

Running Head: THERE IS NO “I” IN CO-TEACHER

THERE IS NO “I” IN CO-TEACHER: TEAM-BUILDING PROFESSIONAL
DEVELOPMENT TO SUPPORT HIGH SCHOOL CO-TEACHERS

By

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Abstract

In an effort to meet the needs of special education students in inclusion classrooms co-teaching is typically utilized as a service delivery model. Research has identified a number of benefits to co-teaching however, a number of obstacles have been found to inhibit its effective implementation in secondary schools. High school special education co-teachers have been found to have an inferior role in their co-teaching relationships and co-teachers have been found to lack the skills needed to collaborate effectively as a team. Teamwork has been an area of focus for the health care and business industry but a focus on team-building in K-12 education has been lacking.

This study involved the implementation of a team-building professional development series for high school co-teachers. The professional development included activities meant to enhance communication, problem solving, collaboration, and trust for co-teachers. The study examined the influence participation in the professional development had on co-teaching relationships. This study utilized a mixed-methods approach and included interviews, surveys, questionnaires, and observations as data collection methods.

The overall findings of this study demonstrate that the majority of teachers have positive perceptions of co-teaching and find it beneficial for both teachers and students. Teachers expressed a number of frustrations regarding how administrators approach the practice of co-teaching. Co-teachers want administrators to be more respectful of co-teaching and take their needs into account when creating schedules and providing professional development.

Participants of this study had varying degrees of satisfaction in their co-teaching dynamic prior to the start of this professional development. All participants described having a positive experience in the professional development. Participants expressed that team-building has a positive impact on co-teacher relationships and should be provided to pairs before the school year starts.

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There was a range in the degree of impact the professional development had on participants. Many felt that since their relationship was already positive, they did not experience drastic changes. Others felt they made progress and are optimistic for continued growth. Some pairs saw slight changes in their dynamic and felt that circumstances beyond their control impacted their ability to work as a team.

Keywords: co-teaching, secondary schools, professional development, team-building, workplace teams.

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Chapter 1: Introduction to the Study

As a result of the Individuals with Disabilities Education Act (IDEA), special education students must be educated in the Least Restrictive Environment. This provides special education students with the opportunity to be educated with their non-disabled peers to the greatest extent that is appropriate for their ability level. School districts have adopted the policy of inclusion in response to these federal mandates. The policy of inclusion is an effort towards increasing social justice for students with disabilities and is intended to provide all students with equal access to a challenging, engaging, and flexible general education curriculum (Moran, 2007; Salend, 2004). Inclusion has shifted the tide of special education making it more common for special education students to spend their school day included in general education classes as opposed to self-contained classrooms comprised solely of special education students. By the Fall of 2010, the National Center for Education Statistics reported that 60.5% of special education students in the United States ages 6-21 spent more than 80% of their school day included in general education classes (<http://nces.ed.gov/>).

The academic performance of special education students is a factor in determining the Adequate Yearly Progress (AYP) status of schools, which affects the federal funding a school district receives. This makes the educational experiences of special needs students an important focus for both teachers and administrators. In an effort to meet the needs of special education students in inclusion classrooms, many schools opt to utilize a collaborative model of instruction (Austin, 2001). The practice of co-teaching involves the collaboration of general and special educators in inclusion classrooms. Co-teaching may be implemented differently depending on the school context but for the purposes of this study, co-teaching will be defined as a special education service delivery model where a general and special education teacher share

responsibility for planning, delivering, and evaluating instruction for a diverse group of students (Kloo & Zigmond, 2008). Co-teaching is intended to draw on the content expertise of the general education teacher and the strengths of the special education teacher in identifying student needs and making curricular modifications to increase special education students' ability to access the general education curriculum (Kloo & Zigmond, 2008). Theoretically, co-teachers should work together to provide all students with innovative instruction and implement appropriate individualization for special needs learners but the ideal of true collaboration between two equal partners in a co-teaching situation has largely not been met (Scruggs, Mastropierie, and McDuffie, 2007).

Both general and special education teachers may be entering into co-teaching partnerships with little to no preparation in co-teaching, which may hamper teachers' abilities to collaborate effectively in co-taught classrooms. Although co-teaching is not a new occurrence in the field of education many teacher preparation programs do not provide pre-service teachers with co-teaching experiences during student teaching or with methods classes in team-building (Bacharach & Heck, 2012). Many student teachers are still learning to teach in isolation and these antiquated capstone experiences are no longer best practice in teacher preparation (Bacharach & Heck, 2012). Teacher confidence levels for working with special needs students has been found to have a big impact on teaching effectiveness for both general and special education teachers making adequate training a crucial component in preparing teachers for inclusion classrooms (Jung, 2007).

Co-teaching at the secondary level has been found to be particularly challenging for teachers. The structure of secondary schools and the need for both general and special education teachers to have specialized content area knowledge in the subjects they teach can act as barriers

to effective collaboration between co-teachers (Keefe, Moore, & Duff, 2004; Scruggs et al., 2007). General education teachers have been found to take on a dominant role in secondary co-teaching relationships because they have ownership of the class, the majority of the students in the class are general education students, and they tend to have more content knowledge than their special education counterparts (Scruggs et al., 2007). The quality of the relationship between co-teaching pairs is an important determinant in the success of co-teaching partnerships but many co-teachers do not have input in selecting their co-teacher, and co-teaching pairs may change from year to year (Keefe & Moore, 2004). School administrators need to include common planning time in co-teachers' schedules to encourage collaboration; however, school administrators do not consistently make a commitment to a school-wide focus on inclusion (Keefe & Moore, 2004). A lack of preparation, inconsistent content area knowledge, absence of common planning time, little choice in co-teaching partner, and the structure of secondary schools all conspire to drive a wedge between co-teaching in theory versus co-teaching in reality.

Problem of Practice

The context of this study is a suburban public high school in central New Jersey. The school implements co-teaching in inclusion classes within an overt tracking system in which students are openly placed into different tracking levels reflected in their schedules (Rubin, 2006). Co-teaching models are implemented in two different ability-based tracking levels, Academic Level and Standard Level. The Academic Level is also referred to as the “college prep” level and is intended for students who plan on enrolling in four-year colleges after graduation. The Standard Level, also referred to as “essentials,” is intended for students who plan on enrolling in community college or vocational programs after graduation.

During the 2014-2015 school year there were a total of 93 co-teachers in 72 different co-

teaching pairs at the school. The implementation of co-teaching at the school mirrors what research says regarding the obstacles to co-teaching effectiveness in secondary schools. Teachers have little input in regards to their co-teaching assignments and co-teaching partnerships typically change every year. Some co-teachers collaborate well and have positive experiences co-teaching together, but that does not guarantee that their co-teaching assignment will remain the same for the following school year. Conversely, some co-teachers may have personality conflicts and different instructional styles but that does not guarantee that administrators will change their co-teaching assignments the next school year. Special education teachers are often scheduled to teach with more than one general education co-teacher each school year. This results in a lack of consistency and ownership of co-taught classrooms because the special education co-teacher is only in those classes part of the school day.

Common planning times are not included in co-teachers' schedules, which can result in the general education teacher planning for instruction without the involvement of their special education co-teacher. This can make it very difficult for the special education teacher to have clearly defined roles and responsibilities for classroom instruction. This also impacts the level to which special education teachers can participate in instruction because they may be unaware of the objectives and activities of the lesson. In addition, if the special education teacher does not feel that the needs of the learning disabled students in the class are being met, or that appropriate accommodations are being included in lessons, conflicts may arise.

Despite the obstacles co-teachers experience at the school there has been little focus on professional development for co-teachers. In the seven years I have worked at the high school I have only been provided with one co-teaching professional development workshop. In 2010, an in-service workshop was provided to co-teachers that utilized instructional videos and a power

point presentation to inform co-teachers of different co-teaching models that can be utilized in the classroom. This in-service did not develop teacher communities, but instead consisted of the presentation of information from “experts” to participants (Stanley, 2011). This was a “one shot” workshop utilizing the “one-size-fits-all” structure that is pervasive in professional development practice despite research emphasizing the shortcomings of this format (Darlington-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S., 2009; Stanley, 2011).

School administrators have not considered the implementation of co-teaching to be an area of weakness, but the results of a recent program evaluation of student support services, conducted as part of the district’s ongoing evaluation of district programming, highlighted co-teaching and professional development for co-teachers as an area in need of improvement. The program evaluation was informed by data collected through a survey using likert-scale responses to questions regarding satisfaction with district student support services. It was emailed to district special education faculty and parents of students with disabilities. Across grade levels, the effective use of co-teaching models and professional development for co-teachers were two areas identified by teachers as in need of improvement.

Improving the professional development provided to co-teachers at the high school should be a focus for school leaders because when co-teaching works it results in feelings of accomplishment, trust, mutual respect, and camaraderie amongst teachers (Keefe et al., 2004). In addition, effective professional development is a key component in improving school quality and increasing student learning (Desimone, 2011). Some special education students at the high school struggle academically, despite their placement in a co-taught classroom. Professional development that supports co-teachers can increase co-teachers’ abilities to collaborate effectively to provide innovative instruction that meets the needs of all learners in the classroom.

Purpose of the Study and Research Questions

Overhauling the scheduling procedures utilized by school administrators is unrealistic and there is no antidote for teachers’ lack of pre-service preparation for co-teaching but providing co-teachers with more professional development opportunities is possible.

Professional development focusing on building positive relationships between co-teachers can be implemented to provide co-teachers with increased opportunities for collaboration to support their professional practice. Team-building activities can be utilized as a means to achieve these professional development goals. Team-building provides opportunities for colleagues to gain experience working as a team and requires participants to communicate, compromise, and collaborate in a variety of activities.

My experiences in a faculty team-building retreat in my previous school district demonstrated the positive impact team-building activities can have on relationship development for teachers. I participated in the retreat as a new teacher at the school prior to the start of the school year. I was initially apprehensive to participate in the retreat because I did not know any of the other attendants and was worried I would feel uncomfortable, however, this was not my experience. Through our participation in various activities we gained experience communicating and collaborating together, in addition to having fun together in playful activities. At the end of the weekend I had developed a better rapport with my colleagues and felt an increased sense of comfort. The nature of the activities increased our levels of trust and camaraderie and served as a bonding experience before beginning the school year. After participating in the retreat I felt more comfortable asking my colleagues for feedback, ideas, and input, which supported my professional practice. As colleagues, we started the school year out with a “team” mentality and worked more collaboratively as opposed to in isolation to meet the needs of our students.

Given my positive experiences in team-building I believed that team-building activities could be utilized to support co-teaching relationships. I believed that a good relationship is an essential element of an effective co-teaching partnership. A co-teaching model of instruction is here to stay therefore; all teachers need to be prepared to share a classroom space with another educator. Occupying the same territory can be challenging, and most teachers are not prepared with the skills required to overcome the obstacles associated with co-teaching before getting into the classroom. It is my belief that the nature of the relationship between co-teachers influences their classroom dynamic. If two teachers do not respect or trust each other, and are not able to communicate and collaborate effectively, they will not be able to take advantage of the innovative and engaging instructional opportunities that result from having two teachers in the classroom. A lack of instructional innovation can lead to a reliance on direct instruction with one teacher as the focal point. It was my assumption that team-building professional development could be utilized to support the development of positive relationships between co-teachers, which would in turn support their professional practice. I believed that participation in low-stakes, team-building activities could improve co-teachers' ability to work as a team which could have a positive impact on their ability to collaborate to design and implement instruction that meets the needs of all learners in their classroom. In my study, I wanted to learn more about how my colleagues perceive co-teaching as a practice, in addition to their perceptions of their current co-teaching relationship. I also wanted to learn about how they experience team-building professional development and the impact it had on their co-teaching relationship.

Research Questions:

The following research questions guided this study:

1) How do teachers who participate in co-teaching conditions perceive co-teaching as a practice prior to team-building professional development?

-How do co-teachers describe their relationships with co-teaching partners?

-What do co-teachers say enhances or impedes their co-teaching relationships?

2) How do teachers evaluate their experiences participating in team-building professional development for co-teaching?

3) How do co-teachers describe their relationships with co-teaching partners since the team building professional development?

-From the perspective of the co-teachers in what ways did the team-building professional development impact co-teacher collaboration?

Theoretical Framework

The theoretical framework for this study combines Maslow's theory of the Hierarchy of Needs and Tuckman's Stages of Group Development. Maslow (1954) created a classification system for human needs that included five categories: physiological, safety and security, belongingness and love, esteem, and self-actualization. Maslow (1954) believed that earlier needs must be met before later needs could be fulfilled. In addition to Maslow's original five categories, his later thinking included a level beyond self-actualization where a person transcends the self to become selfless (Green & Burke, 2007). A description of the five original categories is included in Table 1. For the purposes of this study only Maslow's five original needs were utilized as a lens for analysis.

Table 1

Maslow’s (1954) Hierarchy of Needs

Category	Level	Description
Physiology	1	Survival needs such as food, water, air, and shelter.
Safety and Security	2	The need to feel safe and be healthy. This includes physical, personal, and financial safety.
Belongingness and Love	3	Interpersonal needs which include the need for friendship, intimacy, and family relationships.
Esteem	4	The need to feel respected and have self-esteem.
Self-Actualization	5	The need to realize one’s full potential.

Maslow’s theory of human needs has been applied to the workplace and utilized as a means to interpret employee motivation in their career (Benson & Dundis, 2003; Green & Burke, 2007; Sadri & Bowen, 2011). In a school setting the physiological needs of teachers are met by their surrounding environment and the employee’s income which provides them with money needed to purchase food, water, clothing, and shelter. Their safety and security needs are met by the school’s safety officers, and the security policies and procedures set by the school district. In addition, health insurance, life insurance, and retirement systems provide additional security (Sadri & Bowen, 2011). In schools, a teacher’s need for belonging and love can be met through friendships made at work. Esteem needs are met by receiving positive evaluations from

administrators, positive feedback from parents and students, and the respect of one’s colleagues. A teacher’s self-actualization needs are met by feeling like they are reaching their full potential as a teacher. Pursuing higher education and participating in professional development opportunities can support teachers in meeting the need for self-actualization. The need to move beyond self-actualization towards what Maslow termed, “self-transcendence,” can be met by working towards impacting positive changes in the system of education as a whole (Green & Burke, 2007). A teacher can self-transcend by looking beyond their own classroom and see the impact education can have on society as a whole by working for social justice issues in education.

This professional development intervention was designed to support co-teachers’ need for belongingness and love, and esteem by providing them with opportunities to develop camaraderie and rapport with their partner, in addition to the opportunity to showcase their skill sets by completing a variety of low-stakes, team-building activities. To communicate and collaborate effectively, co-teachers must feel comfortable with each other and need to have a sense of solidarity so that they feel they are a team. Team-building activities can help co-teachers develop rapport and build trust in each other to provide a solid foundation for relationship building. A healthy relationship is needed between co-teachers for effective collaboration to occur. The low-stakes nature of the team-building activities is also important because it puts all co-teachers on an “even playing field.” General education co-teachers may have more content area knowledge than their special education co-teacher, which can impact the nature of their collaboration. Low-stakes, team-building activities provide both teachers with the opportunity to showcase their strengths and offers co-teachers the opportunity to experience equitable interactions while working to achieve a common goal. This professional development will also provide participants with the opportunity to complete activities specific to co-teaching.

These activities can support co-teachers in meeting their need for self-actualization by developing the skills they feel they need to reach their full potential as a co-teacher.

Tuckman (1965) reviewed 50 articles on the stages of small group development and organized the studies by group setting which included: therapy-group studies, T-group studies, and natural and laboratory group studies. The stages that were identified in the articles were then separated into two categories; those that described interpersonal group activities and those descriptive of group-task activities (Tuckman, 1965). The interactions that occurred between group members were considered the interpersonal realm, and the interactions related to the task they were completing were referred to as the task-activity realm (Tuckman & Jensen, 1977). Both of the realms represented concurrent features of how the group functioned because members interacted while completing tasks (Tuckman & Jensen, 1977). Tuckman (1965) identified four stages in the social realm that include testing-dependence, conflict, cohesion, and functional role. In the task realm he identified orientation, emotionality, relevant opinion exchange, and the emergence of solutions as stages (Tuckman, 1965). The connection of the realms led him to summarize the four stages as “forming,” “storming,” “norming,” and “performing” (Tuckman & Jensen, 1977). In 1977, along with Jensen, Tuckman proposed an additional stage he referred to as the adjourning stage. This stage was not utilized in the development of the professional development sessions because co-teachers would be continuing to work together for the remainder of the school year despite reaching the conclusion of the professional development. Table 2 depicts a brief description of Tuckman’s teaming model.

Table 2

Tuckman’s (1965) Stages of Group Development

Stage	Description
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Forming	Team members meet and have the opportunity to get to know each other. They agree on their goals and begin working together.
Storming	Team members work on communicating and establishing their roles which can lead to conflict. Disagreements may occur but it is important to work on developing patience and acceptance in the group.
Norming	The team members have established their roles and feel part of a team. They work to achieve the group goals and are opinion to each other’s viewpoints.
Performing	Team members are motivated to work as a team and are able to work productively as a cohesive unit.

Tuckman’s Stages of Group development influenced the selection of activities and the timeline for their completion to provide the group with the opportunity to establish a relationship in initial sessions and build upon that foundation as the sessions continued. When designing my professional development plan it was my belief that co-teachers need the opportunity to develop and nurture their relationship before they are provided with more logistical training.

Chapter 2: Literature Review

This literature review begins with research on co-teaching in inclusion classrooms. Research regarding the benefits of co-teaching, challenges to co-teaching in secondary schools, and ingredients for successful co-teaching relationships will be reviewed. Next, research regarding characteristics of effective teams will be reviewed. Then, research on professional development to promote partnerships will be reviewed. Finally, research on professional development to promote partnerships will be reviewed.

Co-Teaching in Inclusion Classrooms

The research that will be reviewed in this section will first focus on the benefits of co-teaching in inclusion situations to provide a rationale for the importance of this method of instruction. Challenges co-teachers experience when attempting to implement this instructional model in secondary school settings will then be reviewed to provide an overview of the obstacles inclusion co-teachers experience that makes professional development necessary to support their professional practice. Finally, research on components of successful co-teaching relationships will be reviewed to provide a conceptual framing for the methodology of this study.

Benefits of Co-teaching. Co-teaching has been found to provide a number of benefits for both students and teachers. Walther-Thomas (1997) conducted a three-year qualitative study on the development and implementation of building level programs designed to support students with disabilities in mainstream classrooms. The study included 18 elementary and 7 middle school teams who all used co-teaching as an integral part of their special education service delivery model in eight Virginia school districts. Each team was composed of one administrator and one or more general and special education co-teaching pairs. Teams were selected based on recommendations by district-level leaders for innovative special education programs,

observations by the research team to ensure that inclusive service delivery models were in place and co-teaching was utilized on a daily basis, and willingness of all teams members to participate in the study. Teachers identified a number of co-teaching benefits for students with disabilities which include positive feelings about themselves as capable learners, better academic performance, lower-student-teacher ratio, increased emphasis on cognitive strategies, increased emphasis on social skills, and improved classroom communities (Walther-Thomas, 1997). Although this study did not include high school teachers in their sample, it does demonstrate that teachers believe that co-teaching can provide benefits to students with disabilities.

Austin (2001) had similar findings in their mixed methods study of perceptions of co-teaching. The study used responses from a “Perceptions of Co-Teaching Survey” generated by the researcher in addition to semi-structured interviews with randomly selected survey respondents to explore co-teaching perceptions of 139 elementary and secondary school teachers. The teachers included in this study identified a number of benefits for both general and special education students (Austin, 2001). This study also found that teachers identified a lower student-teacher ratio as a benefit of co-teaching (Austin, 2001). Teachers perceived both general and special education students as being receptive to co-teaching because they observed high degrees of student participation, increased tolerance levels, and cooperation in their classes (Austin, 2001). Although the findings from this study are limited to nine school districts in northern New Jersey, it does demonstrate that teachers in all grade levels find co-teaching beneficial to all students.

Walther-Thomas (1997) and Austin (2001) also found that teachers report benefiting professionally from co-teaching. General and special education co-teachers have been found to report that they generally work well together, solicit each other’s feedback, and perceive co-

teaching as a worthwhile experience that contributes to an improvement in their teaching (Austin, 2001). Educators have also been found to identify professional satisfaction, personal growth, and increased opportunities for collaboration as benefits they have experienced co-teaching (Walther-Thomas, 1997). Scruggs et al. (2007) conducted a meta-synthesis of thirty-two qualitative studies to gain an understanding of the practice and process of co-teaching by synthesizing qualitative research reports. Studies that utilized mixed methods methodology in which surveys were conducted as the quantitative data collection component were also included in this report (Scruggs et al., 2007). Studies that did not reference co-teaching as a primary research question were not included (Scruggs et al., 2007). This meta-synthesis had similar findings as Walther-Thomas (1997) and Austin (2001) in regards to professional benefits and found that the teachers in the studies generally reported benefiting professionally from co-teaching.

Qi and Rabren (2009) conducted one of the few studies to include student perspectives in their data collection. This quantitative study included 31 general education teachers, 14 special education teachers, and 58 special education students, across grade levels and aimed to ascertain the sample's perspectives of co-teaching (Qi & Rabren, 2009). The study found that teachers and students had positive perceptions of co-teaching and felt that it had a positive influence on student behavior, student self-confidence, and student learning (Qi & Rabren, 2009). This study did not include the perspectives of general education students but it does demonstrate that teachers and special education students find co-teaching to be beneficial. In general, research focusing on the perspectives of special and general education students in co-taught classrooms appears to be lacking. More research is needed to develop a deeper understanding of how the students themselves experience co-teaching.

In summary, research on the benefits of co-teaching has utilized surveys and interview methodology to gather data on the perceptions of teachers and students. The research reviewed provides strong evidence that teachers consider co-teaching to be a viable and effective method for teaching in inclusion classrooms with benefits for both teachers and students. However, despite the strength of this research there are still obstacles that co-teachers encounter when attempting to teach collaboratively. While research utilizing quantitative methodology to gather data supporting the academic benefit of co-teaching for students may be needed, it is also important to go deeper into the experience of co-teaching and explore the obstacles teachers face when attempting to implement this service delivery model for students with disabilities in mainstream classrooms.

Co-teaching Challenges in Secondary Schools. Implementing co-teaching effectively has been found to be particularly challenging for middle and high school teachers. The emphasis on content area knowledge, the importance of student study skills, rapid pacing, and pressures associated with high stakes testing can all contribute to the challenges secondary co-teachers experience (Keefe et al., 2004). The unique challenges associated with co-teaching in secondary schools makes adequate training for pre-service teachers crucial but both general and special education teachers may lack the preparation needed to co-teach successfully. Keefe and Moore (2004) conducted a qualitative study of eight co-teachers in a Southwestern suburban high school. The study used a semi-structured interview protocol to elicit the perspective of general and special education teachers regarding the challenges they have experienced co-teaching. The study found that teachers need to be better prepared for the demands of co-teaching with special education teachers needing deeper content area knowledge and general education teachers needing more knowledge of disabilities and modifications (Keefe & Moore, 2004).

Keefe and Moore (2004) utilized a small sample size in their study but other research also supports the need for better preparation for inclusion teachers. Jung (2007) conducted a quantitative study of the opinions held by 68 pre-service teachers in a required education course and 57 student teachers. Jung (2007) found that participants had more favorable attitudes towards inclusion during their professional preparation than during student teaching. The findings indicated that student teacher's attitudes reflected a lack of confidence in their instructional skills for teaching in inclusion settings and that more exposure to special education students, guided field placements, and special education coursework could improve attitudes towards inclusion (Jung, 2007). This study points out the lack of preparation pre-service programs provide teachers in regards to co-teaching in inclusion classrooms which may be a contributing factor to the challenges co-teachers experience.

Secondary special education co-teachers can be even more unprepared to co-teach than their general education counterparts because they may be entering into co-teaching placements without the content area knowledge they need to take on an active role in their co-teaching assignments. Rice, Drame, Owens, and Frattura (2007) reported results of interviews and observations of school faculty regarding co-teaching at the secondary level that were conducted as part of a larger study of a suburban Midwestern school district. The study found that secondary special education teachers might be lacking necessary preparation to co-teach because they are often assigned to content areas outside of their expertise and lack training in the subject areas they are assigned to co-teach (Rice et al., 2007). In their meta-synthesis of 32 qualitative studies, Scruggs et al. (2007) also found that a lack of content knowledge acts as an obstacle to secondary special education co-teachers. General education teachers were found to take on a dominant role in their secondary co-teaching relationships because they had ownership of the

class, the majority of students in their co-taught classes were general education students, and they tend to have more content area knowledge than their special education counterpart (Scruggs et al., 2007). General education teachers may also be unprepared for co-teaching in secondary inclusion classrooms because they may lack the training needed to accommodate the special education students in their classes. Scruggs et al., (2007) found that general education co-teachers tend to rely on traditional methods of instruction in their inclusion classrooms. Secondary general education teachers were found to prefer instructional strategies that can be applied to the whole class and these instructional methods were found to be a source of stress for special education co-teachers because they did not account for the unique needs of the special education students in the class (Scruggs et al., 2007).

As part of their conclusions Rice et al. (2007) and Scruggs et al. (2007) emphasize the need for special education teachers to have content area knowledge and for general education teachers to have more training in special education. The findings from these studies make an assumption that to improve how co-teaching is implemented both teachers need to have a content knowledge base in addition to knowledge of special education instructional strategies. This assumption runs counter to the philosophy of co-teaching where the skills of the general and special education are meant to complement each other, not duplicate each other. Research that explores how general and special education teachers from different backgrounds and varying skills learn to work together to utilize their combined training to capitalize on their co-teaching relationships is needed. Research on how professional development can be used to cultivate these partnerships is also needed.

Special education students are placed into co-taught inclusion classrooms so they may gain access to the general education curriculum but issues may also arise if general and special

education teachers do not define “access” in the same way. Dymond, Renzaglia, Gilson, and Slagor (2007) conducted an interview study as part of a larger investigation at an urban high school in the Midwest. The sample included a total of 25 science, social studies, and special education teachers and participants were interviewed to elicit information regarding their definitions of access to the general education curriculum for special education students (Dymond et al., 2007). General educators responded that special education students are given access by being exposed to the same curriculum and materials, in the same setting, as non-disabled students with the support of a special education teacher in the classroom (Dymond et al., 2007). Special education teachers differed in their responses and often defined access as providing special education students with an adapted curriculum in a general education classroom that is modified to meet their unique needs (Dymond et al., 2007). This study was conducted as part of a larger study and included only one context, further research focusing solely on the theoretical constructs general and special education teachers make of inclusion and co-teaching is needed to develop a deeper understanding of the similarities and differences between special and general educators in their approaches to co-teaching. General and special education teachers may need support and training to develop the skills needed to communicate effectively with each other regarding their differing perspectives. Research on training and professional development interventions that support co-teachers who have different assumptions of how to implement a co-teaching model in their classes appears to be lacking in this body of research.

General education teachers tend to take on the dominant role in secondary co-teaching relationships. If common planning time is not included in co-teachers’ schedules the general education teacher may plan lessons without the involvement of their special education counterpart (Bouck, 2007). Bouck (2007) conducted a qualitative study of two eighth-grade

history classes. The study found that when common planning times are not included the special education teacher may take on a less active role in the classroom which can result in them being viewed by their co-teacher and the students in the class as a glorified classroom aide (Bouck, 2007). Magiera, Smith, Zigmond, and Gebauer (2005) conducted 49 observations of secondary co-taught math classes and had similar findings. The special education teachers in their study were found to be generally responsible for assisting students while the general education teacher maintained the role of primary instructor (Magiera et al., 2005). The study also found that both teachers taking on the role of active instructor was only observed in 9 out of the 49 co-taught math classes (Magiera et al., 2005).

These studies only include data representative of social studies and math teachers and did not include a large, diverse sample but unequal roles in co-teaching partnerships have been found to be an issue across all content areas. Secondary general education teachers have been found to consider themselves the content experts and view the special education teacher as not sufficiently knowledgeable of the course curriculum which results in unequal roles between special and general education teachers (Scruggs et al., 2007). Cook and Friend (1995) have identified five different models of co-teaching which include one teaching-one assisting, station teaching, parallel teaching, alternative teaching, and team teaching and should be used interchangeably by co-teachers depending on the instructional activity. A description of each co-teaching model is included in Table 3. Despite the variety of ways co-teaching can be implemented, Scruggs et al. (2007) have found that the one teaching-one assisting model, with the general education teacher leading instruction, is the most prominent co-teaching model used in secondary inclusion classrooms.

Table 3

Description of Co-Teaching Models (Cook & Friend, 1995)

Model	Description
Team Teaching	Both teachers conduct whole class instruction.
Parallel Teaching	Both teachers plan the instruction together but each delivers it to a heterogeneous group of half the class.
Alternative Teaching	One teacher works with a small group of students while the other teacher instructs the rest of the class.
Station Teaching	Teachers divide instruction into two segments. Each teacher teaches their half of the material at a separate station then trade groups.
One Teaching, One Assisting	One teacher takes the lead in delivering the lesson while the other observes students and circulates the room assisting them as needed.

These studies emphasize the inferior role that special education teachers typically have in co-teaching relationships but research is needed to explore if professional development focusing on team-building for co-teaching pairs results in co-teaching pairs taking on more equitable instructional roles. In addition, research is needed to determine if professional development interventions can result in co-teachers moving away from a reliance on the one teaching-one assisting model to incorporate a variety of co-teaching models in their classroom instruction.

Ingredients for Co-Teaching Success. Successful co-teaching at the secondary level is not a lost cause but changes in the way it is implemented need to be made. In their qualitative

interview study Keefe and Moore (2004) found that the nature of relationships between co-teachers in high school is an important determinant of success. Teacher input in regards to co-teacher assignments was found to be an important factor in regards to successful co-teaching relationships (Keefe & Moore, 2004). Establishing appropriate roles, dividing classroom responsibilities equally, and mutual respect between co-teachers was also been found to be important (Keefe & Moore, 2004).

Bouck (2007) conducted a qualitative study utilizing classroom observations and informal interview methods. One co-teaching pair, who taught two middle school social studies classes together, were selected for the study because it was their first year co-teaching together, they had volunteered to co-teach together, and had reported having negative experiences in past co-teaching relationships (Bouck, 2007). The study supports the importance of teacher input in determining co-teaching assignments by finding that when teachers volunteer to co-teach together based on similarities in their philosophies of learning and behavior management a beneficial co-teaching dynamic can be created (Bouck, 2007). Bouck (2007) also found that co-teaching pairs must be comfortable with difficult conversations regarding grading students, student participation, and principles of behavior, classroom management, and accommodations.

Rice et al. (2007) conducted interviews and observations of secondary co-teachers as part of a larger study of a suburban school district in the Midwest. Participants included 13 special educators, 18 general educators, 5 teaching assistants, 4 school counselors, 3 teacher leaders, and 3 administrators, and were representative in terms of subject area, grade level, and number of years of experience in education (Rice et al., 2007). The general education sample reported that their special education co-teacher must be knowledgeable of course content in order to be prepared for successful co-teaching relationships (Rice et al., 2007). This may not be possible in

all co-teaching situations, making common planning time a necessary component in co-teachers' schedules. Bouck (2007) found that common planning time to communicate plans and responsibilities for various lesson plan components is essential for effective collaboration. This is supported by Keefe and Moore (2004) who found that teachers report a need for administrators to make a commitment to a school-wide focus on inclusive education by providing time for planning and encouraging collaboration (Keefe & Moore, 2004). These studies emphasize the importance of collaboration and the development of mutually respectful relationships between co-teachers. These studies support the need for professional development that provides co-teachers with opportunities to collaborate to build positive relationships and effective communication skills.

In general, research on co-teaching tends to consist of qualitative studies that take place in a single context consisting of relatively small sample sizes. The body of research that exists in the area of co-teaching supports the benefits of this instructional format but also highlights the obstacles that prevent the successful implementation of co-teaching in secondary school. Special education co-teachers typically have an inferior role in co-teaching relationships and pre-service teacher preparation programs have not been adequately preparing both special and general education teachers for co-teaching in inclusion classrooms. Research highlights the challenges and ideals of secondary co-teaching but research exploring how knowledge of these challenges and ideals can be utilized to design professional development to support co-teachers in secondary schools is lacking. Positive relationships between co-teachers have been found to be a vital component in co-teaching success and professional development can be provided that supports co-teachers in working successfully as a team. Team-building activities have the potential to offer co-teachers opportunities to foster relationships through collaboration and communication.

Research is needed to explore how this type of intervention impacts co-teaching relationships in secondary schools.

Characteristics of Effective Teams

Teamwork has become more prevalent in professional organizations making team effectiveness even more of a focus for researchers (Jordan & Troth, 2004). Teamwork, team-building, and characteristics of effective teams have been a prominent research focus for the healthcare and business sector, in addition to higher education. The research that will be reviewed in this section will first look at the role communication plays in team functioning. Next, research on the importance of a shared vision for team members will be reviewed. Finally, research on intra-team trust will be discussed.

Research has found communication to be an essential element of effective teams (Buljiac-Samardzic, 2011; McCaffrey, Hayes, Cassell, Miller-Reyes, Donaldson, & Ferrell, 2012, Mickan & Rodger, 2005; Sargeant, Loney, & Murphy, 2008). Buljiac-Samardzic (2011) conducted a mixed-method study of team effectiveness for youth health care providers. A sample of 52 employees was utilized in the study and participants were asked to complete a score sheet ranking characteristics that influence team effectiveness in their workplace (Buljiac-Samardzic, 2011). Participants ranked team interactions, cooperation, and communication as being most important for team effectiveness (Buljiac-Samardzic, 2011). Communicating feedback was also identified as necessary to continually improve team performance (Buljiac-Samardzic, 2011).

Mickan and Rodger (2005) conducted a quantitative study on team effectiveness in health care. A purposeful sample of 39 health care managers were selected who had extensive personal teamwork experience (Mickan & Rodger, 2005). This sample participated in repertory grid

interviews and completed clarification questionnaires (Mickan & Rodger, 2005). An additional 202 health care practitioners completed a “Teamwork in Health Care Inventory” survey (Mickan & Rodger, 2005). Participants were found to prioritize the team process activity of communication, and consistent communication networks, as important aspects of team effectiveness (Mickan & Rodger, 2005). Sargeant et al. (2008) conducted a qualitative study of inter-professional health care teams, which included a purposeful sample of diverse professionals from evolving primary health care teams who participated in an extensive needs assessment as well as focus group interviews. Participants identified respect for team member’s roles, recognizing that teamwork requires work, and communication between team members as key characteristics of effective teams (Sargeant et al., 2008).

Overall, these studies demonstrate that communication is a key component in effective teams in a variety of workplace settings. Research has found that communication to plan instruction and define roles and responsibilities are vital for effective co-teaching relationships however, co-teachers in secondary school do not always have a common planning time in their schedule (Bouck, 2007). This lack of common planning time can make it difficult to develop the communication skills needed to build equitable and effective co-teaching relationships. Research is needed to explore how professional development interventions can be utilized to assist co-teachers in developing effective communication skills.

Communication has also been found to be a vital component of team effectiveness in higher education settings. Tseng, Heng, Wang, and Sun (2009) focused their quantitative study on online collaboration and teamwork satisfaction. The study investigated relationships between collaboration factors and the teamwork experiences of 46 graduate students in an online course (Tseng et al., 2009). Participants responded to an online survey protocol and results showed a

strong relationship between clear communication and teamwork satisfaction (Tseng et al., 2009). The results of the study suggested that group members who communicated more clearly had a better understanding of the teamwork task and a stronger team commitment (Tseng et al., 2009).

Communication is consistently top ranked as a requirement of employers but little recent research has identified specific skills associated with successful professional communication (Waldeck, Durante, Helmuth, & Marcia, 2012). Waldeck et al. (2012) conducted a content analysis study of published articles to research specific communication skills associated with business communication competence. Their study identified 6 professional communication competences, which include relationship and interpersonal communication, mediated communication, intergroup communication, communicating enthusiasm, creativity and entrepreneurial spirit, nonverbal communication, and speaking and listening (Waldeck et al., 2012). The specific skills associated with relationship and interpersonal communication includes civility, conflict management, small talk, conversation management, and rapport building (Waldeck et al., 2012). Mediated communication includes the skills of online interaction etiquette, online social networking, and willingness and ability to engage in online training and learning (Waldeck et al., 2012). Intergroup communication was found to require the skills of intergeneration communication and intercultural sensitivity (Waldeck et al., 2012). Communication of enthusiasm, creativity, and entrepreneurial spirit requires the skill of communicating a positive attitude (Waldeck et al., 2012). Nonverbal communication competence includes the skills of time management, use of space, and professional dress (Waldeck et al., 2012). Finally, facilitation of public speaking, and listening to the ideas of others, were found to be the skills associated with speaking and listening competence (Waldeck et al., 2012). Co-teachers also need to possess skills associated with professional communication

competence to be able to collaborate effectively with their partner. Co-teachers need to utilize communication skills to build a comfortable rapport to create a positive learning environment for students. They also must communicate professionally and respectfully with each other, fellow faculty, students, and parents both in person and via email to maintain productive relationships. Co-teachers must be open to listening to each other's ideas regarding instruction and student needs, and be comfortable giving and receiving feedback, to create a truly team-oriented dynamic both in and out of the classroom.

A shared vision has also been identified in research as vital to team effectiveness in the workplace (Mickan & Rodger, 2005; Sargeant et al., 2008; Ahles & Bosworth, 2004; Bittner & Leimesiter, 2014). In their mixed-method study of health care teams, Mickan and Rodger (2005) found that participants emphasized a need for a clear purpose and an environment of mutual respect to align the team with the organization's mission. Sargeant et al. (2008) conducted an extensive needs assessment and focus group interviews to inform the development of an educational program for interprofessional health care teams. The purpose of the educational program was to foster collaboration and teamwork among primary health care providers (Sargeant et al., 2008). Participants identified understanding and respecting team member's roles as a main characteristic of effective teams (Sargeant et al., 2008). Bittner and Leimesiter (2014) also found a shared understanding to be a crucial component in team effectiveness in their large-scale action research study of a German car manufacturer. The sample included 36 workers in heterogeneous teams who participated in three, one-day training workshops (Bittner & Leimester, 2014). Field notes and standardized questionnaires for self-assessment in changes in shared understanding and team learning behavior were used to collect data (Bittner &

Leimester, 2014). The study found that a shared understanding amongst all members of the team was crucial for effective collaboration (Bittner & Leimester, 2014).

These studies show that a shared vision has been identified as a key element of effective teams for multiple professions. Research has shown that teacher input in regards to co-teaching assignments is crucial so that teachers with similar educational philosophies can be paired together; however, administrators do not consistently utilize teacher input in determining co-teaching assignments (Bouck, 2007). In addition, co-teaching pairs in secondary schools have been found to define access to the general education curriculum in co-taught, inclusion classes, differently which can result in a lack of parity and a reliance on the one teaching-one assisting model of co-teaching instruction with the general education teacher typically leading instruction (Dymond et al., 2007; Scruggs et al., 2007). This lack of parity and common goals acts as an obstacle to co-teaching effectiveness in secondary schools. These barriers inhibit secondary co-teaching pairs from forming the shared vision required for effective teamwork. Research on professional development interventions is needed to determine how training can be utilized to support co-teachers in cultivating a shared vision.

Research has also found trust to be an important factor in team effectiveness (Jones & Jones, 2011; Kuo & Yu, 2009; Chiocchio, Forgues, David, & Iordanova, 2011; DeOrtentiis, Summers, Ammeter, Douglas, & Ferris, 2013; Tseng et al., 2009). Jones and Jones (2011) conducted an ethnographic study of staff perceptions in interprofessionanl teams in a medical rehabilitation hospital for seniors after a service improvement program was implemented to promote better teamwork. The participants included a purposeful sample of nurses, consultants, physiotherapists, occupational therapists, and social workers who had worked in the hospital before, during, and after the change process was implemented (Jones & Jones, 2011). The study

found that collegial trust was essential for good teamwork and that trust increased with increased meeting time for team members (Jones & Jones, 2011). Tseng et al. (2009) had similar findings in their investigation of the relationship between collaborative factors and the teamwork experiences of 46 graduate students in online collaborative projects. Using an online survey protocol, the study found that trust among team members was an effective factor for explaining how teams collaborated in their online groups (Tseng et al., 2009). These studies highlight the importance of trust in both professional and academic collaboration. Co-teachers do not consistently have input in selecting their co-teaching partners, which may result in a lack of trust between co-teachers. Research on the role team-building professional development can play in cultivating trust between co-teachers is needed to determine if this is a worthwhile professional development intervention in developing trust between co-teachers.

Chiocchio et al. (2011) also conducted a study investigating graduate student teamwork and group collaboration. The quantitative study used validated self-reports as a means of data collection and included a sample of 38 university graduate engineering students who were asked to participate in an integrated design project team competition (Chiocchio et al., 2011). The study found that effective collaboration was required for team performance to benefit from trusting relationships and that intra-team trust and collaboration grew stronger through each phase of project completion (Chiocchio et al., 2011). DeOrtentiis et al. (2013) also examined how trust operates through other variables in a quantitative study of graduate students enrolled in a university Masters of Business Administration program. Students were given a survey before beginning their collaboration with their group and another at the end of the semester after the final project was completed (DeOrtentiis et al., 2013). Group cohesion and satisfaction were identified as dual mediators of the trust-team effectiveness relationship (DeOrtentiis et al., 2013).

These studies demonstrate that trust has been found to be a complex element of collegial relationships that is influenced by multiple factors. Training in team-building may be necessary to assist colleagues in developing intra-team trust to benefit group performance.

The data collection methods in this body of research have tended to rely on quantitative measures using surveys and protocols, qualitative case studies appear to be lacking. More research utilizing qualitative intervention case study methodology is needed to provide rich, thick descriptions of how participants experience interventions to build teamwork in the workplace. Studies exploring how team-building interventions influence how team members communicate, collaborate, develop a shared vision, and build intra-team trust are needed to examine how the interventions affect team performance. In addition, the majority of studies in this body of research tend to focus on healthcare, business, or higher education settings. More research on how teachers, administrators, and school student support services work in interprofessional teams to meet the needs of students in K-12 educational settings is needed to develop a deeper understanding of the team dynamics in schools. In addition, research on how co-teachers work together to collaborate with administrators and student support services to meet the needs of special education students is needed to develop an understanding of the specific characteristics of effective teamwork for co-teachers.

Professional Development for Co-Teaching Partnerships

Professional development for educators is an important component in increasing student learning and improving school quality (Desimone, 2011). School districts in New Jersey require teachers to participate in various professional development activities however; professional development may not be aligned with the needs of co-teachers. The research that will be

reviewed in this section will focus on professional development geared specifically for co-teachers in addition to team-building training.

Professional development can offer teachers opportunities to collaborate and build supportive relationships. Utilizing the expertise of experienced co-teachers can be a valuable source of professional development in schools. Peer coaching and mentoring can be utilized to initiate positive changes in teaching practices (Gold, 1996; Zwart, Wubbels, Bergen, and Bolhuis, 2007). The Designing Quality Inclusive Education (DQIE) program is a systemic and continuous professional development program that was developed in 2002 to provide support to co-teachers in Howard County, Maryland (Walsh, 2012). This professional development program combines demonstration, practice, feedback and coaching, and presents co-teachers with strategies to tier assignments and scaffold supports for students with disabilities (Walsh, 2012). Activities and materials that promote student engagement were also modeled for participants (Walsh, 2012). This system-level strategy was identified through school district research as contributing to the positive correlation between increased access to general education curriculum through co-teaching, and improved the performance of students with disabilities on state reading and mathematics assessments (Walsh, 2012). This study demonstrates that appropriate professional development can be designed and implemented to support teachers in implementing co-teaching effectively to meet the needs of the diverse learners in their classes.

Brownell, Adams, Sindelar, Waldron, and Vanhover (2006) conducted a case study as part of a larger, federally funded, three year study designed to investigate the use of Teacher Learning Cohorts (TLC) to promote teacher learning about instructional strategies to utilize with struggling learners and students with disabilities. The sample consisted of eight TLC participants who were purposefully selected because they varied in their ability to adopt practices

from the TLC (Brownell et al., 2006). Data collection consisted of formal and informal classroom observations, teacher and principal interviews, field notes of meetings, debriefing notes from project staff discussions, and documentation of informal conversations with participants (Brownell et al., 2006). The study found that collaborative learning structures alone are not enough to ensure that teachers implement practices to meet the needs of diverse learners (Brownell et al., 2006). Teachers that had a strong knowledge base to build on, were able to consider individual needs while still providing whole class instruction, and had beliefs that aligned with the innovations being presented in the professional development, were found to be more likely to adopt new teaching strategies than their peers who did not exhibit those traits (Brownell et al., 2006). Teachers’ knowledge, beliefs, skills, and reflective ability all impact how they benefit from collaborative professional development, therefore, staff developers need to identify teachers who require more assistance in adopting innovations and provide them with more learning support (Brownell et al., 2006). To make professional development more useful to high school co-teachers emphasis and connections need to be made between a collaborative and content-specific focus (Brownell et al., 2006; Van Garderen, Hanuscin, & Lee, 2012). This study demonstrates that professional development can assist teachers in improving their instructional practices but participation in professional development workshops alone does not guarantee a change in practice. If professional development is to be successful for co-teachers both teachers must be open to the innovation and work together as a team to implement various instructional strategies.

Co-teaching effectively requires teamwork. Communication, shared vision, and trust are factors associated with effective teams however if these factors are not present, teamwork training can be conducted to facilitate their development. Ahles and Bosworth (2004) and

Jordan and Troth (2004) both found that opportunities to collaborate are not enough to develop effective teams and formal teamwork training may be necessary. Ahles and Bosworth (2004) conducted a longitudinal study of student perspectives of effective teams as they enter and leave an integrated marketing communications campaign course. The mixed-methods study utilized a sample of 89 participants and consisted of qualitative brainstorming sessions at the beginning of the course and a quantitative survey at the completion of the course as the method of data collection (Ahles & Bosworth, 2004). The study found that students need formal teamwork training to carry with them a clear understanding of what characteristics are necessary to form and operate successful teams and the researchers recommend that faculty integrate team-building activities into their courses (Ahles & Bosworth, 2004).

McCaffrey et al. (2012) conducted a quasi-experimental study of a hospital beginning the integration of a new medical residency program where nurses had no prior experience working with medical residents. A sample of 68 nurses and 47 medical residents completed two surveys, which included a Jefferson Scale of Attitudes towards Physician-Nurse Collaboration and Communication, Collaboration, and Critical Thinking for Quality Patients Outcomes Survey (McCaffrey et al., 2012). The study found that a formal educational program and follow up discussion improved participant attitudes and that continuing education may assist in developing positive communication styles and promote collegial teamwork (McCaffrey et al., 2012). This study was not conducted in a K-12 educational setting but it does demonstrate that professional development programming can be implemented to promote the development of skills associated with effective workplace teams.

Jordan and Troth (2004) examined the influence emotional intelligence had on the team collaboration of 350 university students working in 108 teams in an introduction to management

course. The study found that teams with higher average levels of emotional intelligence were more likely to report adopting collaborative conflict resolution patterns compared to teams with lower levels of emotional intelligence and that the ability to deal with one's own emotions leads to higher team performance (Jordan & Troth, 2004). This study demonstrates that collaboration alone does not lead to effective teams and suggest that formal training can be implemented to help team members develop the skills needed to manage conflict to improve team effectiveness.

In general, research on professional development for co-teaching partnerships utilizes surveys, interviews, and observations to explore the experiences of participants in different professional development interventions. More research is needed on how professional development can be utilized to help high school co-teachers overcome the obstacles associated with co-teaching at the secondary level. Research focusing specifically on team-building professional development interventions for high school co-teachers appears to be lacking. More information on how participation in team-building professional development influences co-teaching relationships is needed to determine if this type of professional development is a worthwhile intervention.

In summary, this review of the literature illustrates three themes. First, there are certain criteria needed for co-teaching to be successful and benefit teachers and students but co-teachers in secondary schools face a number of obstacles. These obstacles include a lack of content knowledge and preparedness, and a lack of parity between general and special education co-teachers. Second, successful teams all share certain characteristics, which include effective communication, a shared vision, and trust. Third, professional development can be implemented to support co-teachers in coping with the challenges associated with co-teaching in high school and team-building training can help teams develop the characteristics associated with

successful teams. More research is needed on how professional development can support co-teachers in overcoming the obstacles associated with co-teaching at the secondary level. In addition, studies utilizing team-building training as an intervention are needed to explore how participation in this form of professional development influences the development of co-teaching partnerships.

Chapter 3: Methodology

An intervention case study was conducted utilizing qualitative methods. Merriam (2009) defines a case study as an in-depth description and analysis of a bounded system. Qualitative case studies are characterized as being particularistic, descriptive, and heuristic (Merriam, 2009). A case study design was selected because the study focused on a particular program, team-building professional development for co-teachers, in a specific school setting. In addition, the end product of the study required rich, thick description of the experiences of co-teaching pairs in the professional development program. Finally, case studies are heuristic because they illuminate the reader's understanding of the phenomenon under study (Merriam, 2009). In this case, the goals were to illuminate for the reader the experiences of high school co-teaching pairs in team-building professional development activities and explore the effectiveness of the professional development experience in helping co-teaching pairs work together. The professional development program that was the focus of this intervention case study consisted of six, in-person professional development workshops. Each workshop focused on different team-building activities. For the purposes of this study, team-building was defined as experiences meant to enhance co-teachers' relationships through their participation in activities that build trust, communication skills, and abilities to collaborate effectively

Setting and Sample

The setting of this study is a large, upper middle class high school in central New Jersey. The school is the only high school in the school district and is comprised of approximately 2,794 students. Approximately 17% of the students receive special education services. The enrollment of students by ethnic/racial group is as follows: 68.6% white, 18.9% Asian, 9.1% Hispanic, 3.1% African American, 0.3% Pacific Islander, and 0.1% two or more races. The school has an

outdoor campus design in which each content area is housed in its own building; therefore, students must walk from building to building to participate in their classes and teachers from differing content areas rarely interact.

There are 240 teachers at the school, 93 of which participate in co-teaching conditions. Co-teachers are scheduled to teach in the following content areas: Math, English, Science, Social Studies, and Spanish. Co-teachers at the school have varying amounts of co-teaching experience. Some teachers at the school have little to no experience as co-teachers while others have 15 or more years of co-teaching experience. The majority of teachers who do co-teach have worked with multiple co-teaching partners over the course of their co-teaching experience. All co-teachers at the school, even those not participating in the professional development, were asked to complete a brief survey regarding their satisfaction with co-teaching before the professional development workshops began. The responses from these surveys were used to make comparisons between the perspectives of co-teachers who participated in the professional development and the total co-teaching population at the school. Of the 93 co-teachers at the school, 42 responded to the survey making survey data representative of 45% of the co-teaching population. The Co-teaching Information and Satisfaction Survey was emailed to co-teachers in November 2014 and again in February 2015 to determine if responses changed after teachers had more time to work together. The results of the second survey were very similar to the first survey; therefore data from the November survey were utilized in the description of the findings. Participation in the survey was voluntary and the data is representative of 45% of the co-teaching population at the school. It is unknown if co-teachers who did not respond to the survey share the same perceptions as the respondents.

Participation in the professional development program was voluntary so the sample size was contingent upon participant volunteers. There were 7 co-teaching partnerships that volunteered to participate which made the sample size 15 co-teachers. Qualitative inquiry involves utilizing small, information-rich cases (Patton, 2008). Since only 7 pairs volunteered to participate all 15 participants were included in the interview sample. Many of the participants are from the science department and signed up for the professional development to support me as a colleague. Many participants also decided to participate because they felt the professional development would provide them with a fun atmosphere to spend time bonding with their partner.

Informed Consent

The pre-professional development survey was emailed to all co-teachers at the school to their district email accounts. In the body of the email co-teachers were informed that responding to the survey is voluntary and by completing the survey they agree to let me use their responses in the findings of my study. The email informed participants that their responses will be confidential and their names will be not utilized in the description of the findings. All professional development participants were asked to sign a consent form (Appendix A). The consent form requested permission to use their survey responses and my observations of their participation in the workshop activities in the findings of my study. Participants were informed that their responses would be confidential and pseudonyms would be used in reporting the findings of the study. Participants were also asked to sign a consent form to be interviewed and audio recorded during interviews (Appendix B). Assuring participants of the confidentiality of their responses was essential because participants discussed their relationship with their co-teacher and needed to feel comfortable that their responses would be protected. Participants were also informed that they could withdraw from the study at any time.

Rationale

Building communication, trust, and co-teachers’ abilities to collaborate to achieve a shared vision was the focus of these professional development sessions because research has identified these factors to be elements of effective teams. Low-stakes, non-instrumental activities were selected as a means of building communication, trust, and a shared vision for participants to provide co-teachers with opportunities to develop their relationships in a non-threatening and uncontroversial environment. The focus of these professional development workshops was to build co-teachers’ relationships. I am working under a theory that co-teachers first must have a relationship that exhibits characteristics of an effective team before they can experiment in implementing different co-teaching models in their instructional practice. Low-stakes activities were selected for the initial professional development sessions because there is a broad range of co-teaching experience in the group. Some participants have been co-teaching together for many years, while others are teaching together for the first time. The low-stakes activities that were selected are meant to provide new co-teaching partners with opportunities to build a rapport, while providing veteran co-teaching partners with an opportunity to enhance their rapport, by participating in activities that require communication and collaboration without causing apprehension for participants. These activities were meant to build a foundation for co-teaching partners to build upon in future sessions that are contextual to co-teaching.

Research is lacking that supports the use of low-stakes activities in team-building professional development but there is research that supports the use of low-stakes activities in writing. Elbow (1997) identified a number of benefits to low-stakes writing assignments. Low-stakes writing assists students in involving themselves fully in the ideas of the course they are taking, can lead to improvements in students’ high-stakes writing, and can result in a reduction in

apprehension regarding writing tasks (Elbow, 1997). I am working under the assumption that low-stakes activities in team-building professional development will offer participants the opportunity to fully involve themselves in the ideas of teamwork and will potentially lead to improvements in co-teachers’ abilities to tackle high-stakes activities as a team.

The professional development began with games and problem solving activities to provide participants with the opportunity to play in their workplace. Play has been recognized as important not only for children, but adults as well. Play is a catalyst, having the opportunity to play can make adults more productive and happier in both their personal and professional lives (Brown, 2009). Play is nature’s tool for creating neural networks and reconciling cognitive difficulties and has been found to be essential in the workplace because it provide adults with the emotional distance to rally (Schute, 2009). The play activities in this professional development were meant to provide co-teachers with enjoyable experiences together outside of the classroom to boost their productivity together in the classroom.

Intervention

This study examined the experiences of high school co-teaching pairs in a team-building professional development program and the effectiveness of the professional development in encouraging teamwork between co-teaching partners. The primary intended users of the findings from this study are the high school special education supervisor and the district supervisor of student support services. These stakeholders make decisions regarding the professional development programming offered to co-teachers and the findings from this study can be used for their reference when making future decisions regarding professional development programming for co-teachers. The identity of participants will not be shared when reporting the findings to stakeholders and pseudonyms will be utilized when necessary.

The cognitive goal of this professional development was to build participants’ understanding of the importance of teamwork in co-teaching relationships. The affective goal of this professional development plan was to enhance co-teachers feelings of camaraderie in their relationship with their co-teacher and assist co-teachers in developing a trusting relationship. Finally, the behavioral goal of this professional development plan was to change co-teachers’ relationships to improve their communication skills and enhance the quality of their collaboration.

Participation in this professional development program was voluntary. At the start of this professional development teachers were told that they would be provided with one Continuing Education Unit (CEU) that could be applied to the teacher salary guide for their participation in this professional development program. The school district required 10 hours of professional development to qualify for 1 CEU credit; therefore, this professional development was designed to consist of six 90-minute workshops for a total of 9 hours of professional development. The remaining hour was fulfilled by participants’ completion of interviews. Partway through the professional development series the superintendent announced that CEU credit could no longer be applied to the salary guide and time spent in voluntary professional development would only be applied to fulfilling the required 20 hours of professional development teachers are expected to participate in during the school year. All participants elected to remain in the professional development despite the loss of CEU credit.

The professional development workshops took place after school at the high school. Participants were provided with refreshments at each session. Participants were asked to complete a survey regarding preferred days and times for professional development sessions. The group decided they wanted to meet every other Wednesday from 2:45 to 4:15. Dewey

hypothesized that genuine education comes from experience and must exhibit principles of continuity and interaction; therefore, this professional development provided participants with opportunities for experiential learning (Merriam, Caffarella & Baumgartner, 2007). All professional development sessions incorporated opportunities for participants to engage in interactive, team-building activities. Table 4 includes a description of the activities in each session.

The first session consisted of an hour and half workshop (Appendix C). This first session focused on Tuckman’s (1965) forming stage and aimed to establish group norms and goals for the professional development series, in addition to providing participants with team-building and icebreaker activities to establish a culture of comfort and collaboration in the group. Dufour and Eaker (1998) assert that an essential feature of a professional learning community is a shared understanding and common values (Cochran-Smith & Lytle, 2009). The activities in this first session were designed to establish the “need to know” in regards to the importance of teamwork in co-teaching relationships (Knowles, Holton & Swanson, 1998). This first session provided participants with activities to collaborate as a whole group to build a sense of community. At the start of the first workshop participants were thanked for volunteering to participate in the study and I conducted a brief power point presentation presenting background information that informed my study, the purpose of the professional development, and the elements of data collection participants would be involved in, and participants were given the opportunity to ask any clarifying questions (Appendix D). Participants were then provided with consent forms and given time to read and sign them. Once all participants had signed consent forms we reviewed professional development dates. Participants then completed an icebreaker activity. Participants were then given time with their co-teacher to brainstorm their goals for their participation in the

professional development which were then shared with the group. I decided to move establishing norms and the North, South, East, and West activity to session two so that we would have time to complete a low-stakes team-building activity that would set the tone for the professional development series. Participants completed the Zoom activity followed by a reflective discussion of the activity. The session ended with the completion of a formative evaluation exit slip.

Session two consisted of an hour and half workshop (Appendix E). In lieu of an icebreaker activity participant discussed what the group norms for the professional development should consist of before beginning the team-building activities. Participants then completed the North, South, East, and West activity that developed awareness of their style of participating in collaborative activities. This activity also developed awareness for co-teaching partners of how their co-teacher prefers to engage in collaborative activities. Establishing group norms and the North, South, East, and West activity were also forming stage activities. After the completion of these tasks, participants then engaged in team-building activities. Participants completed the Scrambled Sentences activity with their co-teacher in small groups followed by Group Juggle, which was a whole group activity. These activities were chosen to begin to move participants into the storming stage. The session ended with the completion of a formative evaluation exit slip. The purpose of the activities of this session were to provide participants with the opportunity to communicate and begin to establish roles while maintaining an environment of community, tolerance, and acceptance.

Session three consist of an hour and half workshop (Appendix F). The session began with an icebreaker activity where participants reflected on a “life highlight,” which they then shared with their co-teacher. Co-teachers then shared out the “life highlight” of their partner

with the whole group. The remainder of this session focused on providing co-teachers with opportunities to work together in a collaborative art activity. The group participated in a reflective discussion of their experiences in the activity. This task was chosen as a storming stage activity because it requires teamwork and offers partners the opportunity to communicate, collaborate, and compromise. Collaborative art-making requires participants to trust and respect each other, and involves communication to exchange ideas and work towards a common goal (Sherwin, 2011). Originally it was planned that co-teachers would complete the mid-professional development questionnaire at the end of the session, however; a decision was made to move this the following session due to low participant turnout.

Session four consisted of an hour and a half workshop (Appendix G). The session began with a discussion of when to complete a make-up session for participants that missed session 3. The group decided that they wanted to complete the activities from session three during session six and participate in an extended sixth session. After this discussion, participants then worked in small groups with their co-teacher to create a contraption that would be able to catch a golf ball. This activity was challenging and chosen to provide an opportunity for the group to work through the storming stage. After sharing and demonstrating their contraptions the group participated in a reflective conversation regarding the activity. Participants then participated in a “Yes, and” improv activity with their co-teacher. An improvisation activity was selected because improv emphasizes collaboration over competition and can lead to creative ideas, problem solving, and enhanced communication for participants (Aylesworth, 2008). This activity was selected to serve as a norming stage activity. Co-teaching requires teachers to improvise when presenting a lesson and this activity aimed to provide teachers with an opportunity to refine these skills. One participant suggested that we complete a whole group

“Yes, and” improv where we sat in a circle and each group member responded to the previous participant. The group member who made the suggestion was asked to choose the setting for the improv activity. Participants then completed the mid-professional development questionnaire.

Session five and six included activities that focus on problems in context with a focus on communication skills. The activities in session five were selected to move participants from the norming stage into the performing stage. Session five consisted of an hour and a half workshop (Appendix H). The first activity provided co-teachers with the opportunity to reflect on “communication nightmares” in the workplace followed by the creation of a group list of do’s and don’ts regarding professional communication and feedback. This activity provided co-teaching pairs with the opportunity to discuss effective communication and reflect on how they communicate with each other as co-teachers. Co-teachers then participated in an active listening activity followed by an activity focusing on the difference between debate and dialogue, which provided co-teachers with an additional opportunity to work on active listening skills. The session ended with the completion of a formative evaluation exit slip.

Session six consisted of an hour and a half workshop followed by an additional hour and half make-up session for participants not present during session three (Appendix I). Since it was our last session we started the workshop with a pizza party where we enjoyed a meal together sitting in a circle. We participated in casual conversation while eating then we started the workshop after about 20 minutes. Session six also focused on problems in context and was meant to serve as an opportunity for the group to work in the performing stage of development. The first activity had co-teachers participate in an activity where they utilized metaphors to describe themselves as a teacher and then discuss how their “metaphors” can complete and complement each other in a co-teaching situation. Responses to the formative evaluation in

session five showed that participants wanted to have time to brainstorm ways to implement different co-teaching models in their instruction, therefore; an activity addressing these needs was added to the session. The next activity provided co-teachers with the opportunity to reflect on problems and solutions in co-teaching contexts. Participants were asked to write a personal or hypothetical dilemma, problem, or obstacle that teachers may encounter on a slip of paper. Participants were encouraged not to write something they did not feel comfortable with the group discussing. Co-teaching pairs then randomly selected a problem and discussed together how they would tackle the dilemma as a team. Participants were asked to tape the problem to the top of their chart paper and record their possible solutions beneath it. Participants then completed a gallery walk where they could add potential solutions to the problem on the chart paper. Co-teaching pairs then shared out the solutions to the problem with the group. Participants who attended session three were given the summative evaluation to complete. Participants not in attendance at session three completed the activities from that session followed by the completion of the summative evaluation.

Table 4

Session Activities

Session Number	Activities
1	Welcome and Introductions Starburst Icebreaker Goals Zoom Formative Evaluation
2	Group Norms North, South, East, and West Scrambled Sentences Group Juggle Formative Evaluation
3	Life Highlights Collaborative Art Formative Evaluations

4	Drop the Ball Improv Mid-Professional Development Questionnaire Formative Evaluation
5	Communication Nightmares Active Listening Debate Versus Dialogue Formative Evaluation
6	Pizza Party Creating Metaphors Obstacles and Solutions Make-up Session Summative Evaluation

Researcher Role

As a faculty member of the Special Education Department and a co-teacher at the school, I took on the role of researcher as colleague in this study. I participated in the study as the facilitator of the professional development activities that were the focus of this study. I also took on the role of observer by collecting data during professional development sessions through observations of participants. Teachers frequently facilitate professional development that provides teachers with CEU credit in the school district; therefore, I did not anticipate any concerns with my colleagues relating to my role as a facilitator. Since I am a special education co-teacher at the school I was cognizant of my biases, dispositions, and assumptions so I could maintain my role as objective facilitator (Merriam, 2009). In my past co-teaching relationships I have experienced much of what research says regarding the challenges special education co-teachers face and I maintained awareness of my biases so they did not impact my objectivity.

Data Collection

Multiple data collection techniques were utilized throughout this study. Surveys and questionnaires were utilized to collect data before, during, and after the professional development sessions were conducted. Interviews were conducted with professional

development participants before, during, and after the professional development sessions had occurred. Observations and analytical insights were recorded in my researcher journal throughout data collection.

Researcher journal. I kept a researcher’s journal to record reflections and analytical insights that emerged during data collection. Journals provide researchers with a tool for reflecting on their own thought processes and allow the researcher to gain deeper insights into the data set and methodological process (Dana & Yendol-Hoppey, 2009). I am a special education co-teacher at the school therefore, reflections were utilized to determine and clarify my biases, dispositions, and assumptions to address threats to validity (Merriam, 2009).

Surveys. Surveys were created utilizing SurveyMonkey and consisted of likert-scale and open-ended questions. The surveys were emailed to all participants utilizing teachers’ district email addresses. Survey responses were confidential and stored on my personal password protected SurveyMonkey account and will be kept for a period of three years after which they will be deleted. To keep the responses of participants’ confidential pseudonyms were utilized in descriptions of findings.

Pre-professional development survey. A Co-Teaching Information and Satisfaction Survey was emailed to all co-teachers at the school prior to the start of the professional development (Appendix J). The survey was emailed to all co-teachers two weeks prior to the start of the professional development. After one week teachers were sent a reminder email. All co-teachers were asked to complete the survey even if they were not participating in the professional development. All participants responded to the survey prior to the start of the professional development. Survey questions focused on the following topics: co-teachers’ perceptions of co-teaching as a practice, relationships with co-teachers, factors that enhance co-

teaching relationships and factors that impede co-teaching relationships. The survey responses of all co-teachers were needed to make comparisons between the population of co-teachers at the school and participants in the team-building professional development.

Mid-professional development questionnaire. A questionnaire was developed in SurveyMonkey and distributed to the participants via their district email account after session four (Appendix K). This questionnaire was used to collect data regarding participants’ experiences in the team-building activities halfway through the workshop series. Teachers were given time at the end of session four to complete the questionnaire. The questions focused on the following topics: communication with co-teaching partner during the workshops, collaboration with co-teacher during the workshop, comfort level during workshop activities, enjoyment in workshop activities, and the value and purpose of workshop activities.

Post-professional development survey. All co-teachers at the school were emailed the Co-Teaching Information and Satisfaction survey again three weeks after the professional development had concluded. All co-teachers at the school were asked to complete the survey again because this data was examined to determine if there were changes in responses to the survey after the co-teaching population at the school had more time to work together, and to compare the results of the group who participated in the professional development to those who did not participate. Professional development participants were sent a modified survey that included additional questions relevant to their participation in the professional development workshops (Appendix L). This survey was used to collect data regarding participants’ relationship with their co-teacher after participating in team-building activities. The survey focused on the following topics: relationships with co-teaching partners since the team building professional development, impact of team-building professional development, effectiveness of

team-building professional development, enjoyment in team-building professional development, and overall experiences in team-building professional development.

Evaluation forms. After each session participants were given a short formative evaluation to complete so that changes to the professional development plan could be made if needed (Appendix M). A final summative evaluation was given to participants to complete at the last session to gather data on participant satisfaction with the quality of the professional development (Appendix N). Evaluations were anonymous to encourage participants to respond honestly.

Interviews. Interviews were conducted to gather rich, detailed data regarding participants’ experiences. Participants were interviewed before starting the professional development series to gather data pertaining to their perspectives of co-teaching and their relationship with their co-teacher (Appendix O). Participants were interviewed once at the mid-point of the professional development series to gather data pertaining to their experiences in the team-building activities (Appendix P). A final interview was conducted three weeks after the professional development ended to gather data pertaining to changes they perceived in their interactions with their co-teacher since their participation in team-building activities (Appendix Q). Interviews were face-to-face, and one-on-one to offer participants a private and personalized experience (Creswell, 2009). Interviews were audio recorded and transcribed verbatim to ensure that participants’ responses were fully captured to contribute to validity. To keep the responses of participants confidential, pseudonyms were utilized in descriptions of findings. Interview responses will be stored on my personal password protected computer for a period of three years after which they will be deleted.

Observations. I took on the role of participant as observer during professional

development workshops (Merriam, 2009). My role as a researcher and observer was known to the group but was subordinate to my role as a facilitator of professional development workshops (Merriam, 2009). Since I facilitated the workshops I was not be able to record observations during the workshops so I wrote observations from the sessions in my researcher journal immediately after each session. I utilized the data I collected regarding how co-teaching pairs were interacting and engaging in the workshops to create probing questions to utilize in participant interviews.

Participants completed four professional development sessions prior to completing a questionnaire and individual interview. Originally, the interviews and questionnaire were to be conducted after the third session but several participants were unable to attend session three which was scheduled for the week before the holiday break. Since the sessions were meant to be completed in pairs, any partnership where both participants could not attend would not be able to complete the activities. The poor attendance at session three was discouraging but after modifying the schedule with input from the participants there was perfect attendance at session four. Table 5 depicts the data collection methods used in this study, their connection to the research questions, and categories for analysis. Table 6 depicts the timeline of completion for this dissertation.

Table 5

Data Collection Methods

Research Question	Methods	How do they help me answer my questions?	Categories for Analysis
How do teachers who participate in co-teaching conditions perceive co-teaching as a practice prior to team-	Co-teaching Information and Satisfaction Survey	A survey will allow me to gain information representative of all participants	Co-teaching Information and Satisfaction Survey: -Trust

<p>building professional development?</p> <p>Sub Questions: How do co-teachers describe their relationships with co-teaching partners? What do co-teachers say enhances or impedes their co-teaching relationships?</p>	<p>Pre-Professional Development Interviews</p>	<p>regarding their perceptions of co-teaching before we begin our professional development sessions. This information will provide me with a broad range of perspectives to get data with maximum variation for the sample.</p> <p>Interviews will be utilized to gain deeper data with a small number of co-teachers. Specific co-teaching pairs will be selected to provide a sample representative of different levels of co-teaching experience. Interviews will allow me to gather data to provide a rich, thick description of how co-teachers describe their relationship with their co-teacher.</p>	<p>-Shared Vision -Communication</p> <p>Pre-Professional Development Interview: -Trust -Shared Vision -Communication</p>
<p>How do teachers describe their experiences participating in team-building professional development for co-teaching?</p>	<p>Mid-Professional Development Questionnaire</p> <p>Interviews</p> <p>Observations</p> <p>Evaluation Forms</p>	<p>All participants will be surveyed periodically throughout the professional development series to gather data regarding their experiences. This</p>	<p>Mid-Professional Development Questionnaire: -Affective (Question 6, 7, 12, 13) -Behavioral (Question 3,4,5,8,9,10,11)</p>

		<p>will provide data representative of all participants.</p> <p>The selected sample of participants will be interviewed to provide data that dives deeper into how co-teachers are experiencing the sessions.</p> <p>I will observe participants during the professional development sessions and utilize the data I collect regarding how they are interacting and engaging in the workshops to create questions to ask during interviews.</p>	<p>-Cognitive (Question 1,2,14,15)</p> <p>Mid-Professional Development Interview:</p> <p>-Affective (Question 1, 7, 9)</p> <p>-Behavioral (Question 3,4,5,6,10)</p> <p>-Cognitive (Question 2)</p>
<p>How do co-teachers describe their relationships with co-teaching partners since the team building professional development?</p> <p>Sub Question: From the perspective of the co-teachers in what ways did the team-building professional development impact co-teacher collaboration?</p>	<p>Co-Teaching Information and Satisfaction Survey</p> <p>Interviews</p>	<p>The survey will provide data representative of all participants regarding the impact the professional development series had on their relationship and collaboration with their co-teacher.</p> <p>The selected sample of co-teachers will be interviewed to provide detailed data to provide a rich, thick description.</p>	<p>Co-teaching Information and Satisfaction Survey:</p> <p>-Trust</p> <p>-Shared Vision</p> <p>-Communication</p> <p>Additional Participant Survey Questions</p> <p>-Affective (Question 1,2,12)</p> <p>-Behavioral (Question 3,4,5,6,7,8,9,10,11)</p> <p>-Cognitive (Question 13, 14)</p> <p>Post Professional</p>

			Development Interview: -Affective (Question 1) -Behavioral (Question 2,3,4) -Cognitive (Question 5)
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Table 6

Timeline of Completion

October 2014	Began advertising professional development to recruit participants. Defended proposal. Arranged appointments to conduct pre-professional development interviews. Began conducting Pre-Professional Development Interviews.
November 2014	Emailed Co-teaching Information and Satisfaction Survey to co-teachers. Finished conducting Pre-Professional Development Interviews Began conducting professional development workshops and continued data collection.
December 2014	Continued facilitation of professional development workshops and continued data collection.
January 2014	Conducted Mid-Professional Development Interviews. Completed Mid-Professional Development Questionnaires Completed facilitation of professional development workshops.
February 2015	Conducted Post-Professional Development Interviews. Emailed Co-teaching Information and Satisfaction Survey to co-teachers. Completed data collection.
March 2015	Conducted data analysis.
April 2015	Conducted data analysis and began writing the description of the findings.
May 2015	Continued writing description of the findings.
June 2015	Continued writing description of the findings.
July 2015	Finished writing Chapter 4 and began working

	on Chapter 5.
August 2015	Finished writing Chapter 5 began finalizing the final draft.
September 2015	Completed final draft and contacted committee to schedule dissertation defense.
October 2015	Defended dissertation.

Data Analysis

Qualitative research involves inductive data analysis where researchers build their patterns, categories, and themes from the bottom up through the organization of data in increasingly more abstract units of information (Creswell, 2009). The majority of codes emerged inductively however; several deductive categories were created for coding which included characteristics of effective teams in addition to the professional development goals. Although case studies follow the strategies utilized in all qualitative research, they have certain features that affect data analysis (Merriam, 2009). Since a case study is an intensive, holistic description and analysis of a single bounded unit, conveying an understanding of the case is the top consideration in analyzing the data (Merriam, 2009). Case studies involve a vast amount of data that may include disparate information, which can challenge the researcher when trying to make sense of the data (Merriam, 2009). Given these circumstances, data management is particularly important in case study research (Merriam, 2009). All case data must be organized so the data is retrievable (Merriam, 2009). Patton (2002) refers to this as the case record, which pulls together and organizes the case data in a comprehensive resource package that includes all the major information that will be used in analysis.

To create the case record, audio-recordings from interviews were transcribed verbatim into a word processing document and uploaded to Dedoose. Responses in my researcher journal were organized by workshop. Observations during workshops were recorded in my journal and

used to generate probing interview questions. Likert-scale and open-ended survey responses were exported from SurveyMonkey into a PDF file. All data was saved on my personal, password-protected computer and organized into files in my computer. Survey data was saved in separate folders organized by survey type. Transcripts were saved in separate folders organized by interview then by participant. This study involved multiple cases; therefore, analysis included within-case analysis of individual co-teaching pairs followed by cross-case analysis to build abstraction across cases (Merriam, 2009).

I began data analysis by reading and re-reading interview transcripts to gain a general sense of the interview data. Each interview transcript was printed out and notes, comments, and observations were written down in the margins of the transcripts as they were read (Merriam, 2009). Open coding was utilized and inductive analysis guided the process of discovering themes, patterns, and categories for coding (Merriam, 2009; Patton, 2002). Phrases and terms that were used by the interviewees in reference to their relationship with their co-teacher, experiences in the professional development workshops, and changes in relationships with co-teachers were marked as potential codes (Miles & Huberman, 1994). The characteristics of effective teams, which include shared vision, trust, and communication, were utilized as categories that I looked for in interview responses. Affect, cognition, and behavior were categories I looked for in coding the mid-professional development interviews, the mid-professional development questionnaire, and post-professional development interviews. Once this task was completed for all transcripts a list of all topics that were noted was created and similar topics were clustered together (Creswell, 2009). Topics were abbreviated as codes and data was revisited to determine if new categories and codes emerged before decisions for codes were finalized (Creswell, 2009).

My codes were then shared with my dissertation group to validate the coding scheme. My codes included Classroom Dynamic and Learning Environment, Shared Vision, Trust, Role of Administrator, Co-teacher Self-Image, PD Experiences, PD Reflections, Teamwork in PD, and Post PD Teamwork. An interview transcript was read with cohort members and the initial coding scheme proved inappropriate because it was difficult for my dissertation group to utilize my initial coding scheme to categorize interviewee responses, and many of my initial codes were not applicable. My initial coding scheme proved ineffective in helping me to answer my research questions. After feedback from my cohort my coding scheme was then revisited and modified. My revised coding scheme included Partner Dynamic with the following sub codes: Roles and Responsibilities, Communication Between Partners, Nature of the Relationship, Shared Vision/Common Goals, and Trust. My second code was Benefits of Co-teaching with the following sub codes: Benefits to Students, Benefits to Teacher. My third code was Role of Administration, which included the following sub codes: Scheduling, Training and PD, and Guidance and Support. My fourth code was PD Experiences and included the following sub codes: Enjoyment, Relationship Enrichment, Teamwork in PD Activities, and Reflections. My fifth code was Post PD Relationship, which included the following sub codes: Descriptions of Changes, Post PD Interactions, and Post PD Teamwork in the Classroom. After consultation with my dissertation chair final decisions for coding were then made and the data was coded in Dedoose (Creswell, 2009).

Once interviews were coded, coded excerpts were printed and deeper analysis was conducted to generate themes regarding participants' perceptions of co-teaching, their relationship with their partner, and their experiences in the professional development. Maslow's Hierarchy of Needs was utilized as a framework during data analysis. The responses of

participants were examined to determine the level to which they felt their co-teaching relationship fulfilled their needs and the influence this level of fulfillment had on their perceptions of the relationship and their goals for participation in the workshops. Coded excerpts were then selected to support themes and provide rich descriptions of the experiences and perceptions participants had of team-building professional development, their co-teaching relationship, and the practice of co-teaching. Coded interviews were first analyzed by co-teaching pair and then across all participants. The responses of co-teaching pairs were first analyzed to determine the similarities and differences co-teaching partners had in their perceptions of their relationship, their goals for their participation in the professional development, and their experiences team-building. These similarities and differences were utilized to determine the level to which partners believed they had a shared vision for their co-teaching dynamic and the level of progress they felt they made towards achieving their ideal dynamic through participation in the workshops.

Once all participants' interviews were analyzed by co-teaching pair interviews were analyzed across partnerships to examine the perceptions and experiences that were unique to special education teachers and those distinctive of general education teachers. This analysis was conducted to determine the needs specific to general and special education teachers and how these needs influence their perceptions of co-teaching and their experiences in the professional development. Coded excerpts were then selected to highlight needs and perceptions that were characteristic of general and special education teachers.

Survey responses were then analyzed to draw comparisons between the participants and the co-teaching population at the school. Descriptive statistics of mean, median, mode, and standard deviation were generated for the responses to likert-scale survey questions (Creswell,

2009). These statistics were then utilized to describe a general picture of the perceptions of all co-teachers at the school. Comparisons were then made between the responses of the professional development participants and the responses of the population of co-teacher respondents at the school. Responses to the open-ended survey questions were uploaded into Dedoose and coded using the coding scheme for the pre-professional development interviews. These responses were utilized to draw comparisons between the professional development participants and the co-teaching population at the school. The survey results were utilized to determine the generalizability of the perceptions and needs of the professional development participants and the co-teaching population at the school.

Trustworthiness

To ensure the reliability of my findings I conducted my research over a four-month period of time, triangulated my data, and utilized rich, thick descriptions when reporting my findings. This study took place between November 2014 and February 2015 and included 10 hours of professional development and three separate individual interviews with each participant. To ensure the reliability of the findings participants were asked clarifying questions when needed during the interview process. Transcripts were checked to ensure that mistakes were not made during transcription (Creswell, 2009). Data was triangulated by examining the evidence that was collected utilizing surveys, interviews, observations, and a researcher journal as data sources (Creswell, 2009). In addition, general and special education teachers in different content areas with varying amounts of co-teaching experience were utilized in the study sample to build justification for themes developed through convergence of differing data sources (Creswell, 2009). Data was constantly compared to codes during analysis to ensure that a drift in the definition in codes does not occur (Creswell, 2009). To ensure validity of qualitative findings

rich, thick descriptions were utilized to convey the findings of the study (Creswell, 2009).

Critical self-reflection was ongoing regarding my assumptions, biases, and relationship to the study that may affect the investigation (Merriam, 2009). Discrepant information that ran counter to the themes was communicated in the findings section of the study (Creswell, 2009).

Chapter 4: Description of the Findings

In this study, I began with the hypothesis that teamwork is an essential component of effective co-teaching relationships. When co-teachers work as a team, they have the ability to collaborate to provide innovative and engaging instruction to meet the needs of diverse learners. This assumption was based on my seven years of experience as a high school special education co-teacher. My experiences also led me to believe that, like any relationship, if you do not feel that your needs are met in your co-teaching relationship you do not feel happy or self-actualized. Maslow’s Hierarchy of Needs provided a lens through which to draw conclusions about the needs of co-teachers and the level to which their needs are met by both the school structure and their co-teacher (Maslow, 1943). In addition, it provided a lens to analyze how the team-building professional development impacted participants’ level of need fulfillment in their co-teaching relationship.

I have divided these findings into three sections. In the first section I present the findings on participants’ initial perceptions of co-teaching and the needs they feel must be met for co-teaching to be successful. The data from the Co-teaching Information and Satisfaction survey are included in this section and utilized to compare the perceptions of the participants and those representative of the co-teaching population. I then introduce you to the co-teaching pairs that participated in the professional development and provide a description of their relationship and level of satisfaction prior to the start of the professional development. In the next section, I present the findings on participants’ experiences in the professional development and the perceived impact it had on co-teaching relationships. Finally, I present findings about participants’ future professional development needs after completing a team-building professional development.

Initial Perceptions of Co-teaching

Prior to the start of the professional development individual interviews were conducted with all participants. Interview responses highlighted a number of challenges that participants experience at the school, and participants identified a number of needs they feel must be met for co-teaching to be successful. Despite the obstacles and challenges co-teachers described encountering, participants all perceive co-teaching as beneficial for both students and teachers. In the following section responses from the co-teaching population to the Co-teaching Information and Satisfaction Survey will be integrated with participants’ interview responses to demonstrate the similarities between the perceptions of the participants and those representative of the co-teaching population at the school.

Starting Off On the Right Foot

During individual, pre-professional development interviews all professional development (PD) group members reported that they find the practice of co-teaching beneficial for students and for themselves as professionals. The participants’ positive attitude towards co-teaching made the professional development focus relevant to their professional practice. PD group members’ identification of co-teaching benefits conveyed an inherent appreciation for the teamwork that can occur in co-teaching relationships. This positive mindset allowed the professional development to “start off on the right foot” because all participants were open to the concept of co-teaching.

Survey respondents also reported positive perceptions of co-teaching. Figure 1 illustrates that the majority of both general education and special education respondents have had positive experiences in their past co-teaching relationships. PD group members’ perceptions of past co-teaching relationships varied slightly from those of the survey respondents. In pre-professional

development interviews, participants described both positive and negative experiences of co-teaching. During the pre-professional development interviews, 14 of the 17 participants described having at least one negative co-teaching experience at the school. The majority of these participants utilized these descriptions to draw comparisons between their negative co-teaching experience and what they perceived to be a more positive relationship with their current co-teacher. Survey responses showed that there was variation in the perceptions of current co-teaching relationships where general education teachers had more positive perceptions than their special education counterparts as depicted in Figure 2 and 3.

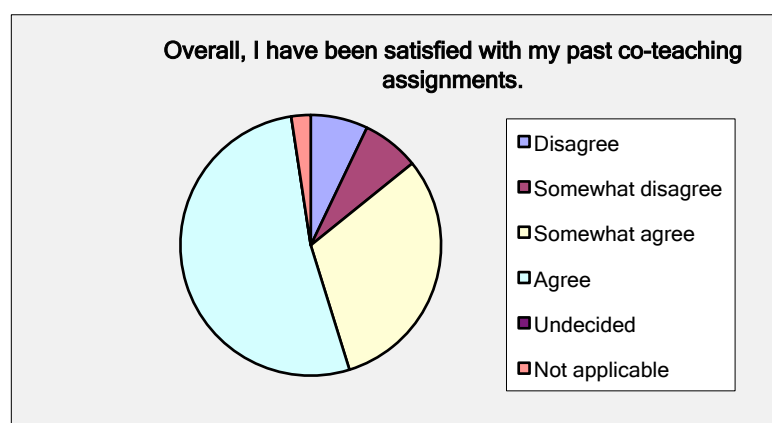


Figure 1. Satisfaction with past co-teachers.

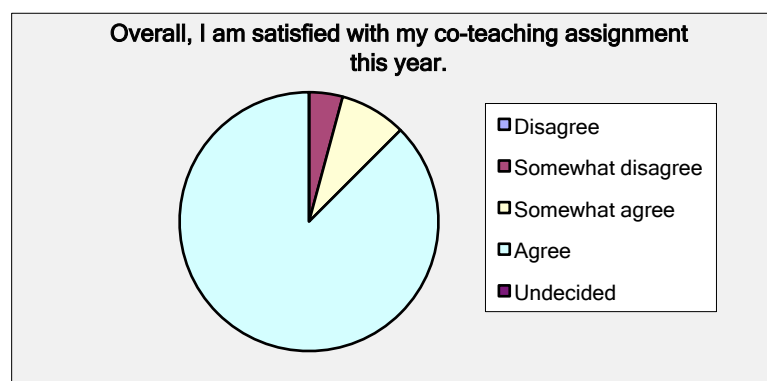


Figure 2. General education teacher satisfaction with current co-teacher.

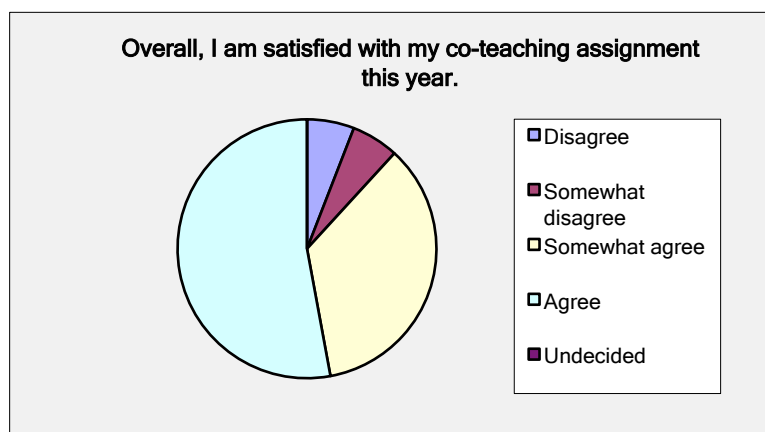


Figure 3. Special education teacher satisfaction with current co-teacher.

PD group members expressed a “two heads are better than one” mentality regarding co-teaching because they believe that when they are scheduled with a compatible partner, there is an improvement in their professional practice, which creates a positive learning environment for students. The majority of both general education and special education respondents also reported that they find co-teaching to be beneficial to them professionally as depicted in Figure 4. Only one teacher responded that they disagree that co-teaching is beneficial professionally and this respondent was a special education teacher.

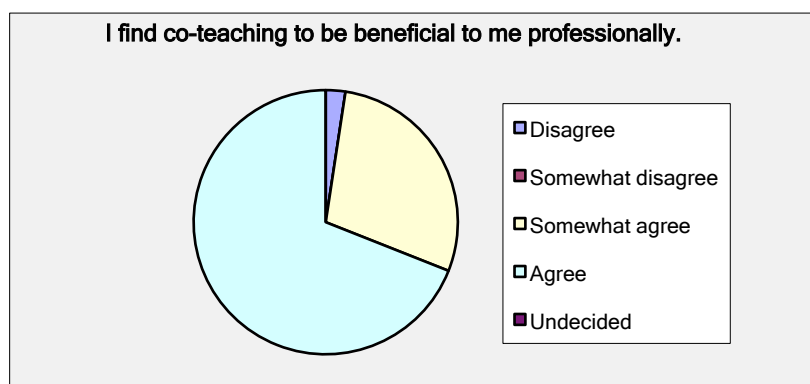


Figure 4. Professional benefits of co-teaching.

PD group members feel that teaching individually can be isolating, and co-teaching provides opportunities for consistent feedback and reflection. Mitch, who has been co-teaching in the district for 7 years, describes this as working in a “bubble.”

I think it's always good to have a sounding board when you're doing something. Sometimes when you're teaching on your own with the kids in the classroom you're kind of like in a bubble. If you have someone there in the classroom that sees what you're doing and sees how the kids are responding to it as you're going through it, because sometimes you're going through it and you're in your own head, I think that's crucial.

PD group members all expressed their appreciation for the opportunity to learn from their peers in a co-teaching situation. Beth, who has been co-teaching in the district for 2 years, discussed her love of learning new things from her partners, a sentiment that was expressed by many participants.

I love to learn. I love to listen to what my co-teachers say and how they teach, what they teach, the language that they use, the way they interact with their students. I'm always trying to look for things to pick up and that I can use or try while I'm teaching my resource class. I want to keep building my toolbox. That's what I'm looking for.

Participants feel that co-teaching provides students with two teachers with two different perspectives and skill sets, which they believe improves their ability to meet their students' needs. Many general education teachers described benefiting from their co-teacher's abilities to make connections with students. Jamie, who has been co-teaching in the district for 3 years, described her admiration for her co-teacher Yvonne's rapport with their students.

Sometimes I catch myself just watching her, like observing how she is with students in the classroom. Because I think that some of the areas where I need to grow as a teacher she's very strong in. It's really interesting for me to watch her and learn from her, learn the way that she interacts with students and learn the way that she builds rapport with students a little bit differently than I do. I think that's always beneficial when you have someone else's perspective on what's going on in the classroom.

PD group members also view co-teaching as logistically beneficial. Participants believe that dividing up tasks like grading, updating the class website, and communicating with parents provides co-teachers with more time to devote to lesson planning and assessing students.

Yvonne, who has been co-teaching in the district for over 10 years, expressed that dividing up

the grading of assessments makes her and Jamie better able to re-teach material to students when necessary.

It helps because then we have more time to focus on the tests we’re grading to see oh, maybe this wasn’t presented right and can we go back and look at it, write down, jot down things and then when we both get together we can say, well this group had the same number wrong that you had, and we can see why they didn’t do well on that certain aspect.

Participants expressed that good communication, respect, and trust can lead to effective collaboration and teamwork in co-teaching relationships. PD group members believe that when co-teachers are compatible, they have the ability to capitalize on each other’s strengths and increase their ability to meet all students’ needs. PD participants also believe that positive collaboration between co-teachers can create an environment where the whole class feels like a team. As Frank said, who has been co-teaching in the district for 7 years, “It just lends itself to building an atmosphere where everybody feels like we’re in it together.”

Prior to the start of the professional development, many of the participants believed they had elements of effective teamwork in their relationship with their co-teaching partner and believed they made a good co-teaching team. The majority of special education and general education survey respondents reported similar perceptions, and believe they collaborate and communicate effectively with their partner as depicted in Figure 5 and 6. Only one respondent reported that they do not collaborate well with their co-teacher and only one respondent reported they do not communicate well with their co-teacher. Both of these respondents were special education teachers. The majority of both general and special education respondents believed they work well as a team with their co-teaching partner as shown in Figure 7. Only one respondent reported that they do not feel they make a good team with their co-teacher and this respondent was also a special education teacher.

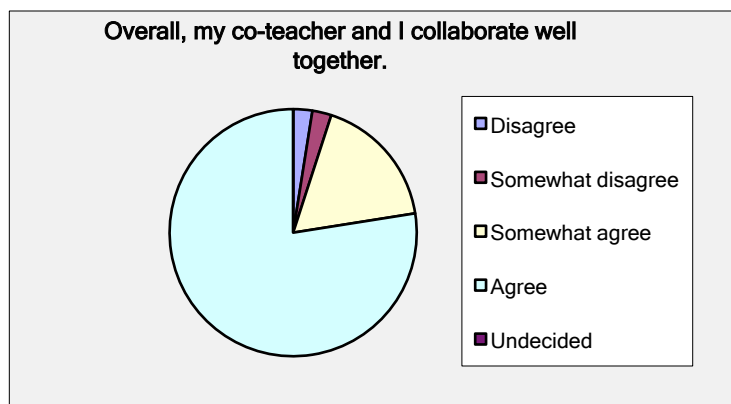


Figure 5. Co-teacher collaboration.

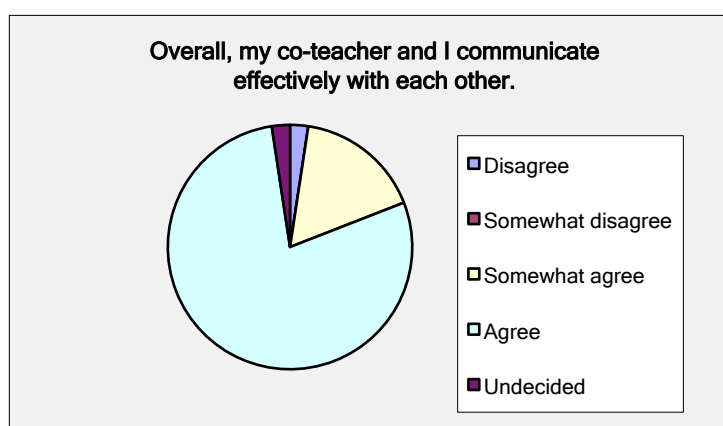


Figure 6. Co-teacher communication.

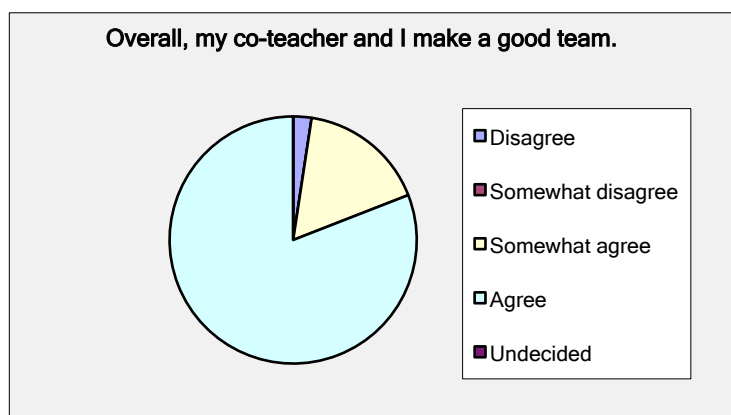


Figure 7. Co-teacher teamwork.

Overall, both participants and survey respondents have positive perceptions of the practice of co-teaching and their co-teaching relationships. Some special education teachers

expressed less satisfaction with their co-teaching relationship and reported that they feel elements of effective teamwork are missing from their co-teaching dynamic. General education respondents did not report similar perspectives and responded positively to questions regarding co-teaching and their teamwork with their co-teacher.

The co-teaching benefits cited by the PD participants can be utilized to make decisions regarding the professional development programming provided to co-teachers at the school. Participants discussed benefiting from collaborating and receiving feedback from their co-teacher. Professional development that provides teachers with opportunities to learn from their peers through collaboration in lesson studies, analysis of student work, and classroom observations could be valuable to co-teachers. The responses of PD group members and survey respondents demonstrates their positive perceptions of the team-oriented nature of co-teaching conditions which makes team-building a relevant professional development program for co-teachers at the school.

The Wish List: What Co-teachers Say They Need

Despite their positive perceptions of co-teaching, participants expressed a number of frustrations in their individual, pre-professional development interviews regarding the implementation of co-teaching at the school. Overall, participants believe they work well with their co-teacher but many feel like there is room for improvement in how they implement co-teaching. Participants expressed dissatisfaction with how administrators approach co-teaching and highlighted a number of changes they believe administrators need to make for co-teaching to be implemented more successfully at the school. PD group members placed the majority of the onus on administrators for the obstacles they face co-teaching. Participants would like

administrators to make changes in how co-teachers are scheduled and supported. In addition, they would like administrators to create a school culture that embraces co-teaching.

Determining pairs. The group communicated feelings of frustration that there is a lack of appreciation on the part of the administration for the complexity of co-teaching dynamics. They feel this is evident in the administration’s haphazard pairing of co-teaching partnerships with little to no input from teachers. Participants are craving acknowledgement from administrators that co-teaching is an art, a style of instruction that requires a special skill set. PD group members believe that not everyone is cut out to be a co-teacher and would like administrators to appreciate the skills of those teachers that are successful co-teachers. Frank expressed the sentiments shared by many participants.

It needs to start at the top, and I think administrators need to realize that just like I may not be able to have all my teachers teach an AP class or not all of my teachers are cut out to teach Standard, I think they need to realize that not all of my teachers are co-teachers.

PD group members feel that the way co-teachers are scheduled is disrespectful to them as professionals. The group was perplexed as to how pairs are even determined because teachers are not involved in deciding if they will co-teach and are not given the opportunity to choose who they will co-teach with if they are scheduled for in-class support. Participants get the impression that little consideration on the part of administrators goes into creating co-teaching partnerships. Renee, who has been co-teaching in the district for 12 years, expressed frustration that was reflective of comments made by other participants.

I sometimes wonder, what really...how much effort and what thought goes into the partners? As a gen ed teacher, I’ve never been asked if I wanted to do it or not. I mean obviously I’ve done it in the 12 years I’ve been teaching but I’ve never been questioned, “Do you want to remain in an in-class support setting? Would you like a different partner?” That’s never been presented to me.

PD group members are disheartened by the laissez-faire attitudes of administrators in the area of creating co-teaching partnerships. When incompatible teachers are paired it can result in a negative experience, which impacts teachers' enthusiasm for co-teaching. Jay, who has been co-teaching in the district over 10 years, expressed his negative perceptions of being paired with an incompatible partner.

If it doesn't work, it just makes the whole year a labor. You have to want to be together and you have to have that connection to make it work. I was in a situation where it just didn't work and the year felt like an eternity. I don't think two people should be arbitrarily joined. I think there should be communication. Find likes, dislikes, find similar teaching styles, methods of grading and delivering instruction. Can they share?

Shelly, who has co-taught for 10 years, expressed frustration that administrators do not get involved and change teachers' schedules when partnerships are not working out.

Denise: Do you think administrators don't get involved because they are unaware that a pair is struggling?

Shelly: No, I think they're aware, but it's just easier to schedule things the way they want to schedule them and not really consider what's working and what's not.

Paul, who has 5 years of co-teaching experience in the district, believes that co-teachers are paired together based solely on certification area and open periods in their schedule.

I don't think there's a lot of choosing teachers that they think will work good together. It's just, "Oh, this person has this period off and they can teach this. This other person has it off and they can teach this." They throw them in like that. I hate to say it but it seems like trial and error for a lot of the part.

The group would like to see administrators take the creation of co-teaching partnerships more seriously. Participants feel that administrators should take more time to get to know them before scheduling pairs and conduct informal surveys, interviews, or questionnaires to ascertain information on teachers' educational philosophies, teaching styles, and personality types. They believe this data should be used as a tool for creating compatible partnerships. Frank believes

that informal interviews should be conducted to inform decisions regarding co-teaching partnerships.

I think more needs to happen on the frontend. You need to really look at people and determine, number one, are they able to become effective co-teachers? Then, I think you really need to take a look at their educational philosophies. I think you need to talk to them before you pair them. I think you...just like you're doing an interview here, I think at the end of the year when you're looking to make a co-teaching pair, there's no reason the administrator shouldn't sit down with the teacher and say, "Hey, Frank. We need to switch you up. We're looking to find the right co-teacher for you, so what is your educational philosophy? What is your philosophy of discipline? What is it that you're looking for in a co-teacher?" Then take a look at what you get back and see, "Okay, based on what they're looking for what would be the best pairing?"

Participants believe that administrators need to pair co-teachers with similar philosophies so that there is a shared vision in the dynamic. Participants are frustrated that they have to rely on the "luck of the draw" when they are scheduled to co-teach. Mitch expressed that lacking a shared vision results in a negative experience for both teachers and students.

I think that both people on some level have to have the same educational philosophy, you have to compromise and agree on how to run things in the classroom. If you can't come to a consensus about how things need to go on a day-by-day basis, I think you're setting yourself up for failure. I think it's just going to be horrendous for everyone involved, the two people who need to work together and actually run the classroom, and for the kids who have to sit through and experience whatever disaster may come from not being on the same page and not agreeing on how to run things.

Participants use commonalities in how they conduct themselves as professionals as evidence to support or refute that they are "on the same page" as their co-teacher. PD group members cited things like attendance and punctuality, preparation, organization, ambition, and adherence to timelines and due dates as factors they want to have in common with their co-teacher. The group also believes it is important for both teachers to be flexible. Participants defined flexibility as a willingness to be a team player and give up some control so that compromises can be reached. They described the importance of being respectful to each other and sharing the same interpersonal skills such as politeness. In addition, participants want to

share some sort of a common ground with their co-teacher, such as similar hobbies or interests, so they can develop a friendly relationship at school.

Only three participants referenced gender or age as a factor in successful partnerships. Diana, who has been co-teaching for 1 year, and Maya, who has 7 years of co-teaching experience, feel that age influences their co-teaching dynamics because they feel uncomfortable communicating feedback or suggestions for improvement to a co-teacher that is older. Jay believes that age and gender play an important role in co-teaching relationships.

There’s got to be some common ground. Two gals working together, you can talk about a movie, a show, a shop, dinner, going out somewhere. Two guys can talk about sports. What does someone with 30 years difference and a different sex talk about? You can’t come in for that 40 minutes, “OK let’s give the lesson plan,” and go your own way. You can’t. You have to be a part, you have to share. There has to be some common ground. There has to be some sort of connection.

Not being “on the same page” was found to be a source of tension for co-teaching partners. When participants lack a shared vision they feel it disrupts the learning environment because it results in a “good cop, bad cop” dynamic. They believe students see that their teachers are not a team and “play one teacher against another” which has a negative impact on the classroom culture. Shelly described the importance she places on both co-teachers adhering to classroom rules.

Well, there have definitely been challenges when there’s a difference in what our expectations are for the kids. For example, I usually, I really don’t want them to leave the class during class time. They’re supposed to use the bathroom, for example, during the break or during independent work time. Sometimes, she is just a real softy, will let them go whenever, so the kids know not to come to me, to go to her. She’ll let them go because she can’t say no or whatever.

PD group members want to be paired with a compatible partner and emphasized the importance of keeping happy pairs together. Participants expressed frustration that their

effective partnerships can be broken up without any notice. Renee believes that administrators should keep compatible partners together as long as the students are successful.

I feel like if you as an administrator know a pair fits, why would you break them up? Don't separate them if you know they work well together, they have a positive reputation with their students, keep running with it and you know the kids are successful in the class which is the most important thing.

PD group members are craving stability in their co-teaching relationships and are frustrated by the scheduling changes they experience each year. Participants feel discouraged by their lack of control when determining their co-teacher and want more involvement so they can avoid being paired with an incompatible co-teacher. Participants also feel uneasy because good partnerships can be broken up with no explanation from administrators and PD group members want administrators to allow good relationships to keep developing. Survey respondents reported similar feelings and believe that being scheduled with a compatible partner is an essential element of co-teaching success. In an open-ended survey question asking respondents what their perceived co-teaching obstacles are, 66% of responders cited being scheduled with an incompatible partner as a major obstacle.

Common planning time. There are no designated common planning periods in co-teachers' schedules, which were identified by group members as a major obstacle to effective collaboration. PD group members expressed that common planning time is needed to communicate roles and responsibilities, reflect on lesson effectiveness, and provide the special education teacher with the opportunity to increase their involvement in the delivery of instruction. Survey respondents also expressed the importance of common planning time. In an open-ended question asking what supports they feel co-teachers need to be successful, 63% of responders reported that scheduled common planning time is essential. One respondent stated that instead of a duty period co-teachers should be scheduled for a “collaboration period.” When asked what

obstacles they experience co-teaching, 66% of responders cited no common planning time as a major obstacle to co-teaching success. When discussing the importance of common planning time Mitch had an “ah ha” moment when reflecting on a previous co-teaching relationship that he felt was ineffective and realized that having no time to plan together impeded the success of the relationship.

I'll tell you what; I think maybe some of the problem was the fact that we didn't have co-planning time. He was coming in one period a day and now I kind of reflected on talking about some of the things we did. That could have been one of the biggest problems is he's walking into the classroom and I've already got my thing going.

Participants feel they get mixed messages from their administrators. They are told they need to co-teach but they are not provided with a schedule that is conducive to collaboration between co-teachers. Special education teachers are often scheduled to work with multiple general education co-teachers each year which, when combined with no common planning time, results in inconsistent awareness of the day's lesson and activities. Some co-teachers do not even see each other until their class starts due to uncoordinated schedules, which further complicates the issue. Jamie, a general education teacher, described how she communicates with her co-teacher Yvonne under these conditions.

I think the biggest thing is time. Yvonne and I don't have any time to plan together. Like I said before, we don't see each other until we're starting class. “Oh hey, it's 7th period, here we are to teach class.” There is no time in our schedule for the two of us to even have just a few minutes to talk to each other about what our plans are or to talk about a student or anything. She works with other teachers throughout the day; she's in the 1000 building for tutorial period. I don't see her except for in the classroom. I think that's the biggest obstacle, is that there is not time for her and I to plan together, to collaborate together other than the little impromptu things that come up when we're able to talk during the class or right after or before class.

Jamie's description of communicating without common planning time was similar to the experiences of many of the participants. This method of communication limits the level of involvement the special education co-teacher can have in the lesson because most of time they

are working “on the fly.” Inconsistent awareness of the lesson objectives can place special education co-teachers in a supporting role, making the general education teacher the lead teacher and the more dominant partner in the dynamic.

Guidance and feedback. PD group members expressed feeling that a general consensus amongst administrators in how co-teaching should be implemented is lacking. Special education teachers report to their special education supervisor and general education teachers report to their content area supervisor but there are no administrators who focus on teachers as co-teachers. Teachers are viewed as individuals when evaluated by their supervisors however, they can be judged on their effectiveness as a co-teacher when observed in a co-taught classroom. Without a shared vision for how co-teaching should be implemented, teachers may be evaluated differently based on their evaluating administrator’s perspective on “good teaching.” Felicia, who has been co-teaching for a year in the district, described the challenges she experiences working with administrators who do not have a common vision for co-teaching.

I think that’s the hardest part because you have one person who is responsible to a content supervisor and the other person responsible to the special ed supervisor so it’s hard to strike that balance still because sometimes you want to do things a certain way because you feel it would be better for the class, but, at the same time you’re contending with the fact that the content area department head has their plan for what students are supposed to be doing, and how teachers are supposed to be delivering instruction. I find that doesn’t always match up, and it makes it a little difficult to really put both people on the same playing field.

Many PD group members expressed that they are craving more administrative guidance because they want to implement co-teaching successfully but are not sure what they should be doing in co-teaching conditions. Diana described feeling overwhelmed by her confusion in how to implement a co-teaching model.

I walked in and no one told us what exactly was expected for co-teaching. I just had to ask other teachers to try and figure out what was expected because I didn’t know. No one told us anything, so we’re both in the dark about that.

Other members would like to be acknowledged for having a successful co-teaching dynamic.

Renee believes that she and her co-teacher Harriet implement co-teaching exceptionally well and is frustrated they do not receive accolades from administrators.

I just find it can be very frustrating that we don't get appreciated for the efforts because it is an extra effort to work with another adult smoothly. I just wish they would acknowledge the success of it, how well we're doing together. It's a thankless job.

Some survey respondents also reported a need for more administrative guidance. When asked to identify the supports they need for co-teaching success most responded that they need common planning time but 25% of responders expressed the desire for more feedback from administrators. Co-teachers believe that the practice of co-teaching benefits both teachers and students but many co-teachers would like administrative expectations to be communicated more clearly. Teachers expressed the desire to be effective co-teachers but some are unclear as to what good co-teaching entails. Other participants who believe they are good co-teachers would like more positive feedback from their administrators in this area and feel that the disregard for their effective co-teaching negatively impacts the co-teaching climate at the school because it is de-motivating.

Needs specific to special education co-teachers. Special education co-teachers have additional items on their “wish list.” Special education teachers feel that inconsistencies in the scheduling of their co-teaching partnerships have a negative impact on them professionally. Special education teachers need administrators to keep them scheduled in consistent co-teaching placements so they can develop a sense of security in the relationship and forge an equitable dynamic. Beth expressed her frustration having to start over again with new co-teachers.

It's the worst thing for us because then you're starting again. Then you're walking on egg shells, you're keeping your mouth shut, observing, figuring out where you can possibly contribute. By then it's December, first semester over. If they could find out if

it’s truly working, honestly, and if it’s working, keep us together. If it’s not working then change it up.

When special education co-teachers have a partnership that is “working” they want to be consistently placed with that co-teacher. Special education group members need a co-teacher who is open to the concept of co-teaching and understands the needs of special education students. Special education participants need to be “heard” by their co-teacher and have a voice both in the planning process and the delivery of instruction. Harriet, who has been co-teaching over 10 years, described a situation she encountered with a previous co-teacher where she felt this need was lacking.

He just thought the kids should be able to learn. They should read, they should listen to me, and they learn. He just thought they listen in class, they go home and read the book and they take a test. I was like “No, no, no, no. We need to give kids something to interact with.” He wanted to give them 3 minutes to take a quiz, a timed quiz. I was like, “No, we have kids with test anxiety. They have extra time.” The teacher didn’t understand that and just wanted to teach everybody in the same way.

Pam, who has over 10 years of co-teaching experience, expressed a similar sentiment and described her ideal co-teacher as someone who is accepting of diversity

First of all, my ideal co-teacher understands special education. Whether they had a couple of special ed classes, whether they had something in their student teaching that allowed them to experience special ed students in the classroom. Somebody who understands what a learning disability is or what an emotional disability is. Somebody who is empathetic to the cause. Someone who is willing to work with me not just put up with me. Someone who understands special ed is 99% gray area and not this black and white thing, that some people are just in their boxes and that’s it. Someone who understands. Who is flexible. Someone’s who’s caring and has a sense of humor. There’s no way you can’t. Someone who’s accepting of anyone who’s different.

Special education participants also expressed feeling that the school culture places expectations on them to be solely responsible for making their co-teaching relationships “work.” Some special education teachers feel that the onus is put on them to co-teach effectively but the same expectation is not put on general education teachers. These participants feel that general

education teachers can keep their special education co-teacher in a supporting role with no consequence from their content area supervisor but special education teachers are expected to be an equal partner in the class. Beth described feeling like the responsibility to co-teach effectively is placed solely on her shoulders.

I think they teach us special ed teachers the co-teaching model is what you must follow. The principal says you have got to be co-teaching when I walk in there. Supervisors say it, everyone says it, but not everybody knows what it means.

They have to decide what they want. Do you want in-class support? I can happily do that. I'll be bored off my gourd, but if that's what you want me to do fine. Then don't come in on an observation and bust my chops that I'm performing as an in-class support teacher and you expected to walk in and observe one of the top co-teaching methodologies but my co-teacher has never heard of any of that stuff.

Without the support of all administrators it makes it very difficult for special education co-teachers to have an equitable role in their co-teaching relationship. The current school culture places the general education teachers in the more dominant role where they have all the power in deciding how involved their special education co-teacher can be in the planning and delivery of instruction. Some general education co-teachers want an equitable, collaborative dynamic however, others want the special education co-teacher to have an inferior role, and function more as a classroom aide rather than a teacher. Special education co-teachers would like all administrators to provide the support needed to create an environment where both general and special education teachers are treated as equals.

Professional development and training. Professional development can be utilized to support faculty and administrators in embracing a culture of co-teaching but participants have been disappointed with the past professional development programming. Participants expressed a need for professional development that provides opportunities for relationship building in

addition to specific co-teaching training to support their ability to co-teach effectively. Beth attributes co-teaching challenges to a lack of effective professional development.

The deficits are not the result of my co-teachers. They’re a result of all of us not being on the same page and all of us not being aware of and knowledgeable and trained in co-teaching.

Jamie expressed that a lack of professional development for co-teachers is unsupportive on the part of administrators and decreases the chance of the relationship being successful because co-teachers are forced to learn by trial and error.

I’ve never had any PD on co-teaching. It was just one of those things that, “Here, go figure it out. Here, you’re in the classroom with this person this year, go figure out how to teach together.” It’s difficult; you figure it out as you go. Sometimes it works, sometimes it doesn’t.

The group believes that the success of co-teaching hinges on establishing a good rapport with your co-teacher before getting into the classroom in September. PD group members feel that administrators are not sensitive to this fact and they would like time designated for co-teaching pairs, especially new partnerships, to work on relationship building before getting into the classroom. Paul believes that new pairs need time to develop their ability to work as a team before they get into the classroom.

Developing the teamwork and a relationship before getting into the classroom is important. The first day I taught with [my other co-teacher] I had met her once or twice over a short period of time, and then we basically had to, everything, our whole teamwork and knowledge of each other developed in the classroom, and having that knowledge of each other and working on teamwork before you get in there I think would help a lot.

Harriet believes that time to build rapport prior to getting in the classroom is a key factor in special education teachers being viewed as an equal by their general education co-teacher.

I think by having situations where you can build rapport outside of the classroom is important. Get to know me. Spend time together planning or just talking. Getting to know that person, so it’s hard for them to see me as an aide. It’s easier to see me as an equal.

In addition to time to build relationships, co-teachers want practical professional development that can provide them with opportunities to develop skills in the art of co-teaching. Some participants expressed the desire to capitalize instructionally on the benefit of having two teachers in the room but are frustrated because logistically they do not know where to begin. Pam summarized these feelings in her discussion of professional development.

Maybe if we had more information on certain techniques, if people could help us with the logistics of making that work, we may know the certain styles of co-teaching and different models of things and groups and whatever, but how can we really make this happen without everybody going crazy and losing too much time? Maybe we need help with more of the logistic part. I think that we’ve gotten stuck in a rut. It may work it may not work, but we just keep doing the same things over and over again. Maybe if we had more information to help us try something different.

The consensus of the group regarding professional development for co-teachers is that it has been lacking. Participants would like to be provided with time on district in-service days to build a relationship with their co-teacher, preferably before they start teaching in September. PD group members would also like more training in how to actually implement co-teaching effectively. Participants have an appreciation for co-teaching but when it comes to actually implementing this model of instruction many feel they fall short. Appropriate professional development can be utilized to help co-teachers build a rapport and support their ability to utilize various co-teaching models to provide their students with innovative instruction.

The items on participants’ “wish lists” require administrators to make drastic changes in their leadership style but administrative changes are beyond teachers’ control. What co-teachers can control is their ability to work together. Professional development can provide co-teachers with the opportunity to develop their ability to collaborate as a team and become empowered in their co-teaching relationships. Team-building can help teachers rely less on administrative changes and rely more on their partner to feel self-actualized as a co-teacher.

The Starting Line: Nature of the Relationships before Team-Building

In individual, pre-professional development interviews, participants were asked to describe their relationship with their co-teaching partner. Participants’ descriptions of their dynamics ranged from positive contentment to apathetic dissatisfaction. The level to which their needs were met in their relationship affected the range in participants’ perceptions of satisfaction. Some participants expressed feeling valued and respected in their co-teaching dynamic and reported feeling happy in their relationship. Other participants described situations where their needs were only partially met and therefore, viewed their dynamic as a work in progress. While others described being in a dynamic where their partner met few of their needs, which resulted in feelings of frustration or apathy. Participants’ interview responses were utilized to create a description of the nature of each pair’s relationship prior to participating in team-building professional development. Table 6 includes profiles of each participant.

Beth, Maya, and Kelly

Beth is co-teaching with Kelly and Maya for the first time. Beth is a special education teacher and Maya and Kelly are both general education teachers in the same science content area. Kelly has been teaching in the district for 15 years and was Maya’s mentor her first year teaching; they are also close personal friends. In pre-professional development interviews Maya and Kelly reported that they lesson plan together without including Beth in the planning process and instead, expected her to read the plans online before coming to class. Beth read Maya and Kelly’s lesson plans ahead of time but often felt like she was walking into the class with an ambiguous understanding of the day’s objective because she was not involved in the planning process.

Maya and Kelly saw themselves as the leader in their co-teaching relationship with Beth and did not perceive Beth as confident with the content, however; Beth did not describe feeling

uncomfortable with the content in her interview. Beth was responsible for “routine” and “housekeeping” tasks that were predominantly clerical in nature. Beth believed the students viewed her as a “helper” which resulted in her feeling inferior to Maya and Kelly. Beth was dissatisfied with her co-teaching dynamic and stated, “I want to be more involved, my gosh, so much more.” Beth felt Maya was more open than Kelly was to creating a more collaborative dynamic. Both Maya and Beth expressed an interest in participating in the professional development because they wanted to increase their level of collaboration. Kelly decided to participate in the professional development because Maya asked her to sign-up. Maya was adamant that Kelly needed to participate because they lesson plan together and any changes that occurred in how Maya and Beth implement instruction would also need to be approved by Kelly. Beth described in her interview a situation where she felt that Maya was accepting of her involvement in the delivery of instruction and Kelly was not.

[Maya] doesn't like [biochemistry] and I love chemistry. I like the methods of it. I was contributing, she felt it very effectively, so she complimented me to [Kelly] so in the afternoon [Kelly] was like, "Go ahead, take the notes. Just do the notes." I wasn't prepared because I have never seen the notes and they just don't match up with the worksheet [in Maya's class]. I lectured off the Power Point, but then my co-teacher there, she interjected because she has things that she wants to ... she wants to present the information in a particular way, which I don't know what the ways are yet.

Kelly did not allow Beth to continue doing the Power Point notes the next day which made her feel embarrassed in front of the students. Beth described having a pleasant rapport with her co-teachers but discussed feeling unfulfilled and would like her co-teachers to trust her enough to give up some control of the planning and delivery of instruction. Beth did not feel like she was reaching her full co-teaching potential because she was functioning more as a classroom aide as opposed to a teacher.

Unlike Beth, Maya and Kelly both expressed satisfaction with their dynamic. Maya and Kelly expressed an appreciation for Beth’s ability to assist with clerical tasks in addition to the positive influence her friendly, funny personality has on the class environment. Kelly noted that Beth’s personable nature is something she lacks.

I think she’s more personable sometimes. For example, I’m more business. I get my stuff done. There’s a lesson that has to be done. There are the objectives and my goal is to complete those objectives, without having any sidetracking. She sometimes adds a little more of her personal life to it, so that makes it more interesting for the kids to connect to. That’s something I don’t typically do.

Maya was working on meeting her need for self-actualization as a co-teacher by participating in the professional development because she expressed a desire to collaborate more with Beth.

Beth also was working on fulfilling this need through participation in the professional development because she expressed a desire to be more involved in the planning and delivery of instruction. Kelly believed she already had all of her needs met in the dynamic because, overall, she was looking for a co-teacher to help her implement *her* vision for the classroom.

Harriet and Renee

Harriet and Renee have been co-teaching together for many years and are both very happy with their relationship. Renee is a general education science teacher and Harriet is a special education teacher. Prior to the professional development, Harriet and Renee perceived themselves as a highly successful co-teaching pair and are also personal friends.

In their pre-professional development interviews, Renee and Harriet reported that they both deliver instruction and felt they were at the point where they could “finish each other’s sentences.” Renee and Harriet both expressed that through their years working together their relationship as evolved into their ideal dynamic and they create a positive learning environment for students. Renee expressed her trust in Harriet’s content knowledge and her ability to deliver

instruction, grade, and create assessments. Harriet reported that she trusts that Renee values her input and is understanding of the needs of special education students. While Renee described them as total equals Harriet perceived Renee as slightly more dominant because inevitably final decision were made by Renee. However, she did feel that Renee values her opinion.

I’m going to say there is a slight advantage in her direction where I feel less equal. Because in the end I can suggest things, like today, “Why don’t we do whiteboards? Let’s get the whiteboards out. The kids are drawing molecules. It would be fun to do it as a warm-up.” Renee’s like, “I hate the whiteboards. I don’t want to take them out.” In the end she really does have the final decision. I mentioned the whiteboards a couple of times and she goes, “If you want to do it go ahead.” I’m happy with that answer.

Renee described her dynamic with Harriet as an ideal co-teaching relationship because they are “on the same” page professionally and personally. In her interview, Renee drew comparisons between her dynamic with Harriet and a past co-teaching partner to justify her rationale for viewing their relationship as exemplary.

Everybody should be open to constructive criticism in this job because none of us are perfect and we all have so much room to grow, even if you’re been doing it for 20 years because everything changes from year to year. She was just very closed minded and gave excuses like “You’re tests are too long for grading.” When I was grading one class and she was grading the other, I could get it done in 40 minutes and she said it took her 4 hours. Me personally, there’s a different issue there, not my tests. Definitely somebody who is not prepared, not ambitious, and just doesn’t want to reach the kids on a casual level. She never took the time to get to know their hobbies.

At the start of the professional development, Harriet and Renee were both content in their relationship because their needs were met and they felt they had realized their full potential as co-teachers.

Paul and Jay

Paul and Jay are working together for the first time but have been personal friends for many years. Paul is a general education science teacher and Jay is a special education teacher. Paul and Jay spend time together outside of school and enjoy similar hobbies.

Despite Jay’s lack of content area knowledge they still reported that they view each other as equals in their dynamic just with different roles in the classroom. Paul and Jay expressed that they believe their strengths complement each other, which contributed to their ability to co-teach effectively. Paul and Jay both reported that they appreciate their ability to joke around with each other and create a comfortable learning environment for students. They perceived themselves as flexible, lacking ego, and able to make compromises. Jay and Paul also shared an aversion to working with “control freaks” and appreciated that they are both “team players.” Jay and Paul are comfortable disagreeing because they feel they can communicate effectively to come to a compromise and trust each other to keep the lines of communication open and honest.

Jamie and Yvonne

Jamie and Yvonne have been co-teaching together for three years. Jamie is a general education science teacher and Yvonne is a special education teacher. Yvonne and Jamie have a friendly relationship but are not personal friends outside of school.

In her pre-professional development interview, Jaime reported that she was responsible for the planning and delivery of instruction and viewed herself as the “decision maker” but wanted to include Yvonne more in the planning process. This desire triggered her interest in participating in the professional development. Jamie thought she was too controlling but expressed her desire to change.

I think one of the biggest obstacles for me is letting go of control. I tend to go in with my lesson plan in mind and just go ahead and start teaching and sometimes quite honestly I forget to make time for Yvonne to contribute to the lesson more. I feel like I don’t stop and take enough of a backseat from time to time.

Yvonne saw herself and Jamie as equals in their dynamic just with different roles.

Yvonne saw Jamie’s role as the deliverer of instruction while her role was to support students during the presentation of information and described her role as more “behind the scenes.”

Yvonne felt her main responsibility was to help the students and to be flexible so she could handle issues when they arose.

If something comes up, I’m flexible. [General education teachers] seem to get a little more uptight, but then it might be because they are regular education teachers, and they have a whole different perspective than what us special education teachers have. We learn to be flexible due to the situations in our resource room classes.

Prior to the professional development, Jamie and Yvonne were content in their dynamic because they had a friendly rapport and a mutually respectful relationship. By participating in the professional development they were continuing to work on building a more collaborative relationship so they could reach their full potential as co-teachers.

Felicia and Diana

Diana is a general education English teacher and Felicia is a special education teacher. Felicia had been having a difficult experience in both of her co-teaching relationships and there had been tension between her and her partners. Felicia and her co-teachers had attended mediation meetings with departmental supervisors and it was recommended that they participate in the team-building professional development. Felicia and Diana agreed to participate but Felicia’s other co-teacher declined.

In her pre-professional development interview, Diana expressed that she felt as though she did significantly more work than Felicia in their co-teaching dynamic. Diana wanted Felicia to be more involved in the planning and delivery of instruction but did not feel that Felicia shared this sentiment. Diana was very timid and soft spoken, and appeared uncomfortable speaking candidly about her relationship with Felicia in her individual interview. Diana described a lesson where Felicia was more engaged and she utilized this example to describe the ideal dynamic she was hoping to achieve with Felicia.

I thought that was a really good day we had. My co-teacher brought in her personal experiences. She was talking about that. It really related nicely to the lesson. I was leading more of the content and then, later on, we were both conferencing with the kids. I just felt it was a good, even split that day.

Felicia reported being more content in her relationship with Diana but had a difficult time articulating specific descriptions of their dynamic. Felicia did note that she is not comfortable with the majority of the curriculum and expressed that she has a difficult time figuring out how to “fit herself into the lessons,” which results in feelings of discomfort.

Something like the Poetry Out Loud. That’s something I don’t really know. I bet it’s the first time I’m ever hearing that. I’ve never heard about it before, unaware of it. When she starts to talk about that, it’s a little bit uncomfortable because even though I’ve read the lesson, I don’t know exactly what I should be doing or saying. I really don’t know what the end product we’re looking for in the end is, other than just that they are supposed to be able to give it feeling, other than that I really don’t know what’s the end game here.

Despite her discomfort, Felicia did not feel that it was her responsibility to familiarize herself with the curriculum. Felicia wanted her co-teacher to ask her what parts of the curriculum she was comfortable with so they could create a role for her in the lesson which was a source of tension for Diana. Diana explained in her interview that she avoided expressing her frustrations to Felicia because she felt uncomfortable “managing” a colleague especially since Felicia is older than her.

Prior to the professional development, Diana and Felicia were not content in their relationship because they were lacking a rapport, which made it difficult for them to communicate with each other. They often communicated via email as opposed to in-person. They also did not have clearly defined roles, which resulted in Felicia lacking confidence in the classroom and Diana feeling like Felicia did not respect her because she allowed her to shoulder the majority of classroom responsibilities.

Shelly and Pam

Shelly and Pam have been personal friends for years and have co-taught with each other off and on over the years. Shelly is a general education foreign language teacher and Pam is a special education teacher. Pam’s children refer to Shelly as “Aunt Shelly” and they spend time together outside of work in different social settings.

In her pre-professional development interview, Shelly described herself as the leader and content expert in her co-teaching relationship but felt she found ways for Pam to be involved. Shelly reported that she feels the need to intervene when she does “allow” Pam to be involved in the delivery of instruction because Pam does not conduct the lesson up to her standards. Pam is not fluent in the target language of the class and often will use English when speaking with students, which Shelly does not accept.

I’m pretty dominant (laughing). Because I do all the planning and I’m the content side of it. I know what has to be covered because I do the planning, so I have so many pieces. I have the language skill and I can do it more quickly. I can structure it the way I want and I can give input that I want the kids to understand. I can control all of that. I do the planning and I do most of the direct instruction. I’m mostly responsible for the direct instruction. I try to find pieces, hopefully every day, sometimes not every day, that she could be the person in front of the class, the teacher.

Pam reported that she did not feel that Shelly allowed her to lead any instruction and felt inferior to Shelly in the classroom. Pam felt that Shelly did not want her involved in class as anything more than a “helper” and that Shelly told her what to do, which Pam found demeaning.

I walk in Monday and Shelly has a packet for me and goes, “Here. Here are the plans and worksheets for the week.” She likes to plan on the weekends. I am not going to go to her house. She says “I don’t want you in my house on the weekend.” We don’t ever plan together. Sometimes once she’s planned something she’ll say, “Well, what do you think?” And it’s after 8:30 at night. Or, “Here’s last year’s quiz. Did you want to change anything?” After she’s already made 50 copies.

Sometimes I feel boxed in or maybe in that class it’s something that I wouldn’t normally do or want to do. With her, she...even when I have a specific thing to do, she always still chimes in and does things sometimes. I just feel like, “Stop talking, it’s my turn!”

Pam believed it was her role to be a “chameleon” in her co-teaching relationship and change to meet her co-teacher’s needs so she did not communicate her dissatisfaction to Shelly. Pam described herself as not “being a fighter” so she avoided advocating for herself but did describe an instance where she became vocal after Shelly scolded her in front of the class about allowing a student to use the restroom.

A lot of times they’ve learned early on. They’ve learned probably by the beginning of October not to even ask her and then just ask me. Also, still puts me in an awkward position. She denied somebody to go to the bathroom today because we had two minutes to study for a quiz. Then some other kids goes “Can I just get a drink?” I said, “Sure.” He got up and left. She starts yelling, “No! Where are you going? Why did you let him go?” I said, “He’s going right there. He’s getting a drink. It’s right across the [hall].” “Oh we’re going to start the quiz.” “Yeah, it’s a going to take 10 seconds to get a drink.” It’s that whole structure, this is the rule, you can’t break the rule, there’s no bending. Yeah, I have a real problem [with that]. I was able to say, “It’s right there.” I spoke up at that point. I have to protect myself too and stick up for myself because I have 26 kids see me being beaten down in front of the class.

Despite her negative perceptions of their co-teaching dynamic Pam expressed that she values her friendship with Shelly outside of school but stated, “in that classroom I’m telling you, Dr. Jekyll and Sister Hyde.”

In her interview, Pam drew comparisons between her dynamic with Shelly and her relationship with her other co-teacher, Lisa. Pam viewed her dynamic with Lisa as ideal because they lesson plan together and Pam feels like she is an equal. Pam also described Lisa as being respectful of the needs of special education students and as someone who embraces co-teaching. Shelly communicated mixed messages in reference to her ideal co-teaching relationship in her interview. Shelly discussed wanting a collaborative co-teaching relationship but she also discussed her desire to be in control and have things done “her way.”

Prior to the professional development, Shelly described more contentment in her relationship with Pam because she was in complete control of the classroom. Pam felt so

overwhelmed by Shelly’s need to control in the classroom that she had become apathetic because she did not think Shelly could change. Pam drew a distinction between the friendship she has with Shelly outside of school and their dynamic in the classroom, which allowed her to cope with the situation.

Mitch and Frank

Mitch and Frank were both hired by the district at the same time seven years ago and have been co-teaching together since they started working at the high school. Mitch is a general education science teacher and Frank is a special education teacher. Mitch and Frank have become close personal friends since starting their professional relationship and spend a lot of time together outside of school.

Mitch and Frank reported that they feel they are equal partners and are happy with their relationship. Frank credited some of the success of their dynamic to the fact that they both started out together therefore, no one was infringing on anyone else’s “territory.”

That definitely helped because I wasn’t coming into Mitch’s class. We were coming into the district together. It was out first shot through the curriculum together, so that every lesson we came up with, we came up with together. Just right from the beginning they were our lessons.

Frank expressed that he was very happy in his co-teaching relationship with Mitch because he is involved in the planning and delivery of instruction and felt respected by Mitch. In his interview, Frank described a past “nightmare” co-teacher as a way to highlight Mitch’s positive attributes as a co-teacher.

You get the response when you’re making suggestions, “Hey I don’t think the class is going well. I think we need to change this or do that.” The response was pretty much “Well, I planned the lesson, so this is what we’re doing.”

I think that the co-teachers both need to be open and understand that you’re in it together, and it’s a give and take. You’re going to do some things that I wouldn’t do, I’m going to do some things you wouldn’t do, but hopefully together, we can find a middle ground,

and that’s usually what ends up being best for the kids. I’ve had an experience where I’ve tried to go to a planning meeting to put some input into planning the lessons before they rolled out, and it wasn’t really accepted and comments get made to other in-class support teachers. “Did your co-teacher try and tell you how to plan your class?” It’s just all these things that build up this wall like, “I am the teacher. You’re here to keep the special ed kids from annoying me.”

Mitch expressed that he appreciates the support that Frank provides on tough days and felt their humorous interactions created a comfortable classroom environment. Mitch also reported that he was happy in his co-teaching relationship and described Frank as his ideal co-teacher.

I think my ideal co-teacher if I was going to describe attributes, it would be someone who has solid meaningful input when we’re putting together a lesson, brings something to the table as far as “All right, listen, I don’t think this...this might not work, let’s try this.” I think me and Frank have a good relationship as far as that goes. Someone who carries their weight which is the situation I feel I am in now.

Prior to the professional development, Frank and Mitch were content in their relationship. They felt they had a positive and ideal co-teaching dynamic that satisfied their needs.

Table 7

Participant Biographies

Name	Partner	Certification	Motivation for Participation
Beth	Kelly and Maya	Special Education	Create a more team-oriented dynamic.
Kelly	Beth	General Education	Asked to participate by Maya.
Maya	Beth	General Education	Increase collaboration with Beth.
Harriet	Renee	Special Education	Support me and spend time with Renee.

Renee	Harriet	General Education	Support me and spend time with Harriet.
Jay	Paul	Special Education	Enrich relationship as co-teachers with Paul.
Paul	Jay	General Education	Enrich relationship as co-teachers with Jay.
Jamie	Yvonne	General Education	Increase collaboration with Yvonne.
Yvonne	Jamie	Special Education	Increase collaboration with Jamie.
Felicia	Diana	Special Education	Administrative recommendation.
Diana	Felicia	General Education	Create a more team-oriented dynamic.
Shelly	Pam	General Education	Refresher on co-teaching models.
Pam	Shelly	Special Education	Attempt to improve professional relationship with Shelly.
Frank	Mitch	Special Education	Support me and spend time with Mitch.
Mitch	Frank	General Education	Support me and spend time with Frank.

The majority of participants had a positive perception of their co-teaching relationship prior to the start of the professional development however, in 5 out of the 7 pairs at least one co-teacher perceived the relationship as inequitable to some degree. In 4 out of those 5 pairs it was the special education teacher who felt their role was inferior. Beth, Pam, and Felicia felt that they had an inferior role in their relationship, and Harriet perceived her role as slightly less equal to Renee’s role. Diana and Jamie saw themselves as more dominant in their co-teaching relationship but wanted to change that dynamic through their participation in the professional development.

Issues of inequity were also reported in responses to the Co-teaching Information and Satisfaction survey. Special education respondents were more likely to perceive their relationship as inequitable when compared to general education respondents as depicted in Figure 8 and 9. General education co-teachers appeared less aware of inequalities in their co-teaching dynamic which may be why they reported more satisfaction in their current co-teaching relationship than special education respondents as shown in Figure 2 and 3. In both the survey and pre-professional development interviews general education co-teachers reported being more in control of their relationship. Special education teachers reported feeling like less of an equal in their co-teaching dynamic because their general education co-teacher has the “final say so” when making decisions.

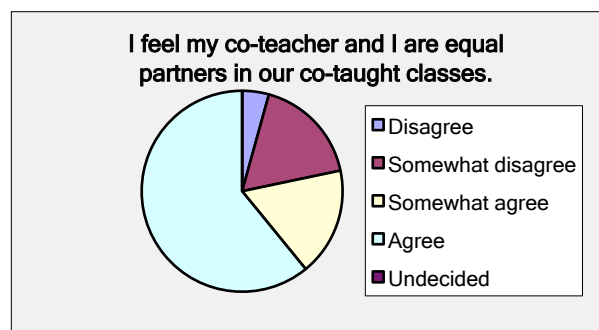


Figure 8. General education teachers’ perceptions of equality.

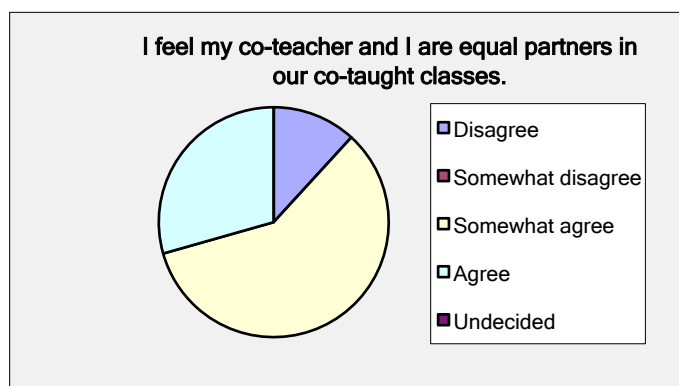


Figure 9. Special education teachers' perceptions of equality.

The level to which co-teachers feel equal in their relationship could be influenced by how co-teachers plan and deliver instruction. PD group members reported that they rarely write lesson plans together. The general education teacher was primarily responsible for writing lesson plans in Oncourse with the special education teacher giving informal input or not being involved in the planning process at all. The respondents to the survey reported similar lesson planning procedures as shown in Figure 10.

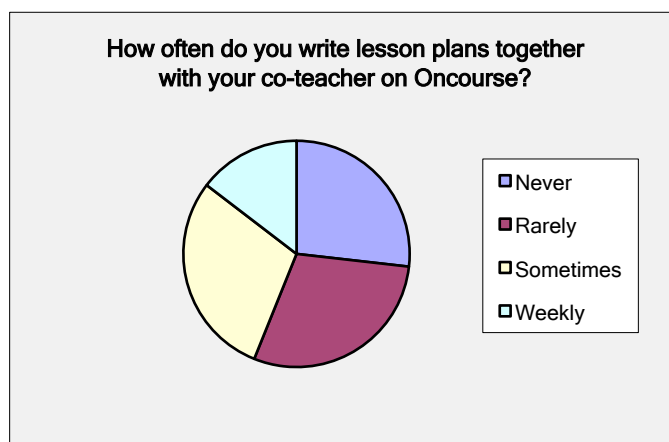


Figure 10. Co-teacher Lesson Planning

All participants described utilizing the “one-teaching, one-assisting” and “team teaching” co-teaching models the majority of the time in their classroom. These findings are similar to findings from the Co-teaching Information and Satisfaction survey as depicted in Figure 11. PD

group members often made reference to “doing the notes” or “going over the power point” when describing their roles in their co-taught classrooms. This demonstrates a reliance on direct, teacher led instruction which may not meet the needs of the special education students in the class. Other co-teaching models are more conducive to student-centered learning and provide more opportunities for both teachers to take on an equal role in the delivery of instruction, which may better meet the needs of struggling learners. A description of each co-teaching model is included in Table 3. When asked to report how frequently they lead instruction in their co-taught classes, general education teachers typically lead instruction daily while special education teachers did not report the same daily involvement in the delivery of instruction as depicted in Figure 12 and 13. Many special education PD participants also reported that their general education partner typically took the lead role in delivering instruction and they functioned in more of a supporting role in the classroom. Little involvement in lesson planning, a reliance on direct instruction, and few opportunities to lead instruction can make it very difficult for special education co-teachers to have an equal role in their co-teaching dynamic.

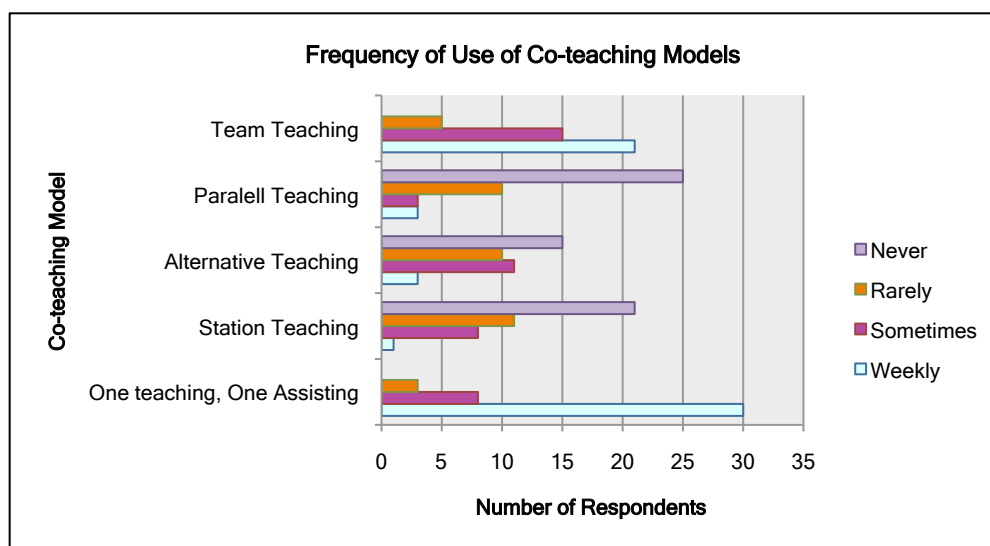


Figure 11. Implementation of Co-Teaching Models.

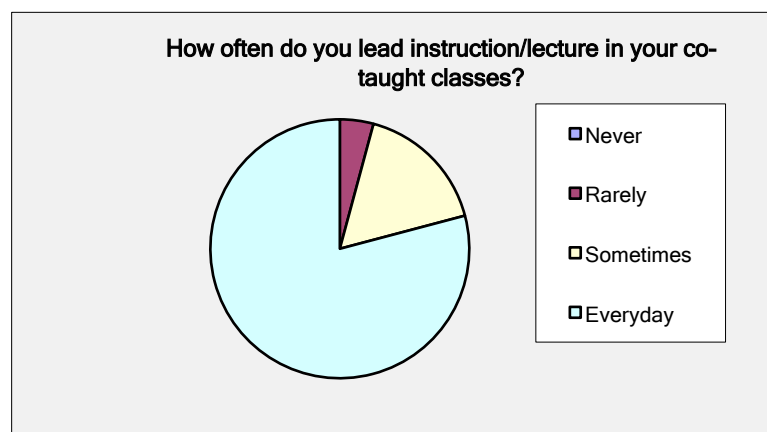


Figure 12. Frequency of general education teacher led instruction.

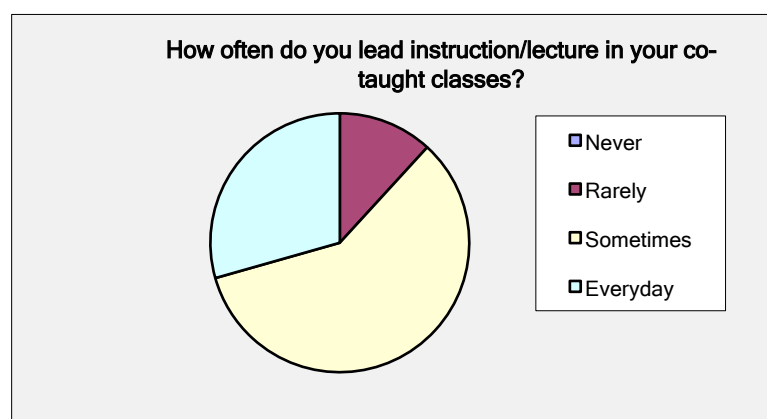


Figure 13. Frequency of special education teacher led instruction.

In their interviews, general education participants discussed the importance of trusting their co-teacher's content knowledge and trusting they will be “kept in the loop” regarding issues with special education students. Special education teachers expressed the importance of their general education co-teacher giving up some control, which they interpret as trust. Pairs that described greater levels of collaboration perceived their dynamic more positively than those that felt collaboration was lacking. Pairs that felt they were both “team players” described more contentment with their relationship and felt like they were “on the same page.” In addition, pairs who described having open, honest communication with their partner reported happier dynamics prior to the start of the professional development.

Eyes on the Prize: Professional Development Experiences and Impact

The mood of participants upon entering the professional development was positive which set the tone for productive sessions. Before beginning the professional development some of the participants expressed dissatisfaction with their dynamic but no one was experiencing open hostility. By signing up to participate in voluntary team-building professional development, all participants demonstrated an understanding of the importance of teamwork in co-teaching relationships and a desire to develop or enrich their teamwork with their co-teacher. Every session had an upbeat energy and all participants were observed having fun, laughing, and communicating respectfully. At no point was any tension observed between participants, and participants reported having an enjoyable experience in the session’s activities on every formative evaluation. PD group members reported enjoying the opportunity to bond with their co-teacher, and their colleagues, in a relaxed atmosphere and appreciated the opportunity to be reflective of themselves and their co-teaching relationship. Based on the nature of their relationship prior to the start of the professional development, and their experiences in the professional development, participants perceived varying degrees of impact on their co-teaching relationship.

Most Memorable Activities

The formative and summative evaluations asked participants to briefly share their reactions to the professional development activities. Participants typically referenced similar activities as being the most memorable. When describing experiences building rapport many group members referenced the Starburst icebreaker activity. This activity required participants to share things about themselves that helped their colleagues get to know them better. For example, participants shared responses to prompts such as most memorable teaching moment

and “if I had a million dollars.” Some participants utilized this as an opportunity to showcase their sense of humor and make their colleagues laugh, while others utilized it as an opportunity to share things about themselves they do not normally discuss. For example, Jamie joked that if she had a million dollars she would go on a tropical vacation without her husband and child so she could relax, and Mitch described a memorable teaching moment where he had a breakthrough lesson with a difficult class. All PD group members were engaged and listening to the responses of the group and this activity served as a bonding experience for the group as a whole.

Participants cited the Group Juggle activity frequently as a memorable and fun experience because they enjoyed laughing with their colleagues. This activity required the entire group to juggle multiple beanbags by tossing them back and forth to different participants. As more and more objects were added into the “juggle” it became increasingly more difficult for participants to keep up with the task, which resulted in scrambling after beanbags and a lot of laughter. Despite the lighthearted nature of the activity the group took the activity seriously and wanted to keep attempting to juggle all of the objects successfully to complete the task. Even as the session was nearing conclusion the group wanted to continue to work on successfully completing the juggling task. Once the group completed the activity successfully participants cheered and gave each other “high fives.” Many participants then expressed to me how much they enjoyed the task and Beth told me she was going to use the activity at her family reunion.

Many participants also referenced the Zoom activity as a professional development highlight because they thought it was a good way to work on communicating as a group and also enjoyed the novelty of the activity. Participants felt a little overwhelmed at first by having to describe their image from the “Zoom” book without being able to show the image to the group.

After their initial confusion the group decided that each person would share out descriptions from their picture and then the group clustered together based on commonalities in their images. From that point, the group was able to easily arrange themselves in order. The group was then amused when they turned their pictures over and were able to see the story come to fruition. Many participants then told me they would like to use the activity the following school year with their students as an icebreaker activity because they believed it was an effective way to work on building collaboration.

The collaborative art activity was also referenced as a memorable activity. Participants were asked to create a Jackson Pollack style piece of art using paint and pipettes. Music was played in the background as co-teachers worked with their partner to create a piece of art. Many participants reported that they enjoyed having the opportunity to be creative and many pairs hung their artwork up in their classrooms or prep rooms after the session. Some pairs found that the activity caused them to be more reflective of their communication style with their partner and referenced this activity during their individual interviews.

Participants referenced the engineering activity most frequently in their interviews and evaluations. Participants described this activity as challenging and found the activity memorable because it required a great deal of teamwork. This task was particularly challenging because it required participants to create a contraption that could catch a golf ball using only straws and masking tape in a limited amount of time. This task required group members to communicate clearly and efficiently, make compromises, and be patient with one another to complete the assignment effectively. Participants drew diagrams to illustrate their ideas; they took turns sharing, and were committed to completing the task successfully despite the difficulty. Each group did not become competitive with other groups and instead maintained focus on completing

the task successfully within their own team. Participants expressed a great sense of accomplishment when their contraption was completed and each group was able to successfully catch the golf ball, which resulted in cheering and clapping amongst the entire group.

Participants also frequently discussed their experiences in the improv activity. Some found it memorable because of the opportunity to be funny and make people laugh, while others found it memorable because they were pushed out of their comfort zone and needed to rely on their partner to help them complete the task. After each partnership had completed their improv scene Pam suggested that we complete a “Yes and...” scene as a PD group. The group agreed and we completed one more round together as a team. In our discussion after the activity, participants made connections between performing an improv scene and the improvisation that occurs in the classroom as co-teachers.

Observations of Communication in Sessions

Overall, all participants were actively engaged in the activities and discussions of every session. Participants were polite and listened while others were sharing, and were engaged in expressing their own thoughts and opinions. Some participants showed more notable communication patterns in the sessions that stood out from the communication style of the majority of participants.

Shelly and Pam had a very lively and humorous rapport in each session. Both Shelly and Pam appeared relaxed, and both made jokes and laughed frequently in their lighthearted interactions when they were collaborating. During activities that had a clearly defined “end goal,” such as Zoom and the collaborative art activity, Shelly had a more difficult time maintaining a humorous and lighthearted nature and became more “intense.” During the Zoom activity, Shelly went into an exorbitant amount of detail when describing her picture and other group members

were observed losing interest in her description due its in-depth, drawn-out nature. During the collaborative art activity Shelly insisted on planning out and discussing each step of how they would create the piece prior to adding any paint to their paper. Things became so scripted and controlled that neither Pam nor Shelly were able to “let loose” and be creative, which resulted in both of them being dissatisfied with their final product. During the engineering activity Shelly expressed frustration to Pam because she was unsure of how to complete the activity. When she expressed frustration and admitted she did not know how to approach the activity, Pam was able to take over in a leadership role and share her ideas for how the contraption should be created. Shelly had a different demeanor and way of communicating during the improv activity. Shelly was more relaxed and calm in her communication during this activity and focused on being humorous when replying to Pam. Pam was also more relaxed in this activity because she was able to communicate with Shelly using her sense of humor, which is a big part of her personality, while also completing the objectives of the task.

In district professional development, and departmental and building meetings, Jay and Paul are typically very quiet and rarely engage in whole group discussions. Contrary to his typical communication style in professional groups, in team-building Jay contributed regularly to discussions and frequently shared his insights and reflections. During the North, South, East, and West activity Jay shared that he believes that “South” people can collaborate well with anyone because they are the “moral compass” and believed that no one in the group was a “North” because their style for group work is not conducive to the profession of teaching because it is not collaborative enough. After the group juggle, Jay shared his reflection with the group that the activity was similar to teaching when you are “juggling” all of your responsibilities. When Paul was quietly expressing his reservations about participating in the

improv scene, Jay quietly encouraged and motivated Paul to participate. The climate in the team-building PD, and nature of the activities helped Jay to be more expressive in a professional group setting.

Prior to the professional development Diana shared that she feels that Felicia was not engaged in her role as co-teacher, and Diana felt like she shouldered the majority of classroom responsibilities. In the team-building activities, Felicia actually took on a leadership role, and was more comfortable communicating and sharing during group work. Diana was always very quiet in the activities and felt very shy sharing in whole group discussions. When Diana was working on an activity with just Felicia she was more talkative and appeared more comfortable. Felicia also developed more of a rapport with Diana and felt comfortable sharing a personal experience with Diana during the Life Highlights activity. Felicia expressed that she did not want Diana to share her moment with anyone else and expressed that she trusted Diana to keep what she shared private.

Kelly and Renee typically took on a dominant role in discussion in both small and whole group. Both Kelly and Renee spoke first and most frequently in small group discussion, which some participants found to be disengaging. For example, Mitch was uncharacteristically quiet in the North, South, East, and West activity when in a group with Kelly and Renee. He later shared with me that it was because Kelly and Renee were dominating the conversation “talking about themselves” and appeared to bragging about how they had both “made a student teacher cry.” Their special education counterparts, Beth and Harriet, were assertive in their interactions in the group and made sure that their ideas and input were heard by their more domineering partner. Maya tended to be quiet in small group work with Beth and Kelly, but would consistently ask

clarifying questions and suggested that group members draw sketches of their ideas during the engineering activity.

Relationship Building and Enrichment

In their mid and post-professional development interviews, PD group members consistently discussed enjoying having time to bond during professional development sessions. “Seasoned” pairs appreciated the opportunity to spend time together to solidify and strengthen their relationship, and newer pairs enjoyed having the opportunity to build a rapport and develop a shared history together. Participants also valued having time to “take their teacher hats off” and have fun with their colleagues. The nature of the activities provided participants with opportunities to work on building trust and communication in a comfortable environment which both veteran and new pairs found beneficial.

Time to have fun. The nature of team-building activities provides colleagues with a chance to “play” at work, which participants rarely have the opportunity to experience. Many participants discussed the benefits of laughing and being funny in the PD activities because they found it invigorating and helped to develop their relationships with the rest of the group. Jamie found her experiences in the professional development energizing after a long day.

I think it was one of the few occasions in professional development that I would leave the session feeling better than I did when I walked in. There was just such a refreshing quality about the experiences that I would leave feeling energized and at 4:15 that’s an unusual experience to have.

Kelly perceives herself as “all business” in the classroom but described being silly in the professional development. The activities provided Kelly with the opportunity to let her guard down and show the lighthearted side of her personality, which helped her to make connections with Beth during the professional development. “When we’re in the classroom we’re a little more retrained and reserved. I think we have a little more fun outside of the classroom.”

Her partner Beth also believed the low-stakes nature of the activities helped them to build a rapport. Kelly is a general education teacher and is the more dominant figure in their dynamic, which can make it difficult for Beth to feel comfortable interacting with Kelly. The activities in the professional development provided Beth with a more relaxed environment to work on building her relationship with Kelly.

I guess it gives us the opportunity to see each other outside of the classroom, which is really nice. I mean, we're still in an educational setting, but we're just like hair down, relaxing.

The games and activities in the professional development provided participants with the opportunity to interact in ways that were outside of their norm. The nature of the activities required co-teachers to work together in unfamiliar situations, which provided them with the opportunity to learn more about each other and strengthen their relationship. Paul enjoyed doing activities outside of his normal routine.

Well, when you're working in the classroom, you always have routines that “you do this,” and “this one does that,” but when you do these exercises and it's something you've never done before, you kind of [learn] how they're thinking or how they would handle an activity.

In addition to having time to work on the relationship with their co-teacher, participants also discussed enjoying the opportunity to develop a relationship with other colleagues. Jamie described benefiting from having a chance to “take the teacher hat” off and spend time having fun with both Yvonne and the other participants.

After teaching all day and having that teacher hat on and getting to the end of a long day, it's really nice to take the teacher hat off and do something that's totally different from what I've been doing all day long. Take on a very different role and become a student as opposed to a teacher and be able to interact, not only with Yvonne, but with other people in the room who I don't normally get to spend time with either, so it's been fun in that respect, getting to know some other people.

Not all the teachers were able to let themselves have fun during the PD. Shelly and Pam expressed dissatisfaction with the painting they created in the collaborative art activity and both

felt they planned too much, which hindered their ability to be creative. Pam realized that, even in settings outside of the classroom, their dynamic is very regimented. Pam expressed her desire for her and Shelly to remember to have fun interacting with each other.

We learned so much about ourselves at that point with that hideous painting that we made; the thing that we overplay and that we overanalyze when we do things. I think sometimes just learning that you got to take a step back is important and have the fun part, and not just always the planning and the educational part.

The team-building professional development provided participants with the opportunity to build a rapport and have fun with their co-teacher as well as with teachers they do not typically interact. Taking time to build relationships in entertaining activities with faculty across different departments can create a more team-oriented climate across the school campus.

Bonding experiences for seasoned pairs. Group members that already felt they had a strong relationship prior to the professional development still found the experience worthwhile because they had the opportunity to strengthen their bonds and have fun together which they rarely have time to do with hectic schedules and commitments outside of work. Even though Harriet and Renee have been working together for many years, and are personal friends, Harriet still found her experiences in the professional development valuable.

Because we’ve been doing it for so long we were already in a really good place. The PD helped because it’s just fun to have fun together and we haven’t done that in a long time because life is busy and school is busy.

Pairs who feel they are in ideal co-teaching situations also felt that taking time to have fun together helps to keep their relationship healthy. These pairs feel it is important to consistently work on keeping their relationship strong to maintain their effective co-teaching dynamic.

Harriet believes team-building professional development can keep healthy relationships on track.

It solidifies it because you can always have your ups and downs, but I think doing things like this...let’s say we...something was a crazy day, so doing an activity like these at the end of the day just helps you stay on track and keep things solidified.

Even though Mitch and Frank feel they make a great co-teaching team, Frank still feels their experiences team-building were beneficial for their relationship.

Even myself and Mitch, I took something away from every activity that we did; just gave us an opportunity to look at things in a different way and just made us focus on what we do and how we interact with each other, so I think that enhances self-reflection, but I think the big benefit is with people that haven’t gotten to that place where they know what they’re partner is thinking and whether they are on the same page.

Even though some pairs believed they had a happy and healthy relationship prior to start of the professional development they still believe that good co-teaching relationships require ongoing work. These pairs believe it is important to take time to bond and refresh their relationship to keep things “on track” so they can continue to work effectively as a team to meet the needs of their students.

Bonding experiences for newer pairs. Participants in newer co-teaching relationships were not friends outside of school so their only interactions happen during the school day. The professional development provided these pairs with time to work on building their relationship in diverse activities to strengthen their bond. Jamie, a general education teacher, realized that her experiences in the professional development provided her with time to spend quality time with her special education co-teacher Yvonne, which she has never done before.

So far, I think that it’s the first opportunity that my co-teacher and I have actually had time to just spend time together other than just the brief conversation we might have in passing during the day. It’s the longest period of time that she and I have had to just get to know each other in a sense, even though we’ve been working together for three years now. This is the first time that we’ve spent time doing something other than improvising in class.

Diana, who can be very shy and timid, described benefiting from the relaxed atmosphere and felt it created the right environment to work on her relationship with Felicia.

I liked that it wasn’t just solely focused on work and planning, like we...there were activities where you can just kind of relax and know we weren’t being necessarily

evaluated or something like that. It was just...we knew we were trying to build a friendship or a bond, so it was good.

Team-building also provides new co-teaching pairs with opportunities to build a shared history together as partners. Beth expressed that their experiences in the professional development gave them things to talk about during their free periods together.

We always talk about it when we get back to our office, “That was fun, that was interesting.” And we’ll share stories like, “Remember when somebody said this, or remember when you did that?” Or, “remember when you put me on the spot [in the improv activity] and I didn’t know what to say? That was funny.” Yeah we do have a lot of fun.

Maya expressed that she feels participating in the professional development enriched her newly forming relationship with Beth. Maya reported that they make more of a conscious effort to support each other on a daily basis.

I think we started off pretty friendly, and I think it’s just added to it. I mean, we take a lot of pride now in how we accomplish even the smallest goals with our students. We’ve had quite an interesting set of kids this year, so when we can take small steps we are excited together. We have a better delegation of responsibilities. Also, it’s nice that we both volunteer to help each other out. I’ve noticed that’s increased a lot more. Not that we were not trying to help each other more before, it’s just more pronounced now. Like, “Let me do this for you. Let me do that for you.” Or, “I can take care of x, y, z if you can do this.”

Newer pairs do not have the same relationship foundation as “seasoned” partnerships, which can impact their ability to work as a team. Rather than relying on developing years of experience in a consistent partnership, team-building professional development has the potential to expedite relationship development for co-teachers. This team-building professional development provided newer pairs with the opportunity to complete low-stakes activities in a fun and relaxed environment, which helped them to develop a rapport, and shared history. These experiences create a foundation for their relationship that can support their ability to work as a team in the classroom.

Time to work on communication. Participants’ felt that the activities not only provided them with time to have fun, but also provided them with opportunities to work on communication with their partner. Providing participants with low-stakes activities created a “safe space” for newer pairs to practice communicating. Maya described benefiting from working on her communication skills in the team-building activities.

To be honest, I like the idea of just practicing how to communicate, how to talk to each other. Especially when we had to build that contraption, we had a couple of ideas, it was just nice I guess, some of us got a little frustrated with each other’s ideas, but we all to take a second, “All right what’s your idea? Why do you think it’s a good idea? What’s your idea, why do you think it’s a good idea?”

We were talking about what we wanted to do and what our plan was. It was difficult. One person was saying, “I think we should do this,” and it was hard for me to understand what she was actually saying. I said, “Do you mean this?” We drew a little picture and figured it out. I think that activity was a good illustration of the need for communication because it was a very frustrating task.

PD group members with less established relationships expressed that by communicating and compromising in problem-solving activities, they developed trust in their ability to communicate with their co-teacher. They did not feel afraid to contribute in activities because they knew they would be able to communicate respectfully. Felicia was very engaged in the activities and communicated comfortably with both Diana and the other participants. Diana described Felicia as being disengaged in their interactions in the classroom however; this was not the case in the PD. The nature of the activities, and the collaborative climate of the professional development, encouraged Felicia to be more communicative with her partner and her colleagues.

I think it opens up dialogue a lot. We talk a lot more than we did initially in the beginning, so I find that that happens. I think it also gives us something to do that's not in the classroom. It's sort of like outside the classroom, but yet it's related to our work, so it gives us some other thing that connects us, rather than just simply the classroom.

I feel that it's just a more supportive environment sometimes. Sometimes when you feel like, perhaps, there's not so much support out there, it's a little harder to take chances

because you're concerned about the harshness in which you're willing to be judged, and how that's going to affect you with your job.

Even pairs with established relationships discussed benefiting from opportunities to work on their communication skills. Some co-teaching pairs described having unspoken communication and are able to “finish each other’s sentences” because they know each other so well. The nature of the team-building activities required pairs to focus on how they communicate with each other because the situations were unfamiliar and outside the norm of their typical interactions. Even though Paul and Jay have been close friends for many years the nature of the team-building activities required them to communicate in different ways.

A lot of times at least in the classroom, we don’t really even need to communicate because we know what each other is doing. When it comes to these activities we have to communicate a little more.

Harriet considers her relationship with Renee to be ideal but still believed she developed better communication skills after her participation in the professional development and has become more mindful of listening and truly understanding what Renee is saying before beginning to share her perspective.

I think maybe I’ve tuned in because what really affected me in the PD was the active listening. I think, me personally, have tried to apply that in myself to listen more, to find a meaning, to find the underlying meaning of what my co-teacher is trying to say.

Collaborating in a co-teaching situation requires ongoing communication. Team-building provides newer pairs with the opportunity develop more rapport, which increases their feelings of comfort expressing their opinions and feelings with their partner. It also gives newer pairs the opportunity to build experience communicating with their partners in a variety of situations, and less established pairs were able to practice their communication skills in low-stakes problem solving activities to prepare them for higher-stakes conversations in the classroom. Even established pairs benefit from having the opportunity to reflect on their communication style

with their partner to develop more awareness of their partner dynamics. It also provides all co-teachers with the opportunity to work on active listening skills, which is a valuable skill in both professional and personal relationships.

Opportunities to build trust. In addition to building communications skills, the unfamiliar nature of the activities built trust for some pairs. Some participants felt that they were able to develop more trust because being “playful” helped them to lower their inhibitions. Other partnerships reported feeling more trust in their relationship because they relied on each other to complete the task. Kelly appreciated her playful interactions with Beth in the professional development and believes it helped to build trust in their relationship.

I think what we did in our PD was great because it kind of allowed us to establish trust in different forms I guess. We don’t usually get to do that in the classroom setting. It’s all business, there is no play. But in the PD you get to have fun a little bit. You get to trust each other on a different level. I think that’s good.

Maya typically takes the lead role in her relationship with Beth but the nature of the team-building activities allowed some role reversal to occur. Maya, who is a general education teacher, felt “out of her element” at times when completing the activities, which resulted in her relying on Beth, a special education teacher, to help her complete the tasks. These experiences built trust in their relationship and made Maya feel more connected to her partnership with Beth.

I kind of need her there. I’m not in my element if it’s not science. It sounds silly but, I don’t like standing in front of crowds; I don’t like talking to big groups of people. But if it’s something I know, I get it done, it’s not a problem. In the team-building activities I don’t know what you’re going to throw at us so I get nervous. I like having her there, she’s my little safety blanket, because she can explain it and then I can figure it out along the way.

Maya also made a connection between the feelings of security Beth provides in the professional development with a recent situation where she felt they worked well as a team to handle an issue with a student.

She’s also very level headed to keep me calm. I get nervous around parents. She knows the technical jargon too which helps...She made me feel very comfortable. She’s also good at dealing with parents and talking with them, so I can hide a little bit behind her.

Maya’s experiences in the professional development helped her to feel more connected to Beth.

These feelings have translated into their classroom interactions and Beth described sensing more trust from her co-teachers.

I think I could say I’ve noticed a slight change in acceptance. I don’t know if trustworthiness is the right word. It might be the right word. We’re more comfortable with each other.

Kelly and Maya placed such an emphasis on their dynamic with each other at the start of the professional development that there was not much “room” for Beth. Their increased feelings of trust and comfort are important because it provides Beth with more space to have a healthy co-teaching relationship with Maya and Kelly separately.

The playful nature of the activities allowed participants to lower their inhibitions and let their guards down. The teamwork that occurred in the professional development helped co-teachers feel more trust in each other and in their co-teaching dynamic. Many participants felt that the trust they experienced in the professional development was then translating into their relationship in the classroom.

Opportunities to Reflect and Change

PD group members expressed that the nature of the team-building activities allowed them to interact with their co-teacher in different ways and these experiences provided opportunities for reflection. The reflective discussions that occurred at each session included connections that participants made between their experiences in the activity and their experiences co-teaching. As a result of this reflection, some participants realized positive changes in their relationship dynamics in both the activities and in the classroom. Pairs that already believed they had a

strong relationship found that their experiences in the professional development were a source of validation. This validation encouraged their positive perceptions of their co-teaching relationship.

Equalizing. Many participants described experiencing equitable interactions during the completion of the professional development activities. The nature of the professional development activities created an environment where both special and general education co-teachers could contribute from an equal position. Experiencing this equality allowed the special education teacher to take more of a leading role, which helped to build their confidence. General education teachers described taking more of a “backseat” at times because their special education co-teacher seemed more adept at leading the team through the completion of the activity. These experiences resulted in general education teachers becoming more aware of their partner dynamics, which helped them to relinquish some control in their interactions with their special education co-teacher.

Special educators taking the lead. At the start of the professional development, the majority of participants reported feeling that the general education co-teacher had, to some degree, a more dominant role in the dynamic. Even co-teachers who felt they had the ideal dynamic viewed the general education teachers as having slightly more of a lead role. The activities in the team-building professional development provided co-teachers with the opportunity to try on different roles. The activities were low-stakes and were not content specific, and this created a “level playing field” for all participants which allowed the special education teachers’ skill sets to shine. Harriet felt like she took on more of a leadership role in experiences in the professional development, whereas in the classroom she feels Renee is slightly more dominant.

I think in the professional development we're complete equals. In the classroom we are equals.... but it's not...I don't know, a 60-40. So it may be a little switched in the team-building as far as me being a little more of like the one she looks to.

Shelly tends to be very controlling and dominant in her co-teaching relationship but the nature of the activities provided Pam with the opportunity to take charge in the activities, which is rare in her dynamic.

Shelly was the first one to say, “I don't know how to do this.” I was actually comfortable enough to say, “All right, let's try this.” Take the bull by the horns at that point.

For some special education participants, their equitable interactions with their co-teacher in the professional development provided them with a snapshot of their ideal dynamic. Their experiences interacting with their co-teacher as an equal acted as an incentive to keep working on the relationship. In her mid-professional development interview Beth drew comparisons between her experiences in the professional development and her experiences in the classroom with her co-teachers.

In the classroom? Oh no, it's a whole different feeling. I mean it's...I hope to someday...that it would be that easy. I hope someday it's as easy in the classroom as it is in the activities. That's my hope. That's what I keep pursuing, but no it's different. In the activities, we're starting at the baseline. Nobody comes in with any kind of preconceptions or anything. It's just, “Here we are, here's what we're doing, brand new, let's do it.”

The opportunity to take on more of a leadership role gave many special education participants more confidence in themselves which has helped them to develop more of a “voice” in their dynamic. After participating in the professional development, Beth reported that she is sharing her opinion more back in the classroom and is feeling less reserved in her interactions with her co-teachers.

I used to dance around and almost ask permission...where now I'll say, “Would you look at it this way, or would you consider this? How about if we do that? What about...” just come up with things.

The team-building activities provided special education teachers with a relaxed and safe environment to practice taking on leadership roles in their collaboration with their general education co-teacher. These experiences helped boost special education teachers' confidence which supported their ability to have their “voice” be heard in their co-teaching dynamic. Special education participants observed that the changes they experienced in their interaction in the professional development started to become evident in the classroom as well.

General education teachers relinquishing some control. Having the opportunity to take on a supporting role in the team-building activities helped general education co-teachers see their special education partner in a different light. These experiences have helped many general education teachers develop more trust and respect for the abilities of their special education co-teacher. Maya felt that taking turns leading and supporting in the activities was a valuable experience and she reported that her interactions with Beth in the professional development made her realize that, “This is really what co-teaching should be.”

It's good, I like it. I look to her first, and I think she subconsciously knows that she gets the assignment immediately so she just begins. It's a good example of a leader taking the lead, and a follower appropriately following, until I can come up to her level then we can both share ideas and be leaders. Which is good, I've always believed that there must be followers, and there must be leaders. It doesn't mean that you're always stuck as a follower, or always stuck as a leader, but it works nicely. You can't have too many cooks in the kitchen right?

Experiencing role reversals in the professional development provided many general education co-teachers with the opportunity to reflect on their dynamic with their co-teachers. This reflection developed more awareness of the level of involvement they typically provide their co-teacher with in the classroom. After participating in the professional development, Jamie reported that she is more aware of Yvonne's role in the classroom.

At this point, I think that one of the ways that it's influenced me is it's made me start to think about my relationship with my co-teacher more, whereas before it just happened. It

was again, kind of spur of the moment improvising all the time. Now I feel I am more cognizant of it. I think about it more. I think about how I can better include her in what we’re doing in class. I’m more cognizant of when I’m making an assessment of something, of asking her opinion about it. I think it has taught me to just think about the fact that she and I do have a working relationship that needs constant building and strengthening, like any relationship.

General education teachers experienced more equitable interactions with their co-teachers in the professional development and this made them more aware of inequities in the classroom. Many participants reported that they were making an effort to give up some control to create a more collaborative dynamic. After the professional development, Jamie reported making a commitment to provide Yvonne with the opportunity to start class.

I think I’m working on trying to let her do more of the talking so I’m making more of an effort to let go of some of the control and trust her. At the beginning of class I’m trying to let go of always being the one to start class.

Shelly is admittedly very controlling and likes to have everything done “her way” in her co-taught classrooms. Her experiences in the professional development made her more aware of her dynamic with Pam and made her want to be more of a team player.

It did help me to think about her a little more in terms of her role in the class. I tried to relinquish a little bit more at times to her, in that way it was good, because it just made it more present all the time. She is there and she should be teaching too, and it’s not just me, me, me. Type A, Type A, Type A.

Special education participants reported noticing these changes in their general education co-teacher. Special education co-teachers noticed that the equitable interactions they had in the professional development were starting to translate into the classroom. Yvonne discussed the changes she observed in her relationship dynamic with Jamie after participating in the professional development.

She tends to be a little more lenient, a little more easygoing and kind of let’s me take the ball on certain activities because she realizes that I had a lot more experience on certain things and I don’t know, I just think it works a lot better.

Beth's noticed that her co-teachers are including her more in the creation of class assessments, which typically did not happen prior to the start of the professional development.

I used to get the whole test, look at it, edit it for all students, and then my co-teachers would just say, “Whatever.” Now I produce the final product of the test, so I find that welcoming that I'm becoming more involved with that here. If we continue working in the same teams, then I can take over writing quizzes and things like that.

By taking a step back in the team-building activities the general education teachers were able to observe the skills and strengths of their special education co-teacher and this helped them to develop more trust in their co-teachers' abilities. Experiencing a more equitable dynamic in the professional development made many general education teachers more aware of their inequitable interactions in the classroom. As a result, many general education participants are making more of an effort to relinquish some control.

Challenging assumptions. The interactions of co-teachers in the team-building activities provided some participants with the opportunity to interact with their partner and make reflections that challenged the assumptions they had previously made about their co-teaching dynamic. Before the professional development started, both Kelly and Maya assumed that Beth was not competent in the science content matter of their class and did not trust that she was capable of having a substantive role in the planning and delivery of instruction. Beth assumed that she needed to be subservient in her co-teaching relationship, and be timid and wary when giving her input to her co-teachers in order to make their relationship work. The equalizing nature of the team-building activities allowed Beth to be a leader and develop more confidence, which challenged her assumption that she needed to be subordinate in her interactions with her partners. In turn, Maya and Kelly's assumption that they needed to consistently be the leader in their interactions with Beth was challenged, and they were able to develop more trust in Beth's

abilities. The increase in trust made it possible for Beth to have more involvement and input in the planning and delivery of instruction.

Both Jamie and Shelly assumed that they naturally were the leader and more controlling partner in their relationship. They assumed that these roles were needed to have their class run smoothly and accomplish the lesson objectives each day. The nature of the team-building activities put all participants on an “even playing field” where all participants had the opportunity to excel and showcase their skill sets. Being in situations where they did have superior content knowledge provided them with opportunities to observe the skills and strengths of their co-teacher because they were “taking a backseat” in some of the activities. The experiences challenged their assumptions that they must maintain control and exemplified the importance of providing more opportunities for their co-teacher to be actively involved in the classroom.

The interpersonal nature of the professional development also allowed some participants to challenge their assumptions about me. Jay made assumptions based on my appearance that I was unapproachable therefore; I was not a colleague he had gotten to know very well prior to the professional development.

I only knew you to say hello to you. You always were cordial. I remember when you were dark, gothic almost. "Oh, there she is." Then the only other thing I remember you asked me to hold the door once for you when you were pregnant. Not that you weren't polite to me but I got to see you in a whole different way and hopefully you see me in a different way because we never worked together. That's the net result.

After our time together team-building, and in individual interviews, Jay was able to develop a rapport with me which challenged the assumptions he initially held. Jay was able to see me in a “whole different way” which allowed us to develop a friendlier dynamic.

The nature of the team-building activities allowed co-teachers to interact with each other in new ways. These interactions allowed co-teachers to see each other in new ways and provided opportunities to observe their partner in different roles. These changes allowed participants to challenge the assumptions they made about each other, which helped them to develop a more team-oriented dynamic.

Feeling validated. Pairs who felt content with their relationship prior to start of the professional development found that their experiences in the activities validated their positive perceptions of their co-teaching dynamic because they realized they are able to work as a team in a variety of situations. The majority of these participants discussed incidents specific to their relationship with their co-teacher to describe the validation they experienced. Harriet and Renee were the only participants who made comparisons between themselves and other PD group members to feel validated.

Co-teachers who felt they exhibited characteristics of effective teamwork in their co-taught classroom also observed that they were able to work effectively as a team to complete the professional development activities. This realization made them feel even more confident in their relationship. Renee feels validated in the strength of her relationship with Harriet. “For us it’s just, I think, it’s an eye opener as to what we do naturally together no matter if we’re in the classroom or not and how they mirror each other.” Mitch’s experience in the professional development made him realize that he and Frank are team-building all time.

Frank and I, we’re very good friends outside of work as in here, so I think it’s natural. We’re always doing stuff, as far as help each other out in houses, if something’s wrong with the car. We get together and we do a lot of things outside of school in much the same way we do it in school. I think naturally we are team-building on our own anyway.

Participants also felt that their experiences in the professional development demonstrated how effectively they communicate with their partner. Renee believes that her experiences in the

collaborative art activity demonstrated the effective spoken and unspoken communications she has with Harriet.

I know we've been communicating. Sometimes, I think it's like an unsaid communication. I think its pretty give and take. It's easy. There hasn't been a whole lot...I think we've been able to say whatever we want. Like a lot of the activities, when we painted. Yeah, we were painting, but we could each do our own thing and still have an end product.

Yvonne was impressed with how she and Jamie communicated during the improv activity and realized that they can communicate effectively in a variety of situations. “Then this last one, we enjoyed too with the improv, getting up there and just playing off each other. We could do it. We had no issues. We have no hesitation talking it seems.” Jay, a special education teacher, also found the improv activity to be a validating experience. Paul, a general education teacher, was feeling uncomfortable having to perform in front of the group however, Jay was excited by the idea of participating in the improv but “didn't want to show Paul up” because he knew the activity was outside of Paul's comfort zone. Paul was resistant to completing the improv activity and initially was refusing to participate.

I just want to be respectful of him because he is my co-teacher and you don't want to embarrass anyone, so I tried, I tried a couple of times and finally I said, “Come on, let's not be the last one. That will be even more pressure. Let's just get things done. Let's just start it.”

Paul eventually agreed to participate in the activity and performed an improv scene with Jay. Paul and Jay competed a few rounds of “Yes, and...” before Paul reached his limit and rather than saying “Yes, and...” and continuing the scene he responded “No,” to Jay's comment.

When he said no, I cut it off, and he thanked me. I said, “Paul, I knew that was really uncomfortable that's why I got your back,” and that meant a lot to him and that's something you might not be able to do in the classroom and that'll be something that we'll share for as long as we're teaching together. That was a good moment, a learning moment where realized that I really do have his back.

Paul later stated that he felt the improv activity was the most worthwhile experience for him because it pushed him out of his comfort zone. Paul shared that he believes working outside of your comfort zone is important because it is the only way you will grow as a person.

Because as a teacher, a lot of times you're always having to think on your feet, come up with ideas or solve things right there, and that's basically what you're doing in improv, it's just something I don't like though. I don't like being the center of attention. Especially when it's with colleagues and I don't know, I just, it's something I don't excel at.

Jay and Paul's experiences in the improv activity validated their level of trust in each other. Jay was able to demonstrate that Paul can trust that he will “always have his back,” and Paul was able to complete a difficult task because he had Jay's support.

Harriet and Renee were the only pair to critique other participants in their interviews and pointed out perceived weaknesses in other participants to validate the positive perceptions they have of themselves. Renee and Harriet made comparisons between their dynamic, which they feel is ideal, and the interactions of other pairs in the professional development. Both Harriet and Renee judged the effectiveness of how the other pairs interacted and utilized it as evidence to support that their relationship was superior. Renee judged the interactions of Pam and Shelly in the collaborative art project to emphasize that she and Harriet have a stronger relationship.

Sometimes I wonder how their classroom goes because they spend so much time discussing things and I feel like possibly scripting it that I wonder what, like as a student, does it feel like scripted or once they get in front of the kids is it just a natural feel.

When we did the art piece there was a group and I just thought it was interesting how long they talked about and how strategic it was when Harriet and I were just like go for it and each did our piece and it was what it was and voila, you know.

Harriet referenced Diana's interactions in the activities and felt that she was too quiet, which made her question Diana's teaching abilities.

I think actually working together with other pairs because I know how Renee and I work together, but it's interesting to see the dynamic, and it does come out. Even though

you’re having fun, if you’re paying attention, you can see the dynamic of other partnerships, and that’s been very interesting. Even with Renee and I, it’s whatever... the way we interact in the classroom has basically been the same way [in the activities]... but I’ve been...I’ve enjoyed seeing other people’s responses to things.

Some people take control, some people step back. Some people just being very quiet which is surprising. Surprising for being a teacher. I just always assumed that all teachers were the one who wanted to be out in front, and that surprises me when they seem to be a little bit more reserved.

Participants made many reflections during the professional development sessions, in our individual interviews, and independently over the course of this professional development series. These reflections made participants more aware of themselves and their co-teaching dynamics. Some co-teachers utilized their reflections to work on making desired changes in themselves as a co-teacher, while others utilized them to validate their positive perceptions of themselves and their co-teaching dynamic which they found motivating.

Roadblocks Impacting Change

After participating in the professional development several participants expressed that they felt validated, and believe they have an ideal co-teaching relationship. Other participants reported positive changes in their dynamic and are optimistic for continued growth. Some co-teachers reported observing slight changes in their relationship but experienced “roadblocks” that have hindered them from achieving their ideal dynamic. Felicia and Diana, and, Pam and Shelly felt they made some progress in their relationship after completing the professional development but there are some obstacles that prevent them from achieving their ideal co-teaching dynamic.

Diana, a general education teacher, feels that the professional development helped to improve her personal relationship with her special education co-teacher Felicia but she still perceives significant differences in their work ethic and expectations for the relationship.

I feel like it’s very up and down. The PD definitely helped on a personal level and I felt like we both worked well together during the PD and I had a really good time. When we went to the classroom I feel like we both, I think, enjoy working together but then, it

seems to me, but I don't know for sure, that she doesn't seem interested in the actual teaching part. I feel like that plays a huge role and then that makes me feel frustrated about just teaching together because the other person doesn't want to. It's hard to explain. I guess the personal level its good, but not so much with the co-teaching.

Diana questions Felicia's motivation to change and become more involved in the planning and delivery of instruction. “But I feel like some...you can't always teach motivation, like you're either, to an extent you are, like you want to do well at the job or you don't.”

Felicia also feels more bonded to Diana after their participation in the professional development but feels frustrated over her lack of understanding of classroom roles.

Even when discussing that, I feel like maybe the idea of roles needs to be more defined or fleshed out so that it's demonstrated to more understanding of what they mean by roles. That threw me in the beginning, was, “What do you mean by roles?” I feel like that almost feels like acting. I don't know what that kind of concept means in terms of roles. Is it, there's supposed to be this finite thing that I am in the classroom, and that's it, and that's all I do, or what does that really entail? Does that switch, does that stay the same? What is it? For each one, what are the responsibilities and expectations for each type of role? If you're this role, what is expected that you'll do? If you're that role, what is it expected that you'll do in that particular position? That's something that is ambiguous.

Felicia has not established for herself what her ideal type of interaction in a co-taught classroom entails. This lack of vision results in a lack of engagement in the classroom because rather than establishing a role she avoids having one. Felicia and Diana have developed more rapport through their participation in the professional development however, they did not experience a drastic change in their dynamic in the classroom.

Shelly, a general education teacher, and Pam, a special education teacher, both described having a fun experience together in the professional development and Shelly felt that it strengthened their bond. “I think it was nice to just strengthen the bond; when we went through the classes and things, we had a good time and we could plan to do those things together.” Pam enjoyed that she was able to express her sense of humor in the team-building activities. Pam

drew a comparison between her feelings collaborating with Shelly in the professional development as opposed to in the classroom.

Whereas in front of the classroom, it's just very professional. If I crack a joke and then we get off, I get everybody off task, she gets angry. She's very, you know, "This is what we do. This is the time."

In times like that Pam describes feeling like she "messed everything up." After recounting this negative experience Pam made sure to state that when her and Shelly are in a more relaxed environment, such as at the movies or out to dinner, they are able to have fun together. There is a stark contrast between Shelly and Pam's relationship at work compared to outside of work. Their experiences in the team-building activities have provided Pam with the opportunity to have lighthearted interactions with Shelly in a professional capacity but Pam is still not communicating honestly with Shelly.

Shelly feels she has made more of an effort to include Pam in the delivery of instruction but still maintains complete control over the process.

When I do the planning I just look, and see, and assign, she can do this part, and she can do that part. She created some new activities, which she hasn't been able to do yet so she'll be leading those. Just that kind of thing. Usually I just plan and roll and go with the whole thing, but when I plan, I have to plan a little differently because she doesn't do it as quickly as I do because she's not the content teacher. She doesn't have the flow of language, or whatever. I just have to pace a little bit differently. I just have to keep things in mind a little differently, if I plan for her to be in the front of the class.

Pam does not share this perception and does not feel that Shelly has included her more in the planning and delivery of instruction. Pam is apathetic about the relationship and feels that Shelly is not capable of changing because of her controlling nature. Pam is able to accept her dynamic with Shelly because she is fulfilled by her relationship with Lisa where she feels like a true co-teacher.

It should look as if there are two teachers; whether we each have certification or not.

And I know we present ourselves like that in the beginning of the year and then [with Lisa] the kids know that we’re two Spanish teachers.

Neither Pam nor Shelly is very motivated to change their dynamic. Shelly is happy maintaining complete control over the planning and delivery of instruction and Pam is already fulfilled by her relationship with Lisa. Shelly may not have the personality to be an effective co-teacher due to her controlling nature, and Pam’s apathy and avoidance of conflict keeps their relationship from being truly collaborative.

Team-building provided co-teachers in less than desirable dynamics with the opportunity to bond and build rapport but participants must be committed to change for team-building professional development to truly have an impact. In both of these relationships at least one co-teacher avoided honest communication with their co-teacher which impacted their ability to meet each other’s needs. These pairs were not communicating their needs to each other, which kept them from creating and achieving a shared vision.

The professional developmental development did not push Diana and Pam to challenge the assumptions they made about their co-teachers prior to the start of the professional development. Diana assumed that Felicia did not want to have an active involvement in the planning and delivery of instruction in their co-taught class. Since Diana did not communicate these feelings to Felicia she was not able to challenge these assumptions. Pam assumed that Shelly was incapable of changing her controlling and domineering personality in the classroom. Pam did not communicate her dissatisfaction with her subservient role in the relationship and did not honestly express how Shelly’s domineering interactions with her in the classroom make her feel belittled and embarrassed. Since Shelly was not clearly aware of Pam’s feelings, Shelly was not able to challenge the assumptions Pam made about their dynamic.

Next Steps for Professional Development

After their participation in the professional development PD group members articulated what additional professional development they feel they need as a co-teacher. All participants discussed the importance of team-building in developing a new co-teaching relationship and expressed their desire to participate in team-building professional development again if they are scheduled with a new co-teacher. Jay expressed that team-building is a great learning experience for co-teachers.

I think if we had something in the summer where we were able to get to know each other, do a PD thing on that kind of level and then really understand how we think, I think that would have established a better relationship instead of trying to find out, “let’s see how this works,” and then go from there, because sometimes it’s just luck of the draw.

You’ll let your guard down, you’re a person, another person can see you as you are and it still relates to the classroom and that’s the thing, these [aren’t] just silly games and yeah we laughed and we had a blast, but it’s very effective in showing you who you are, what’s your learning style, what’s your teaching style, are you a team player, do you respect other people, can you pick up on their styles and I think that all came out through the activities.

Participants believe that the interpersonal nature of the team-building activities were effective in developing rapport which they believe is an essential component of an effective co-teaching relationship. Yvonne believes that the nature of the activities helped her express herself.

I just feel like the activities you had us do kind of opened up that vault, that we kind of keep quiet at times, and let us express what we feel like. I just feel like a little more interpersonal things would be better for co-teaching workshops.

Frank believes that if he and Frank participated in team-building professional development before they started teaching together it would have expedited the development of their effective co-teaching dynamic.

I mean, we were close prior to attending. I feel like if we had something like this during our new teacher orientation or when we were first paired together, I think it would have gotten us to where we are today a little bit faster.

We've been fortunate; we've been together for seven years now so we've made the mistakes and hit all the bumps in the road along the way, so where we are now is a pretty good place.

Participants expressed their desire to participate in department –wide or school-wide team-building to develop their relationship with their colleagues. The size and structure of the school can be isolating, and participants expressed the desire to create a more team-oriented environment at the school by participating in a similar professional development program again. Many participants appreciated having time to get to know other colleagues and would like more opportunities to develop a sense of camaraderie with other co-workers. Harriet expressed the sentiments shared by many participants regarding her enjoyment working with other colleagues.

It really was enjoyable to meet other people, and I would love to be in that situation again, in a fun atmosphere, getting to know people outside of the classroom even if we're still in school.

Jay was very impacted by his positive experiences in the professional development and is eager to participate in more team-building activities in the future. Jay felt his participation helped him learn more about his co-workers, including me, and would like the school to make more of an effort to develop a team-oriented climate.

I like the team building. I would like to have the whole department have an exercise in team-building. The first thing that comes to mind is some sort of scavenger hunt with clues and get people who normally wouldn't interact see a different side. I saw a different side of the teachers that I never see in the classroom because we're able to let our guards down and just react to the situation. I think that maybe the hope is to ever have to engage or have any kind of encounter with someone else, that you see another side so you can make a connection, you know how to approach.

I only knew you to say hello to you. You always were cordial. I remember when you were dark, gothic almost. "Oh, there she is." Then the only other thing I remember you asked me to hold the door once for you when you were pregnant. Not that you weren't polite to me but I got to see you in a whole different way and hopefully you see me in a different way because we never worked together. That's the net result.

I think the department would be stronger. I think the teachers would be. We're all in this together. We all have an equal stake and it would be great to have some sort of activity where we can build upon and learn about everyone else.

PD group members also expressed a desire to learn from their co-teaching peers.

Participants would like to be provided with time to observe other co-teachers, and would like time on district in-service days to collaborate with other co-teachers to design lessons and brainstorm ways to utilize different co-teaching models. Some participants also recommended that teachers new to co-teaching be provided with co-teaching mentors to have collegial support in implementing this challenging model of instruction.

Participants also discussed their desire for professional development that focuses on instructional strategies specific to co-taught classrooms. Participants felt that the team-building professional development provided them with a solid foundation for their co-teaching relationship and are now ready to develop more practical skills in implementing co-teaching effectively. Jamie expressed her desire for continued professional development for her and Yvonne now that they have a solid relationship foundation.

I think that the sessions that we did were really great. I feel like they were really a great foundation. An absolutely essential piece of the puzzle because they built that trust and I got to know things about Yvonne that I didn't know before. I was left with this sense of, “Okay, what's next?” I want the next thing. Now I want to take that foundation and build on it and I'm not sure how to do that on my own. I would want something [like], “Okay now you guys have built this fabulous relationship, what can you do with it?” What are practical things that you can do in a classroom or what are some ways that, given your current schedule, she and I could try to find some time to plan together? How do we do that? How do we plan together because it's not something that she and I have ever done in a formal sense? I feel like what we did was a really necessary foundation, but now I want to build on it with actual classroom strategies and stuff I can use in the classroom. I think that would be the natural next step for me.

Participants discussed their desire to integrate some of the activities from the professional development into their own classrooms. Many participants would like to utilize icebreakers and the “Zoom” activity in their classes at the beginning of the school year to develop a team-

oriented environment in the classroom. Renee discussed her desire to utilize these activities to help her students work as a team because she feels teamwork is essential for students when completing science labs.

Particularly, I feel that it's importance for us in [science] because they're partners at the lab stations so they need that level of communication to move forward with the experiment. If they can do activities like that when we have time, I feel like it strengthens what they need for class.

Participants all finished the professional development with an understanding of the importance of teamwork, and more of an understanding of themselves and their co-teaching partner. Participants expressed that the activities were not only enjoyable, but helped them develop their relationship with their co-teacher and their other colleagues. Even though participants all reported positive experiences, some participants were not able to reach their ideal dynamic. This demonstrates that team-building professional development is the first step for co-teaching pairs and should be implemented to build a foundation for co-teaching relationships. Co-teachers then need to participate in professional development that builds upon that foundation and supports them in developing their ideal co-teaching dynamic in the classroom.

Chapter 5: Discussion

The inspiration for this study came from the obstacles I have encountered as a high school special education co-teacher. Over the past seven years I have worked with several different co-teachers and felt content in some of these relationships because I thought we were on the “same page,” and very unhappy in others because my needs were not met. I have informally observed my colleagues in similar situations and saw how their experiences co-teaching varied with different partners. This led me to believe that a healthy relationship with your co-teacher, where both teachers fulfill each other’s needs, is necessary for co-teaching to be implemented effectively. It also led me to the assumption that teachers needed to function as a team to truly co-teach.

I observed a lack of district-provided professional development for co-teachers, which I felt was a contributing factor to the challenges associated with co-teaching at the high school. I wanted to provide my colleagues with a professional development program that could support them as co-teachers and assist them in developing the ability to implement this challenging model of instruction successfully. The activities in this professional development were designed to help participants build the skills associated with effective teamwork while also strengthening their co-teaching relationship. Through this study I wanted to first develop a deeper understanding of my colleague’s co-teaching dynamics and experiences co-teaching, and provide them with the opportunity to share their stories. I also wanted to explore the impact team-building professional development had on co-teachers’ relationships, and their ability to collaborate with each other in both the professional development and the classroom. I believed that team-building would be a valuable professional development focus for co-teachers and the

experiences of the participants in this study would be utilized to determine if this was a viable intervention for co-teachers at the school.

Summary of the Study

Teachers in this school setting have little input regarding their co-teaching assignments, co-teaching partnerships can change every year, and special education co-teachers typically work with multiple co-teachers each school year. Common planning periods are not included in co-teachers' schedules, impacting their ability to act as a team in the classroom. Some co-teachers are able to collaborate effectively under these conditions while others find it difficult to have equal involvement in the planning and delivery of instruction, which can result in special education teachers taking on a supporting role. When the special education co-teachers in this study were in an inequitable co-teaching relationship their ability to tailor instruction to effectively meet the needs of the diverse learners in the classroom was impeded.

All co-teaching pairs at the school were invited to participate in a voluntary team-building professional development program. The professional development consisted of a variety of low-stakes, team-building activities as well as activities specific to co-teaching. Participants of the study were interviewed before, during, and after the professional development to gather information on their perspectives of co-teaching, their relationship with their co-teacher, their experiences team-building, and the impact these experiences had on their relationship. PD group members also completed formative evaluations after all sessions, a mid-professional development questionnaire, and a summative evaluation at the last session. The entire co-teaching population was asked to complete the Co-teaching Information and Satisfaction survey to collect data representative of the perspectives of the co-teachers at the school so comparisons could be made between the perspectives of the participants and those representative of the co-

teaching population.

Before we began the professional development participants’ degree of satisfaction in their relationship varied. The level to which they felt they and their partner had a shared vision for co-teaching impacted participants’ perspectives. Participants that felt they were on the “same page” felt happier in their co-teaching dynamics than those who felt they lacked a shared vision. Regardless of their level of satisfaction with their co-teacher, all PD group members believe co-teaching is valuable to both teachers and students. Participants appreciate the opportunity to receive feedback and “bounce ideas” off their co-teaching partner because they feel it helps them develop more awareness of the needs of their students. PD group members also believe that co-teaching reduces the student-to-teacher ratio, which logistically allows them to reach more students.

PD group members believe that co-teaching is an art, a method of instruction that is difficult to implement successfully because sharing “territory” in the classroom is challenging. All participants believe in co-teaching in theory however, many co-teachers have encountered obstacles trying to implement this method of instruction. Co-teachers expressed the desire to utilize a variety of co-teaching models but feel unsure of how to actually implement these changes. Participants reported a need for more professional development, in addition to more administrative support, before they would be able to make changes in how they co-teach. The sentiments expressed by the participants, and the range in level of satisfaction in co-teaching relationships, were mirrored in the responses of the co-teaching population to the Co-teaching Information and Satisfaction survey.

In formative and summative evaluations all PD group members reported positive experiences in the professional development. The most common adjective used to describe each

session was “fun.” Participants appreciated having the time to “play” and be silly at work because there is often not enough time in the day to laugh with your co-workers and get to know each other in new ways. PD group members felt that their experiences in the team-building professional development were uplifting and motivating, and this was something they rarely experienced in past professional development. The nature of the professional development activities also provided co-teachers with the opportunity to take on new roles, with the special education teacher taking the lead role in some activities and the general education teachers taking on a supporting role. This helped the special education teacher feel more confident in their interactions with their co-teacher, and helped the general education teachers to see their partner as a whole person that is capable of more than just the role of “helper.” The reflections that occurred during the professional development helped participants develop more self-awareness and awareness of partner dynamics. This supported special education teachers in developing their “voice” and helped general education teachers make more of an effort to relinquish some control in the classroom. Pairs that felt their relationship was ideal before the start of the professional development found their experience enriching and validating because it gave them time to bond in new ways, and realize they work well as a team in a variety of situations.

Participants expressed their belief that a good relationship is the foundation for a successful co-teaching dynamic. PD group members expressed that team-building professional development should be provided to co-teachers, especially new pairs, before school starts in September so they can begin to develop their ability to work as a team before entering the classroom. PD group members also expressed the desire to participate in more co-teaching professional development now that they have built a solid relationship foundation to help them learn new ways to capitalize on the benefits of having two teachers in the classroom. In addition,

participants would like more time to learn from other co-teachers to improve their co-teaching abilities by being provided with release time to observe other co-teaching pairs and having time to brainstorm with other co-teachers on district in-service days. Participants enjoyed having the time to collaborate with colleagues they typically do not interact with and expressed their desire to continue to have opportunities to learn from their fellow co-teachers.

Discoveries

The participants of this study believe in co-teaching, and many possess a strong desire to implement co-teaching successfully, however; they encounter obstacles in their school context that make it difficult for them to execute this model of instruction according to their ideal vision. When PD groups members are scheduled to work with an incompatible partner, and do not feel like they are co-teaching up to their full potential, they become frustrated and unhappy. They place the majority of the blame for the problems they encounter in these situations on their administrators because the administration determines co-teaching partnerships with little to no input from teachers. Since participants see their administrators' scheduling procedures as the source of the problem they also see them as the only source of solution. They did not feel motivated or equipped to navigate difficult relationships with co-teachers to create a successful partnership in the classroom.

Team-building professional development is utilized frequently in the business and health care sector but research on the implementation of this type of professional development in school settings is lacking (Bittner & Leimester, 2014; Buljiac-Samardzic, 2011; Jones & Jones, 2011; Jordan & Troth, 2004; Mickan & Rodger, 2005; Sargeant et al., 2008). Team-building professional development is one way that co-teachers can develop the skills needed to control the success of their relationship and find solutions to the problems they encounter working together

with less reliance on administrative involvement. Providing co-teachers with professional development specific to their needs is essential because professional development can support educators in increasing student learning and improving school quality (Desimone, 2011). If co-teachers feel that the nature of their relationship is the biggest obstacle to their ability to co-teach effectively, professional development that focuses solely on different co-teaching models may not be appropriate because it does not address their need to change how they interact with each other. The findings of this study provided beginning evidence that team-building professional development can fulfill this need by providing co-teachers with opportunities to strengthen their relationship, which can result in changes in their instructional practice in the classroom.

Co-teachers Need to Feel Empowered

The roadblocks that PD group members described encountering mirror what research says are challenges associated with co-teaching in secondary schools. Participants cited lack of content area knowledge, lack of knowledge of special education, inequitable relationships, and incompatible partners as the major obstacles they experience co-teaching. Research has found that the increased emphasis on content area knowledge in secondary school makes it difficult for co-teachers to have equitable roles in the classroom, especially if the special education teacher does not have a background in the subject area (Keefe & Moore, 2004; Rice et al., 2007; Scruggs et al., 2007). The general education teachers in this study reported having to some degree, a more dominant role in the classroom because they have more content expertise. Some participants described frustrating co-teaching situations when their partner did not have a strong knowledge-base in the content because they felt this resulted in them not “pulling their weight.”

General education teachers also need more information to co-teach successfully.

Research has found that general education teachers lack knowledge of the needs of special

education students and this impacts the nature of their co-teaching relationship (Scruggs et al., 2007). Special education teachers in this study reported frustration when administrators schedule them with a general education co-teacher who has a limited understanding of co-teaching and special education because it makes it difficult for them to have an equitable role in the relationship. Many special education participants expressed their discontent with their lack of involvement in the planning and delivery of instruction, and feel stifled by their general education co-teachers' instructional practice because it limits their ability to tailor instruction to meet students' needs. Research has also found that a reliance on direct instruction causes stress for special education co-teachers because teacher-centered instruction does not account for the unique needs of special education students (Scruggs et al., 2007). These differences in philosophy of education are further intensified when teachers are not given common planning time, as was the case in this study (Bouck, 2007). Inadequate time to collaborate further limited the special education teachers' ability to contribute their perspective and have an active role in the classroom.

When participants lacked a shared vision for co-teaching they felt unhappy in their relationship. These feelings were further exacerbated when a co-teacher did not possess a command of the content, or lacked knowledge of special education, because it created an inequitable dynamic. PD group members believe that administrators should schedule teachers with similar educational philosophies and expectations for co-teaching so they will be able to effectively work as a team in the classroom. General education teachers also want to be scheduled with a special education teacher who has a background in the content area and special education teachers want to be paired with a general education teacher who is sensitive to and aware of the needs of special education students. Participants believe that the hurdles they

encounter co-teaching result from their administrator matching them with an incompatible partner.

I was not surprised to learn of the obstacles my fellow co-teachers have encountered because they reiterate the issues that research has found to be associated with co-teaching in secondary school. I was however, surprised to realize that because participants see the administration as the root of these issues they abdicate all control of the success or failure of their relationship to their administrators. PD group members believe that the single most important factor in co-teaching is being paired with a compatible partner with a shared vision, however; administrators at the school decide co-teaching partnerships with limited involvement from teachers. Teacher input has been found to be an essential component in creating successful co-teaching relationships but the teachers in this study must rely on the “luck of the draw” to be paired with a companionable colleague who has a similar philosophy of education as their own (Bouck, 2007; Keefe & Moore, 2004). If participants are “lucky” they are paired with a fitting partner, if this is not the case they feel their only option is to suffer through an uncomfortable school year. Co-teaching is a deeply personal experience for PD group members and they would like administrators to be more respectful of this fact. Participants feel the solution to co-teaching problems is for administrators to change their scheduling procedures and make more of an effort to pair teachers with similar teaching styles. Jay summarized the feelings of many participants when he described the negative situations that result from being mismatched and what a solution to this issue would entail.

If it doesn't work, it just makes the whole year a labor. You have to want to be together and you have to have that connection to make it work. I was in a situation where it just didn't work and the year felt like an eternity. I don't think two people should be arbitrarily joined. I think there should be communication. Find likes, dislikes, find similar teaching styles, methods of grading and delivering instruction. Can they share?

PD group members do not feel supported by, or given guidance from, their administrators and are instead thrown into co-teaching relationships without any professional development and essentially told to “figure it out.” The uncomfortable and unhappy experiences that participants have encountered co-teaching have led to feelings of aggravation and resentment. Jamie described the feelings shared by other participants regarding the lack of guidance and support she feels.

I’ve never had any PD on co-teaching. It was just one of those things that, “Here, go figure it out. Here, you’re in the classroom with this person this year, go figure out how to teach together.” It’s difficult; you figure it out as you go. Sometimes it works, sometimes it doesn’t.

PD group members encounter challenges when they are scheduled to work with someone who they do not feel is on the “same page” as themselves and believe that these challenges are caused by their administrators creating ineffective partnerships, therefore; the solution is for administrators to become more skilled at matching teachers. Participants do not feel prepared to overcome the challenges they may encounter on their own because they have received little to no training in co-teaching and instead require administrative intervention. Participants did not describe a time when they worked to overcome the roadblocks they experienced in an initially unhappy co-teaching relationship to have a successful school year. When participants are unhappy with their partner they bide their time, wait for the year to end, and hope they get placed with a better match the following year. They allow the decision their administrator makes when scheduling them to dictate their happiness for the year. If they are with someone they perceive as incompatible they feel that the situation is hopeless and beyond their control to remediate. If an arranged marriage is used as a metaphor for co-teaching, participants skip over marriage counseling and jump straight to divorce when they feel their relationship is not working.

PD group members believe there is no solution beyond getting a schedule change for the following year when a relationship is unsatisfactory. They have become so preoccupied and offended by how their administrators have disappointed them when creating co-teaching partnerships that do not feel empowered to find ways to bring about desired changes on their own. Participants need to regain control of the success of their relationships to avoid feelings of hopelessness. Team-building can be utilized as an intervention to provide unhappy pairs with the support needed to begin to strengthen their relationship and build the skills needed to overcome the challenges they are experiencing.

PD Does Not Have to Hit Participants Over the Head

An assumption can be made that in order to impact how teachers co-teach they need to be provided with direct instruction on co-teaching. Having a co-teaching pair attend informative professional development on co-teaching models may seem like a logical choice however; this style of professional development does not guarantee impact. The only co-teaching professional development I have been provided with in the district matched this description. I attended the workshop with my co-teacher and the professional development focused on the different co-teaching models and the importance of varying the delivery of instruction in the classroom. Despite the relevant content, the workshop had no influence on my co-teaching dynamic. This incident made me realize that co-teaching is far more complex than the different models that can be utilized in the classroom. Brownell et al. (2006) also found in their research that many factors impact whether or not the innovations addressed in professional development will translate into classrooms. Teachers' knowledge, beliefs, skills, and reflective ability all impact how they benefit from collaborative professional development (Brownell et al., 2006). Educating teachers on the changes they should make in their co-teaching relationship does not guarantee impact, as

was my experience in the co-teaching workshop I attended with my co-teacher. This event influenced my desire to conduct an unconventional professional development program for co-teachers that relied more on play rather than on direct instruction to provide learning opportunities for participants. Workplace “play” might initially seem frivolous but it’s benefits became the foundation for this professional development plan. Play has been found to be a catalyst for learning for both children and adults, and workplace play can make adults more productive and happier personally and professionally (Brown, 2009).

The experiences of the participants in team-building professional development demonstrated that professional development for co-teachers does not have to be didactic to have an effect. Co-teachers can participate in low-stakes team-building activities that do not directly relate to co-teaching models and still feel like they are participating in worthwhile professional development for co-teachers. Even though many of the professional development activities were not co-teaching specific, the nature of the activities still lent themselves to reflections about co-teaching. This professional development plan included activities in the final sessions that specifically focused on co-teaching models but participants did not cite these components as having the greatest impact. Participants referred to team-building activities when describing reflections they made about their co-teaching dynamic and these activities were mentioned when describing their most memorable experiences. I learned that professional development for co-teachers can be playful and low-stakes, and participants will still make connections to co-teaching.

The novelty of an unconventional professional development format was beneficial for participants because they were able to have fun with their colleagues in a relaxed environment, which is something they felt they needed after teaching all day. Beth summarized the feelings of

many participants on the benefits of “doing something different.”

After teaching all day and having that teacher hat on and getting to the end of a long day, it’s really nice to take the teacher hat off and do something that’s totally different from what I’ve been doing all day long.

The nature of team-building was motivating for participants because they were able to laugh and have positive interactions with their co-teacher and colleagues, which is not something they typically do in professional development. Jamie expressed that a fun professional development atmosphere is invigorating.

I think it was one of the few occasions in professional development that I would leave the session feeling better than I did when I walked in. There was just such a refreshing quality about the experiences that I would leave feeling energized and at 4:15 that’s an unusual experience to have.

Participants thought their experience in the professional development, as opposed to the content of the professional development, had the greatest impact because the relaxed environment and playful interactions had a positive influence on their mood. Team-building not only provided an outlet for discussions and reflections on co-teaching but also was successful in boosting co-teachers’ morale and feelings of camaraderie with their partner and colleagues. PD group members not only wanted to spend time building their relationship with their co-teacher but with all of their colleagues. Participants were craving more camaraderie across the school campus and enjoyed having the opportunity to bond with new colleagues.

The nature of relationships between co-teachers in high school is an important determinant of success (Keefe & Moore, 2004). Given the influence that relationships have on how teachers co-teach, professional development cannot only address co-teaching models in a didactic manner; teachers also need the opportunity to work on how they interact with each other. Team-building allowed the participants of this study to work on their relationship in a non-threatening environment while completing low-stakes activities. The environment in the

professional development was positive and playful which helped to lower participants' inhibitions and make connections with their colleagues.

You Can Not Change Co-teaching Until You Change Relationships

Special education participants described co-teaching experiences where they were not treated as an equal by their general education co-teacher, and general education teachers typically reported having a more dominant role in the relationship. These inequities are not unique to this school context; research has found inequitable roles to be common amongst secondary co-teachers (Scruggs et al., 2007). Special education teachers have been found to have difficulty taking an active role in the classroom and being perceived as an equal partner by their general education co-teacher (Keefe & Moore, 2004; Rice et al., 2007; Scruggs et al., 2007). General education teachers predominantly take on a lead role in their co-teaching relationships because they have ownership of the classroom and more content area knowledge than their special education partner (Scruggs et al., 2007).

Despite the variety of ways co-teaching can be implemented the one teaching-one assisting model, with the general education teacher leading instruction, is the most prominent co-teaching model used in secondary inclusion classrooms (Scruggs et al., 2007). Co-teachers in this school context also rely on this method and rarely implement a variety of co-teaching models in the classroom which results in some special education participants acting more as a classroom helper rather than a co-teacher. Before special education participants could take on an equal role in the classroom they needed to be seen by their general education co-teacher as a competent partner. The teamwork needed to implement a variety of co-teaching models required the general education participants to trust that their co-teacher is capable and required the special education participants to feel confident sharing their perspective and taking an active role in the

classroom. In order to truly co-teach participants needed a relationship that was trusting, collaborative, and communicative.

Co-teaching requires both teachers to work as a team to plan and deliver instruction to meet students' diverse needs. Teamwork has become more customary in professional organizations, which has made team effectiveness an area of focus for both professionals and researchers (Jordan & Troth, 2004). Even with the increased focus on professional teamwork research on team-building for co-teachers is virtually non-existent. The team-building professional development that was the focus of this study was designed to help co-teachers develop the skills research has found to be characteristic of effective teams. The experiences of the participants in this study demonstrated that building teamwork goes hand-in-hand with relationship building. The low-stakes nature of the activities allowed co-teachers to practice the skills they needed to work as an effective co-teaching team while also developing their relationship in a relaxed environment.

Research has found that communication between team members is essential for team effectiveness (Buljiac-Samardzic, 2011; McCaffrey et al., 2012; Mickan & Rodgers, 2005; Sargent et al., 2008). Bouck (2007) found that effective co-teaching teams are comfortable having difficult conversations regarding grading, student participation, classroom management, and accommodations. Some of the participants of this study started the professional development lacking rapport in their relationship, which impacted their ability to communicate regarding such controversial topics. The nature of the team-building activities provided participants with the opportunity to practice communicating with their partner in low-stakes situations to create the foundation needed to work up to more difficult conversation related to the classroom. Maya expressed her appreciation of having time to practice communicating.

To be honest, I like the idea of just practicing how to communicate, how to talk to each other. Especially when we had to build that contraption, we had a couple of ideas, it was just nice I guess, some of us got a little frustrated with each other's ideas, but we all to take a second, “All right what's your idea? Why do you think it's a good idea? What's your idea, why do you think it's a good idea?”

We were talking about what we wanted to do and what our plan was. It was difficult. One person was saying, “I think we should do this,” and it was hard for me to understand what she was actually saying. I said, “Do you mean this?” We drew a little picture and figured it out. I think that activity was a good illustration of the need for communication because it was a very frustrating task.

The nature of the activities put all co-teachers on an even playing field therefore neither general or special education teachers had a dominant role. As a result, many special education teachers felt comfortable sharing their ideas and advocating for their point of view, which was something they avoided if they were in an inequitable dynamic. General education teachers were also open to hearing the ideas of their co-teacher and felt comfortable with them taking the lead. While communicating as equals and reaching compromises in the activities, participants were also developing more comfort and rapport in their relationship.

In addition to the ability to effectively communicate, team members must be able to trust each other for their professional team to work effectively (Jones & Jones, 2011; Kuo & Yu, 2009; Chiocchio et al., 2011; DeOrtentiis et al., 2013; Tseng et al., 2009). When describing their relationship, general education participants discussed the level of trust they have in their special education co-teacher's content area knowledge. Special education co-teachers described the level they trust in their co-teacher's ability to understand the needs of special education students and be open to hearing their “voice” in the classroom. The team-building activities helped PD group members develop more trust in their relationship because it changed how they interacted with each other. Special education teachers were able to take on more of a leadership role in the activities and showcase their skill sets. General education teachers were then in the position to

take on a more supporting role. These experiences helped the special education teachers to gain more confidence and trust in themselves, which resulted in their increased ability to share their “voice.” As a result, general education teachers were able to view their special education co-teacher as a competent and trustworthy partner as opposed to an inferior member of the team. Kelly was the dominant co-teacher in her dynamic before the start of the professional development but her experiences team-building helped her to develop more trust in her co-teacher, Beth.

I think what we did in our PD was great because it kind of allowed us to establish trust in different forms I guess. We don’t usually get to do that in the classroom setting. It’s all business, there is no play. But in the PD you get to have fun a little bit. You get to trust each other on a different level. I think that’s good.

Team-building activities can equalize the relationship between co-teachers and can change how they relate to each other by establishing more trust in the relationship. Team-building professional development provides low-stakes activities where participants can rehearse trying on different roles. The relaxed environment in the team-building professional development created a safe space for the special education teachers to be more assertive when collaborating with their co-teacher and allowed general education teachers to feel comfortable relinquishing some control.

A shared vision has also been identified as vital to team effectiveness and a shared understanding amongst all team members is crucial for effective collaboration (Mickan & Rodger, 2005; Sargeant et al., 2008; Ahles & Bosworth, 2004; Bittner & Leimester, 2014). Developing a shared vision for co-teachers can be challenging because administrators do not consistently utilize teacher input when creating co-teaching pairs (Bouck, 2007). The co-teaching pairs in this study who believed they had an ideal dynamic also described feeling they have a shared vision and were on the “same page.” A shared vision existed organically between

these pairs because they had similar educational philosophies; it was not something they described working to create. These pairs “lucked out” by being placed randomly with a partner with whom they have a shared vision for co-teaching.

For some, a shared vision did not exist initially and many of these participants reported a lack of rapport in their relationship. Before these pairs were able to develop a shared vision they first needed to develop the ability to communicate and increase the level of trust and comfort they have in the relationship. Team-building provided a lighthearted environment for co-teachers to have fun together which helped them develop camaraderie. The bonding that occurred in the professional development helped pairs feel more comfortable and connected to each other and the professional development helped to create a shared history for pairs who have limited experience working together. Beth described her bonding experience creating a shared history with her co-teachers.

We always talk about it when we get back to our office, “That was fun, that was interesting.” And we’ll share stories like, “Remember when somebody said this, or remember when you did that?” Or, “remember when you put me on the spot [in the improv activity] and I didn’t know what to say? That was funny.” Yeah we do have a lot of fun.

Team-building provides co-teachers with the opportunity to work on their communication skills, build trust, and develop camaraderie. While developing these skills participants are able to strengthen their relationship and begin to create a shared vision for co-teaching if one is lacking. Participants believe that a strong relationship foundation is needed before teachers can co-teach effectively. After participating in team-building participants believed they were then ready to work on developing the skills needed to implement a variety of co-teaching models in the classroom. Jamie expressed her desire for continued co-teaching professional development.

I think that the sessions that we did were really great. I feel like they were really a great foundation. An absolutely essential piece of the puzzle because they built that trust and I

got to know things about Yvonne that I didn't know before. I was left with this sense of, “Okay, what's next?” I want the next thing. Now I want to take that foundation and build on it and I'm not sure how to do that on my own. I would want something [like], “Okay now you guys have built this fabulous relationship, what can you do with it?” What are practical things that you can do in a classroom or what are some ways that, given your current schedule, she and I could try to find some time to plan together? How do we do that? How do we plan together because it's not something that she and I have ever done in a formal sense? I feel like what we did was a really necessary foundation, but now I want to build on it with actual classroom strategies and stuff I can use in the classroom. I think that would be the natural next step for me.

The experiences of the participants in this study demonstrates that professional development cannot ignore the influence the nature of co-teachers' relationships has on their ability to co-teach. Co-teachers need professional development that is two-tiered. First, co-teachers need the opportunity to work on building their relationship and the skills needed to work as a team. They need to have time to learn to communicate and compromise, build trust, and develop a rapport. In addition, co-teachers need the opportunity to interact as equals so they can perceive each other as competent and capable partners. Once co-teachers have a solid relationship foundation they then need to be provided with training specific to the art of co-teaching. Once a healthy relationship has been formed co-teachers need training in co-planning, collaborating with time limitations, and content specific ways to integrate the different co-teaching models into their classroom. If teachers do not have a good relationship they may be resistant to change which could make co-teaching training irrelevant.

Team-building is Not a Panacea

Even though all of the participants reported that they enjoyed the professional development, and all PD group members were observed actively engaged in the team-building activities, changes did not translate into the classroom for some pairs. Diana and Felicia, and Pam and Shelly experienced roadblocks, which impacted their ability to forge a more equitable relationship. These participants all described having a positive experience in the professional

development but the professional development was not able to significantly influence the nature of their relationship. Team-building is not a universal solution for co-teachers and may not address the unique needs of some pairs, as was the case for these participants.

Diana wanted to create a more equitable and collaborative dynamic with Felicia. She was unhappy with Felicia’s lack of involvement and wanted to work together to plan and deliver instruction. Diana felt that Felicia had no interest in changing their dynamic and was content to have minimal involvement in the class. Even though they communicated during the professional development Diana did not develop the skills needed to have difficult conversations with Felicia regarding her unhappiness with their lack of equity. Felicia’s limited role in the classroom was a stark contrast to her active engagement in the team-building activities. Felicia used her lack of knowledge of the curriculum as a rationale for her lack of involvement in the classroom and did not make an effort to prepare herself with the requisite knowledge needed to take on an active role in the class. Although they collaborated and had fun together in the professional development, the activities did not help them to create a shared vision for their co-teaching relationship. Team-building was not enough to inspire Felicia to become more involved in the classroom and did not provide Diana with the skills needed to confront the issues she experiences with Felicia.

Shelly is admittedly domineering and controlling. She has issues sharing her territory in the classroom and would ideally like everything done “her way.” Shelly felt that her experiences in the professional development made her more aware of including Pam in the delivery of instruction Pam, however, did not report that she felt Shelly was relinquishing control. Pam was unhappy with her dynamic with Shelly but was also not invested in working to change the relationship, and instead was content being a “chameleon” and avoiding conflict. Shelly’s

personality may be incompatible with the philosophy of co-teaching and she may be better suited teaching her classes independently. Pam did not develop the skills needed to have difficult conversations with Shelly and the team-building was not enough to inspire her to want to work to make progress towards a more equitable dynamic with Shelly. Pam expressed her feelings of fulfillment in her relationship with her other co-teacher because Lisa was inherently open to the idea of co-teaching and knowledgeable of special education. Pam did not have to “fight” to have an equitable dynamic with Lisa and was therefore, content in this relationship. She is satisfied when her co-teaching relationship naturally meets her ideal vision but is not committed to working towards progress when a co-teaching dynamic is less than ideal.

Other pairs also started the professional development with inequitable roles but these participants were able to make progress and see changes in their relationship. In most of these relationships both co-teachers began the professional development with a desire to create a more collaborative and equitable dynamic therefore, both teachers were committed to progress and change. Kelly and Beth were an exception to this case but still were able to make progress through their participation in the professional development. Kelly only agreed to participate in the professional development at Maya’s request and was content maintaining a dominant role in her co-teaching relationship. Even though Kelly was initially dominant in her relationship with Beth, Beth was committed to forging a more equitable dynamic and her experiences in the professional development helped to build her confidence and find her “voice.” Kelly developed more trust and comfort in her relationship with Beth in the professional development and this combination allowed them to begin to see positive changes in the classroom.

In the case of Diana and Felicia, and Pam and Shelly, both co-teachers were not committed to change, which influenced the professional development’s ability to impact their

relationship. Diana did not develop the same confidence as Beth and did not participate in difficult conversations with Felicia. Felicia was not committed to change and was content allowing Diana to shoulder the majority of the responsibility in the classroom. Pam also did not develop the desire or ability to have difficult conversation with Shelly, and Shelly was content to maintain a domineering role in the classroom. In both of these incidences one co-teacher avoided conflict and the other maintained the status quo because their more dissatisfied partner did not challenge them. Although their experiences were enjoyable, the professional development was not enough to initiate necessary changes in their dynamic in the classroom. Team-building may not be the solution for all co-teachers and the inequities in the their relationship may be influenced by personality traits that are not conducive to the teamwork required in co-teaching relationships.

Implications

The findings from this study can be used to make recommendations for the supports that should be provided to co-teachers. These implications will be broken down into two categories: implications for the school setting of this study and implications for education policy. Some implications for the setting of this study require administrators to make systemic changes in scheduling procedures utilized for co-teachers. Other recommendations require administrators to modify the process they employ to provide professional development to co-teachers. Implications for broader education policy require policy makers to focus on the importance of the relationship between co-teachers in their ability to co-teach effectively.

School Setting of the Study

Secondary co-teachers are a hybrid of a content area teacher and special education teacher. All administrators and teachers at the school need to develop a shared vision for how

co-teaching should be implemented. Administrators and teachers of this school context need to reach a consensus on the characteristics of effective co-teaching and commit to a truly collaborative co-teaching model. This cultural shift is needed to create an environment where it becomes more common for special education teachers to have an equal role in the planning and delivery of instruction and less common for special educators to function as a classroom “helper.” Teachers need to be on the “same page” when they co-teach and be in agreement on how they implement this model of instruction. Both teachers need to be comfortable with their level of involvement in the planning and delivery of instruction and feel that they are in a co-teaching relationship that meets their needs. Administrators need to be more sensitive to the complexities of co-teaching dynamics so they can provide necessary guidance and support when co-teaching relationships do not organically meet teachers’ needs.

Participants discussed the importance of being paired with a compatible partner and expressed their desire for their administrators to be more thoughtful when pairing them with their co-teaching partner. A committee of co-teaching volunteers should be organized to create a survey they feel would be helpful for their administrators to use when scheduling partners. In addition, discussion of co-teacher’s experiences in their co-taught classroom should be included in post-observation conferences and summative evaluation conferences for administrators to develop a better understanding of how their teachers are experiencing co-teaching conditions. This information, in addition to survey responses, should be utilized to craft compatible partnerships. At the end of each school year administrators should also request that their teachers notify them if they would like to remain in their co-teaching relationship. If both teachers in the partnership would like to remain a pair, their relationship should not be broken up if logistically possible.

Participants of this study identified a need for common planning time in interview and survey responses. Once compatible pairs have been determined, co-teachers should be scheduled to have a common planning period. If logistically this is not possible, co-teachers should be provided with at least one “collaboration period” a week in lieu of their duty period. Designating common prep time is needed to increase the level of involvement special education teachers have in the planning of instruction in their co-taught classes. In addition to time to plan, co-teachers in this school context also expressed the desire to participate in more co-teaching training.

Professional development for co-teachers in this setting needs to occur in two phases. First, co-teachers must be provided with opportunities to team-build and develop their ability to communicate with each other, trust each other, and develop a shared vision. Then, co-teachers need professional development to support their ability to implement a variety of co-teaching models in their instructional practice. Participants of the study highlighted the importance of the nature of co-teaching relationships in the success of co-teaching dynamics. PD group members expressed that team-building professional development has a number of benefits and believe that co-teachers should be provided with this form of professional development to help them build healthy relationships. New partnerships should be given team-building professional development during their district in-service days to begin to develop a rapport and sense of camaraderie before entering the classroom.

Once a solid relationship foundation has been established, co-teachers then need to complete a professional development needs assessment on the training they believe they need to implement a variety of co-teaching models in the classroom and overcome obstacles associated with co-teaching. Professional development should then be designed that specifically meets

these needs and co-teachers should be provided with this professional development on district in-service days. A committee of teachers can be formed to design the needs assessment and utilize the findings to create a professional development program that is catered to the needs of the co-teachers at the school.

In addition, co-teachers need to be provided with time to learn from each other. In individual interviews, participants of this study all expressed their desire to have time to collaborate with other co-teachers and have the opportunity to learn new co-teaching strategies from their colleagues. To offer co-teachers more opportunities to learn from each other, co-teachers should be provided with release time to observe their colleagues co-teaching. Co-teachers should also be provided with time during monthly curriculum meetings to collaborate and brainstorm ways to utilize a variety of co-teaching models with other teachers in their specific content areas.

Education Policy

Co-teaching is a prevalent service delivery model for special education students in inclusion classrooms in K-12 education settings. Despite its prevalence and the challenges associated with co-teaching, policymakers have not made an investment in preparing pre-service teachers for co-teaching conditions, and also have not provided necessary training to K-12 educators to support them in implementing this challenging model of instruction successfully. Policymakers do mandate that special education teachers be Highly Qualified in the content areas they teach but, despite having a background in the content area and a Highly Qualified status, special education teachers may still find themselves in an inferior role.

Policymakers can mandate that both teachers have content area knowledge but that does not guarantee that an equitable dynamic will translate into the classroom. Co-teachers need a

relationship dynamic where both partners view each other as competent and capable, and respect each other’s abilities. Teachers must change the assumptions they make about each other and change their perceptions of what it means to be a co-teacher, which will require relationships to change. Co-teachers need to possess elements of effective teamwork if they are to collaborate effectively to plan and deliver instruction that meets their students’ unique needs therefore, team-building professional development must become more prevalent for co-teachers. Team-building can be implemented to support school districts as they progress towards a culture that embraces co-teaching by providing faculty members with the opportunity to build rapport and develop characteristics of effective teamwork.

Co-teachers in secondary schools also need ongoing training and professional development in current best practice for special education students to move away from a reliance on direct instruction and incorporate more student-centered learning. This transition is needed to provide more opportunities for co-teachers to incorporate a variety of co-teaching models into their lessons that can allow both teachers to have equal involvement in the delivery of instruction. An increased emphasis on differentiated, student-centered learning, in addition to the equal involvement of both general and special education teachers in the planning and delivery of instruction, can support co-teachers in meeting the needs of the diverse learners in the classroom.

When implemented effectively, co-teaching has the potential to result in engaging and innovative instruction that is catered to meet students’ needs as a result of the collaboration and teamwork of two equal partners in the classroom. To make this type of co-teaching dynamic the norm, a larger cultural shift is needed. Both general and special education teachers need to be regarded as equals, with equal ownership of a co-taught classroom. An administrative expectation must also exist that both general and special education teachers be held accountable

for collaborating as equals, as opposed to placing the onus of “making co-teaching work” on special education teachers’ shoulders. To make this cultural shift occur, policymakers need to make co-teaching more of an area of focus, and co-teachers need to be provided with appropriate training and support in both pre-service programs and in ongoing district provided professional development. In addition, administrators need more training in co-teaching as part of their ongoing professional development in best practice for special education students. Administrators need to become instructional leaders in the art of co-teaching, and create a school culture that views both special and general education teachers as equals. Administrators must have the expectation that co-teachers work as a team to design and implement innovative instruction that meets their students’ needs through the use of a variety of co-teaching models.

Future Research

Research on team-building professional development in school settings is lacking therefore, more research must be conducted to determine if this intervention has a positive impact on co-teachers in a variety of settings. Co-teachers with a broad range in pre-professional development dynamics will need to be studied to determine if pairs in more hostile dynamics are able to make positive progress in their relationships. School-wide team-building should also be studied to determine if this type of intervention can support general education teachers, special education teachers, and administrators in developing a shared vision for co-teaching and explore the impact this shared vision has on school culture and student learning.

In addition, research is needed that explores the impact interactive professional development that focuses on experiential learning has on teachers’ instructional practice. Providing co-teachers with the opportunity to collaborate in activities that put them in the role of a student and model current best practices may be beneficial in supporting co-teachers in moving

away from teacher-centered to student-centered instruction. Research is also needed to explore if implementing more student-centered instruction results in co-teachers utilizing a wider variety of co-teaching models in their classrooms.

Limitations

Case studies are rooted in real-life contexts and can provide a holistic description of a phenomenon but there are limitations to using this type of research design (Merriam, 2009). The first limitation is that the researcher is the primary instrument of data collection and analysis; therefore, I relied on my own instincts and abilities throughout my research efforts (Merriam, 2009). Case studies focus on a single unit so there are issues with generalizability (Merriam, 2009). The researcher and reader of the case study also need to be aware of biases that could impact the ethical nature of the final product of the case study research (Merriam, 2009).

The context of this study is a large, upper middle class, suburban high school, which limits how applicable the research design and findings are in other school environments such as an urban district. There are also sustainability limitations. The final data collection occurred three weeks after the professional development ended; therefore, it was not possible to determine if co-teachers worked successfully as a team for the remainder of the school year or if their relationships improved after working together for more time. Co-teachers may be reassigned each school year, which also impacts the sustainability of the professional development.

There were also limitations to the study sample. Participation in the professional development was voluntary so participants already demonstrated inherent motivation to work as a team by volunteering to participate. Many of the participants of this study are teachers in the same department as me, and part of their decision to participate was their desire to support me in

my academic endeavors. This too demonstrates their inherent desire to work as a team.

Participants of this study began with varying degrees of satisfaction with their relationship however; no one was experiencing hostility. It is not known what impact team-building would have on pairs in an antagonistic relationship.

The time commitment that this professional development required was another limitation. Attendance issues arose for some participants, which required a “make-up” session to be scheduled. Committing to 6 weeks of after-school professional development may be a challenge to some teachers because of responsibilities outside of school. The time commitment may also dissuade some participants, especially those in hostile dynamics, from participating in a voluntary professional development program.

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Appendix A

Consent Form

Non-clinical, Minimum Risk Study

Co-Teachers’ Experiences in Team Building Professional Development

You are invited to participate in a dissertation study that is being conducted by Denise Goodhue, a doctoral student at Rutgers University, under the supervision of Dr. Carrie Lobman who is a professor in the Graduate School of Education at Rutgers University. The purpose of this study is to investigate how secondary co-teaching pairs experience team-building professional development.

Approximately 6 co-teaching pairs from the study setting will be participating in this study. Each individual's participation in professional development sessions will last approximately 10 hours. Participants will also be asked to complete surveys that will be emailed to their district email accounts. Completion of each survey will take approximately 15 minutes. The study procedures include participation in 6 professional development workshops and completion of surveys. Survey themes include: co-teaching experience, roles and responsibilities in your co-teaching relationship, communication with your co-teacher, collaboration with you co-teacher, experiences in team-building activities, impact of participation in team-building professional development, and value of team-building professional development

There are minimal risks to participation in this study. Participation in this study is voluntary. You may choose not to participate, and you may withdraw at any time during the study procedures without any penalty to you. In addition, you may choose not to answer any questions with which you are not comfortable. There are a number of benefits to your participation in this study which include opportunities to build upon your communication skills, problem solving skills, and collaborative skills between you and your co-teacher through participation in enjoyable, team-building activities in a positive environment

This research is confidential. Confidential means that the research records will include some information about you, such as your name, whether you are a general or special education teacher, and number of years co-teaching experience. I will keep this information confidential by limiting individual's access to the research data and keeping it in a secure location. The research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. Pseudonyms will be utilized in reporting research findings and no member of the professional development group, or your co-teaching partner, will have access to your responses.

If you have any questions about the study procedures, you may contact Dr. Lobman at 732-932-7496 x8116. If you have any questions about your rights as a research subject, you may contact the Sponsored Programs Administrator at Rutgers University at:

Initial _____

**Rutgers University Institutional Review Board for the Protection of Human
Subjects Office of Research and Sponsored Programs**

3 Rutgers Plaza

New Brunswick, NJ 08901-8559

Tel: 848 932 4058

Email: humansubjects@orsp.rutgers.edu

You will be given a copy of this consent form for your records.

Sign below if you agree to participate in this research study:

Subject _____

Date _____

Principal Investigator _____

Date _____

Initial _____

Appendix B**Interview Consent Form**

Non-clinical, Minimum Risk Study

Co-Teachers’ Experiences in Team Building Professional Development

You are invited to participate in a dissertation study that is being conducted by Denise Goodhue, a doctoral student at Rutgers University, under the supervision of Dr. Carrie Lobman who is a professor in the Graduate School of Education at Rutgers University. The purpose of this study is to investigate how secondary co-teaching pairs experience team-building professional development.

Approximately 6 co-teaching pairs from the study setting will be participating in this study. Some participants will also be asked to participate in three individual interviews. Each interview will last approximately 30 minutes. The study procedures include participant interview.

Subjects will be asked to participate in a face-to-face, one-on-one, semi-structured interview with the researcher. The interview will address the following themes: co-teaching experience, roles and responsibilities in your co-teaching relationship, communication with your co-teacher, collaboration with you co-teacher, experiences in team-building activities, impact of participation in team-building professional development, and value of team-building professional development.

There are minimal risks to participation in this study. Participation in this study is voluntary. You may choose not to participate, and you may withdraw at any time during the study procedures without any penalty to you. In addition, you may choose not to answer any questions with which you are not comfortable.

This research is confidential. Confidential means that the research records will include some information about you, such as your name, whether you are a general or special education teacher, and number of years co-teaching experience. I will keep this information confidential by limiting individual's access to the research data and keeping it in a secure location. The research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. Pseudonyms will be utilized in reporting research findings and no member of the professional development group, or your co-teaching partner, will have access to your responses.

If you have any questions about the study procedures, you may contact Dr. Lobman at 732-932-7496 x8116. If you have any questions about your rights as a research subject, you may contact the Sponsored Programs Administrator at Rutgers University at:

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New Brunswick, NJ 08901-8559

Tel: 848 932 4058

Email: humansubjects@orsp.rutgers.edu

You will be given a copy of this consent form for your records.

Sign below if you agree to participate in this research study:

Subject _____

Date _____

Principal Investigator _____

Date _____

Consent to Audio Recording

This interview protocol involves audio recording your responses during the interview. Participation is voluntary. You may choose not to have your responses audio recorded and you may choose to stop audio recording at any time during the study procedures without any penalty to you. In addition, you may choose not to answer any questions during audio recording with which you are not comfortable.

Sign below if you agree to have your interview responses audio recorded:

Subject _____

Date _____

Principal Investigator _____

Date _____

Initial _____

Appendix C

Session 1 (90 minutes)

Learning Objectives:

1. Participants will be able to describe their goals for their participation in the professional development.
2. Participants will be able to communicate and use problem-solving skills to complete a group activity.

Materials:

Chart Paper
Markers
Pens
Starburst candy
“Zoom” by Istvan Banyai

Session Activities:

1. Welcome and Introductions (30 minutes)

Participants will be welcomed to the professional development and thanked for their participation.

Participants will all introduce themselves to group activity.

Participants will be presented with a power point summarizing the purpose of the professional development, the components of data collection, and background information relevant to the professional development followed by the opportunity for participants to ask clarifying questions. Participants will read and sign consent forms

2. Icebreaker Warm-Up (15 minutes)

Adapted from <http://www.nsrharmony.org>. Participants will be given a small package of starbursts. Each color will represent a different question category. Yellow-Something you did/that happened this summer. Red: Something you love to do. Pink: Great teaching moment. Orange: If I had a million dollars I would...

3. Establish Goals (10 minutes)

Participants will be asked what their goals are for the professional development. Participant responses will be charted on chart paper and displayed during the session.

4. Zoom and Discussion (30 minutes)

Participants will work as a team to sequence the pictures of the book in the correct order without looking at one another's pictures. Participants will then participate in a reflective discussion of their experiences in the activity.

5. Formative Evaluation (5 minutes)

Participants will be asked to complete an exit slip evaluating the workshop.

Appendix D

Introduction Power Point Content

Dissertation Summary

Team-building PD for HS Co-teachers

Co-Teaching Research

What we know....

Teachers believe co-teaching is beneficial.

Successful co-teaching relationships share similar characteristics.

Common “ingredients” are cited as requirements for co-teaching success.

Co-teaching can be very challenging.

What we need research on...

Professional development geared specifically for co-teachers.

Work place teams and teamwork as it relates to co-teaching.

Why Team-Building?

Teamwork, team-building, and work place teams have been a research and staff development focus in the business and health care sector but not in the field of K-12 education...why not?

Teamwork in Our Field

Special education teachers, general education teachers, child study team members, guidance counselors, and administrators collaborate to meet the needs of special education students. This requires teamwork.

Teamwork in Co-Teaching

Co-teachers are the ultimate team when it comes to meeting special education students needs in inclusion classrooms.

Successful co-teaching requires mutual respect, effective communication, collaboration, and trust (all elements identified by research as components of effective teams)but we often aren’t given opportunities to build this rapport before entering the classroom, or to develop our relationships once we start co-teaching.

Team-Building PD Plan

My PD plan includes activities that are geared towards relationship-building with the goal of providing opportunities for co-teachers to:

Communicate

Collaborate

Problem-solve

And hopefully have some fun!

PD Activities

This PD will involve opportunities to participate in different team-building “games” in addition to activities that are specific to educational and co-teaching contexts.

Why games?

Research has shown that “play” is important for not only children but adults as well.

Work place “play” enhances performance and is a catalyst that makes adults more productive, and happier in their professional lives.

Our Team-Building PD and My Study

I am fascinated by co-teaching relationships and the art of co-teaching.

Reflection and discussion with my dissertation chair led me to this topic as the focus of my study.

I am conducting a qualitative case study in which I will examine co-teachers’ experiences in team-building PD and the effect team-building has on co-teaching relationships.

My focus is on studying you....your thoughts, your opinions, your experiences...

What does participation in this PD and case study entail?

Pre-PD interviews

Pre-PD survey

Six 90-minute workshops

Mid-PD interview (scheduled at your convenience after session 3)

Mid-PD questionnaire (completed during session 4)

Post-PD interview (Scheduled at your convenience 3 weeks after our last session)

Post-PD survey (Emailed 3 weeks after our last session)

Formative and Summative Evaluations (completed at the end of our PD sessions)

Why so much data?!

My study is qualitative in nature so I need to provide rich, thick descriptions when reporting my findings.

I need to triangulate my data by having a variety of data sources to build the “trustworthiness” of my findings.

Let’s Get Started!

Thank you for signing up for this PD and for taking this journey with me!

Appendix E

Session Two (90 minutes)

Learning Objectives:

1. Participants will be able to establish norms for the professional development to foster a sense of collaboration and community.
2. Participants will be able to communicate to problem solve.
3. Participants will be able to collaborate to achieve a common goal.

Materials:

North, South, East, and West compass points and questions
Beanbags
Sentence cards

Session Activities:

1. Group Norms (5 minutes)

Participants will be asked to develop a list of norms for how our group will function to ensure that each session is productive, respectful, and collaborative. Norms will be recorded on chart paper and posted at each workshop.

2. North, South, East and West: An Exercise in Understanding Preferences in Group Work (30 minutes)

Adapted from <http://www.nsrharmony.org>. Compass points will be placed on the four walls of the room. Each compass point described a difference preference for working in groups.

Participants will be asked to select the direction that best describes them and stand in that section of the room. Participants will then be given time to answer reflection questions pertaining to how participants prefer to participate in group work. Participants will then participate in a reflective discussion based on their responses.

3. Scrambled Sentences (30 minutes)

Adapted from <http://www.nsrharmony.org>. Each co-teaching pair will be given envelopes containing a mix of words needed to form sentences. The co-teachers will need to unscramble the cards to create 4 sentences.

There are two specific rules for the activity:

1. No participant may speak.
2. No participant may ask another person for a word or in any way signal that another person is to give her/him a word. (Participants may voluntarily give words)

4. Group Juggle (20 minutes)

Adapted from <http://www.nsrharmony.org>. The group will be asked to form a circle. They will then be told to create a pattern of tossing the beanbag as a team by calling out a person's name and then throwing the beanbag to him/her. After a person receives the ball, he/she will be asked to throw it to someone else in the group until everyone has thrown and received the beanbag only once. The group will be told to remember the pattern and try to create the pattern again. After the beanbag is passed through the group a second time, the group will be asked to try to create

the pattern with multiple beanbags to see how many beanbags they can toss. The group will be told that when I count out loud, “1, 2, 3, STOP,” the group needs to stop and see how many bags they have in play. The group will then be asked to set their own goal for beanbags in play and try the activity again. Participants will then be asked to reflect upon the experience in a group discussion.

5. Formative Evaluation (5 minutes)

Participants will complete an exit ticket evaluating the workshop.

Appendix F

Session Three (90 minutes)

Learning Objectives:

1. Participants will be able to communicate with their co-teacher to solve a problem.
2. Participants will be able to collaborate with their co-teacher to achieve a common goal.

Materials

Paint

Paper

Pipettes

Jackson Pollock pictures

Session Activities:

1. Life Highlights Activity (20 minutes)

Adapted from <http://www.huddle.com/blog/team-building-activities/>

Participants will be asked to close their eyes for one minute and consider the best moments of their lives. Examples may include moments they have had alone, with family or friends, professional successes etc. Participants will be asked to share this moment with their co-teacher. Participants will then be asked to narrow their best moment down to only 30 seconds.

Participants will each be asked to share with the group their 30 second moment and why they chose that moment. This activity will enable participants to get to know their coworkers on a more intimate level and get know each other's personalities to create a comfortable environment for the sessions.

2. Collaborative Art (65 minutes)

Co-teaching pairs will work together to create a collaborative art project. Participants will be asked to create a Jackson Pollock style piece of art. Pictures will be displayed to provide a reference. Participants will need to collaborate and communicate with their co-teacher to make decisions while creating their art work. Participants will then be encouraged to hang their collaborative art project in their classroom. The whole group will then participate in a reflective discussion of the activity.

3. Formative Evaluation (5 minutes)

Participants will complete an exit ticket evaluating the workshop.

Appendix G

Session Four (90 minutes)

Learning Objectives:

1. Participants will be able to collaborate to solve a problem.
2. Participants will be able to collaborate with their co-teacher to participate in an improv activity.
3. Participants will be able to communicate with their co-teacher to complete an activity.
4. Participants will be able to reflect upon their experiences in team-building activities.

Materials:

Straws
Masking tape
Golf ball
Settings list

Session Activities:

1. Drop the Ball (20 minutes)

Adapted from <http://www.onlineexpert.com/>. Co-teaching partners will collaborate with another co-teaching pair to design and create a contraption that can catch a gold ball. Groups will be given 12 straws and 18 inches of masking tape and will create something that can catch a golf ball when it is dropped from a height of 10 feet.

1. “Yes and...” Improv activity (55 minutes)

Co-teaching pairs will choose a setting for their improv scene. Co-teachers can think of their own ideas or choose from a list of options. Co-teachers will perform an improv scene and must respond to their co-teachers statements with “Yes and...” This activity emphasizes the importance of accepting the ideas of their co-teaching partner. Each co-teaching pair will have 10 minutes to perform their scene.

3. Improv Discussion (10 minutes)

Participants will be asked to reflect and share what skills they felt were needed to complete this activity. Participants will also be asked to share what their experience was like in the activity.

3. Formative Evaluation (5 minutes)

Participants will complete an exit ticket evaluating the workshop.

4. Mid-Session Survey (10 minutes)

Participants will be given time to complete the mid-session survey on SurveyMonkey.

Appendix H

Session Five (90 minutes)

Learning Objectives:

1. Participants will be able to collaborate with their co-teacher to create guidelines for professional collaboration.
2. Participants will be able to utilize active listening skills in communication activities.

Materials:

Chart paper
Markers
Paper
Pens
Debate vignette
Active listening handout

Session Activities:

1. Communication Nightmares (40 minutes)

Adapted from <http://www.nsrffharmony.org> Feedback nightmares. Everyone will be asked to write about a time when they experienced negative professional communication. Co-teaching pairs will then share any part of the writing that they are willing to share. Pairs will then be asked to come up with a list of five communication do's and five don'ts. The whole group will then participate in a reflective discussion and create a group list of professional communication do's and don'ts.

2. Active Listening (15 minutes)

Adapted from <http://www.nsrffharmony.org>. Co-teaching pairs will complete the NSRF active listening protocol.

3. Debate versus Dialogue (30 minutes)

Co-Teaching pairs will be given the following scenario:

Allison is a special education student in the 9th grade who is classified as dyslexic and ADHD. Allison has been having a difficult time coping with her parents' divorce and was not completing homework or adequately preparing for tests and quizzes for the majority of marking period 1. Allison was off task frequently the first few weeks of the marking period and was talking to friends or texting during class time, neglecting her class work. Allison expressed concern for her grade the last few weeks of the marking period and handed in several missing assignments. Allison also came in for extra help before the last test of the marking period and scored an 80% on the test. Allison's overall grade for the marking period is a 63%. The special education teacher wants to manually override the grade to be a 65%. The general education teacher is opposed to this and is adamant that the grade remains a U.

Teachers will be instructed to debate the following scenario vehemently regardless of their personal opinions with the goal of “winning the argument.” After a few minutes of argument teachers will then be asked to reflect as a group the difference between a debate and an argument.

They will then be asked to participate in a dialogue where they ask questions and listen to the other’s perspective to come to a joint decision. Participants will be encouraged to reference their active listening protocol from session five if needed. The group will then reconvene to discuss the difference between their experience debating and dialoguing.

4. Formative Evaluation (5 minutes)

Participants will complete an exit ticket evaluating the workshop.

Appendix I

Session Six (90 minutes)

Learning Objectives:

1. Participants will be able to collaborate to determine solutions to various obstacles.
2. Participants will be able to apply characteristics of teamwork in different instructional situations.
3. Participants will be able to utilize communication skills to work together to achieve a common goal.
4. Participants will be able to utilize communication skills in an active listening activity.

Materials:

Paper
Pens
Chart paper
Markers
Tape
Metaphors handout

Session Activities:

1. Creating Metaphors (15 minutes)

Adapted from <http://www.nsrharmony.org>. Participants will be asked to fill in the blank on their creating metaphors handout: When I am at my best as a teacher I am _____. Underneath the written description participants will be asked to draw a picture, symbol, or some other graphic representation of their metaphor. Participants will then be asked to answer the following question on their handout: What guidance might this metaphor offer me in tough or sticky situations? With their co-teacher participants will discuss each of their metaphors in turn. The first presenter explains his or her metaphor and answers clarifying questions from their co-teacher. Their partner will then answer the following questions orally to their co-teacher: What I heard is..., What are some strengths of this metaphor? This process will then be repeated with the other co-teacher's metaphor. Pairs will then discuss how their metaphors can work well as a team in their co-teaching situations and elaborate ways in which their metaphors are complementary.

2. Co-teaching Models Revisited (30 minutes)

Co-teachers will review co-teaching models and collaborate to brainstorm lesson ideas that incorporate the different models. Co-teachers will then share out their lesson ideas with the group.

2. Solutions to Challenges and Obstacles (35 minutes)

Each participant will be asked to think of an obstacle or challenge they have encountered as a teacher or to create a hypothetical obstacle or challenge a teacher may encounter. They will then be asked to write a brief scenario of the problem on a piece of paper. Responses will be anonymous. Each participant will then fold their scenario and place it in a bowl. Participants will then get with their co-teacher and randomly pick two problems from the bowl. Partners will

tape the scenario on top of chart paper and collaborate to determine how they could tackle the obstacle as a team and write their response on chart paper. All charts will then be hung up around the room. Participants will participate in a gallery walk to read the problems and solutions and be encouraged to write on the chart any additional ideas they have regarding how to solve the problem as a co-teaching team. The whole group will then participate in a reflective discussion of the activity.

4. Summative Evaluations (10 minutes)

Participants will be asked to complete a summative evaluation of the professional development.

Appendix J

Co-Teaching Information and Satisfaction Survey

Name: _____

Co-Teacher: _____

1. Are you participating in the team-building professional development?

☐ Yes☐ No

2. Are you a general or special education co-teacher?

☐ General Education☐ Special Education

3. How many years have you been co-teaching?

☐ Less than 1☐ 1-2 years☐ 3-10 years☐ more than 10 years

4. How many different co-teachers have you worked with since you have taught at BRHS?

☐ 1 co-teacher☐ 2-4 co-teachers☐ 5 or more co-teachers

5. If you are participating in the team-building professional development, how long have you been co-teaching with your partner?

☐ less than 1 year

☐ 1-2 years

☐ 3-5 years

☐ more than 5 years

☐ Not Applicable

6. Overall, I have been satisfied with my past co-teaching assignments.

☐ Disagree

☐ Somewhat disagree

☐ Somewhat agree

☐ Agree

☐ Undecided

☐ Not Applicable

Comments:

7. Overall, I am satisfied with my co-teaching assignment this year.

☐ Disagree

☐ Somewhat disagree

☐ Somewhat agree

☐ Agree

☐ Undecided

Comments:

8. What content area do you and your co-teacher teach?

☐ English

☐ Social Studies

☐ Math

☐ Science

☐ Foreign Language

Other:

9. What level course do you and your partner co-teach?

☐ Standard/Essential

☐ Academic

☐ Both

10. I find co-teaching to be beneficial to me professionally.

☐ Disagree

☐ Somewhat disagree

☐ Somewhat agree

☐ Agree

☐ Undecided

Comments:

11. Overall, my co-teacher and I collaborate well together.

☐ Disagree

☐ Somewhat disagree

☐ Somewhat agree

☐ Agree

☐ Undecided

Comments:

12. Overall, my co-teacher and I communicate effectively with each other.

☐ Disagree

☐ Somewhat disagree

☐ Somewhat agree

☐ Agree

☐ Undecided

Comments:

13. Overall, I think my co-teacher and I make a good team.

☐ Disagree

☐ Somewhat disagree

☐ Somewhat agree

☐ Agree

☐ Undecided

Comments:

14. Overall, I trust my co-teacher.

☐ Disagree

☐ Somewhat disagree

☐ Somewhat agree

☐ Agree

☐ Undecided

Comments:

15. My co-teacher and I have a mutually respectful relationship.

☐ Disagree

☐ Somewhat disagree

☐ Somewhat agree

☐ Agree

☐ Undecided

Comments:

16. I feel my co-teacher and I are equal partners in our co-taught classes.

☐ Disagree

☐ Somewhat disagree

☐ Somewhat agree

☐ Agree

☐ Undecided

Comments:

17. How often do you implement the following co-teaching models?

Co-Teaching Model (Cook & Friend, 1995)	Never	Rarely	Sometimes	Weekly
One Teaching, One Assisting One teacher takes leads instruction/lecture while the other observes students or circulates around the room, assisting them as needed.				
Station Teaching Teachers divide instruction into two segments. Each teacher teaches their half of the material at a separate station then trade student groups and repeat the same instruction.				
Alternative Teaching One teacher works with the small group (e.g., 3-8 students) while the other instructs the rest of the class.				
Parallel Teaching Both teachers plan the instruction together, but each delivers it to a heterogeneous group consisting of half the class.				
Team Teaching Both teachers conduct whole class instruction. Ex: teachers take turns leading a discussion or one teacher speak while the other demonstrates a concept.				

18. How often do you write lesson plans on oncourse with your co-teacher?

☐ Never

☐ Rarely

☐ Sometimes

☐ Weekly

Comments:

19. How do you and your co-teacher communicate to determine roles in lessons?

20. How often do you lead instruction/lecture in your co-taught classes?

__Never

__Rarely

__Sometimes

__Everyday

Comments:

21. Briefly describe what your roles and responsibilities are in your co-teaching relationship.
22. Briefly describe the roles and responsibilities of your co-teacher.
23. What characteristics do good co-teachers have?
24. What are characteristics of someone who is not meant to co-teach?
25. What supports do you need to make co-teaching effective?
26. What obstacles can make co-teaching effectively challenging?

Appendix K

Mid-Professional Development Questionnaire

Name: _____

Co-Teacher: _____

1. Thus far, I have found the professional development activities to be worthwhile.

☐ Disagree☐ Somewhat disagree☐ Neutral☐ Somewhat agree☐ Agree

2. Briefly, please explain your response.

3. My co-teacher and I have been working well as a team in the workshops.

☐ Disagree☐ Somewhat disagree☐ Neutral☐ Somewhat agree☐ Agree

4. Briefly, please explain your response.

5. What skills do you feel co-teachers need to complete the activities successfully in the workshops?

6. Do you feel you and your co-teacher have the skills needed to complete the activities in the workshops successfully?

☐ Yes

☐ Partially

☐ No

7. Briefly, please explain your response.

8. Thus far, participating in the professional development activities has had a positive impact on my co-teaching relationship.

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

☐ Agree

9. Briefly, please explain your response.

10. My co-teacher and I have been communicating effectively in the workshops to complete the activities.

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

☐ Agree

11. Briefly, please explain your response.

12. Thus far, my experiences in the professional development workshops have been positive.

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

☐ Agree

13. Briefly, please explain your response.

14. I am happy my co-teacher and I decided to participate in this professional development.

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

☐ Agree

15. Briefly, please explain your response.

16. Other comments:

Appendix L

Additional Post-Professional Development Survey Questions for Participants

Name: _____

Co-Teacher: _____

1. I have noticed that participation in the professional development had a positive impact on my relationship with my co-teacher.

☐ Disagree☐ Somewhat disagree☐ Neutral☐ Somewhat agree☐ Agree

2. Briefly, please explain your response.

3. I have applied the skills used to complete the session activities in my interactions with my co-teacher outside of the professional development sessions.

☐ Disagree☐ Somewhat disagree☐ Neutral☐ Somewhat agree☐ Agree

4. Briefly, please explain your response.

5. Participation in the professional development has influenced how my co-teacher and I communicate with each other.

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

☐ Agree

6. Briefly, please explain your response.

7. Participation in the professional development has positively influenced collaboration between my co-teacher and I.

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

☐ Agree

8. Briefly, please explain your response.

9. My co-teacher and I have worked well as a team since the professional development has concluded.

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

☐ Agree

10. Briefly, please explain your response.

11. What changes have you noticed in the roles and responsibilities of you and your co-teacher?

12. What adjective would you use to describe your relationship with your co-teacher?

13. I would recommend this professional development to my colleagues who are co-teachers because team-building activities can positively impact co-teachers' relationships.

☐ Disagree

☐ Somewhat disagree

☐ Neutral

☐ Somewhat agree

☐ Agree

14. Briefly, please explain your response.

Appendix M

Formative Reaction Evaluation adapted from Silberman & Auerbach (2006):

1. What one word described your reactions to today’s workshop?
2. Why did you select that word?
4. What aspect of today’s workshop did you find most useful?
5. What aspect did you find the least useful?
6. Do you have any suggestions to improve our next workshop?

Appendix N

Professional Development Evaluation

Assessment Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel the professional development covered the promised objectives.					
I feel that this professional development was a valuable experience.					
I think that the sessions were well organized.					
I feel that appropriate materials and activities were used in the sessions.					
The activities in the workshops required skills relevant to co-teaching					
Participating in this professional development was a positive experience.					
Participation in the activities helped my co-teacher and I to build trust in each other.					
Participation in this professional development increased my comfort level with my co-teacher.					
This professional development provided opportunities for my co-teacher and I to collaborate positively.					

What activity did you find most enjoyable to complete with your co-teacher?

Why was it a positive experience for you?

What activity did you find most challenging to complete with your co-teacher?

Why was it a challenging experience for you?

What were the strengths of this professional development?

What were the weaknesses of the professional development?

What could be improved about this professional development?

What was your overall impression of your participation in this professional development?

Comments:

Appendix O

Pre-Professional Development Interview Questions

1. Describe a typical day in your co-teaching relationship.
2. What was your favorite co-teaching moment? What about it made it so memorable for you?
3. What obstacles have you encountered during your experiences co-teaching?
4. How would you describe your role in your co-teaching relationship?
5. Do you feel your role and your co-teachers' roles are equal in the classroom? Explain.
6. Do you think students view you as equals? Explain.
7. Describe your ideal co-teacher. Why did you choose those characteristics?
8. Describe the type of person that would make co-teaching a nightmare for you. Explain.
9. What are the ingredients for co-teaching success?
10. Do you feel you have them with your co-teacher? Explain.
11. What does an ideal co-taught classroom look like?
12. How does your co-teaching reality compare to the ideal?
13. What supports do you think co-teachers need in order to have a successful co-teaching relationship?
14. How can co-teaching be beneficial to students?
15. How can co-teaching benefit teachers?

Appendix P

Mid-Session Interview

1. So far, how has your experience in team-building professional development been?
2. What have you found to be the most worthwhile component of the team-building activities?
3. How does participation in team-building activities influence your relationship with your co-teacher?
4. In what ways are your interactions with your co-teacher similar and/or different in the team-building activities compared to in the classroom?
5. How would you describe your teamwork with your co-teacher? Are you working well together as a team?
6. How would you describe your communication with your co-teacher in the team-building activities?
7. Have you and your co-teacher been having fun in the team-building activities? Explain
9. How comfortable are you in collaborating with your co-teacher in these activities?
10. I have noticed in our sessions.....can you talk a little about that for me?

Appendix Q

Post-Professional Development Interview

1. How would you describe your relationship with your co-teacher since the professional development ended?
2. Can you speak about any changes that you have noticed in your relationship with your co-teacher? What do you do differently regarding instruction? What do you do differently regarding planning?
3. In what ways have you integrated the skills you used to complete the team-building activities with your co-teacher in your interactions in the classroom?
4. Can you describe a situation where you and your co-teacher recently worked together as a team?
5. What do you think future professional development sessions should focus on to support co-teaching partnerships?