concerns and identified their roles as co-teachers based upon their

strengths.

Like S3, S1 co-taught with two other general educators during the school day but unlike S3, it was in the same content. G3 was similar to G9 in that each only had one co-taught class and had to plan for their non-ICS classes as well. G3 said they controlled the lesson planning and activities for the ICS and non-ICS classes since they were all very similar. G9 also controlled the lesson but the big difference between S1 and G3 and S3 and G9 is that S1 was an active participant in their co-taught class.

> S1: I would say, in this situation, am I good with teaching them? Absolutely. Can I get them to listen to me? Absolutely. Do I know their strengths and weaknesses? As much as I can, I do know. If it's a content question, I can answer them. I can do that. I'm at my best. Reading aloud to them, which I absolutely love and explaining, that is my forte. I love that. If we have days like that, which we do, sometimes they're independently reading and sometimes not, then G3 can work on whatever computer case needs working on and G3 interjects when G3 needs to.

S1's experience with the content and as a co-teacher of eighteen years provided them with skills necessary to take a pro-active role in the classroom. S3 has less experience co-teaching, is not comfortable with co-teaching, and less experienced with the content. Both of these general and special education co-teaching teams had no time to prepare for their co-teaching, but S1 had the foundation of content knowledge and experience that allowed them to be more successful.

S9 and G13. This co-teaching team, like S1 and G3, are members of the same content department and familiar with each other. Their familiarity runs a little deeper as S9 and G13 had co-taught together the previous school year. Having co-taught together has helped both S9 and G13 in their classroom instruction.

> S9: I'm used to G13's teaching style and I've been teaching the class for a long time. I know, we know, what's coming up next. I feel G13 and I are a well oiled machine now because we're heading into the end of our second year together.
> G13: We were able to flow right back into what we were doing last year.

S9 and G13 also co-taught two classes together. Having had experience co-teaching with

each other and working together for a couple of classes daily has enabled S9 and G13 to present

their content in a structured and professional manner. There is consistency between their classes

and their team, G13 calls it "balance".

> G13: I have S9 *th and *th periods, it's the same, that balance is so important. I have my
> ICS classes [with S9] and I like my ICS classes.

S9 has much experience with the content and explained how important it is to have

mastery of the content. It was not easy when S9 began to co-teach in the content area. S9

explained what they did when they first began to co-teach.

> S9: The special ed teacher should know the content. If he or she does not know the
> content, which is something that I experienced …I told you in our first interview how
> I acted when I did not know the content in the beginning when they first put me in the
> [subject] department. Before I was qualified in [subject], I was one of my students. I
> couldn't do subject, and so I acted like they do. I took notes. I made copies. I did all
> the things I was good at, at the time. I dealt with classroom behavior. I dealt with
> parent emails. Until I learned the content, I used to bring my little notebooks home at
> night and redo the homework, redo the problems, and I only said something when I
> knew it was fact. [Now] I've been teaching this [subject] for a long time, I know
> what's coming.

S9 took it upon them-self to learn the content as the district does not provide time for

special educators to learn new content. When assigned to a new course, special educators have

to spend an entire school year becoming familiar with the scope and sequence of the course and

the next school year they may not have that class again, being assigned to a different subject. S9

indicated this situation is a difficult one and special educators cannot be effective in delivering

the essential aspects of the content under that situation. S9 gave an example of a colleague who

was in that same situation.

> S9: The concrete example of that for you is S7, so S7 is teaching [subject] this year.
> Never saw [subject] since S7 was in high school, okay. Throw S7 in how many? I
> think S7 has three in-class-support [same subjects]. Now if they take S7 and S7
> couldn't be the teacher, S7 had to learn the content, so since we don't provide that

opportunity you have to do it on the fly, right? It becomes a whole different animal then, it's not the teacher teaching the content because you've got to learn the content first. S7's praying now that they get [same subject] again next year, so this experience doesn't get thrown out the window for naught, right?

S9 referred to what took place in the district when co-teaching was initially implemented. S9 spoke about how co-teachers could observe the content classes they were assigned to teach as well as being provided with pre-class preparation time to discuss co-teacher roles with respect to the content.

> S9: Even as a seasoned professional teacher, I would want that still. Let's say next year they put me in your expertise, [interviewer], they put me in [content]. You'd be darn right I'd be out there observing [content], because I don't know anything about it.

G13 emphasized how experience with content and co-teaching together has enabled them to work together to provide effective instruction. Working together means co-instructing and together S9 and G13 meet the needs of all students in their classroom.

> G13: The ICS teacher needs to know content especially in [this subject] because they are … all the kids are relying on both teachers…you really need to have both teachers helping everyone. That's the way it flows and they look at both of you as the teacher and we've come across that way.
> S9: G13 says something. I say something. When you're [G13] up at the board, let's say, and you're teaching a concept, we present, and then we talk about it, and then we do it. It's just constant back and forth, back and forth.

The articulation, or "groove" as S9 puts it, that takes place between S9 and G13 provides two perspectives in lesson delivery. This mutual exchange was very evident in both classroom observations. Concepts were presented and reinforced by both co-teachers. As G13 would demonstrate how to complete a task, S9 was there emphasizing the key steps and main points to remember. When both S9 and G13 worked together in this manner they even completed each other's sentences. Co-instructing like this is a vital part of their co-taught classroom and both teachers are able to meet the needs of all students in this manner.

G13: Our classes really need to have both teachers helping everyone. They think that S9 is also [the subject] teacher and don't see the special ed teacher part of it.

S9: That always makes us feel good that the kids really don't know because they do, they just think there's two [subject] teachers in the room. That has been a really big success of in-class-support I have to say. I was helping [student] who struggled so much and [student] needs somebody to restate it, to say it again and again, a couple of times, do it with them one on one. Even though [student] just saw it on the board, [student] needs that little bit of one on one again and then [student] can do it, so we're constantly doing that.

G13: It's helping everybody; benefitting all the students.

G13 continued by stating that there are teachers that would not take the time to make necessary modifications in the inclusive general education classroom. They would not work with the special education co-teacher to develop lessons that meet learning needs of students.

G13: I'm just saying from [subject] experience, I think that part of that is the general education teacher being willing for that. People in the [subject] department have a lot of control issues with making modifications. I think it's a control thing. Wanting to make those modifications, like the guided notes, spend that extra time making the guided notes. There are people, they won't take that time.

S9 supported this statement when talking about past experiences with co-teachers that did not appreciate their interjecting during the lesson. Using different methods and strategies to help students learn was not accepted by some general educators. During the classroom observation S9 sang the procedure for steps in completing an exercise, some students sang along, too.

S9: I've worked with teachers where I'm not allowed to answer any questions, ever, and I could name you the teachers who I would not be singing the [lesson concept] with. Yesterday, I sang the [lesson concept]. Why? Because it's hard to memorize things for certain students, including myself, so I take things and put them into songs, big deal. I can tell you that would ruffle some [other teachers] feathers.

S9 spoke about how, as they had become more experienced with the co-teaching model, they developed more interpersonal and individual accountability. S9 had to communicate with their past co-teachers the importance of both the general and special educator's responsibility for instructional modifications and accommodations.

S9: In the past I've known teachers who get freaked out if there's an [instructional] aide in the room, for goodness sakes, not even another teacher. The control thing, knowing that somebody has to give up that control, knowing that you have to have modifications; those are the things that are tough. I've become assertive over the years, so now I would say to somebody, I'm sorry, but this is what we have to do with this kid. It's my responsibility.

S9 and G13 discussed how they are able to meet the learning needs of students in their inclusive classroom. Having had experience co-teaching in the previous school year and working together for two classes daily enabled them to build a better co-teaching environment.

There is one major drawback, however, to their co-teaching situation; S9 co-teaches with three other general educators daily, same content but different courses and levels. That has had an impact on the additional planning that needs to take place. S9 and G13 "make it work", but it is not ideal. Having the familiarity and experience with each other gives them a foundation from which to work.

G13: I think it's utilizing the time that you have. You might see [co-teacher] for five minutes here and there, and you give them the heads up. This is what we're doing today.

S9: To give you a concrete example, when I'm coming into my period * class, G13 is leaving for [duty] period, so G13 doesn't have to be somewhere right away. I do. G13 stands with me at that door and says I just did this with our [class] kids in period *. I think this is what we're going to do for our kids in period **, or G13'll say, here's what I'm doing for [subject] class today. What do you think? We use those minutes right there.

When asked about having more time than a few minutes a day to prepare together for classes S9 stated, "That would be glorious".

S12 and G23. Of the four co-teaching teams interviewed, S12 and G23 is the only team to be co-teaching all five classes daily; S12 and G23 co-teach together all day. They also have co-taught together for five years. This team is very familiar with each other both in and outside of school. Working together for many years and having the opportunity to co-teach for all

classes has enabled S12 and G23 to create structured class routines and effective instructional

strategies. These characteristics were evident during both classroom observations.

During the first observation, G23 began the class (introducing the lesson) while S12

circulated among the students getting them on task. When G23 finished, S12 began to review

the previous day's lesson, making connections between that and what to expect in the present

lesson. The opposite action took place during the second observation with S12 beginning the

class and G23 reviewing the previous lesson. Both co-teachers moved around the classroom

assisting students, interjecting ideas for clarification, and demonstrating seamless transition

between activities. Their roles appeared interchangeable.

As a special educator, S12 sees their role as more of academic support, similar to S3.

However, S12, having many years of experience with the content and knowing G23 as well as

they do, participated actively and on an equal level with G23. When they first began to co-teach

G23 was new to the district, S12 oriented G23 to the course they were teaching and both worked

with each other's strengths, combining their talents to co-instruct.

> S12: Yeah, I think you know G23 is the RegEd teacher, so G23's the materials [content] teacher, then I would show G23 what we did [in the past], so then when G23 did the lesson it was my job to make sure the kids understood the lesson.
>
> G23: It was really helpful to have somebody who had already done, gone through the curriculum and has materials to share, show what they have done in the past, things that they have used that had worked. I [would] bounce ideas off S12 and S12 bounces ideas off me and we'll find things and say I saw this, what do you think of it…..
>
> S12: …and let's do this and maybe it's an activity that's above them [the students] but we want to try and challenge them a little bit and then if it doesn't work we'll down play it, umm, and as far as me being in there G23 will do the lesson then I'll throw in everyday life experiences to kind of make those connections for them.
>
> G23: The fact that we have taught for a little bit now, time with each other, we've gotten to know each other's strengths a bit more too so like, I know a little bit more about S12, S12's more the gardener, S12 does more planting, does more boating, so S12 has areas of hobbies, interests, that are different than mine so S12'll talk more about that aspect of our curriculum and vice-a-versa. S12 knows I have more of a [specialty] background so, you know, we'll play off of each other as far as our hobbies, too.

> We've gotten to know each other outside of the classroom, we've gotten to know each other and where our strengths lie within our curriculum.
>
> S12: G23 has strengths. My strengths [are] G23's weaknesses; my weaknesses [are G23's strengths].
>
> G23: [We] kind of complement each other.
>
> S12: Yeah we were like "OK, you take that over. I'll take that over."

Even though S12 sees G23 as the content teacher, S12 is comfortable with letting G23 know that they have delivered content in a not-so-clear or incorrect manner. This is different from S3 who stated that their co-teacher, G9, is the content teacher and they would never try to teach what G9 teaches. S12 said G23 is the content teacher, but S12 having had many years experience with the content will interject and articulate with G23. S12, more than S3, is confident in their knowledge of the content material and knows G23 well enough that they can work with each other in such a manner.

> S12: G23 is the lead and I respect that because G23's degree is different than mine. I know the curriculum and I know the content and even if G23 messes up I'm not afraid to tell G23 they made a mistake and G23 will say thank you, so, but as far as teaching wise, again, I will join in and we'll bounce off of each other or maybe if I realize the class isn't getting it, I'll step up and put my own little spin on it with my personal experiences or try to come up with my own ideas to help them remember, right on the spot.
>
> G23: S12 would go and backtrack and pull up a [concept] and say what does that mean, so in that sense that's really helped me. Then I started looking at and saying oh, they might not know this word or I have to explain that word, so I kind of learned from S12, too.

The familiarity that S12 and G23 share transcends into their classroom practice. As G23 presents and explains concepts S12 would re-explain using different terms. Similar in fashion to S9 and G13, S12 and G23 would present two perspectives to assist student learning and understanding. S12 and G23 incorporated guided notes, hands-on activities, projects, films, and demonstrations to reinforce content.

> G23: When we modify the activity we usually allow certain students extra time if they need it. I know we've modified where a student has a reduced amount of problems, [they] have to do a certain number [of questions], but it is reduced.

> S12: Or just simply giving them a word bank if they need it for a test, an assessment. G23 is very accommodating to special ed kids and the regular ed kids. G23 doesn't feel they verse [compete with] each other, they're all the same. Typically, when we're in the classroom and when we are floating around the targeted kids (who are special ed kids) we kind of forget [who is who] because you are helping everybody and they all kind of merge together.
> G23: We also accommodate by verbal tricks, to help them remember.
> S12: Little mnemonics, sayings or…
> S12 & G23: We accommodate for all.
> S12: We don't want anybody to stand out.

Both co-teachers also share in lesson planning, unlike G3 and G9 who "control the

lesson". S12 indicated that G23 is a willing partner in their co-teaching relationship in that G23

creates the lesson with modifications and S12 will then review what was planned and make

additional modifications. There was flexibility between these co-teachers. G23 attributed that

flexibility to their willingness to listen to what S12 has to say.

> G23: I was willing to listen. It was getting to know each other…like any relationship you need to get to know the person.
> S12: Don't forget G23 has to be willing enough to modify and hand over so I can modify as well. Like I said, G23'll do the lesson plans then I'll take a look at it and I'll throw other stuff in there like a video just so our kids, the special ed kids, can learn from that and the material is not over their head.
> G23: I definitely agree with the flexibility and part of that flexibility is sometimes the subject teacher, I think sometimes …
> S12: …the subject teacher has to give up the control.
> S12: [Characteristics] that make it work; being flexible, really.
> G23: Yeah.

S12 and G23 play an interactive instructional role in their inclusive general education classroom.

They also share in other classroom responsibilities and routines such as grading and

student progress. S12 and G23, during the school year taught a new subject for the first time.

Having had experience co-teaching together in one subject and co-teaching all five classes daily

enabled them to collaborate more to develop instructional strategies for the new course.

> G23: This is our first year, even though we've been together before this, this is our first year teaching [new subject]…we teach all five classes together and it's continuity for

us…knowing who you're working with and what to expect from them, I know what S12 will do and what to expect.

S12: It's the same for me. We both know the classroom routine.

G23: That routine, the consistency for us [helps] in this first year of teaching [new subject].

Five years experience co-teaching and experience with the same subject has provided S12 and G23 with the skills needed to implement effective instruction. They have had the time to discuss how each teacher can contribute their expertise to the co-taught classroom and build on that each year.

G23: Teaching the five [classes] together did allow us to find time to collaborate more this year. At least with all five classes we can chit-chat while at the door.

S12: …give each other a head's up on whatever... [discuss] what students didn't get or understand…that wasn't a good idea, we should do [something else].

This time also allows these co-teachers the opportunity to reflect on their instruction which is a necessary part of the cooperative process (Villa, Thousand, & Nevin, 2013).

Five out of thirteen special educators have co-taught with the same general educator. In this district many co-teaching teams do not have the same opportunity as S12 and G23 have had. Special educators who co-teach with three or more general educators daily (S1, S3, and S9) find that they have no time to collaborate with their co-teachers. The special educators who co-teach in different subjects and levels (S1, S3, and S9) indicated they are even less prepared; S9 called it a "nightmare". The co-teachers, S1 and G3 and S9 and G13, who are familiar with the content and/or have co-taught with the same general educator in the past, have some advantage but not the same as S12 and G23. The teams of S3 and G9, S1 and G3, S9 and G13 have less time for face-to-face interaction, have less time to collaborate, and less time to reflect on their practice, impacting what their co-taught classroom looks like, impacting co-instruction.

Planning Time – The Need and When

In the previous two sections the complexity and professional demand of secondary co-teaching and preparation for implementing instruction was a central focus. Those concerns are all part of co-teaching preparation and knowledge. Another important factor in co-teachers developing similar understanding is opportunity for regular and scheduled planning time; time for co-teachers to collaborate on an ongoing basis (Austin, 2001; Keefe & Moore, 2004; Mastropieri et al., 2005). A lack of co-planning time is a barrier to effective co-teaching. Without structured planning time co-teachers work in a reactive manner and the special educators has a lesser role with instruction.

The district co-teaching teams all expressed the necessity for common planning time but three out of the four teams do not have that opportunity. Of those teams who do not have common planning time, both general and special educators described their collaborative experience as "planning on the fly" and having no time to discuss and critique instruction. A significant aspect of co-teaching is deciding how co-teachers will meet students' needs. Without time to collaborate, lesson modifications and accommodations may not be developed and student needs not met (see Table 13).

Table 13: Planning Time Influences Co-Teaching

Co-Teaching Team	Preparation Prior to Start of Classes	Scheduled Co-Planning Time	Work with Many Co-teachers	How Teams Plan
S3 & G9	None	None	S3 – 3 different co-teachers/2 different subjects/2 buildings/teaches 2 RC classes	Do not plan – general educator briefs special educator before class
S1 & G3	None	None	S1 – 3 different co-teachers/same content/same building	Plan on the fly/check in between classes
S9 & G13	None/have co-taught together prior school year	None	S9 – 4 different co-teachers/same content/different levels	Plan on the fly/check in between classes
S12 & G23	Yes/in previous	Yes – re-worked	No – co-teach all	Co-plan/have

	years/have co-taught together for 5 years	schedule	day	common planning time

One of the greatest factors affecting this district's co-planning time is the number of co-teachers general and special educators work with daily. Of the four teams, three are impacted in this manner. Another aspect of coordinating planning time impacts the general educator who only co-teaches one or two classes and the balance of the day they teach on their own. A similar situation exists with special educators who co-teach part of the day and instruct content area resource center courses. General and special educators need their prep time for those classes, too.

S3 and G9. In relation to this team, the special educator was significantly impacted by having no common planning time with any co-teachers. S3 also taught two content area resource centers (refer to Table 10 for S3's schedule). The contracted teaching day consists of five instructional periods and one duty, lunch, and prep period. Each period is about forty-five minutes long. One daily prep period is a very short time to plan with three co-teachers in two different content areas and plan instruction for two resource center classes. S3 expressed the need for common planning time with their co-teachers but it is nearly impossible to meet with each teacher as each teacher's schedule is different leaving no common planning time. On their survey, S3 included the following, "Having time to discuss lesson plans with the three content teachers I work with would be a definite plus. Co-teaching with three, in two different subjects I never have the opportunity to discover what is planned for the future". In the interview S3 added a few more concerns regarding the logistics of working with three co-teachers and traveling between two buildings.

S3: The worst part is that I have no common prep with any of them. It's like, walk into the class, here's what's going on. If you think about it, at least, you can't really prepare for the depth that you probably should. I usually walk in a minute or two late from coming up from the other building. G9 will be talking or lecturing or whatever, and when G9 has a break or whatever, comes over and real quick [says hello] and this is what we're doing today, pretty much.

G9 spoke about the need for common planning time but the prep time G9 has now is vital for their other classes. G9 does not want to give up that time to plan for one class when they have four other classes to plan for. Planning time for their co-taught class consists of briefing S3 as G9 uses the same instructional methods in the ICS class as they use in their other classes.

G9: I work through every single lunch period and I would love to spend prep time with you [S3] but would I have to be giving up my prep time that I have? It's a big work load and [do not want to] loose prep time. The collaboration planning [for the co-taught class] is on the fly. I'm one of those people that really worries about everything. I'm kind of like a Type A want-to-be. For all intents and purposes, my whole year's planned out. On a more specific level, I'm planned a month ahead because it freaks me out when I see that in a week's time, I have to have my lesson plans in. I just like to be super planned, but when it comes to you and I (S3 and G9) talking about [class], it's "today, we're going to be working on a time line map. This is what it's going to look like."

S3, even though they admitted they are not as content knowledgeable as G9, takes a lesser role, that of academic support only, in the co-taught class because they are not fully aware of the daily lesson plan and have not had time to understand what is going to be taught and how they can make modifications for individual students. S3 is only able to react to the instruction as it occurs.

S3: I take directions very well. At least I try to. I think [planning time] would be a big plus, but I don't have that in any classes, not just here, the other 2 [co-taught] classes either. There's no planning [time], at least if [there] were co-teaching time, or planning time, I would know more what to expect when I walked in. I just kind of follow the lead and react to it.

S3 understands how G9 feels about losing prep time for their non-ICS classes, S3 teaches

non-ICS classes, also. S3 feels that there is not enough prep time to plan for both ICS and other

assigned classes.

> S3: I know what you mean; it's almost like a disservice. It's like it would be stealing
> from the both of us, if they were to make that the only prep time that we had.

S3 still feels that time is needed at some point to co-plan. S3 discussed how they check

teacher web-sites for lesson objectives but face-to-face planning time should be a priority.

> S3: I check a list on your [G9] calendar now and then, this may look like the same as face
> to face talk, I don't think it is. I could look at G9's lesson plan that's posted on
> online, but it's not the same thing as sitting down face to face. You could read
> something online all you want, but if I have a question about it, then [I need] to sit
> down. [I can] email G9 a question, G9 can email back, it takes more time and I don't
> know if the clarity is there. If you just sit down and look at it together; if G9 says
> we're going to cover this [during] this week I'd have a better understanding of what
> maybe is expected of me. It would give me a chance maybe to pop open a [text] book
> and just review something real quick that I haven't seen in a while. Just to put me in
> the ball field instead of out in the parking lot somewhere. With that time to talk about
> it [the lesson], maybe to look up and just do some background on it, it would put me
> in a better position to help G9 in what G9's teaching and help everybody probably.

When asked if they had any suggestions to change the lack of co-planning time, G9

indicated that they do not want to have any more added on to their schedule. S3 suggested that

perhaps co-planning time could be scheduled during the district in-service days. In the following

comment S3 also refers to keeping the team together. If S3 and G9 co-teach again, S3 would

have a more clear understanding of how the course is instructed. Instead of reacting, S3 would

be able to anticipate issues with learning. S3 also spoke about the questionnaire that special

education and other departments received toward the end of the school year. S3 speculated that

perhaps the questionnaire will be used to assist in co-teaching team assignments so planning time

can be provided.

> S3: As for planning and stuff like that, maybe when we have teacher in-service days, say
> maybe take an hour, just sit down and go over what we're going to be going over the

> next month or 2 until the next ... Just in general, nothing specific, just general. "We're going to be covering this part of the [lessons], stuff like that; you have any questions for me?" Something like that. It might not even take a whole lot of time and the more we teach together the less need there is going to be for that time. We received the questionnaire, the special ed teachers did, would we like to teach with one teacher different levels, different subject a day or different teachers doing the same thing each day. I think what they're trying to do, maybe, is to do it so that, say, if I was doing an in-class-support with [subject], I'd either stay with the same teacher all day long or do the same grade, even with different teachers all day long, so that maybe the planning would be better that way than somebody like myself working with a variety teachers where the more teachers you work with, the less planning time there is for collaborating.

There was a sense of frustration during this topic of discussion. S3 and G9 feel planning time is needed but there is a conflict when teachers instruct other non-ICS classes.

The suggestion of using regularly scheduled in-service days appealed to not only S3 but also to G9. This would not be "another thing to add on" to their schedule. In fact, G9 suggested that time should be set aside prior to the first day of classes for co-teachers to meet and discuss not only instruction but roles and expectations, too. Effective co-teaching depends on preparation as much as the individual teacher's instruction depends on preparation. Meeting prior to the start of classes could provide opportunity for both co-teachers to identify how they can work together.

> G9: Probably the day before it starts, right?
> S3: Something like that. Just, if I know I am going to be with G9 next year, what areas we are going to cover [topic] to current time or whatever. Even that would give me some time, I think, to know to pop open the text book and just go through a few things…sure, some summer reading. For me, it's the technology stuff that I would probably want to [do].

S1 and G3. This was another first time co-teaching team. S1 and G3 had no time at the beginning of the school year to prepare together and they had no common planning time during the school day. Even though this team is familiar with each other and S1 knows the curriculum,

still, a weakness in their co-teaching relationship, "It's planning. It's just you want to be

prepared", G3 stated. Both of these co-teachers emphasized their need for planning.

> G3: No preparation, planning. No here's how I want to map off the year. There was none
> of that at that time.
> S1: Then, it makes me feel like we're remiss but we weren't really remiss because there
> [were] no opportunities given to us.
> G3: That takes time to [plan]. Our biggest impediment is time. Because we have no prep
> time, I'm controlling the lesson, what the activities will be that day.
> S1: There used to be days like that where you can plan so at least you know the direction
> you're going, especially when it's somebody new [your co-teaching with].

S1 spoke about how the district approached co-teaching when it was first implemented.

Time was dedicated for co-teachers to map out classroom instruction. Co-teachers were given

the opportunity to discuss how each teacher could provide instruction. G3 agreed with S1 and

brought up a good point about how the planning of instruction takes on different levels, the

when, the how, and by whom instruction would take place.

> G3: That first initial, you need that first initial meeting at least to map out the year and
> then just establish what your roles will be, how do you want it to function, and then I
> mean I'd like it for the middle of the year. It's almost two different modes of
> planning. You have big picture planning. Where are we going with our direction and
> then you also have the minutia, the day-to-day planning, for this particular lesson,
> how do we want to approach this lesson, and I can't answer that at the beginning of
> the year.

The importance of a first meeting was emphasized by G3. In this co-teaching team case

S1 had no time to prepare for and learn the technology G3 uses in their instruction. In addition,

G3, like G9, controls the planning of the class. S1 had no time to learn how to use and apply the

technology as S1 co-teaches with two other general educators.

For these reasons S1's co-teaching role is limited and complicates the delivery of special

education instruction.

> G3: I think it's more about learning the tool, the comfort level of the tool. Because I think
> once you know it, you'll be like, automatic.

S1: If it's a content question, I can answer them. I'm at my best. G3 can work on whatever computer case needs working on and G3 interjects when G3 needs to. It would be upping my game [to learn the apps]. Like any other skill, not reinforced, because I don't do it…using it makes you better at it.

S1 also stated that common planning time is essential in "addressing student issues", both co-teachers need to be on the same page and it is not easily accomplished if co-teachers do not have adequate planning time. S1 and G3 stated they do not have common planning time but they do try to plan for their co-taught class. Similar to S3 and G9, their planning is "on the fly". Both co-teachers say finding the time is "tricky" and it is "not the best way" to plan. S1 admitted that if they did not have the content knowledge this co-teaching arrangement would not be good. S1 stated, "Thank God G3 has the confidence in me to know that I know the material so I can go with the flow, but it [technology component] just doesn't happen".

This team tried to plan. Mostly, they "wing it"; it is "tricky", and not always the best way to plan. They gave an example of how they eke out minutes throughout the day to discuss what will take place in their classroom.

G3: [We have no planning time], none.
S1: Yes, none and I feel guilty about that.
G3: I catch you in the hallway.
S1: I do feel guilty because G3 does the planning for the class. I feel guilty about that but there is no way to really rectify unless we're on the phone at night.
G3: [We plan] in the hallway passing real quickly…
S1: …or at the end of the period is what we're doing tomorrow.
G3: We know what we need to cover [for the year] but on a day to day, yeah, it does feel like winging on the fly at times. What we need, time. I just feel like we do a good job of winging it.
S1: [We] communicate through e-mail, which I mean we do function so we do do it, but it's popping my head in here, G3 popping their head [in my other class]. The one good thing is that we teach in the same hallway. Now granted this hallway does work great together, so God forbid, *th period [if] G3 had something that I could come out of a class for a moment like we could work or if G3's like, "I really need to show you this." If we taught on the other sides of the building and I've done that before, I would be walking in blind to classes. That was virtually chaotic. We make it work on our own but it isn't ideal, right?
G3: Right. I agree. The ideal situation would be that scheduled, dedicated time.

There was one moment that S1 and G3 were able to find time to plan together and not in the hallway. It was during class time while students were working independently. S1 and G3 were trying to create a rubric for an essay assignment.

> S1: G3's like, "You need a good rubric an easy rubric to go through with the essays." I'm like, "I have one that G1 and I developed." Went and got it, and then G3 and I, the kids had to do something independently, they were taking a partner test, G3 and I sat at the computer and we're like, "How about this from basic? How about we change this or how about we give more weight to this, because maybe this doesn't have enough weight?"
>
> G3: That was during class time.
>
> S1: We had planning time. It was class time, but we had a moment to plan together and we worked great together.

For two reasons, this form of planning goes beyond what S3 and G9 were able to do. Contributing to this team's ability to find time is that even though S1 co-teaches with three general educators, like S3, S1 is in the same content area and in close proximity to their co-teachers, unlike S3. This situation is not ideal. It did afford the opportunity to plan, but it was during class time, not a time independent of instruction time.

S1 and G3 were asked how their planning would be different if they had scheduled co-planning time. Their first reaction was to say, "I don't know, we don't have time, we don't know". After thinking about it for a moment both co-teachers expressed excitement.

> G3: Yeah and what it might do is also come up with new ideas for things. If I say, "Okay this is what I thought you would do for this ... " Who knows what we could come up with? I think that's the big key. It's the great unknown. Who knows what we could come up with? All the things we could do. We're not like we're both very good, but when you put us together with time to plan, we could really shine and sparkle and really do something awesome. Oh my god, if we got common prep and common lunch, oh, the best. Performance of it I think would stay the same, but it would be, I think a little bit more solid...
>
> S1: …polished.
>
> G3: Yeah, polished is a good word. "Okay this is what we're doing; there would be a flow to what we do." Instead of, "Right now we're doing this. Oh, okay."

In the last comment G3 indicated that having time to plan would provide them with the

opportunity to be proactive about their instruction rather than being reactive about their

instruction.

S1 and G3 stated that scheduled common planning time is the ideal. S1 and G3

understood that district scheduling can be complex. With that in mind they offered several

suggestions in addition to a common prep period. S1 mentioned "common lunch or flexible

duties".

> S1: Yeah, flexible duties, meaning study hall does not really work, but if there's a hall duty and you need to have a moment where you can talk or if one person has the flexible duty, that would even ... It wouldn't be ideal, but it would be better. Even if we met one day as a team, it'd be great.

> The best scenario, though, would be a common prep.

> G3: Oh my, what if we had the exact same prep period? Hoof!

> The alternatives to these suggestions would be to collaborate using shared documents.

G3 stated that face-to-face planning is really better and more productive.

> G3: Now we could use like a collaborative, a shared Google doc, but if we're going to do planning, I'd rather be talking in person about it as opposed to doing it through technology, not that we couldn't do it that way, but if we do it in the brainstorming phase and generating ideas phase, it's messy. It's better for us to be talking about it as opposed to typing it out on a Google doc. I'm afraid that it would muddle the process and actually make it more difficult because we might be off on different tangents and we don't have time, yeah.
> S1: Think about when we were just developing the rubric for the essays, which I didn't finish yet, I had something to work off of so I ran to my [other] classroom and got it and came back because the kids were working quietly so we went ... I mean really, it was a brainstorming session. Yes, we had this jumping off point, but we had to find what was meaningful to our class as opposed to a different class and our level as opposed to different level, and some things we wanted to add. We wrote something down, we went, "Oh, no, no, don't do this," and I'm like, "How many points do you want this?" and G3 goes, "What do you think about this?"
> G3: We're much faster working face to face than we are working via email or Google doc or whatever have you and plus the comfort level, too. You're [S1] just learning Google doc so yeah, this could help teach you, but ...the whole point is for us to plan not for you to learn the technology, that would be something separate. You couldn't

just launch us into say, "Okay, here, you're going to do collaborative lesson planning using Google docs." Great idea in theory, but that's only if both people or all parties are familiar with the Google docs. If you don't know the tool, you can't do the task with that tool.

G3 made a good point, planning is planning, learning how to use and apply a technology application is training and that is different from planning. S1 and G3 emphasize how face-to-face planning is a significant aspect of co-planning. S3 felt the same way. Using technology can take more time and S3 does not feel "the clarity is there". G3 stated using technology "muddles the process". Working directly with each other, co-teachers can address misunderstandings on the spot and accomplish more.

S9 and G13. This team had no assigned prep; the one factor that was an advantage for this team was that they co-taught together in the previous year. A disadvantage for S9, they co-teach with four different general educators daily. During the first interview S9 and G13 provided a description of how they plan.

> S9: …no planning time.
> G13: I would say [to S9], this is what we're doing today, look this over.
> S9: Yeah, that's what will happen. Most days, G13, I see G13 like period *; G13's leaving the room I go into. G13'll say something, maybe that I have to think about or something, or on the way here just now [we talked about the lesson].
> G13: It's utilizing the time that you have. You might see them [co-teacher] for five minutes here and there, and you give them the heads up. This is what we're doing today.

This is the extent of their co-planning time. S9 and G13 plan on the fly, just like S1 and G3 and, to an extent, S3 and G9. Having the experience of co-teaching in the previous school year and many years experience teaching the content provides S9 and G13 with the knowledge to plan lessons that meet student needs. S9 did stress that teachers make the co-teaching relationship work, "no matter what, teachers make it work". G13 also emphasized the effort co-teachers make. Still this is planning on the fly. Having no planning time, even with experience,

limits discussion about co-instruction and as S1 and G3 stated this type of planning in not ideal.

It seems that S9, especially working with four co-teachers, tries to do the best they can to plan

for each of their classes; S9 and their co-teachers go beyond the regular schedule to make it

work, but say that it is not the most effective way to plan.

They also indicated that time to reflect on classroom actions is limited. Factors

impacting that include instructing other non-co-taught classes and teaching with several different

co-teachers. Again, this is not consistent planning time; S9 indicated that consideration should

be given for co-teachers' common planning time.

> S9: Teachers can make it work without a common prep time, but be respectful, that if
> you're not giving us common prep time to at least put us together so that we have
> maybe a lunch together, five minutes between classes together, after school together.
> You know what I mean. That's what worked out for me I'm with teachers that are
> willing to spend a few minutes here and there.

S9 is fortunate to have a common prep with one of their co-teachers (G16) and stated that

G16 would seek out S9 to discuss class instruction.

> S9: I'll give you a concrete example. I work with G16 every morning. We have off [at the
> same time]. We do have a common prep, but even if we didn't, G16 would come to
> me, because G16 plans the morning of the day G16's teaching. G16 shows me the
> worksheet that day and says we're going to do this. What do you think of this? Should
> we cut this out? We have a few minutes together of banter about modifications or
> anything. G16 always asks me my opinion, which is nice.

G16 is one of the four co-teachers S9 works with. They had common time together; there

was discussion about their class and the daily activities, but S9 did not have common time with

their other co-teachers. Teachers get one prep period daily, if educators co-teach with several

other teachers or teach other classes on their own they still need that prep time to plan for those

other classes. S3 and G9 brought up this point indicating that one prep period provides limited

time for planning. If S9 divided their one prep period to allow for planning with their four co-

teachers, S9 would have about eleven minutes with each teacher for planning purposes, provided

the co-teacher was not instructing during S9's prep. S9's prep period does not coincide with all

four of their co-teachers. S3 had the same difficulty.

S9 described how working together all day with one co-teacher (G19) was the best for

co-teaching and co-planning. They had consistent opportunity to co-plan. S9 stated, "We were

both really doing what we were supposed to be doing together". Just prior to the second

interview, S9 and G13 received their schedule for the next school year. S9 mentioned that

consideration must have been given to co-teachers based on feedback from the department

surveys.

> S9: Our supervisor is listening to our needs, and I'm the example of being [with] the four
> different teachers in four different rooms, three different subjects. When our
> supervisor asked us for feedback and also through all of this with you, Karen,
> supervisor is listening to us, that it's better for us to be with as few teachers as
> possible and as few subjects as possible. G13 and I are going to work together next
> year, all four together.
> G13: I think it's going to be a lot different next year just because we're going to have
> three of the same classes at least and then one other class, but still three of the same.
> It's going to work out well.

It appears that S9 and G13 are scheduled to co-teach four classes together. G13 indicated co-

teaching for the several classes will allow them opportunity for more planning time. This

schedule change, especially for S9, will improve how S9 and G13 plan. The purpose of co-

planning time is to provide co-teachers with face-to-face collaboration, collaboration that is not

on the fly. Being able to teach four classes together will reduce the number of co-teachers S9

works with and allow S9 and G13 consistency with their planning.

S12 and G23. This is a unique team. Unlike the other teams S12 and G23 co-teach with

each other all day long. It could be assumed that with a schedule such as that S12 and G23

would have a common prep. That was not the case, at least initially. When their schedules came

out S12 and G23 were pleased to be co-teaching all classes but they noticed their prep was not

the same.

> S12: We realized that G23's lunch was my duty and this right now is G23's prep, but it's my lunch. We were like, "What are we going to do? We don't get to meet?" G23 was flexible enough to flip, right? Once in a while, G23 pops into my duty every now and then to go over anything or to show me something or for me to look something up or to change something.

Table 14 shows how S12 and G23 were able to manipulate their lunch and prep period so

each co-teacher could eat lunch together and discuss plans for their classes. After switching

G23's lunch and prep it not only allowed for a common lunch but also time for G23 to speak

with S12 while S12 was on duty.

Table 14: S12 and G23 - Finding Time for Co-Planning

Co-Teachers	Period A	Period B
S12	Duty	Lunch
G23	Lunch*	Prep*
*The Change to Find Planning Time	Prep (Lunch and Prep were flipped)	Lunch

> G23: When S12 has their duty, I have my prep I can go and talk to S12 for a minute or give S12 something. Which if we teach in different classes with different teachers, probably wouldn't have that opportunity to be able to go find S12, it would be too different, our schedules would be so different.

Co-teaching all five classes together provided another opportunity, time to speak with

each other in-between classes. S12 and G23 also used email and shared document systems to

plan lessons and create activities. This method works for this team and is different from S3 and

G9 and S1 and G3 in that S12 and G23 have face-to-face time to discuss changes in their shared

document and clarify concerns.

> G23: I think one of the things [S12 and G23] teaching the 5 together, even though our schedules aren't exactly the same it did allow is to find time within the day to collaborate more this year. At least with all 5 classes we can chit-chat while at the door (between classes).
> S12: Give each other a head's up on whatever, a student, or they didn't get this or understand that, or hey, that wasn't a good idea, we should do the other. In between

classes G23'll say, "Listen, [during] you're prep period I'm going to send you this. Take a look at it. Make any alterations you want on it." Then I'll do what I have to do, look it up, send it to G23. G23'll make copies on the way back or whatever. [Regarding lesson plans] G23'll normally e-mail the lesson plans to me so I can look at them ahead of time and then what I'll do is go on the computer and I'll research or create things, I'll say hey I saw this what do you think of this, you know, I'll shoot G23 an e-mail back. G23 also started Google Chrome.

G23: Aahum. *(Affirmatively)*

S12: And we've been working with that and G23's been sending it to me through that way. I try to add to that, too, it's still a work in progress for me and G23, too, but we can share more stuff that way.

Co-teaching all day, S12 and G23 were able to take time to converse and reflect on their lessons. What works in one class may not work in another. G12 and G23 can see how their lessons and activities play out and they make changes as needed.

G23: We make changes during class, too. [Class period] we're going to do this, let's do this, too.

S12: We critique it and G23'll say "How do you think that went?" I'll say, "No, we're not doing that next year." Or even we're not doing that [class] period because the [class] period kids aren't going to [understand], they're not up there. Their level is just not there. We have to redo that. We'll change it throughout the day or change it for the next year. Or take it out and just remove it.

S12 and G23 said their schedule of co-teaching together all day and having common planning time is ideal, but S12 and G23 also realize the difficulties of not having that opportunity.

G23: Last year we didn't have common time.

S12: No.

G23: It was more difficult. Other than after school, a little bit after school that we were staying is when we could or whatever to talk about it before going home.

If a common prep period could not be scheduled and if teams could not manipulate their schedules to make time for co-planning, S12 and G23 said that the regularly scheduled in-service day would be the next option.

G23: Whenever we have those half days…

S12: …in-service days would be great.

G23: If not during the school day [to plan], I would say [then] during the school year. That's all I could see is maybe on the in-service days, on the half days.

Having the opportunity to co-teach together all day has provided S12 and G23 with common time to co-plan class lessons and activities and reflect on their practice. S1 and G3 indicated they have little or no time for reflective practice as they have no common planning time. S3 and G9 did not even comment about reflective practice until they were asked how their co-teaching would be different if they had time to plan. S9 and G13 are able to discuss their co-teaching as they travel from one class to the next. That, however, is only a short segment of time. This district's co-teachers understand the complexity of scheduling and make their co-teaching relationship work even with snippets of time for planning. All four co-teaching teams interviewed indicated they need time to co-plan, if it cannot be scheduled, which would be the ideal, then provide time during regularly scheduled teacher in-service day.

The time S12 and G23 spent co-planning lessons is reflected in their classroom actions. This was evident during their two observations. Even though familiarity with their co-teacher and with the content impacts how co-teachers implement instruction, it is clear that having common co-planning time is the significant factor in establishing a strong foundation for successful and effective co-teaching.

Co-Teaching Professional Development and Training

Special educators have specialized training in educating students with disabilities and are either content certified or highly qualified in content areas. General educators are content certified but have not received specialized training in working with students with disabilities. To put a general educator and a special educator into a co-teaching situation requires thoughtful planning (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010; Murawski & Dieker, 2004; Orr, 2009). Training and professional development opportunities are part of this planning, yet

districts may not provide professional development specific to co-teaching or if they do, co-teaching in-service only provides resources and information. What is not part of the professional development is how co-teachers can implement instructional strategies and co-teaching practice (Scruggs, Mastropieri, & McDuffie, 2007).

Studies have shown that professional development has a positive impact on the instruction for students with disabilities (Rice & Zigmond, 2000; van Hover & Yeager, 2003; Villa, Thousand, Nevin, & Liston, 2005). Training in the area of instructing students with disabilities and co-teaching has not been part of the district professional development offerings since the co-teaching program was implemented in the mid 1990's. General and special educators are assigned to co-teach and do not necessarily have the skills needed to jointly plan, deliver, and assess instruction.

The district co-teachers, when surveyed about co-teaching professional development, indicated a variety of needs (Appendix C). The four co-teaching teams interviewed indicated similar responses and cited areas of particular need. In this section, the skills co-teachers have, need, and want are reported. Each team differs regarding professional development and training. Their needs range from communication skills to co-teaching guidelines and expectations to special education law. Needs vary, but one message clearly emerged, co-teachers desire professional development, co-teaching professional development that meets their needs.

S3 and G9. This team, having no planning time, teaching with other co-teachers and teaching non-ICS classes daily, mentioned the need for co-teaching guidelines the most (Appendix G).

> G9: Expectations…I don't know what I'm supposed to ask S3 to do…I don't know how to speak to S3 to let them know about my expectations.
> S3: If I know what was expects I can work better with the students.

G9 has co-taught with different co-teachers each year for the past five years. G9 has not had training or support to help with co-teaching skills. There is no consistency and G9 seems very much in need of support.

> G9: I don't know what I'm supposed to be doing. Am I supposed to be sending S3 letters every week saying this is what we're doing? I would love to hear how the other classes are doing it. What are the other classes doing? I worry that I'm not being enough [help] for the [students] all of them. I always worry that I'm not ... they [students] need so much attention. Like S3 said, they need so much attention. If there were some training that would help me maybe help you and [students]. I just would like to talk about what it is.

S3 indicated they see their role in class as one of support. Instructional strategies used to present content in G9's class are different from what S3 is used to, "[I] wouldn't try to teach what G9 teaches". S3 also reported how they are looked at as an aide in one of their other co-taught classrooms.

> S3: Technology, I have to go a ways, in fact we spoke last weekend, I'm going to try to sign up for a couple of the PD Hours, that I have coming up here, to try to get me into Google docs and everything else, because I've been a Microsoft word person my whole life, Google Doc's is very innovative, very current, very up to date. I've got to get in line with it little bit more, so I can see maybe more what some of the kids are doing.
>
> S3: Like with G7 [one of S3's other co-teachers], a lot of the time is, "Can you make me copies of this?" I don't mind that, believe me, but I spend half my time running to the copy machine making copies. That's what G7 needs.

Training in the area of technology could improve S3's skill set. If they became more familiar with the technology used in class and how it is used, S3 could take a more active role in classroom instruction. Professional development that addresses co-teaching guidelines and expectations could benefit both S3 and their other co-teacher. G7, one of three co-teachers S3 works with daily, may not realize S3's full potential as a special educator. Talking about expectations could assist S3 with defining their role and communicating to G7 how they can actively support all the students in the class.

The professional development needs of this team are only one facet of co-teaching

training. How professional development is conducted is another. Both S3 and G9 discussed

logistics behind professional development training. G9 feels that it would be helpful to hear

from other, more experienced co-teaching teams.

> G9: I would love to hear how the other classes are doing it. What are the other classes
> doing? Maybe they could just say, "This was an early problem we had to deal with,
> how would you solve it?" That just gets the conversation going. I could think of
> perhaps, like a question thing. Where a teacher, especially like maybe last September,
> S3 and I could have instead of going to do an in service, you are going to have all the
> co-teachers get together, why can't … I learn from other people who have done it,
> who have gone before me. [Another option] is a question bank, just anything that's
> on our minds, what it is, I don't want to step on S3's toes, what kind of problems did
> you encounter in your early years and how did you overcome it, working with that co-
> teacher; something like that, you know, learning from colleagues.
> S3: Afford us the time to confer or just discuss and ... even if it's the people, like you
> mentioned, that have been doing in-class-support for a while. Even if it's in pairs of
> teachers, just to sit. Like you said, an informal conversation sometimes is a lot better
> than that formal lecture.

During both of the observations and interviews, S3 and G9 seemed timid about co-

teaching. Not having the knowledge to use the class technology, not knowing how to

communicate expectations, and not having time to sit and discuss how they could capitalize on

each other's strengths had an impact on instruction and academic support. In the end, what came

out of the interview was a desire for improvement.

S1 and G3. S1 is in a similar situation as S3 in that they are not knowledgeable about the

technology G3 used to deliver instruction. S1 also indicated it is difficult for them to learn the

technology due to their schedule and co-teaching with two other general educators. G3 believed

that S1 is very capable of acquiring the skills needed to use the technology, but time is a factor.

If S1 had more time to work with G3 and learn G3's instructional strategies S1 would be better

equipped to support the students. S1 can reinforce the content, but cannot assist students in using

the technology to learn the content.

G3: I think you have a great skill set for instruction to begin with and, really, I think it's more about learning the tool, the comfort level of the tool. Because I think once you know it, you'll be like, automatic, I can apply it this way. I think that's what it is more than anything else.

S1: We're so pinched for time as it is.

G3 distinguished the situation of S1's need to learn the technology used in class from planning time. Planning time is not for a co-teacher to learn instructional strategies it is time to plan how lessons will be delivered. Learning how to use and apply a technology application is training and is different from planning; training needs to take place in addition to planning.

G3: The whole point is for us to plan, not for you to learn [how to use the technology].

S1: Not to learn it and learning it takes that much more time.

G3: That would be something separate to do. It has to be something in addition to… You couldn't just launch us into say, "Okay, here, you're going to do collaborative lesson planning using Google docs." Great idea in theory, but that's only if both people or all parties are familiar with the Google docs.

S1: And comfortable…

G3: … and comfortable with it because if you don't know it, now you have to learn that before you can move on to the task [planning] that we're supposed to do. If you don't know the tool, you can't do the task with that tool.

Besides learning the technology, S1 strongly advocated for a co-teaching definition that includes co-teacher expectations. S1 stated the more experience one gains as a co-teacher boosts confidence, however, if co-teaching teams change each year the description and expectations of one educator is different from another. S1 described how co-teaching is implemented very differently by each of the teams. The district had not defined what co-teaching is or provided opportunity for co-teachers to develop a definition of what co-teaching should look like in the district. G3 agreed putting emphasis on their lack of training in special education.

S1: [A co-teacher's] comfort level goes up [with experience], it increases from year to year but it depends on someone's definition. It's never really been given to us in definition so much. Communication and expectations would be really great.

G3: In all the years I've done the co-teaching, whenever it's been assigned to me, ICS, there was never any explanation of this is how it should be conducted. It was just left up to our own devices. I had no training so I was very uncomfortable when I was first asked to do it because I did not think I would be good. I was very… I had

> trepidations because I didn't have the training. I didn't think I could break it down or knew what to do. We need a special ed crash course. This piece of special ed, if you're going to pair a special educator with a regular general educator, then that special ed piece needs to be brought to the general educator. That has to be there because otherwise, there's no ... how are you really going to know if you're meeting the law?

S1 and G3 also discussed the importance of understanding the logistics behind co-teaching. General educator understanding of special education is one facet. The understanding of special education law and what the IEP is another. S1 talked about the importance of the IEP and that both co-teachers have to follow the IEP. S1 stated that they have been in co-teaching situations where the IEP is not implemented therefore modifications are not put into place. Both general and special education co-teachers need to understand how to implement the IEP together.

> S1: I'm beholden to the IEP more than I'm beholden to the curriculum. Explain the IEP to people who don't know. You need to make sure that [GenEd] knows it's not just about reading the IEP. You can be a great regular ed teacher, but you might look under modifications and services and have no idea what that means.
> G3: We need to know what that means, that's exactly right. That's a big piece of it right there. If you're going to pair a special educator with a regular general educator, then that special ed piece needs to be brought to the general educator. That has to be there because otherwise, there's no ... How are you really going to know if you're meeting the law or you're even doing it logistically correct.
> S1: I had a really bad situation where a co-teacher thought I was undermining them when in reality what I was doing was trying to get the child to be successful but it looked like I was undermining them.

S1 discussed how the general education teacher did not understand the supports they used to assist in student learning. The general educator misunderstood S1's role. This situation can easily occur when co-teachers do not have time to discuss expectations and establish a co-teaching relationship. This not only weakens the co-teaching team but can have a negative impact on student learning when supports, modifications and accommodations are not implemented correctly.

If general education teachers have not had training in special education or do not

understand the IEP, the IEP may not be properly fulfilled. This is definitely a need and all co-

teachers, especially general educators, would benefit from a better understanding of the IEP

process. S1 made the point that the law mandates inclusive education; ICS and co-teaching is

part of that inclusive education and classroom teachers need to be kept abreast of the

requirements and the implications. S1 indicated that district training does not follow the changes

in the special education law. G3 called it "logistics and law, L and L". That would be a part of

the "special ed crash course". This team felt it is "the district's job to keep everybody on the

same page". Rules and regulations have been revised and the district should update co-teaching

teams. There can be serious implications if all co-teachers do not understand the IEP and how to

implement it.

> S1: Now with the mandate, inclusion mandate, in the state so we're bringing back kids from out of district placements and putting them in our school, which is bumping up then your traditional resource kids. Many of them have been bumped into ICS settings where the ICS teachers, the learning specialists, but the general ed teachers need to have a piece of that special education.
> G3: Yeah, but the laws have changed already so I think they still need refreshers.
> S1: Think about it. You would be prime for a lawsuit if you [don't understand the IEP].
> G3: There was a lawsuit, one of my students and the lawsuit wasn't because of me. The suit was already brought up when student was in [lower grade], but because student traveled through the high school and the suit wasn't finished, it stayed with student and I remember ... with S2, actually student was in our ICS class, S2 was the co-teacher in that one and we really had to be on our game because it was law. It was law.
> S1: I have to say there are special cases and really special cases, [supervisor] has been wonderful coming to me, not formal, but wonderful coming to me and [supervisor's] been really good, but we still can't expect G3 to know what I don't even know. A younger teacher wouldn't that…they don't have a lot of experience.

The question was posed to S1 and G3, what would benefit you the most in terms of

support from the district?

> G3: Time, time.
> S1: Time and training.

G3: Time and training and input with our pairings.

S1: Input, as in do you want to be paired? Who would you like to be paired with? Who are you comfortable with?

G3: That's a big thing because if you don't have a good pairing, none of this stuff [professional development] matters. If you can't connect personally and work well together none of this matters.

G3 indicated that even under the best of circumstances, co-teachers having professional development and planning time, nothing will work unless co-teaching teams are good pairings. G3 made a good point, for co-teaching to work well with effective delivery of instruction in the inclusive classroom, how teams are arranged, the characteristics of the teams, co-planning time, and professional development all need to be part of the equation.

S9 and G13. S9 is an experienced co-teacher. S9 has co-taught in the same department and classes for at least fifteen years. S9 has worked in many different co-teaching relationships and is adamant about how necessary it is to bring co-teachers together prior to the start of classes, especially if co-teachers do not know each other.

S9: I think that the first thing that should be addressed is the social aspect of it. When I [was] first assigned this job, we [co-teachers] were brought together. These two people, you guys are going to work together. Let's do a little boundary breaking. Let's do a little get to know you. That's my first thing, social, then the nuts and bolts.

For S9 it is important to meet with their co-teacher in a social setting so both could have the opportunity to talk about themselves; likes, dislikes, strengths, experiences. An important point S9 makes is that the district used to provide that opportunity.

S9: I remember we used to, first marking period, bring everybody in, bring the teams in. Remember that? How's it going? That would strike up some conversations. Then maybe you would tweak some problems. You would have some problem solving going on in a team kind of way.

Another opportunity the district used to provide co-teachers was a chance for co-teachers to observe other co-teachers. Teams could observe how other teams implemented instructional strategies and new teams could learn from the expertise of seasoned teams. Teachers who might

be contemplating co-teaching could observe and speak with practicing co-teachers. Having an

opportunity such as that could help teachers make an informed decision about whether or not

they would want to co-teach. As S9 stated, "Let's help a new teacher out". During the

interviews with S3 and G9 and S1 and G3, G3 and G9 spoke about similar concerns. The general

educators did not know what they were supposed to do when they began to co-teach. G3 did not

think they would be good and G9 was not sure what they were supposed to say to their co-

teacher and indicated they would very much like to know what other co-taught classes do.

> S9: We were allowed to … the co-teaching team used to go and visit and they [district] had coverage and all … and it was great because you can learn from each other. Even as a seasoned, old, professional teacher, I would want that still.

Certainly, G3 and G9 could have benefitted from visiting other co-taught classrooms and

perhaps even agree with S9, that visiting other teams is what they would want, too.

G13 spoke about their experience when they first started teaching and co-teaching in the

district. They did not have an orientation and if it was not for a content department teacher and

two special educators G9's school year might have started off unsettled.

> G13: I never had a new teacher orientation. S9 reaching out to me put me at ease because I didn't even know, at that point, I was teaching ICS…but I wasn't told I was working with S9. I was never given that information.
> S9: We wanted G13 to feel welcome and showed G13 the ropes…we just wanted to make sure everything started going smoothly…between me and S6 and G19, G13 was golden, not because of [district].

S9 described how they assisted G13, the district provided no formal orientation and co-

teachers and a department colleague guided G13 through their first year as a new content and co-

teacher. S9, S6, and G19 oriented G13 to the department and course structure and what G13

would experience as a co-teacher. S9, S6, and G19 did this on their own time. If time was

allotted for these co-teachers to meet during a dedicated period prior to the start of classes, it

might have provided G13 with a stronger introduction and foundation for implementing co-

teaching practice. S9 often mentioned how the district used to provide supports for co-teachers.

S9 would like to see those supports again.

During the second interview, which was near the end of the school year and teachers

were notified about their next year's schedule, S9 and G13 spoke about an arrangement made for

a district general educator (G30) to observe new classes they were assigned to teach the next

school year. G30's subsequent schedule also included co-taught classes. It was arranged for

G30 to observe their non-ICS courses, the courses they were scheduled to co-teach, and have a

chance to meet with their co-teachers.

> G13: G30 [a new teacher] is coming to observe classes.
> S9: G30's coming to observe our class next week.
> G13: On Monday, G30's going to come observe.
> KF: That's new [I was unaware this was happening].
> G13: Yeah. G30's going to come observe G15 and S7, because I think G30 might be
> working with S7 as well *th period, and then G30's coming to watch the two of us.
> S9: G30 has ICS, I think, all day, or they have [class level]. We know G30 has [certain
> classes] all day. We don't know how many ICS's there are.
> KF: G30 is coming from the other school [in the district]?
> G13: Right.
> S9: They're letting G30 [observe], so that's another step in the right direction. I think we
> have two positives that have come out of this, of your study.
> KF: Thank you.
> S9: You know what I'm saying?
> S9: We're opening [communication]!
> G13: Because it's not just a special ed thing, too.
> S9: It's not a special ed thing too, right.
> G13: It's almost like these are the two classes G30's teaching, so G30 can actually see
> what the students are like, what [class] is like as well.

S9 and G13 provided an example of collegial visits and emphasized that visits are not just

for special educators, general educators need this support, too. Collegial visits was something

that used to be encouraged in the district. At least with this situation, the district supervisor

arranged a new teacher visit, an opportunity to see what they might experience with their new

schedule and meet with their prospective co-teacher.

Throughout each theme, assignment of co-teaching teams, what happens in the co-taught class, and need for planning time, S9 emphasized the importance of communication and familiarity. During discussion about professional development and district support, S9 stressed the need to bring back the professional practice of co-teachers meeting prior to and during their co-teaching relationship. Having time to "strike up some conversations" between co-teachers, according to S9, is indispensible.

S12 and G23. These co-teachers expressed that an important ingredient in their team relationship was getting to know each other. G23, when new to the co-teaching team, expressed that getting to know their co-teacher, having the opportunity to listen to them and discuss how they could work together as a co-teaching team, helped them establish a strong foundation.

> G23: I do think when you're first starting, there should be something in order to, I know for a new teacher coming in it makes sense that they want to meet, so bring somebody in, but there should be something set aside for even the teachers that have been here to meet and try to work out [class expectations] and go over things with the teacher they're going to be working with for the first time. We need to sit down to go over and try to make some kind of guidelines or what the roles are. It would be nice to have that time [to discuss] I think we're going to do this next and this is where we're going. Ask do you have any insight, anything better to try. We could have that time to bounce those ideas off each other; during those district PD days some time when we're together to work on things.

Much like the comment S9 made about the importance of bringing co-teachers together prior to the start of classes, the opportunity S12 and G23 had to establish guidelines and expectations set the stage for their professional growth as co-teachers, however, professional development should not stop there.

Professional development should be consistent, engage educators, and focused on meeting co-teacher needs. The district began several new technology initiatives, such as a shared documents system. Some co-teachers are familiar with this application but many are not. S3 and S1 talked about how they are less skilled in using the shared document system but do not have

the time to pursue learning it within their daily schedule. Training in this area would provide co-

teachers with additional skills to assist in the creation of co-taught lessons and class activities.

Training had been scheduled but it was after the contracted teaching day. The other co-teaching

teams spoke about scheduling this type of training and suggested using district in-service days as

a way to reach the staff; G23 and S12 agree.

> G23: We did do a little PD with another teacher to use Google Docs, the basics. S12 has
> done some, I've worked with it more than S12 has but I've only gotten to show S12
> quickly the basics. If we had time, a little longer we could actually learn more about
> Google, how we could use it more collaboratively even if we aren't sitting in the
> same room together. To me, that's what I see as being a great collaborative tool for
> us; not just us but all the teachers. We haven't had the training. Having training after
> school is hard sometimes, you (S12) have children, I have children. It's hard
> sometimes to schedule those days to stay especially if the training doesn't start right
> after school. Sometimes they don't start until 3:00pm and having then go to 4:00pm.
> I don't have that luxury of staying that long; I can stay to 3:15. It's not that I don't
> want to stay; it's not feasible I think S12 is in the same position as me. I wish they
> would do it more when we have those in-service days.

In addition to specific topics, another method, suggested by S12, for co-teachers to gain

additional insight into co-teaching practice is to visit co-teaching colleagues consistent with

other teams.

> S12: I think maybe time should be allotted to go and observe teams. What works for
> them [other teams] may not work for you, but you can fine tune it and make it your
> own or you can say hey, yeah, I like that. Maybe pop in on your prep period when
> somebody else's teaching, just for a few minutes. Nothing major; nothing, just say
> "Hey, do you mind if I sit in just for ten minutes to see how things go?" Fifteen
> minutes. Seeing how [another subject] is…they might have a totally different
> technique.
> G23: Yeah, that we never thought about before. That could maybe transfer over to the
> [my subject] classroom. Something they do in [one subject] could transfer over to the
> [other subject] room. Or even in [another subject]. We do sometimes go over the
> history of the [topics]. How does that relate into history? This would be a nice way
> for cross curriculum [study], too.
> S12: I know how to co-teach. What I do works for me, but my type of personality is
> there's always room for improvement. That's the way I see myself, I could always
> improve myself. If I go and observe even though I've been co-teaching with
> seventeen different people, maybe I can observe and pick up something that
> somebody else does and I would be like, "Oh, I like that. I'm going to try that, too."

S12 talked about how the opportunity to observe other teams could provide new sharpness and refresh and refine co-teaching skills. With respect to visiting co-teaching colleagues, G9 and S9 indicated similar views. G9 stated that learning from other teams could help them better understand what they are supposed to do as a co-teacher and S9 spoke about how visiting co-teaching teams was encouraged in the past and "it was great because you can learn from each other".

S12 and G23 are fortunate to have had time to get to know each other and work together as co-teachers for a number of years. They are the exception. Many co-teaching teams have not had formal opportunity to meet prior to beginning their co-taught class and co-teachers must work out expectations and roles "on the fly" as the school year progresses. Complicating co-teaching teams is that teachers are often reassigned each year. Co-teaching professional development in which time is dedicated for co-teachers to work together, that is not an addition to an already packed schedule, and is available during the school year could provide additional resources for this team and their colleagues.

Summary of Findings

The initial examination of the district co-teaching program was accomplished through co-teaching survey results. On a broad perspective, the general and special education co-teaching teams rated the program positively. Co-teachers indicated they share common views and agree on the goals of the co-taught classroom. When delving deeper into the survey responses it was more apparent that general educators are the primary instructors in the co-taught classroom, co-teachers have little or no common planning time, have received little co-teacher training, and feel they have insufficient resources to implement co-teaching practices.

It was found that co-teaching teams were assigned. Co-teaching teams where the special educator worked with three or more co-teachers were particularly affected. Three of the four teams interviewed were in that position. Out of all special education co-teachers, seven out of the thirteen work with three or more general educators daily. Over one-half of all district special education co-teachers experience no co-planning time with their general education co-teacher. The design of these co-teaching partnerships provided no co-planning time and working with many general educators required the special educator to be extremely pliant, having to adapt to several different classroom routines and different co-teacher expectations from period to period. Those special educators working with many co-teachers daily reported that they were less effective; they reacted to the content instruction as a result of having no time to prepare.

Without common planning time and resources, cooperative decision making was difficult to achieve and general and special educators were less equipped to define their roles and determine how their expertise can shape instruction in the inclusive classroom. This is, perhaps, one reason why the general educator is the primary instructor within most classrooms. The co-teachers' ability to cooperatively make decisions about instruction is greatly diminished when the general and special educator cannot meet to determine what, how, and when instruction will take place.

Within the theme of how co-teachers were assigned what further complicated these partnerships was teams changed year to year. Special education co-teachers that were re-assigned each year and to a new content area did not participate equally in classroom instruction. Even when re-assigned to a content area of expertise teachers could be teamed with a new co-teacher which impacted instruction. The district does not provide dedicated time prior to the start of classes for co-teachers to discuss their strengths and expectations. As a result, co-

teachers oriented themselves to each other and the content during the daily classroom routine.

This manner of working prevented organized and structured co-planning and the undefined roles

allowed the general educator to take over leaving the special educator in a lesser, subordinate

role. General and special educators reported that when they worked with the same co-teacher for

consecutive years, co-teaching became easier; co-teachers had a better idea of what and how

content was going to be taught, a better understanding of their co-teacher's teaching style, and a

more coordinated and consistent approach to lesson delivery.

In the area of professional development, all co-teaching teams stated they would benefit

from co-teacher training. There is a lack of district co-teaching professional development, this

particularly impacted co-teachers who did not have common planning time or had not previously

worked together. Co-teachers, especially general educators as they have not had formal special

education training, desire more clear understanding of the special education process. District co-

teaching teams desire professional development that meets their needs, allows them to work

together, provides opportunity to refresh and refine skills, is ongoing, and professional

development that is not an addition to an already packed schedule. Professional development

could offer opportunities for co-teachers to work together to develop roles and expectations and

become more familiar with content and methods of instruction.

Across each of the four themes, the assignment of co-teaching teams constrained each of

the other factors. The establishment of co-teaching partnerships was affected by factors such as

not being familiar with the co-teacher and teaching with many co-teachers daily. This affected

how teams planned (or did not plan), how teams structured their classroom, and the roles each

educator assumed with instruction. Co-teachers stated they work hard to implement effective

inclusive classroom instruction; however, the manner in which co-teaching teams are arranged

results in a lack of time to prepare and plan impeding effective co-teaching. Dedicated time prior to the start of classes and periodically throughout the school year, coupled with resources such as administrative support could assist co-teaching teams. That opportunity could provide time for co-teachers to discuss expectations, roles, content, and reflect on their instructional methods and content delivery. With changes such as these, district co-teaching teams would have the opportunity to maximize their talents and potential.

CHAPTER 5: DISCUSSION OF FINDINGS

The purpose of this study was to investigate the characteristics and implementation of the high school co-teaching program.   I am a thirty-eight year veteran special educator. Twenty-two of those years I have spent as a co-teacher in the high school district and I had the honor of being part of the initial implementation of the district co-teaching program. This experience helped to shape my perspective on this study as I am familiar with co-teaching expectations, strategies, collaboration, and the need for knowledge and preparation that supports effective co-teaching practice. This experience makes it possible for me to more clearly understand co-teacher interactions and needs and provide a worthy perspective that an outside researcher might not be able to realize. It is my goal that this study will further increase understanding of how co-teaching is implemented and the actions and needs of secondary co-teaching teams.

Over the years, changes have occurred in the district co-teaching program. This study, through survey, classroom observations, and interviews gave me the opportunity to document what district co-teachers had to say about program implementation, co-teacher team relationships, and co-teachers' needs. The classroom observations coupled with in-depth interviews of four co-teaching teams allowed me to evaluate district co-teaching practice and assess changes that could be enacted to support and improve co-teaching practice. In this chapter, the study's findings will be discussed with respect to the relevant literature. Then, the discussion is extended into the implications for co-teaching practice. The meaning that was constructed from the results identifies changes that could be enacted to more effectively implement the district co-teaching program, including interventions such as co-teaching professional development. To begin, an overview of this research and findings will be provided which will set the stage for the implications that emerged from this study.

Findings

Co-teaching research at the secondary level is generally limited (Dieker, 2001). Scruggs and colleagues (2007) indicated in their metasynthesis of secondary co-teaching research that there are problems with reporting co-teaching research. The interviewing of only successful co-teaching teams and the lack of available studies that report on what co-teachers actually do in their classrooms are just two of the difficulties. Much secondary co-teaching research is focused on development of definition and identification of co-teaching characteristics (Cook & Friend, 1995; Dieker & Murawski, 2003; Bouck, 2007; Rice, Drame, Owens, & Frattura, 2007). An important factor in secondary co-teaching is a clearer understanding of what co-teaching is. This study of the district co-teaching teams builds on the work of other researchers by focusing on not only the strengths of the secondary co-teaching program, but also the weaknesses of co-teaching practice that impact effective implementation. In studying the current implementation of district co-teachers, the variability of practice within the high school was identified. This takes research beyond the identification of definitions or documenting ideal characteristics of secondary co-teaching.

This case study examining four high school district co-teaching teams showed the diversity of team relationships within the co-teaching program. Each of the co-teaching teams in this district functioned under different conditions and expectations or, as with one case, did not understand what was expected of them. The scheduling of co-teaching teams did not seem intentionally planned, there was little or no opportunity for co-planning, and there was a great need for relevant and ongoing professional development. These problems with the current formation of the district co-teaching program do not provide a strong foundation for co-teachers to develop collegial relationships (Mastropieri, Scruggs, & McDuffie, 2007; Murawski &

Dieker, 2004; Murawski & Lochner, 2011; Orr, 2009; Rice & Zigmond, 2000). In addition to impacting the quality of co-teaching in the district, these problems likely affect student learning as well (Sileo, 2011).

Actions such as thoughtful arrangement of co-teaching teams, the importance of co-planning time, and the need for relevant and ongoing professional development are addressed quite often in previous research (Dieker & Murawski, 2003; Muller, Friend, & Hurley-Chamberlain, 2009; Orr, 2009; van Hover & Yeager, 2003). This case study supports the findings of other researchers in that all four co-teaching teams strongly indicated that thoughtful arrangement of co-teaching teams must take place in order for co-teachers to begin to establish a positive working relationship. However, this study adds to previous findings by detailing specific ways teams could be arranged and factors that impact these arrangements. Two out of the four co-teaching team cases had no experience co-teaching with each other. They had no time to prepare prior to the start of classes and shared no common planning time during the school day. Having had no time to prepare for co-teaching was reflected in their classroom practice. On the other hand, the two teams that had co-teaching experience with each other reported more positive interactions; both co-teachers were actively involved in content instruction. One team, S12 and G23, provided a concrete example of how working together for many years can assist co-teachers in developing a strong co-teaching relationship and deliver effective instruction to all students in their co-taught classroom.

Arrangement of Co-Teaching Teams

Implementing secondary co-teaching is complex and professionally demanding. When co-teaching programs are not well planned, misunderstandings and difficulties between special and general educators can impact co-teaching success (Rice & Zigmond, 2000; Sileo, 2011;

Weiss & Lloyd, 2003). All district co-teaching teams were assigned to co-teach together and there was no communication from administration about their assignment. Two of the four teams had no experience co-teaching together. S3 and G9 had no familiarity with each other until they began their co-teaching partnership. S1 and G3 had some familiarity as they were members of the same department. Two teams had more familiarity and experience with each other as they had co-taught together previously. The familiarity and experience each team had, as a result of their co-teaching assignment, impacted their actions as co-teachers.

      Co-planning time. How co-teaching teams were arranged in the district had a significant bearing on the opportunity for general and special educators to co-plan. According to the survey (Table 3), eighty-two percent of special education co-teachers and eighty-nine percent of general education co-teachers indicated they had little or no co-planning time. The lack of co-planning time was clearly represented by the four co-teaching teams interviewed for this study. Without thoughtful arrangement of teams, three of the four teams had no co-planning time at all and a lack of co-planning time is a significant barrier to an effective co-teaching program (Murawski and Lochner, 2010). Without time to plan together, district co-teachers, especially the special educators, reacted to instruction and to each other. S3 and G9, for example, did not plan together at all. The general educator in this case briefed the special educator about the lesson just prior to class. S3 was not familiar with the scope and sequence of the content, which hindered S3's ability to support instruction and student needs. S1 and G3 could approach content instruction more collaboratively, only because S1 had knowledge of the content. S1 and G3 did not plan together and referred to their type of planning as "winging it" and "planning on the fly". S9 and G13 had no common planning time either, but they had co-taught the same subject in the previous school year. S9 also had several years of prior experience with the content. Their

arrangement allowed for the development of interpersonal skills and positive interdependence. Because of their experience together and with the content, G13 could deliver instruction while S9 implemented learning strategies and modifications to meet student needs and vice versa. S12 and G23, however, provided the best example of what thoughtful arrangement of co-teaching teams can do.

S12 and G23 are a team that had co-taught together for a number of years and they co-taught together for all teaching periods. This experience allowed S12 and G23 to become very familiar with not only the content, but with each other. This all-day-schedule had also allowed S12 and G23 to find co-planning time. The time spent together provided opportunity for S12 and G23 to develop positive interdependence and monitor their practice. They have been able to learn from each other, approach the delivery of content in a proactive manner, and compare their actions to previous teaching, which aids in monitoring their progress. Previous research indicated that thoughtful arrangement of co-teaching teams allows general and special educators time to prepare and develop appropriate content knowledge and instructional approaches and allows the special educator to take a more central role with classroom instruction (Austin, 2001; Dieker & Murawski, 2003; Keefe & Moore, 2004; Mastropieri et al., 2005; Murawski & Lochner, 2011). Co-teachers must have the opportunity to collaborate together to meet instructional and student needs (Moin, Magiera, & Zigmond; Muller, Friend, Hurley-Chamberlain, 2009).

Co-taught classroom actions. At the core of co-teaching is determining instructional strategies that will be effective in helping students with disabilities meet core content standards. These strategies should not be an add-on to the curriculum but incorporated into the curriculum (Mastropieri & Scruggs, 2001; Murawski & Dieker, 2004; Scruggs, Mastropieri, & Okolo,

2008). The best way to achieve this is for co-teachers to engage in responsive discussion. This

is accomplished through active dialogue. The case of S12 and G23 supports those findings. S12

and G23 were able to develop instructional strategies that have been incorporated into daily

lessons and because they were together all day, S12 and G23 could discuss the effectiveness of

their instruction. Those teams who did not have that opportunity, S1 and G3 and especially S3

and G9, had more difficulty. In the case of S1 and G3, with no co-planning time, G3 did the

planning and S1 added in the instructional strategies needed to support student learning. This

team even acknowledged that time to reflect on lessons is an important part of co-teaching, but

they did not have that time. As for S3 and G9, G9 also planned the lessons. S3 was not part of

any direct instruction and played a lesser role, even with providing academic support. S3 simply

asked students if they needed help, S3 did not actively incorporate any learning strategies to

support content instruction.

Few studies focused specifically on co-teacher practice and actions in the classroom

(Mastropieri & Scruggs, 2001; Moin, Magiera, & Zigmond, 2009). In their meta-analysis of co-

teaching research, Murawski and Swanson (2001) called for future research that describes the

actions of the special educator in the co-taught classroom. This case study, although limited to

the context of this district, did take into consideration the actions of both the special and general

education co-teachers in their classroom. Through the classroom observations, co-teaching

teams had the opportunity to display their co-teaching skills and in the interviews talk about what

their co-taught classroom looked like. Co-teachers demonstrated instructional strategies and

elaborated on how this was, or was not accomplished. What was particularly evident from the

classroom observations and co-teaching team interviews was the more experience co-teachers

had together and the more opportunity a team had to co-plan, the more the special educator took

an active role in classroom instruction. The more co-planning time general and special educators

had, the more they collaborated to incorporate instructional strategies and modifications to meet

the needs of all students. The actions that took place in the co-taught classroom were directly

influenced by how the co-teaching teams were arranged.

Working with many co-teachers. As stated earlier when reporting the co-teaching

survey results, seven out of the thirteen special education co-teachers are impacted by their

assignment to work with three or more general educators daily. In addition, both general and

special educators stated they became frustrated when their co-teaching partner changed each

year. These two factors emerged during the co-teaching team interviews as well. Special

education co-teachers, especially, voiced their frustrations and indicated how co-teaching

arrangements, working with three or more co-teachers daily and teams changing year to year,

complicate the daily schedule and opportunity to plan. These two factors appear in limited

fashion in previous research. In the literature reviewed for this study, only two pieces touched

upon those issues. Murawski and Dieker (2004) discussed how co-teaching partners should be

carefully chosen. Working with many co-teachers daily does not contribute to relationship

building and collaborating with many educators can hinder that. What contributed to

relationship building is working with the same co-teacher; permanence of co-teaching pairs

should be a priority (Moin, Magiera, & Zigmond, 2008). This study offers additional detail to

these co-teaching issues.

In one case, the special educator, S3, worked with three co-teachers in two different

content areas and two different grade levels. In another case, S1, worked with three different

general educators, same content and grade levels. In the third case, S9, co-taught with four

different general educators daily, same content but different grade levels. In all three cases, the

special educator traveled from room to room and between buildings (Tables 9, 10, 11). All three

special educators reported they were less effective because working with many co-teachers daily

required them to adjust to new roles, activities, and expectations on a class by class basis; there

was no consistency. The changing of co-teaching partners from year to year only compounded

the inconsistency.

       Keep co-teaching teams together. Both special and general educators pointed out that it

is important to keep co-teaching teams together. The examples they gave reflected the

importance of relationship building and integrating instructional practices. When co-teachers

stay together they become more of a team, the teachers learn each other's style, and are more

comfortable with exchanging ideas; there is an articulation that becomes part of their

instructional delivery that does not happen when co-teachers change from year to year. S12 and

G23 were a good example of how co-teaching together for several years allowed the general and

special educator to get to know each other, build rapport, and develop trust. S12 and G23 stated

they have "consistency and flow". S9 and G13 expressed very similar experiences. During their

first year together they learned a lot about each other. In their second year of co-teaching

together, S9 and G13 "were able to flow right back" into the co-teaching relationship they

developed in the previous year. S9 and G13 are, also, an example of a team that had no common

planning time, but being assigned to co-teach together again seemed to moderate the lack of

planning time. The familiarity and experience S9 and G13 shared as a team had allowed them to

develop cooperative and proactive co-teaching skills. Both co-teaching teams, S9 and G13 and

S12 and G23, stated there was a constant "back and forth" between the co-teaching pairs. This

was evident during their classroom observations and less obvious, even absent, from the

observations of the teams that had not co-taught together in the past. Co-teachers who have

changed from year to year, S1 and G3, S3 and G9, all stated they wish they could be with the same person in the next year. As the school year progressed, even though they had no co-planning time, the teams got to know each other and began to develop their working relationship. When assigned to a new co-teacher they lost that momentum.

One survey respondent (G4) stated, "An imperative part of co-teaching is chemistry; allow teams to stay together for consecutive years to build rapport". What also emerged from the survey and what was clearly stated by co-teaching teams that were interviewed was the importance of getting to know your co-teacher. Survey responses indicated that co-teachers are not sure if they share common views. It takes time to develop working relationships and "good rapport between teachers that are co-teaching is essential". Certainly without co-planning time, working with many co-teachers daily, and co-teaching teams changing year to year, this condition cannot be met; neither can this condition be met when co-teachers express they have had no training or support.

Professional development and training. Special and general educators have specific training; special educators' training emphasizes the education of students with disabilities. Special educators are either highly qualified or content certified. Content and pedagogical knowledge is emphasized as part of general educators' training. General educators receive little training in working with students with disabilities. To have a special and general educator placed into a co-teaching situation requires thoughtful planning; part of that planning includes training and professional development. A lack of opportunity for training in co-teaching and content skills can have negative effects on a co-teaching program (Rice & Zigmond, 2000). Teachers feel unprepared for co-teaching and even if willing to co-teach hesitate to do so without

an opportunity to develop co-teaching skills (Rice & Zigmond, 2000; Scruggs, Mastropieri, & McDuffie, 2007; van Hover & Yeager, 2003; Villa, Thousand, Nevin, & Liston, 2005).

Survey responses (Table 7) indicated a variety of professional development needs. Special educators felt strongly about professional development in the areas of content knowledge, instructional strategies, and communication and collaborative skills while general educators felt parental rights in special education, understanding of the IEP, and knowledge about accommodations and modifications were important. It appears that special educators would like more training in the areas of general educator expertise and general educators would benefit from training in the areas of special educator expertise. Both special and general educators indicated they would be willing to learn new skills. General educators, though, indicated they have not received training to use co-teaching strategies (Table 6). As indicated by the survey, there is a need for co-teaching professional development.

The four co-teaching teams interviewed expressed particular needs that parallel the results of the survey. The need for co-teaching guidelines and expectations, the opportunity to become familiar with co-teachers and their instructional methods, and a better understanding of the special education process are a sampling of what the district co-teaching teams asked for. Co-teachers desire the opportunity to learn new skills and what emerged from the interviews is that there is an important first step in co-teacher training.

S9 brought up what they feel is the first and necessary part of a co-teaching partnership, bringing co-teachers together prior to the start of their classes. "I think [that] is the first thing that should be addressed…the social aspect of it. We used to [do that]". S12 and G23 felt the same way. Getting to know each other was an important ingredient in establishing their relationship. G9 describes a different experience. Multiple times, during the interviews, G9

stated that they did not know what was expected of them. G9 had co-taught with different co-teachers each year, had no training or support, not even an introduction to their co-teachers. G9 stated, "I would just like to talk about what [co-teaching] is". G9 indicated that having time for an initial meeting could provide an opportunity to get to know their co-teacher. The teaching workforce needs more preparation for co-teaching (Friend et al., 2010) and addressing the social aspect, getting to know your co-teacher, appears to be an important first step in preparing to co-teach.

District co-teaching teams expressed additional training needs. S1 and S3 stated they felt unprepared to co-teach, especially in a general education classroom that uses a different method such as technology to deliver instruction. G3 and G9 would like a better understanding of their role in the co-taught classroom, including how special education law applies to them. Feeling unprepared to co-teach and not having the necessary skills to teach students with disabilities is a central theme that appears in much of the research (Grskovic & Trzcinka, 2000; McHatton & McCray, 2007; Rice & Zigmond, 2000; Scruggs, Mastropieri, & McDuffie, 2007). G9 suggested a way to better prepare for and gain more insight into co-teaching; they would like to hear how other district co-teachers are co-teaching. In the past, one way the district provided opportunity for co-teachers to hear from each other was to visit co-teaching colleagues. S9, who has co-taught in the district for fifteen years, remembers when coverage was provided for co-teachers to visit each other. S9 said that resource was valuable in that co-teachers could learn from each other. S12 began co-teaching in the district after that opportunity was discontinued, but stated that time to observe other teams could help with refreshing and refining one's own co-teaching skills.

Two of the four co-teaching teams interviewed had the opportunity to work together in the past. Only one worked together for a number of years, but is the exception. None of the teams had formal opportunity to meet prior to the beginning of the school year, leaving each co-teaching team to work out expectations and roles as the year progressed. Co-teaching teams that changed from year to year were even more disadvantaged. The opportunity for training and professional development could mitigate the lack of co-teaching skills and experience, but the district co-teaching teams did not have that opportunity. Co-teaching professional development that engages teachers, is coherent, allows co-teachers to collaborate, and is ongoing has the potential to provide valuable resources for the district co-teaching program (Friend et al., 2010).

Literature examines secondary co-teaching practice from a broad perspective. Areas such as preparation and knowledge, classroom instruction, and co-teacher training and support provide guidelines for secondary co-teaching programs. Co-teaching team successes have been the basis for effective co-teaching practice. Findings from this study are congruent with other studies on secondary co-teaching in that a co-teaching program must be thoughtfully planned and training and resources are needed to assist special and general educators in the co-taught classroom. This case study extends the findings of previous research by identifying actions that resulted from inconsistencies in implementing the high school co-teaching program.

Further Research

Using the findings from this study, stakeholders in other secondary co-teaching settings can utilize the findings when examining and evaluating their own co-teaching program, but may not be applicable for co-teaching programs at lower grade levels. The findings examined secondary co-teacher actions within the context of legislative mandate to ensure students with disabilities have access to the general education curriculum. Providing detailed descriptions of

high school co-teacher actions can contribute to the literature through the documentation of co-teaching team successes as well as their frustrations.

This study took into consideration the actions of the special and general educator in the co-taught classroom. Teams had opportunity to demonstrate their co-teaching skills, but the observations were confined to a period of only several months during the school year. It is strongly recommended that further research focus on classroom actions of co-teachers over an entire school year, or even longer. Actions of co-teaching teams that work together for several years can be compared to teams that change from year to year. Evidence from this study suggests that co-teaching teams, working together for consecutive years are better able to plan, implement, and reflect on their co-teaching practice. Without the consistency of working together from year to year, co-teachers were less likely to develop interpersonal skills, leading to less active involvement in providing instruction to all students in the co-taught classroom. Such actions can impact special education delivery services, affecting students in the co-taught classroom. However, while this study looks at this issue from teacher report, a longitudinal study that compares pairing co-teachers for multiple years versus varying their pairings year to year through observation, would add significantly to the literature.

Research suggests the importance of co-teacher professional development and that professional development aided in teachers' ability to adapt instruction (Kosko & Wilkins, 2009; Rice & Zigmond, 2000; Villa, Thousand, Nevin, & Liston, 2005). Results of those studies, which focused on co-teacher professional development, could assist school districts in the development of relevant co-teaching in-service that not only provides resources, but also information about co-teaching practice and instruction. Participants in this study expressed a variety of needs with respect to co-teacher training and professional development. Co-teachers

in this study indicated their need for guidelines, a better understanding of certain instructional methods, and a need for training in special education for general education co-teachers.

Future research should continue to look at how professional development and training benefits co-teachers. Several participants stated they did not know what was expected of them. One participant, S1, emphasized that the district had not defined what co-teaching is or provided a description of what the district co-teaching program should be. S1 said, as co-teaching teams change each year the description and expectations of one educator is different from another, leading to inconsistencies in interpretations of what co-teaching is. Future research should look at how the establishment of a district standard for co-teaching description and expectations affects the implementation of co-teaching. This work could then look at when these standards are implemented how professional development aligned with these standards impacts instructional strategies and special education modifications and accommodations. Research should investigate how co-teaching teams use training and if co-teaching teams' classroom instruction changes over the course of professional development.

With respect to clear definition, consistent implementation, and the development of effective co-teaching partnerships, continued examination of secondary co-teaching should include student perceptions and student outcomes. Additional data on the effectiveness of co-teaching can be provided by important stakeholders, the students themselves. In this study, co-teachers indicated that students were receptive to having two teachers in the room, but that is only one side of the story. Academic success in co-taught classrooms can provide additional support for the use of co-teaching as an important special education service delivery in the general education classroom. But how co-planning, co-teaching relationships, and instructional practices impact teacher-student relationships and student learning is still an open question.

Also, student achievement on content assessments and high stakes testing can substantiate the effects of co-teaching.

Implications

Prior research points out co-teaching studies at the secondary level are generally limited; however results from those studies highlight the complexity of this instructional model. Co-teaching is different from the one-teacher classroom and is dynamic, requiring special and general educators to work together to deliver instruction in the inclusive classroom (Bouck, 2007; Cook & Friend, 1995; Dieker, 2001; Dieker & Murawski, 2003). Actions of co-teachers and factors that influence and affect co-teaching are described and careful attention to the arrangement and implementation of co-teaching teams is encouraged (Friend, 2008; Dieker & Murawski; 2003; Ploessl, Rock, Schoenfeld, & Blanks, 2010; Weiss & Lloyd, 2003).

There has been a change in the way co-teaching is implemented in the district. When the program was first established general and special educators were asked if they would like to participate and were given a voice in choosing their co-teaching partner. Administration supported the initial implementation by placing emphasis on thoughtful and intentional pairing of co-teachers. Common planning and preparation time was scheduled and professional development opportunity for co-teaching teams was provided. Co-teaching teams who attended various professional development training would formally report back to other teams during district in-service and share what they learned. Those opportunities provided co-teachers with time to work together and time to build their co-teaching relationship. Those opportunities strongly supported the district co-teaching program. Over the years, those links in the district co-teaching chain have broken.

It is important to understand secondary co-teaching complexities. Being cognizant of

those complexities can inform and assist administration and general and special educators in

making decisions about the co-teaching program. This study has been the first formal look at the

district co-teaching program and provides a good opportunity for the district to implement

changes. Creating conditions that support and assist co-teachers in developing their partnerships

can increase the capacity of the district co-teaching program.

Key issues affecting the district co-teaching teams are the arrangement of co-teaching

teams, common planning time, co-teacher roles and expectations, and resources such as

professional development. The recommendations I am making involve those four issues and can

be divided into three areas: communication, preparation, and continuing education.

Communication involves discussion between administration and co-teachers about the

scheduling and arrangement of co-teaching teams. A more clear understanding of how ICS

classes are scheduled can provide co-teachers with advance notice pertaining to their potential

co-teaching partner. Preparation includes time for co-teachers to meet. Co-teachers need time to

prepare; they need time prior to the start of classes, during the school day, and time after

instruction to reflect on lesson delivery and student achievement. Continuing education for co-

teachers requires that specific, ongoing professional development that meets the needs of district

co-teachers is available.

Secondary co-teaching research has focused on the implementation, characteristics, and

needs of co-teachers. Recommendations have been made for developing or revising secondary

co-teaching structure. The results of my study have elucidated the importance of co-teaching

resources and supports and I, too, have made recommendations with respect to the district co-

teaching program. Although each recommendation was presented separately, I will argue, that

for significant impact to result, open communication and the arrangement of co-teaching teams, dedicated co-planning time, and co-teacher training and professional development must be infused and implemented together. The reality of co-teacher arrangements is the assignment of co-teaching teams is constrained by district scheduling methods. However, if administration engages in communication with general and special educators about their co-teaching assignments and dedicated co-planning time, coupled with co-teacher professional development that is incorporated into program structure, it will improve co-teaching partnerships, co-instruction, and ultimately student achievement.

How co-teaching teams are assigned was a significant concern among the four co-teaching teams interviewed. The teams indicated five aspects of successful co-teaching practice they feel are important: communication, familiarity with their co-teacher, the importance of keeping teams together, working with limited co-teachers daily, and who should co-teach. Co-teachers emphasized the importance of who should co-teach by stating teachers should want to co-teach and teachers should have a say in who they would like to co-teach. The logistics of arranging co-teaching teams can be complicated at the secondary level and quite often the scheduling of co-teaching teams is not consistent (Orr, 2009; Murawski & Dieker, 2004). Co-teachers stressed the importance of the co-teaching relationship and that the district needs to pair co-teachers more strategically.

Communication

One way to begin the discussion is to clarify the ICS scheduling process. Administration should address questions such as, how ICS classes are scheduled and what determines co-teacher pairs. As the district course scheduling becomes clearer, administration should inform staff about the potential need for ICS classes. Since guidance counselors complete their student

course selection meetings by the end of April, the May department meeting would be a good time to begin discussing the configuration of ICS classes.

Communicating with co-teachers about how the ICS class scheduling is progressing can provide district co-teachers with a better understanding about their co-teaching assignment. Many co-teachers feel as though they are left in the dark about their co-taught classes. Co-teachers say they want to know who they will be working with. Keeping co-teachers informed about their assignment will provide opportunity for special and general educators to begin to communicate and get to know each other. At this point in the scheduling, administration should also allow co-teachers to visit each other's classrooms. This would be especially helpful for co-teachers assigned to a new course and co-teachers who have not taught together. Opportunities such as this would allow:

- Co-teachers to compare schedules and identify time when co-planning can take place.

- Co-teachers to meet and initiate discussion about themselves and their expertise.

- Co-teachers to become familiar with the scope and sequence of the co-taught class.

Preparation

Administrators need to take care and assign educators to no more than two co-teaching partners. Seven out of the thirteen special educators worked with three or more co-teachers daily. It is also recommended that administrators listen to co-teacher needs and give potential co-teachers options; discussion should take place about with whom they are interested in co-teaching. Pairing co-teachers who desire to work together can set the foundation for a more positive partnership and keeping teams together can continue to build that partnership. All eight interview participants strongly stated the importance of keeping teams together. Co-teachers reported that keeping teams together helped with the cooperative teaching process. When teams

are together for consecutive years they have consistency, they are familiar with each other, and it contributes to collaborative partnerships. However, in a large high school district such as this, choosing co-teaching partners may not be feasible. In this case, it is particularly crucial for teachers who have no history of co-teaching to be scheduled with co-planning time.

The assignment of co-teaching teams is an essential part of developing a co-teaching program. Co-teaching teams need to prepare for their co-taught classroom (Austin, 2001; Keefe & Moore, 2004; Mastropieri et al., 2005). This study revealed a weakness in the district co-teaching program, co-teachers have little or no common planning time and it was the arrangement of co-teaching teams that impacted co-planning. Co-teachers who work with three or more co-teachers daily were expressly affected by the lack of co-planning time; over one-half of special education co-teachers are in this situation. A lack of co-planning time is a barrier to effective co-instruction, without it co-teachers work in reactive manner. For co-teachers to clarify expectations and roles and agree on meaningful instruction co-teachers must engage in proactive discussion (Dieker & Murawski, 2003; Murawski & Lochner, 2011).

Co-teaching teams were assigned with no communication from administration about their assignment, leaving teams unable to prepare. There are opportunities during the school year that can provide preparation time and co-teaching professional development. Teacher in-service days at the beginning of the school year are an ideal time to begin co-teacher discussion. Special and general educators can meet to establish roles, expectations, and examine the scope and sequence of courses to see how their expertise fits into content instruction. Designated time on in-service days during and at the end of the school year could be utilized as co-instruction preparation time and give co-teachers opportunity to evaluate and reflect on instruction and student progress. Figure 3 illustrates a potential preparation and in-service schedule. This would assist new co-

teachers, particularly, by helping to begin the co-planning of instruction and the building of a co-

teaching relationship.

Figure 3: Potential Co-Teaching Preparation and In-Service Schedule

September	November	January/February	April	May/June
•Co-teacher Preparation •New/Veteran Teams •Discuss Guidelines •Q & A	•Co-teaching Professional Development	•Co-teacher Mid-Year Check •Discuss Team Progress •Q & A	•Co-teaching Professinal Development	•Coteacher Team Reflection •Discuss Progress and Changes •Scheduling for Next Year •Q & A

In September, the teacher orientation day is utilized for initial co-teacher preparation.

New and veteran teams met with administration to discuss scheduling and program guidelines.

This is also an opportunity for co-teachers to hear from each other and gives new co-teaching

teams a venue to discuss how their expertise can work together within the scope and sequence of

their co-taught course. Topics for the question and answer segment should be offered by both

administration and co-teachers.

The mid-year and end-of-year sessions are utilized for checking on progress and

reflecting on co-instruction. Teams can discuss changes they can implement and have

opportunity to hear from colleagues about their co-teaching experiences. At the end-of-year

session, administration can brief co-teachers about next years' scheduling and discuss its

implications.

The November and April district in-service days should address specific weaknesses in

the co-teaching program through professional development. Topics for training will come from

both administration and co-teachers. The professional development needs as identified in the

district co-teacher survey can provide initial suggestions for in-service training. In addition to

the November and April district in-service, subsequent co-teacher training can be provided

through the district educational foundation. This format which brings co-teaching teams together

has the potential to bolster communication and allow additional preparation time. As this study

identified inconsistencies and variations in the district's co-teaching program, this annual cycle

of co-teacher meetings and professional development can increase consistency of program

implementation.

Professional Development

Training and professional development are part of the planning for co-teaching programs

and educators need training and time to practice their skills together. Educators must believe

they have the skills and abilities to co-teach, without it they can doubt their capacity to co-teach

(Kosko & Wilkins, 2009; Villa, Thousand, & Nevin, 2013). Also, professional development has

a positive impact in the instruction of students with disabilities (Rice & Zigmond, 2000; Scruggs,

Mastropieri, & McDuffie, 2007; van Hover & Yeager, 2003; Villa, Thousand, Nevin, & Liston,

2005). In the discussion of findings it was brought out that co-teachers indicated they would be

willing to learn new skills. Special and general educators appear to need training in each other's

expertise. As co-teacher training and professional development has not been a part of the district

professional development offerings, it is recommended that co-teaching professional

development that meets the needs of co-teaching teams be offered.

The district co-teaching survey indicated a variety of professional development needs.

Survey results pointed out that professional development in content knowledge, instructional

strategies, communication and collaborative skills is desired. In addition, co-teachers would like

to be informed about the special education process. This includes how to implement the IEP and

understanding instructional modifications and accommodations. General educators, in particular,

felt it was necessary to be better informed about parental rights in special education. All four co-teaching teams interviewed expressed the desire for ongoing professional development and cited areas of particular need. These teams expressed the want for co-teaching guidelines, in relation to the district's definition and expectations for co-teaching teams. Teams also desire training in co-teaching skills and communication, instructional methods using technology, and special education law including a clearer understanding of the IEP. During the interviews, S1 spoke about the importance of the IEP and that both the general and special education co-teachers have to follow it. Regular training in this area can better insure that a student's IEP is properly implemented and fulfilled. Another area of particular concern was with special education law. There have been changes in the regulations and it is important for the district to update co-teaching teams.   As noted in this study, some specific co-teacher professional development needs are:

- Co-teacher program guidelines and co-teacher expectations
    - District guidance regarding the implementation of co-teaching
        - Establish a common understanding of co-teaching
        - Explain considerations that are necessary in implementing co-teaching
        - Establish a shared belief system
        - Approaches of co-teaching – how and when to implement them
        - Establishment of classroom routines and management
- Communication and collaborative skills
    - Strategies for optimizing each teachers expertise to determine roles and responsibilities
- Instructional strategies

- o Using low and high tech resources to deliver instruction

- o Ways to differentiate instruction by content, product, or process

- o Examining research based instructional strategies

    - Strategies for accommodating different types of learning

        - Visual, auditory, tactile/kinesthetic learners

    - Content area/academic strategy instruction

        - Cueing, rehearsal, and strategy training for reading

        - Cognitive strategies for writing

            - o Strategies Instruction Model (SIM)

            - o Cognitive Strategy Instruction in Writing (CSIW)

            - o Classwide Peer Tutoring (CWPT)

- Understanding the IEP, special education modifications and accommodations

    - o Components and significance of the IEP

    - o Understanding and implications of IDEA and NCLB

        - Parental rights in special education

Using the knowledge of experienced co-teachers and administrators, professional development

that is relevant to co-teaching can be created. As new co-teaching teams will have different

needs then veteran teams, co-teaching staff, working together, could set priorities for

professional development.

Professional development comes in many forms and a suggested format was that co-

teachers might be able to learn from each other. Co-teachers can learn from colleagues who

have experience in this method of instruction, not only learn from successes but also co-teachers'

difficulties and how they overcame them. One way to accomplish this is to open co-teachers' classroom practice to each co-teaching team.

In the past, co-teaching teams were provided the opportunity to visit co-taught classrooms with the goal to help co-teachers across the content areas learn about instructional practices implemented by co-teaching colleagues. Teams would visit co-teaching colleagues' classrooms to observe a particular lesson or activity. Co-teachers volunteered to open their classrooms to colleagues and indicated the particular time for visits to occur. Coverage was provided, making it easier for co-teachers to visit classes. At the time, co-teachers could visit each other two to three times per year. This would be best for new co-teachers to see different successful co-teaching relationships in action. Even for veteran co-teachers, observing colleagues can assist in generating new co-teaching practice, provide new sharpness, and refresh and refine co-teaching skills.

Insights obtained from surveying the district co-teaching staff and observations and interviews from co-teaching teams gives us further information about the implementation and needs of district co-teachers. Besides the information garnered from surveys and interviews, co-teachers' actions in their classroom were captured. Successful co-teaching is the result of many influences. This study shows how one step taken to implement district co-teaching affects many other factors of the co-teaching program. It has also shown that when professional needs are not addressed co-teaching may not be as effective as it could be. Factors inside the co-taught classroom are not the only influences that impact co-teaching; it is a combined effort between administration and co-teachers that will significantly impact co-teaching success and sustainability.

Impact

Prior to beginning data collection I spoke with A1 and indicated that I would keep them informed about the study. We had the opportunity on several occasions to discuss what was beginning to emerge about district co-teaching characteristics and needs. A dialogue then began between several district administrators (A1 and A2) and me discussing co-teaching needs and the possibility of planning and implementing structured professional development related to co-teaching practice.

This study has already had an impact on the district. During the last phase of data collection administrative actions took place which had not occurred for many years. In March, several supervisors sent scheduling surveys to their staff. Specific to the special education department, its survey explicitly asked for co-teacher input regarding scheduling. Staff was asked how scheduling for the department could be improved and ICS teachers were asked about their co-teaching arrangement. I realized the impact when S9 stated, "Our supervisor is listening to our needs. Our supervisor asked us for feedback and also through all of this with you, Karen, our supervisor is listening to us".

In addition, near the end of the school year, an arrangement was made for a district general educator to visit and observe new classes they were scheduled to teach. Their prospective schedule included co-taught classes and the general educator had the opportunity to meet with the co-teacher. Co-teachers expressed their excitement saying these changes are positive steps in the right direction. Using the feedback provided by co-teachers and offering opportunity to visit classes and meet with co-teachers is a great example of opening up communication and providing supports for general and special education co-teachers. It is a positive step and establishes a foundation on which to build additional co-teaching resources that can assist in improving and sustaining the district co-teaching program.

Limitations

Qualitative research seems to have inherent limitations. Observation and interviews can be influenced by many factors and documents may be incomplete or inaccurate (Patton, 2002). Another limitation of this study may be the survey instrument. The Secondary Co-Teaching Survey is adapted from other instruments. My interpretations may be different from the intent of the original instruments and I cannot assume that this co-teaching survey is as reliable. With co-teacher observation, it is possible that I may have affected the situation. The co-teachers might have behaved differently when I was in the room and perhaps I might not have perceived an action in the manner in which it was intended. Interview data might have been distorted by participants' attitude or mood and the co-planned documents, such as co-taught activities and assessments, varied in quality and content. Through the triangulation of data sources (surveys, observations, interviews, and documents) I believe I was able to identify consistencies and inconsistencies across the measures.

This qualitative case study used a variety of data sources building on the strong aspects of each. A major strength of case study is the use of multiple sources of data collection (Yin, 2009). Using multiple data sources allowed me to look at a broad range of actions and commentary regarding the characteristics and needs of co-teachers.

The intent of this study was to examine the co-teaching program at SJHSD; generalization may not be possible. Perhaps other high school districts with similar demographics may be able to use the results of this study to assist in developing and improving their co-teaching program. Even with its limitations this study still has the potential to impact the district co-teaching program. Information and insight gained from surveying, observing, and

interviewing co-teachers can inform co-teaching practice and provide the district administration

with information to better support the co-teaching program.

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Appendix A
Data Collection Table

Research questions:
- What are the characteristics of the co-teaching model at South Jersey High School?
    - How is the high school co-teaching program implemented?
- What are the professional development needs of co-teachers from the various content areas?
    - How can co-teachers use professional development knowledge and skills in their classroom?

Type of Data Collection (measure)	Sample (who)	Where (in high school)	Data Related to: Characteristics, Professional Development
Confidential Survey	All high school general/special education co-teaching teams	On-line via e-mail or personally delivered	To determine co-teacher perceptions, knowledge, instructional strategies, and need for professional development (PD)
Observation of Co-Taught Classrooms *prior to* professional development (PD)	4 co-teaching teams	Co-teaching team's respective classrooms	Gather information about instructional strategies, materials, student accommodations/modifications, co-teaching arrangements, level of collaboration, classroom responsibilities
Interviews of Co-Teaching Teams *prior to* PD	The same 4 co-teaching teams	In classroom or agreed upon location in high school building	To inquire about and clarify high school co-teaching methods
Observation of Co-Taught Classrooms *after* PD	The same 4 co-teaching teams	Co-teaching team's respective classroom	Gather information about instructional strategies, materials, student accommodations/modifications, co-teaching arrangements, level of collaboration, classroom responsibilities - to identify change as a result of PD
Interviews of Co-Teaching Teams *after* PD	The same 4 co-teaching teams	In classroom or agreed upon location in high school building	To inquire about and clarify high school co-teaching methods – to inquire directly about change as a result of PD

Appendix B
Co-Teaching Survey

Thank You for taking time to complete this co-teaching survey. This survey is part of a case study to develop a better understanding of co-teaching implementation and practice at SJHS. Your feedback is important to our co-teaching program. Your responses will speak to the district and provide knowledge that can help to improve co-teaching practice.

This survey should take about 25 minutes of your time to complete. Your responses will be kept confidential. For completing this survey you will receive 1 hour of professional development credit. If you have any questions please speak personally to or contact Karen Foglia at kfoglia@srsd.net. Survey results will be available through Karen Foglia.

I consent to take this survey: Yes   No   Date of survey: _____

Co-teaching assignment: _____ Regular Educator   _____ Special Educator

Background

1. How many years have you been teaching? _____ years

2. How many years have you been co-teaching? _____ years

    This is my first year co-teaching _____

3. How many co-teachers are you currently co-teaching with? _____

For the following statements please indicate the extent to which you believe your knowledge, instructional strategies, and preparation support you in your co-taught classroom.

4. I understand the curriculum standards with respect to the content area in the co-taught classroom.

1	2	3	4	5
Not at all		Somewhat		Completely

5. I have familiarity with methods and materials needed to teach the content.

    1   2   3   4   5

6. I modify goals incorporated into the class lessons and assessments.

1	2	3	4	5
Not at all		Somewhat		Completely

7. I vary classroom management techniques to enhance learning for all students.

    1   2   3   4   5

8. I have confidence in my knowledge of the curriculum and content.

1	2	3	4	5
Not at all		Sometimes		Completely

9. I consider IEP goals and objectives when grading for students with disabilities.

1	2	3	4	5

10. I structure activities for students' understanding of content.

1	2	3	4	5
Not at all		Sometimes		Completely

11. I can adapt and individualize instruction and activities to meet student needs.

1	2	3	4	5

12. I am prepared to discuss student progress and concerns with parents.

1	2	3	4	5
Not at all		Sometimes		Completely

13. I am willing to learn new teaching strategies related to content instruction.

1	2	3	4	5

14. I am familiar with individual student needs and can plan accordingly.

1	2	3	4	5
Not at all		Sometimes		Completely

15. I am confident in dealing with parental concerns and challenges.

1	2	3	4	5

16. I am confident as an educator working in the inclusive classroom.

1	2	3	4	5
Not at all		Sometimes		Completely

17. My co-teacher and I have common planning time to communicate and collaborate about content lessons.

1	2	3	4	5

18. I can read the non-verbal cues of my co-teacher.

1	2	3	4	5
Not at all		Sometimes		Completely

19. My co-teacher moves freely about the room.

1	2	3	4	5

20. My co-teacher and I agree on the goals of the co-taught classroom.

1	2	3	4	5
Not at all		Sometimes		Completely

21. Lesson planning can be spontaneous with changes occurring during instruction.

    1   2   3   4   5

22. I often present lessons in the co-taught classroom.

    1   2   3   4   5

23. My co-teacher and I have jointly planned the rules and routine for class.

    1   2   3   4   5
Not at all   Sometimes   Completely

24. My co-teacher and I use a variety of measures for grading.

    1   2   3   4   5

25. My co-teacher and I share planning and responsibilities for classes.

    1   2   3   4   5
Not at all   Sometimes   Completely

26. My co-teacher and I practice open and honest communication.

    1   2   3   4   5

27. My co-teacher and I share common views on how to manage inappropriate behavior.

    1   2   3   4   5
Not at all   Sometimes   Completely

28. My co-teacher and I share views about parent involvement.

    1   2   3   4   5

29. My co-teacher and I are flexible in dealing with unexpected events.

    1   2   3   4   5
Not at all   Sometimes   Completely

30. My co-teacher and I often incorporate humor into classroom lessons and activities.

    1   2   3   4   5

31. My co-teacher and I consistently work with *all* students in class.

    1   2   3   4   5
Not at all   Sometimes   Completely

32. I have received the training I need to successfully use co-teaching strategies.

    1   2   3   4   5

33. I have sufficient resources to implement successful co-teaching practices.

1	2	3	4	5
Not at all		Sometimes		Completely

34. To improve my skills for a better co-teaching program, professional development in the following areas would be beneficial:

- Content knowledge/Lesson planning

1	2	3	4	5
Not important		Somewhat		Very important

- Instructional strategies/Behavioral management

1	2	3	4	5

- Communication/collaborative skills

1	2	3	4	5
Not important		Somewhat		Very important

- Parental rights in special education

1	2	3	4	5

- The IEP/PLEP/writing goals and objectives

1	2	3	4	5
Not important		Somewhat		Very important

- Accommodations/modifications

1	2	3	4	5

- Other (please indicate)

The following resources were used in developing this co-teaching survey:

Gately, S. E. & Gately, F. J. (2003). Understanding co-teaching components. *Teaching Exceptional Children, 33*(4), 40-47.

Noonan, M. J., McCormick, L., & Heck, R. H. (2003). The co-teacher relationship scale: Applications for professional development. *Education and Training in Developmental Disabilities, 38*(1), 113-120.

Appendix C
Survey Tally Sheet

Survey results: Individual responses (names) matched with number; sorted as regular educator and special educator; tallied
This tally is for: Regular Educators Responses and Special Educator Responses Combined (= SpEd; * = GenEd)*
Survey questions are highlighted to match research questions – see below (p. 59) for key.

Background

1. How long have you been teaching? **SpEd – 11.5 to 41 years** **GenEd – 2 to 24 years**		
2. How many years have you been co- teaching? **SpEd – 11.5 - 21** **GenEd – 2 to 17**		This is my first year teaching. **No - for all participants**
3. How many co-teachers are you currently co-teaching with? **SpEd – 1 to 4 (1 is the exception; more the rule)** **GenEd – 1 to 2**		

Preparation and Knowledge (pre-co-teaching training, educational training): **For general educator - skills to teach students with disabilities; ability to make content modifications/accommodations; ability to work with special educator to meet legal requirements.** **For special educator – content knowledge. For both – communication/collaborative skills; classroom role; compatibility; planning time.**
Themes to look for: content knowledge, understanding IEP, knowledge and application of modifications and accommodations, planning lessons to meet student needs, working with parents of students with disabilities,
Instructional Strategies and Approaches: **Provide structured classroom; ability to reinforce content with explanation, questioning, and feedback; use of variety of instructional approaches; providing clear goals and objectives; actively involve students in tasks; both educators work together, share responsibility and content materials; adaptation of content to meet student needs.**
Themes to look for: classroom management; teacher roles; student engagement

Research Questions:
1. What are the characteristics of the secondary co-teaching model at South Jersey High School?
   a. How is the high school co-teaching program implemented?
2. What are the professional development needs of co-teachers from the various content areas?
   a. How can co-teachers use professional development knowledge and skills in their classroom?

Survey questions have been highlighted to match research questions.

Research Questions:

1. What are the characteristics of the SJHS co-teaching program?
    Survey questions: 4-12, 18, 19, 22, 24, 26-28, and 30   (highlighted in yellow)

1. a. How is it implemented?
    Survey questions: 14-17, 20, 21, 23, 25, 29, and 31   (highlighted in green)

2. What are the professional development needs of co-teachers from the various content areas?
    Survey questions: 6-9, 11, 13, 32-34 a-g   (highlighted in pink)

Question	1 – Not at all	2	3 - Sometimes	4	5- Completely
4. I understand the curriculum standards with respect to the content area in the co-taught classroom.			* *	*** *****	******* ************
5. I have familiarity with methods and materials needed to teach the content.				** ****	********* **************
6. I modify goals incorporated into the class lessons and assessments. **Also PD**	*	**	***	**** ***	**** ************
7. I vary classroom management techniques to enhance learning for all students. **Also PD**			** **	* *******	******* *********
8. I have confidence in my knowledge of the curriculum and content. **Also PD**			*	*** ***	****** ***************

9. I consider IEP goals and objectives when grading for students with disabilities. **Also PD**	*		*	**** **********	***** *******
10. I structure activities for students' understanding of content.	*		***	** ********	**** **********
11. I can adapt and individualize instruction and activities to meet student needs. **Also PD**			* **	* ************	******** ****
12. I am prepared to discuss student progress and concerns with parents.				** ******	********* ************
13. I am willing to learn new teaching strategies related to content instruction.				* *	********* *****************
14. I am familiar with individual student needs and can plan accordingly.			* **	** *************	******** ***
15. I am confident in dealing with parental concerns and challenges.			** **	* ****	********* ************
16. I am confident as an educator working in the inclusive classroom.			***	*** *****	******** **********

Question	1-Not at all	2	3 - Sometimes	4	5-Completely
17. My co-teacher and I have common planning time to communicate and collaborate about content lessons.	***** ********	** ***	* *****	** *	*
18. I can read the non-verbal cues of my co-teacher.	*	**	* ******	**** ****	****** *****
19. My co-teacher moves freely around the room.	*		* ***	** ***	******* ***********
20. My co-teacher and I agree on the goals of the co-taught classroom.	*	*	***	** *******	******** ******
21. Lesson planning can be spontaneous with changes occurring during instruction.			** *	*** ******	****** ***********
22. I often present lessons in the co-taught classroom.	**	*	**	*** ***	*** ***************
23. My co-teacher and I have jointly planned the rules and routine for class.	** **	**	*** ******	* ***	***** *****
24. My co-teacher and I use a variety of measures for grading.	*	*	* ***	** ****	******* *********
25. My co-teacher and I share planning and responsibilities for classes.	* ***	* ****	***** ****	** ******	** *

Question	1	2	3	4	5
26. My co-teacher and I practice open and honest communication.		* *	* **	**** ******	***** *********
27. My co-teacher and I share common views on how to manage inappropriate behavior.	* *		*	***** ********	***** **********
28. My co-teacher and I share views about parent involvement.	* *		**	**** *****	****** **********
29. My co-teacher and I are flexible in dealing with unexpected events.				** ******	******** ************
30. My co-teacher and I often incorporate humor into classroom lessons and activities.		*	* *	*** *****	******* **********
31. My co-teacher and I consistently work with *all* students in class.			*	*** ****	******* *************

Training and Professional Development

Question	1-Not at all	2	3-Sometimes	4	5-Completely
32. I have received the training I need to successfully use co-teaching strategies.	*	** *******	** ******	**** ***	** *

33. I have sufficient resources to implement successful co-teaching practices.	* ***	*****	*** ****	** *****	**** *

34. To improve my skills for a better co-teaching program, professional development in the following areas would be beneficial:	1-Not Important	2	3- Somewhat	4	5- Very Important
• Content knowledge/Lesson planning	* *****	** ***	** **	** ***** *	**** **
• Instructional strategies/Behavioral management	** *	* ***	** ******	**** ***** *	** *
• Communication/collaborative skills	* **	 *	*** ******** *	** ***	***** ***
• Parental rights in special education	* **	*** *** *	* *	**** *****	** ******
• The IEP/PLEP/writing goals and objectives	***** ***	*** *	* *****	** *****	****
• Accommodations/modifications	*** *	*** **	* ***	*** *****	* *******
• Other (indicate response) *Differentiated Instruction – G14*					

Anecdotal comments included on respondents' surveys:

S3 – Having time to discuss lesson plans with the 3 content teachers I work with would be a definite plus (co-teach with 3/in 2 different content areas); never have the opportunity to discuss what is planned for future classes; much of the time I feel like a teacher's aide…I don't consistently stay with the same teacher for the same subject (grade and level) from year to year.

S6 – Reading non-verbal cues of my co-teacher can change from year to year if you work with someone new; have been to several in-services but not in a long time. I think it would be helpful to go again with new teachers. When you are working with someone new or a new teacher, you should attend a training session or in-service of some sort. S6 also indicates that they instruct about half the time, if co-teach with same person more than 1 period then S6 will teach lesson; PD would be helpful especially for new co-teachers – be it new, new teacher or new to co-teaching or simply new co-teaching partner – even if they have co-taught before.

S10 – makes a comment about limited options regarding levels for special education students – no average level in history

S11 – indicates PD won't help and every co-teacher partner needs to have a "pre-nup"/supervisor signs off.

S12 – stated answers are based upon being with same teacher for 5 years; if with new teacher answers would be different.

G1 – comments on how they and co-teacher (S1) have not had formal training but have managed to formulate a wonderful ICS situation.

G2 – responds "not at all" in areas of planning; their co-teacher (S1) and they have no common time.

G4 – imperative part of co-teaching is chemistry – allow team to stay together for consecutive years to build rapport; discrepancies of what is expected of ICS teachers - establishing common goals is the key to success.

G8 – writes – need more time to communicate than the 5 minutes before the bell/we don't need to learn how to work together but time to plan working together.

G9 – States a variety of measures are used by both but G9 does the entire grading (see #24) and doesn't know if shares common views (see #27) and #28 "don't   know" - sounds like there is no communication specifically how to use accommodations and modifications/discuss class placement – many special education students in one class.

G11 – mentions placement options limited – no average level – could have negative effect on students

G14 – common prep is crucial for collaborative lesson planning.

G15 – gets frustrated when person co-teaching with changes from year to year/has had more positive experiences in the past/this year not so good.

G16 – doesn't feel PD would be beneficial at this time (same as S11)

G19 – doesn't think Pd is needed; GenEd and SpEd should not be with many co-teachers – 2 at most is more effective; co-teachers should volunteer (in speaking with G19, G19 has asked to co-teach for next school year – several classes with past co-teacher)

S6 – indicates that they instruct about half the time, if co-teach with same person more than 1 period then S6 will teach lesson; PD would be helpful especially for new co-teachers – be it new, new teacher or new to co-teaching or simply new co-teaching partner – even if they have co-taught before.

The following resources were used in developing this co-teaching survey:

Gately, S. E. & Gately, F. J. (2003). Understanding co-teaching components. *Teaching Exceptional Children, 33*(4), 40-47.

Noonan, M. J., McCormick, L., & Heck, R. H. (2003). The co-teacher relationship scale: Applications for professional development. *Education and Training in Developmental Disabilities, 38*(1), 113-120.

Appendix D
Co-Teaching Observation Guide

Co-Teaching Observation Guide

General Education Teacher _____ Grade Level_____

Special Education Teacher _____ Date _____

Subject Observed _____ Time _____

Observer <u>Karen Lederle Foglia</u>_____

Description of Class and Class Activity:
Sketch of Classroom (diagram of student seating, teacher movements and instructional activities during instruction)**:**

Rating Scale
0 – Should be there and is not   **1 –** Saw an attempt (somewhat evident)   **2 –** Saw well done (clearly evident)   **N/A** – Action not applicable

	0	1	2	Comments
Have planned together				Co-planning documents evident. Variety of instructional activities and materials are readily available and used. Both teachers know what to do.

Research based instructional strategies used in classroom.	List instructional strategies observed (i.e., graphic organizers, advance organizers, mnemonics)
Lessons are differentiated in content, process, product, and/or learning environment.	Student accommodation/modifications evident. Choices for student participation in content, process or product evident in planning and or instruction. Use of instructional menus, matrix, contracts, etc.
Teachers use "we"/"us" or parity is otherwise evident**.**	Describe (both teachers' names on board, classroom)
Both teachers are actively involved in instruction and activities.	Both are simultaneously present. Both are involved in the classroom activities. Both have defined roles (refer to models of co-teaching).
Students are engaged and participating in learning.	

Both teachers work with all students.	Both adults move around the classroom assisting and monitoring all students learning.
Both teachers share equally in classroom and instructional responsibilities.	Both interject ideas for clarification of lesson content. Both provide feedback to students. Both facilitate smooth transitions from activity to activity.
Routines and formal procedures are evidenced and used by teachers and students.	Teachers use nonverbal communication during lesson activities to manage behavior and direct instruction.

Level of collaborative and effective teacher communication/interaction evidenced.

Co-teaching instructional arrangements are observed:

___ one teach/one observe
___ one teach/one drift, support, assist
___ parallel teaching
___ station teaching
___ team teaching
___ alternative teaching
___ other: _____

Student instructional grouping pattern or
patterns observed:

___ whole group
___ small group
___ flexible grouping
___ collaborative groups
___ individual seat work
___ other: _____

Notes and/or comments:

Appendix E
Co-Teaching Interview Guide

The following questions are part of the semi-structured co-teaching follow-up interview and will be used to inquire about co-teaching partnerships at South Jersey High School. The co-teaching team will be interviewed together. In answering these questions, it is hoped that a more clear understanding about the high school co-teaching partnership will be identified. This list of questions is not exhaustive; the questions can be used as a jumping off point for further discussion.

Co-Teaching Roles and Responsibilities/Instructional Techniques/Preparation and Planning

1. How was your co-teaching team determined?
    a. Were you assigned?
    b. Volunteered?
    c. Years co-teaching together?
    d. Years co-teaching?

2. How many co-teachers do you work with during the school day?
    a. Same subject area?
    b. Describe experiences (benefits/barriers) teaching with more than one co-teacher?

3. How do you collaborate about course instruction?
    a. Do you have common planning time?

4. Describe your role in the co-taught classroom.

5. Who is responsible for the following procedural elements of the classroom? Describe what that procedure looks like.
    a. Homework collection
    b. Grade recording
    c. Taking attendance
    d. Checking student agenda book
    e. Student requests (i.e., going to restroom)
    f. Contacting parents
    g. Writing referrals
    h. Providing lesson/test accommodations/modifications
    i. Arranging seating chart/assigning groups
    j. Creating lessons/assignments
    k. Making/grading tests and assignments

6. What does instruction look like in your classroom?
    a. Who is responsible for instruction?
        i. Equal responsibility?
        ii. Strategically planned?
        iii. How successful is this instruction?
    b. Is there room for improvement?

7. How are lectures/lessons structured?
    a. How often does whole group instruction take place?
    b. How often does small group instruction take place?
    c. Pullout?

8. What types of student grouping do you use?
    a. How successful were they?

9. How do you meet the individualized needs of your students?
    a. How do you differentiate lessons?
    b. How do you collaborate about lesson differentiation?

10. What types of assessments do you use?

Curriculum Expertise/Training

11. What aspects of the curriculum are you most comfortable teaching?
    a. Least comfortable teaching?
    b. Explain

12. Which, if any, specific programs or specialized curriculums have you used or observed?

13. *(To be asked prior to professional development)* For a better co-teaching program what training or expertise would you like to gain?
    a. Professional development topics?

14. *(To be asked after professional development)* How have the co-teaching in-service professional development programs helped you?
    a. Topics particularly useful? Why?
    b. Topics not useful? Why?
    c. Would you benefit from regular and ongoing co-teaching professional development? Explain.

Appendix F
Table for Variables – Research Questions – Items on Measures

Variable	Research Question	Item/Question on Measures
Co-teaching knowledge and skills	1) What are the characteristics of SJHS co-teaching program?	<u>Survey</u> See questions 4, 5, 6, 7, 8, 9, 10, 11, 12, 18, 19, 22, 24, 26, 27, 28, 30: curriculum, methods and materials, IEP goals and objective, presentation of lessons, measures for grading, co-teacher interaction. <u>Observation</u> -Evidence of research based instructional strategies used in classroom (SRSD, Peer-tutor, mnemonic devices). -Lessons are differentiated in content, process, product, and/or learning environment. -Teachers use "we"/"us" or parity is otherwise evident. -Both teachers are actively involved in instruction and activities. -Students are engaged and participating in learning. -Both teachers work with all students. <u>Interview</u> See questions 4, 5, 6, 7, 11: description of roles, responsibilities, instruction, lesson structure, and curriculum expertise.
	***********************	***********************
	1a) How is the high school co-teaching program implemented?	<u>Survey</u> See questions 14, 15, 16, 17, 20, 21, 23, 25, 29, 31: familiarity with student needs, classroom logistics.

		Observation -Have planned together -Both teachers share equally in classroom and instructional responsibilities. -Routines and formal procedures are evidenced and used by teachers and students. -Level of collaborative and effective teacher communication/interaction evidenced. -Co-teaching instructional arrangements are observed. -Student instructional grouping pattern or patterns observed. Interview See questions 1, 2, 3, 8, 9, 10, 12: co-teaching assignments, collaboration, classroom strategies.
Variable	**Research Question**	**Item/Question on Measures**
District Co-Teaching Professional Development	2) What are professional development needs of co-teachers from the various content areas and experiences?	Survey See questions 6, 7, 8, 9, 11, 13, 32, 33, 34 a, b, c, d, e, f, g: modifications/individualization of instruction, classroom management, teaching strategies, and professional development needs. Observation Post-professional development should indicate more evidence/increased use of skills on all items of observation Interview Post-professional development should indicate more evidence/increased use of skills on all items of observation also 11, 12, 13, 14

	********************* 2a) How can co-teachers use professional development knowledge and skills in their classroom?	********************* <u>Observation</u> Post-professional development should indicate more evidence/increased use of skills on all items of observation <u>Interview</u> See questions 1, 2: demographic information See questions 3-12: collaboration skills, curriculum, lesson modification, IEP, student activities, and instruction.

Suggested by and adapted from:
Creswell, J. W. (2009). *Research design*. Thousand Oaks, CA: Sage Publications, p. 150-151.

Appendix G
Categories and Themes Table

Assignment of Co-Teaching Teams
(Partly answered during April 8, 2014 SpEd Co-Teacher In-Service, guidance schedules then SpEd Supervisor assigns co-teacher as needed; conversation continued with Supervisor about "realities" – see Sept. 3 notes)

Themes	Description	Co-teaching Teams	Times Mentioned/Comments
Communication *** SpEds mentioned this 33 times, GenEds 16 times = 49 – little/no administrative communication until March 2014 survey – "listened to teachers"*	Communication – Administrative Administration speaks with co-teachers Communication - Co-teacher how co-teachers found out about their assignment and with whom they were teaching	S1 and G3 S3 and G9 S9 and G13 S12 and G23	5, 6 22, 1 4, 6 2, 3
Co-teacher input 　　Experience 　　　With content 　　　With co-teacher *Responses as a team – mentioned about 24 times*	GenEd/SpEd volunteered, expressed a desire to co-teach, had previous co-teaching experience	S1 and G3 – want input S3 and G9 – want input S9 and G13 – want input S12 and G23 – want input	10 – experience makes a difference 4 8 – have a "conversation" about whether to co-teach 2 – G23 "I wish it was so and so instead, but I'll make it work", survey before pairing
Working with many co-teachers/logistics 　　Different co-teachers each year *Mentioned about 29 times throughout all interviews*	Number of co-teachers GenEd/ SpEd works with daily or from year to year and how that impacts co-teaching	S1 – 3 co-teachers S3 – 3 co-teachers/different subjects S9 – 4 co-teachers S12 and G13 – co-teach all day together	10 – G3 only has 1, had different each year 9 – G9 only 1, different co-teachers each year 6 – G13 has 2; S9 states logistics are same for GenEd 4 – G23 and S12 co-teach all day; S12 and G23 have had other co-teachers over the years
Who should co-teach/Co-teachers' Input *Mentioned 34 times*	GenEd/SpEd qualities for co-teaching *(links with Characteristics of co-teaching)*	S1 and G3 S3 and G9 – eluded to this S9 and G13 S12 and G23	21 3 – S3 described where they are more comfortable teaching (not-co-teaching) 6 4 - …controlling person teach teaching is not going to work very well for you.
Keep teams together *Mentioned 33 times*	Co-teaching teams that work well together should stay together; consistency	S1 and G3 S3 and G9	7 12 – S3 doesn't "know as much as G9 does; (#1 p. 7, 12, 13; #2 p. 10) Pair for more than a year, continuity and coordinated instruction

		S9 and G13 S12 and G13 – the example	7 - #1 p. 3 7 – gotten to know each other's strengths, first year tough, the flow, it's comfortable we have the whole routine now

Maybe combine: Communication, Co-teacher Input, and Who Should Co-teach
Maybe combine: Working with Many Co-teachers and Keep Co-teachers Together

Characteristics of co-teaching/what the co-taught classroom looks like
(Began as two separate categories, when reviewing transcripts for second time these categories were very similar)

Defining roles
 	
(maybe combine with Share Responsibilities, Routines, Procedures, Goals, and Work with all Students, Meeting IEP, Student Progress)
	Which co-teacher does what task
	   Control Lesson
	   Academic Support
		S1 and G3
		
		S3 and G9 – had different interpretation
		
		S9 and G13
		
		S12 and G23 – described how
			8 – SpEd supports, GenEd controls lesson
			
			13 – expressed not sure, not clear on role, S3 just asks student if they have questions
			
			5
			
			4 – GenEd content, SpEd modification

Flexibility *(control)*	Ability of co-teacher to make decisions based on situation; make changes in class routine/instruction as situation warrants	S1 and G3 S3 and G9 – did not express S9 and G13 – co-teachers style S12 and G23	5 – flow with events, can't take things personally 0 10 3 – work in progress, a characteristic that makes it work
Proximity *(also see classroom observation)*	GenEd/SpEd positions in room	S1 and G3 – GenEd/SpEd move around room S3 and G9 – different interpretation S9 and G13 – GenEd/SpEd move around room S12 and G23 – GenEd/SpEd move around room	2 – always one set of eyes firmly on the students; one teacher up front, one in back 0 – S3 stays in background, G9 plans, grades, leads, lectures Not mentioned in interview – evident in observation; both circulate around room, both articulate with each other during lesson Mentioned 1 – evident in class observation
Strengths and weaknesses *(strengths and weaknesses, experience, familiarity, and how teams make it work)*	GenEd/SpEd expertise, how individual expertise complements co-teacher's expertise	S1 andG3 – complement S3 and G9 – not specifically expressed S9 and G13 – complement S12 and G13 – complement	15 – Respect, humility, professionalism, trust, honesty 2 – S3 mentioned "strength" in complimenting G9 4 – Balance, GenEd content strong, SpEd modifications strong 3 – G23's strengths are my weaknesses, complement each other, play off each other

Experience with co-teaching	Amount of time GenEd/SpEd has spent in co-taught classroom	S1 and G3	8 – G3 has different co-teachers each year
		S3 and G9 – different, co taught but not with same teacher, ever	1 – S3 and indicating limited experience
		S9 and G13	2 – Both S9 and G13 have other, different co-teachers each year
		S12 and G23 – co-taught together for many years	6 – co-teaching consecutively for many years, GenEd learned more from working with SpEd, whole day together opportunity to build skills
Share responsibilities, routines, procedures goals	GenEd/SpEd take equal part with classroom planning, instruction, daily activities	S1 and G3	5 – Indicated they support each other
		S3 and G9 – no sharing	1 – G9 does the planning, lecturing , grading
		S9 and G13	4 – "Constant back and forth, back and forth"
		S12 and G23	2 – "back and forth", grading

Familiarity	GenEd/SpEd know each other
	    Co-taught together
	    Collegially
		S1 and G3 – collegially	2 – S1 and G3 same content department

		S3 and G9 – not familiar	1 – S3 not used to G9 teaching style
		S9 and G13 – familiar	4 – Co-taught last year, "used to G13's teaching style"
		S12 and G23 – familiar, out of school	4 – teaching [subject] since back in the day, if G23 messes up I am not afraid to tell them they made a mistake
Parity *(also see classroom observations)*	GenEd/SpEd identify each other as equals; students see GenEd/SpEd as equals	S1 and G3	5 – "Giving up control" each contributes
		S3 and G9 – Gen lead/SpEd support	0 – not mentioned at all
		S9 and G13	3 – "S9 is also the subject teacher", "they look at both of you as the teacher"
		S12 and G23	2 – "we", put my own spin on it, evident in observation
How teams make it work *(think about this – how many times and who said "co-teachers make it work")* *May eliminate this – covered in other themes*	Co-teachers work together to create a classroom environment that meets students needs	S1 and G3	S1, S9, S12, G23, G3, and G13 specifically mentioned they make it work
		S3 and G9 – did not express	S9 and G13 – "Find the flow, find the groove"; "utilize the time you have"
		S9 and G13	
		S12 and G23	S12 and G23 case – have to work with others in department for equipment.
Verbal and non-verbal communication *(also see classroom observations)*	Co-teachers speak with each other during instruction and use non-verbal cues to meet needs of students	S1 and G3	2
		S3 and G9 – little; see June 10 G9 meeting	7 – G9 does not know how to express expectations to S3.

		notes	
		S9 and G13	2 – very evident in class observation
		S12 and G23	3 – bounce ideas off, if I realize the class isn't getting it,
Work with all students/meeting IEP/student progress	Do not single out students with disabilities; use of differentiated instruction; instructional strategies that are congruent with IEP	S1 and G3 – review IEP	2 – meet IEP
		S3 and G9 – not clear	0 – not mentioned
		S9 and G13 – review IEP; add mods/accoms as theme	10 – "Whatever is needed"
		S12 and G23 – review IEP; add mods/accoms as theme	10 – less problems on test, you are helping everybody, G23 will do lesson plans-I'll take a look at them, choice in project

Planning time – need/when

Plan on the fly	Have no planning time, co-teachers brief each other about instruction whenever they have a minute	S1 and G3 – all the time	5 – S1 also co-teaches with 2 other teachers
		S3 and G9 – no planning, GenEd briefs SpEd prior to class	2
		S9 and G13 – all the time	5 – "I see G13 leaving the room and G13'll say….."
		S12 and G23 – common time; co-teach together all day	0 – co-teach all day, described how they plan
Found time	Co-teachers found common time in schedules to co-plan	S1 and G3 – rarely	1 – mentioned only 1 specific instance
		S3 and G9 – no	Not mentioned
		S9 and G13 – rarely, have co-taught together in past	3 – Have time between classes and lunch; next year will have 4 classes together
		S12 and G23 – "flip-flop" lunch	5 – flip in schedule to make time, co-teach all day
Reflective practice	Co-teachers take time to discuss and critique instruction	S1 and G3 – little time for reflective practice	3 – Plan time provides opportunity for reflection, if plan on the fly don't have that (part of Conceptual Framework)
		S3 and G9 – no	Not mentioned
		S9 and G13 – little time	Not mentioned in interview except for "this worked with my *th period class, let's try with…"
		S12 and G23 – yes, often	5 – we're not doing that *th period, their level is not there, review lessons – create

New co-teachers	Planning time is especially important for co-teachers who have not worked together/teachers who have not co-taught	S1 and G3 – needed	2 – need that initial meeting, establish roles, Face-to Face
		S3 and G9 – needed	15 – need common plan, important, Face-to-Face
		S9 and G13 – needed	1
		S12 and G23 – needed	2 – refer to additional time to plan during in-service days
How different if co-teachers have planning time	Having planning time has an impact on co-teaching practice	S1 and G3 – speculated; gave examples	7 – Performance more solid, polished, floe would be different – not rushed, could really shine, do something awesome.
		S3 and G9 – speculated	1 – S3 stated that working with less co-teachers would provide time to plan and "brush up"
		S9 and G13 – gave examples	2 – "work out well having several classes in a row"
		S12 and G23 – described how it was when they did not have planning time	1 – described how planning was w/o common time – difficult (plan on fly)

Co-teaching PD/Training

Co-teacher guidelines/expectations/definition	To set standards for co-teaching practice	S1 and G3 – time to discuss	Not specifically mentioned – talked about communication (see Type of PD)
		S3 and G9 – see June 10 G9 meeting notes	7 – expectations, need vision for co-teaching
		S9 and G13 – needed esp. if new; time to discuss	7 – S9 stressed social aspect of co-teaching; get to know co-teacher
		S12 and G23 – time to discuss	2 – example of how a co-teacher did not consult with S12, set aside time for teachers to work out and go over things.
District support	What the district can do to provide assistance for co-teachers	S1 and G3	Did mention its district responsibility to keep teachers on the same page
		S3 and G9 - ?	1 – use of in-service days
		S9 and G13	7 – First time in new subject; losing personal touch
		S12 and G23	3 – get to know co-teacher, what co-teachers can do (suggestion), time to get to know co-teacher
Type of PD • SpEd law • Communication • Collegial discussion/visits	Co-teacher needs; expressed topics for co-teacher professional development; training to improve co-teaching skills	S1 and G3 – specific needs	14 – co-teacher training, SpEd crash course, communication, how to structure lessons, SpEd law/IEP
		S3 and G9 – see June 10 G9 meeting notes	11
		S9 and G13 – specific	8 – visit new course (collegial visit), visit new co-teacher

| | | needs | 2 – collegial discussion and visit, independent study and discussion – workshops, videos |
| | | S12 and G23 – offered ideas | |

Unanticipated Themes

Schoolwide acceptance	How district recognizes co-teaching	S1 and G3 – teacher/student schedule, only GenEd name S3 and G9 – no mention S9 and G13 – teacher/student schedule, only GenEd name	S1 and G3, S9 and G13 mention that both teachers names are not on schedule, parents/students don't realize it's a co-taught class
Scheduling of students/numbers of students in co-taught classroom *(also see surveys)*	Large class sizes; majority of students in class have IEP's; no option for higher level	G11 – survey S10 – survey S1 and G3 – no mention S3 and G9 – see G9 June 10 meeting notes; August 18 email S9 and G13 – not mentioned	
Co-teaching and new teacher evaluation model *(also see surveys, April In-service notes)*	GenEd/SpEd roles, how teacher effectiveness (with respect to student progress) is determined; fairness	S11 – survey S1 and G3 S3 and G9 – no mention S9 and G13 S12 and G23	See S12 – good points See G3 – accountability