Feasible Interventions: Bridging the Gap Between Co-teachers

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Abstract

The purpose of this case study was to gain a deeper understanding of the perceptions of the feasibility of employing the five models of co-teaching (Friend & Cook, 1995) through the co-teachers’ experience and how this affected both the relationship between co-teachers and student outcomes. This research addressed a literature gap not previously scrutinized regarding the feasibility of implementing the five co-teaching models with the specific design of having the aforementioned roles distinguished between co-teachers. The results of the study confirm the previous research that found the need for co-teachers to have common planning time, parity, comparable personalities, and/or philosophies and identified roles and responsibilities. The literature suggested that if the previous elements were not in place for co-teachers then it would be likely that the special education teacher would have a submissive role in the co-teaching approach. The results of this case study indicate that the overall co-teaching experience was perceived as positive for both special education and general education teachers and students at Smith Middle School. The results of the study suggested that the focus on skills and strategies was a good starting point for co-teachers. The identified roles gave a focus for the co-teachers to work from rather than employing the various models without any direction. This helped translate into the special education teacher gaining credibility with the general educator co-teacher.

Keywords: Co-teaching, collaboration, Co-teaching models, relationship, student outcomes
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Chapter I: Introduction

Problem of Practice

Federal and state laws, state regulations, advocacy groups, parents, school administrators, and educators have articulated the need for collaboration between special and general educators (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). School districts have responded by developing inclusion programs and, as a result, a large body of literature discussing the failed attempts to build successful inclusion programs is available. The preponderance of literature suggests the failure of inclusion programs are due to deteriorating relationships between general and special educators (McKenzie, 2009; Carter, Prater, Jackson, & Marchant, 2009).

Co-teaching is one of the most complex models associated with inclusion programs (Cook & Friend, 1991; Kloo & Zigmond, 2007). The problem many co-teachers face is with the collaboration process, as experienced by the co-teachers of Smith Middle School. Many special educators at Smith Middle School report difficulty creating true co-teaching environments because general education teachers tend to place them in a submissive role in the classroom.

Smith Middle School is part of a regional school district educating 453 students of the seventh and eighth grade. Smith Middle School serves three communities that fall into the socio-economic categories of the middle class to the upper middle class. The co-teachers at Smith Middle School struggle to employ a structured method to deliver instruction.

The five models presented by Cook and Friend (1995) offer approaches that provide structure to the roles and responsibilities for co-teachers to implement. These are the most frequently cited models of co-teaching in research on co-teaching (Beninghof, 2012; Villa, Thousand, & Nevin, 2008). The five models consist of One Teaching, One Assisting, Station Teaching, Parallel Teaching, Alternative Teaching, and Team Teaching. These models are
designed to enhance the delivery of service by offering specialized instruction options for all students, improving instructional practices, reducing the stigma placed on disabled students, and increasing the support for general education teachers in planning for various learning profiles (Cook & Friend, 1995). In these models, both co-teachers take on various roles and responsibilities of classroom instruction.

Cook and Friend’s (1995) One teaching model has one teacher acting as lead instructor while the other takes on a supportive role helping students as needed. The lead teacher offers the direct instruction and the assistive role roams around the room checking for understanding and offering assistance to students in need.

Station teaching calls for the instructional content to be divided into two or more sections and the instruction being delivered in two or more separate locations of the classroom. Each teacher has a station. This model reduces the student to teacher ratio and allows the instruction to be tailored more to each student’s needs. In cases that three or more stations are employed, students work independently or with peers (Cook & Friend, 1995).

The parallel teaching model splits the class in half indiscriminately and the two co-teachers deliver instruction concurrently (Cook & Friend, 1995). Co-planning of instructional time is the key to success for parallel teaching because instruction is taught at the same time from the two co-teachers.

Alternative teaching provides the flexibility of small group instruction. One teacher works with a small group while the other works with the large group of students. The small group is provided with intense and in-depth instruction necessary for students to be able to access and comprehend the curriculum that the larger group is learning (Cook & Friend, 1995).
The last Cook and Friend’s (1995) model is Team Teaching that requires both co-teachers to switch and share the lead role of instruction. For example, the general education teacher delivers the content portion of the instruction and the special educator teaches the skill that is needed to engage in the instruction. In this practice, the special education teachers would teach organizational skills and how to take notes for an upcoming activity and the general education teacher would teach the content.

Each of the previously described models has attributes designed to maximize the use of general and a special education instructors in a classroom concurrently. Cook and Friend (1995) suggest that the both teachers are required to co-plan the lessons to determine which model best serves their purpose.

Smith Middle School recently implemented an extensive co-teaching program. More than 95% of the students receiving special education services are included in the general education setting for the majority of their learning experience. The common complaints of the faculty are that the co-teaching program lacks support for a collaborative effort in the areas of professional roles, staff responsibilities, and ongoing professional development supporting the relationship of the stakeholders in the co-teaching programs.

This case study investigated teacher perceptions of the feasibility of implementing each of the five models as a possible solution to the challenge of creating positive co-teaching relationships to improve the effectiveness of the delivery of instruction. In the planning and delivery of the aforementioned co-teaching models, the special education teacher focused on teaching the skills and strategies that students needed to access the content while the general education teacher taught the content.
Pagach and Johnson (1989) recognized that successful collaboration between general and special education required an equal level partnership built on a volitional effort and shared ideas that work off each other’s strengths and weaknesses. Pagach and Johnson (1989) suggested that general and special educators need to identify roles and responsibilities in proven models that accentuate strengths and minimizes weaknesses. Pagach and Johnson’s (1989) recommendations of parity and the need to identify roles and responsibilities between co-teachers continue to be cited throughout recent literature. Current studies still recognize the lack of collaboration between co-teachers as a problem (Scruggs, Mastropieri, & Mcduffie, 2007; Knackendoffel, 2007; Kloo & Zigmond, 2008).

**Significance of the Problem**

Prater (2003) reports from the U.S. Department of Education in 2000 that “seventy-five percent of the students with disabilities served under the Individuals with Disabilities Act are educated in general education classrooms” (p. 58). This large number of disabled students in the classroom setting makes it necessary for general education teachers to have strategies “to assist them with making appropriate modifications and adaptations to their curriculum, instruction, and learning environment” (Prater, 2003, p. 58). One of the most important methods for general education teachers to use is the co-teaching model (Villa, Thousand, & Nevin, 2008; Beninghof, 2012). However, the inconsistent delivery of co-teaching models across school districts and classrooms inhibits an accurate measurement of common practices and overall effectiveness of co-teaching for improving student learning (Volonio & Zigmond, 2007; Kohler-Evans, 2006).

Kohler-Evans (2006) cites the difficulties of making the co-teaching relationship work as interrupting the modifications that need to be delivered to all students who benefit from the specialized instruction. In short, if the co-teachers do not employ a structured model to help
guide them with the co-teaching delivery of instruction then the specialized services are diluted in the general education setting. (Carter et al., 2009; Volonio & Zigmond, 2007)

The commonly expressed opinion of faculty at Smith Middle School is commensurate with the Carter et al. (2009) study that examined the persistent problem of general and special educators not knowing how to plan for the unique needs in the context of a collaborative effort. “Teachers may not only lack the skills to collaborate effectively, but also not know how to develop frameworks for addressing the educational needs of students with disabilities” (Carter et al., 2009, p. 69). Before the fall of 2012, the faculty of Smith Middle School had never had any training on the implementation of models of co-teaching to help establish roles and responsibilities to improve the service. The expressed opinions of not having enough training are very common within the literature investigating the significance of the problems of implementing co-teaching in schools. “The under use of special educators is likely attributable to the interrelationship between the performance expectations of their collaborative role and the limitations of their training” (McKenzie, 2009, p. 380). The faculty reported in an informal way that they had trouble collaborating, an indication that the teachers may not have been introduced to the professional development required for effective collaboration to take place in schools.

Nevin, Cramer, Voigt, and Salazar’s (2008) descriptive case study of a public school district in Florida underscore the significance of the co-teaching challenge. This study was completed over a two-year period while professional development was offered with the goal of improving the co-teaching service for the school district. The study found all the special education students receiving co-teaching services demonstrated measurable improvement in reading. The small sample size of eight disabled students also indicated that “six out of eight
students with IEP’s made adequate yearly progress in math, where as all eight made adequate yearly progress in reading” (Nevin, Cramer, Voigt, & Salazar, 2008, p. 292).

Additionally, Murawski and Swanson’s (2001) quantitative meta-analysis of co-teaching from 37 articles found that “the limited data suggests that co-teaching can have a positive impact on student achievement” (p. 265). Reading and language arts were found to have the largest improvement while math was reported having a moderate improvement (Murawski & Swanson, 2001). This finding indicates the importance of having robust delivery of a co-teaching model and how it can affect student performance.

The delivery of a co-teaching model demonstrates collaboration between the teachers as it is imbedded in the method of instruction (Beninghof, 2012; Villa, Thousand, & Nevin, 2008). The students observe teachers working from each other’s actions and use of language and the students see this as two professionals working together (Beninghof, 2012; Villa, Thousand, & Nevin, 2008). Collaboration with co-workers is a necessary skill for students to learn because it is a requisite talent necessary for the demands of the current work force and collaboration is a necessary element for lifelong learning (Fullan & Hargreaves, 1996). Additionally, a co-teaching model not only demonstrates collaborations but also typically calls for students to work with peers in groups to learn from each other and this teaches collaborative skills (Beninghof, 2012; Villa et al., 2008). Beninghof (2012) suggests co-teaching models are designed to include disabled students in the general education setting and that “children who grow up in spaces where diversity is cherished are able to easily embrace diversity in the world around them” (p. 13).

**Practical & Intellectual Goals**
The practical goal of this inquiry is to explore the implementation of five commonly practiced models of co-teaching (Cook & Friend, 1995) with the special education teacher having instruction responsibilities for teaching skills and strategies of a lesson and the general education teacher delivering the academic content. This exploration helped identify which of the five models were feasible to implement and how it impacted the inner workings of co-teachers establishing and maintaining their relationship.

There is a noted gap in the literature that does not discuss the feasibility of implementing the five co-teaching models with the specific design of special education teachers teaching skills and strategies to access the content that is taught by the general education teacher. The intellectual goal of this case study was to gain a deeper understanding of the relationship between general and special education co-teachers and identify the perceptions of the feasibility based on their experience of employing the five models of co-teaching. The goal was to learn how this might have affected both the relationship between the co-teachers and student outcomes. This inquiry is built on the assumption that co-teachers will remain committed to implementing feasible models and use the roles of the special education teacher focusing on teaching the skills and strategies to access the academic content that the general education teacher will be delivering. This case study worked to discover the feasibility through the co-teachers’ experience of implementing the five models of co-teaching (Cook & Friend, 1995) with the identified roles at the Middle School Level. The results will add to the academic knowledge of co-teaching and it will inform administrators on how to meet the needs of the co-teacher through professional development.

**Research Questions**

The central research questions studied:
1. What are the perceptions of the co-teachers of the feasibility of implementing each of the five co-teaching models with the special education teacher focusing on skills and strategies and the general education teacher instructing on content?

2. How might the adoption of co-teaching models with the special education teacher teaching skills and strategies and the general education teacher teaching content influence teacher perceptions of their co-teaching relationship?

3. How do the adopted models of the five co-teaching models affect the support that students with special needs and struggling learners receive?

**Theoretical Framework: Cultural Historical Activity Theory**

In an effort to scrutinize the problem of practice manifesting as the deterioration of relationships between general and special education co-teachers, a theoretical lens was used to illuminate the issues impacting this problem. Cultural-historical activity theory (CHAT) provides a theoretical lens that revealed the underpinnings causing the problem of poor collaboration between general and special educator co-teachers (Roth & Tobin, 2004; Roth, Tobin & Zimmermann, 2002; Roth, 2002). CHAT is comprised of components that identify issues that may prevent teachers from adopting a proposed change in teaching practices (Roth & Tobin, 2004; Roth, Tobin & Zimmermann, 2002; Roth, 2002).

The focus of CHAT is two fold: examine the environment in which the teacher exists and discover the ways teachers view the experience. Roth (2002) uses CHAT to “distinguish differences between activity, actions, and operations” (Roth, 2002, p. 5). This perspective of CHAT can identify activities as they relate toward an individual’s motives (Roth & Tobin, 2004; Roth, Tobin & Zimmermann, 2002. Roth, 2002). Roth and Tobin (2004) found that the inherent concepts of CHAT were ideal for understanding the complexities of co-teaching.
In Feldman and Weiss’ (2010) study of understanding change in teacher practices, historical activity theory was used to understand why it was difficult for teachers to change their practice to using a new form of instructional technology. Feldman and Weiss (2010) concluded that CHAT was the best theoretical frame to use in the study because it helped identify the problematic issues of an activity system represented by “the roles of teachers and other participants, the tools and artifacts that they use, and the communities in which the activities were situated” (p. 34). CHAT acknowledges that participant identity plays a role as a “social outcome of discourse” (Feldman & Weiss, 2010). This perspective permits a further understanding of how teacher identities are constructed and adjusted to an activity system (Feldman & Weiss, 2010, p. 37).

Roth, Tobin, and Zimmermann’s (2002) study used CHAT to develop a method of analyzing co-teaching with the purpose of accounting for the influences of human actions with the various points of view offered by the participating co-teachers. Therefore, CHAT “accounts for the fact that human beings participate in the shaping of their (learning) environment rather than merely reacting to given conditions” (Roth, Tobin, & Zimmermann, 2002, p. 3). The activities are performed by the “community” (Roth, 2002, p. 5) while “actions” focusing on the attainment of goals are carried out by the individual (Roth & Tobin, 2004; Roth, Tobin & Zimmermann, 2002) “Operations” are influenced by conditions that are viewed as usual or common practice activity (Roth, 2002). This use of CHAT suggests “in the course of individual and collective development, activities can become actions and actions can turn into operations” (Roth, 2002, p. 5). CHAT exposes the contradictions between activities, actions, and operations that are at the focus for discovering strategies for change (Roth & Tobin, 2007).
CHAT is designed to build the analysis of identifying the causal relationships of teachers accepting change as this relates to the problem between general and special education co-teachers collaborating in a co-teaching model (Roth & Tobin, 2004; Roth, Tobin, & Zimmermann, 2002; Roth, 2002). From this perspective, it will uncover the needs of the co-teachers as they report on the feasibility of employing the five commonly practiced models of co-teaching and offer direction and focus for educational leadership to meet the identified needs of the co-teachers (Roth & Tobin, 2004; Roth, Tobin, & Zimmermann, 2002; Roth, 2002).

Feldman and Weiss (2010) cited the three generations of CHAT reported as useful to apply to educational change endeavors. The first generation of CHAT was developed by Vygotsky (1978) and was built on the principle of artifacts such as tools or language effects human action.

Feldman and Weiss’ (2010) study of a teachers workshop offered an application of the first generation of CHAT. This application of the triangular diagram positioned the “subject” as representing the teachers in the workshop. The mediated artifacts in Feldman and Weiss’ (2010) model took the form of the “tools” or more specifically the content of the workshop. Lastly, the “object” was to instruct teachers how to use the computer technology with the outcome of gaining knowledge (Felman & Weiss, 2010). Feldman and Weiss (2010) suggested that the missing elements of this model are entities of culture and historical practices. Therefore, Feldman and Weiss (2010) embraced the work of Engestrom (1987) that expanded Leont’ev’s (1981) work to developed the second generation of CHAT. Feldman and Weiss (2010) offer that the second generation of CHAT has an activity system composed of seven parts: (1)”subject(s)” made up of teachers, (2)”action” focused toward an “object” that is best described as the implementation of teaching strategies, (3)”Tools” comprised of the specific researched based
strategies, (4)”community” made-up of teachers and students and facilitators, (5)”Division of labor” that were the roles and responsibilities, (6)”rules” that govern the teachers and students, and lastly (7)”outcomes,” the implantation of the strategies.

Feldman and Weiss (2010) offered that the use of the second generation of CHAT was an effective way of understanding what happened with the teachers when they implemented the learned digital strategies taught by these authors (2010). This kind of usage of CHAT can be applied to co-instructors learning ways to employ co-teaching models because CHAT can offer a frame that examines the needs, desires, and interests of general and special education inclusion teachers and attempts to find a common thread to forge a relationship between co-teachers (Feldman & Weiss, 2010). Identifying these needs, desires, and interests between co-teachers will add clarity to the feasibility of delivering the five commonly practiced models of co-teaching.

Roth and Lee (2007) suggested CHAT can be an effective theoretical framework for determining how theory relates to practice for significant educational problems. CHAT examines the minds of “subjects” in a social context using the lens of identifying the problems between individuals as it relates to the individual and collective perspectives created or influenced through the established social environment (Roth & Lee, 2007). The application of the second generation of CHAT and its seven components of the aforementioned “activity triangle” allows for the understanding of human thinking in relation to a social setting (Roth & Lee, 2007). This application of CHAT was used in the co-teaching\cogenerative dialoging model that took a reflective approach to analyzing past practice and current action (Roth & Lee, 2007). Co-teachers used co-teaching\cogenerative dialoging to identify strategies for change interventions. “Adopting CHAT as guiding framework allows for a questioning of the structural determinations
of current educational practices” (Roth & Lee, 2007, p. 217). This suggested that the application of CHAT encourages teacher participation in developing the teaching environment and strategies (Roth & Lee, 2007).

The “third generation” of activity theory proposed by Enestrom (2001) employs “two interacting systems as its unit of analysis, inviting us to focus research efforts on the challenges and possibilities of inter-organizational learning” (p. 133). The third generation of CHAT was built upon the work of Vygotsky and Leont’ev’s who developed the theory as a means of understanding human behavior Engestrom (2001). Engestrom (2001) takes Vygotskyian principles that claim human action is influenced by culture and through this cultural lens the human mind could better be understood. Engestrom (2001) took the component of contradictions as being the impetus for change as indicated in the second generation of CHAT made known by Il’enkov.

CHAT provides the lens that will frame the issues of co-teachers adopting the change in current practices and implement models with a higher rate of fidelity (Roth & Tobin, 2004; Roth, Tobin & Zimmermann, 2002; Roth, 2002). Though the theoretical lens of CHAT, this study probed the perceptions of both general and special educators employing co-teaching models with the previously discussed roles and hopes of exposing the underlying issues relating to their execution.

**Summary.** CHAT provides the necessary lens for understanding the issues that teachers face as they change practices and employ co-teaching models (Roth & Tobin, 2004; Roth, Tobin, & Zimmermann, 2002; Roth, 2002). In an effort to implement change with co-teaching practices, CHAT scrutinizes how the historical and cultural changes affect the “individual, community, division of labor, tools, and rules undergo” (Roth, 2002, p. 1). The strategies of CHAT call for
co-teachers to take part in developing the professional development that will expose the existing problems between general and special education co-teachers (Feldman & Weiss, 2010; Knackendoffel, 2007).

This theoretical framework illuminated the needs of the co-teachers involved with educational change (Roth & Tobin, 2004; Roth, Tobin, & Zimmermann, 2002; Roth, 2002). The measured needs and perceptions of co-teachers identified the components to understand the problems of co-teachers (Feldman & Weiss, 2010; Roth & Tobin, 2004; Roth, Tobin, & Zimmermann, 2002; Roth, 2002). Through the lens of CHAT, this inquiry probed the condition of the co-teaching environment based on educator skills, educational demands, and how educational leaders responded to the problem.
Chapter II: Literature Review

This literature review includes a brief history of special education mandates and the inclusion models created in response to the changes in the law. The historical review naturally leads to studying the benefits of inclusion that include the documentation of various co-teaching models. The problems of implementing inclusion and co-teaching models are discussed and the review of the literature ends with a discussion of successful attributes of co-teaching.

History of Special Education Mandates

The first landmark legislation of special education was Public Law 94-142, The Education for All Handicapped Children Act (EAHCA) of 1975, that mandated disabled students have a right to access a “free and appropriate education” (FAPE) in the “least restrictive environment” (LRE). Rozalski, Angie, and Miller (2010) suggest that the EAHCA of 1975 was influenced by the benchmark legal case of Brown v. Board of Education (1954) citing “students with disabilities should be included in public schools, not separated in institutional settings as many were at the time” (p. 152). Additionally, Wright and Wright (2008) suggest that a Congressional Investigation in 1972 of the Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania and Mills v. Board of Education of the District of Columbia “found that millions of children were not receiving an appropriate education” (p. 14).

Special education advocacy and researchers have valued mainstreaming and inclusion years before the federal legislation of EAHCA in 1975. Thus, the research and advocacy for providing special education services in the general education setting influenced lawmakers to develop the LRE clause of the EAHCA. McKenzie (1971) recognized the instructional benefits of teaching disabled students together with regular education students and called for the collaboration between the consulting special education teacher and general educator.
Rozalski et al. (2010) noted that the LRE is determined by Individualized Education Program (IEP) Teams comprised of parents, teachers, administration, and advocacy people. The IEP Team decides on appropriate placement based on a continuum of services ranging from hospitalization to the general education classroom. IEP Teams answer the following questions when determining LRE: What are the educational benefits of the special education vs. general education settings?, What are the social benefits of being educated with his or her peers?, What is the negative affect of the student with disabilities in the general education classroom?, and What are the costs of the general education placement (Rozalski et al., 2010)? The answers to these questions are designed to direct an IEP Team to whether or not a co-teaching setting is appropriate for a student with a given disability.

In 1990 the EAHCAof 1975 was renamed the Individuals with Disabilities Act (IDEA) and was amended to include provisions including the right to an evaluation and procedural safeguards to ensure due process and to support parental participation (Horn & Tynan, 2001). IDEA was subsequently amended in 1997, then updated in 2004, offering an emphasis on educating disabled students in the general education setting that would hold them to a high achievement standard (Weichel, Murawski, & Swanson 2001; Kloo & Zigmond, 2008). The United States Department of Education made the latest revisions to IDEA in 2004 and there have not been any reauthorizations of IDEA (2004). The revisions of IDEA (2004) have the requirement for school districts to provide disabled students an education with nondisabled students at the “maximum extent appropriate” (§612). IDEA (2004) further stipulated that the removal of disabled students from the general education setting is to be considered “only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieve satisfactorily” (§612).
Along with the progression of the legal mandates, the bulk of the literature outlining the history of special education law and practices identify a common theme of collaboration between general and special educators. Cook and Friend (1991) defined collaboration as “a style for direct interaction between at least two co-equal parties voluntarily engaged in shared decision making as they work toward a common goal” (p. 26). Collaboration is the key concept for analyzing the relationship of special and general educators, including co-teachers (Cook & Friend, 1995).

From as early as the 1970’s, the academic literature cited the need for both general and special education teachers/programs to collaborate. The joint participation between regular and special educators is necessary to provide all students with an effective delivery of services (Bagley & Larsen, 1976). Bagley and Larsen’s study on the effects of a consultation model underscored the need for a “…regular teacher and consultant … working in an atmosphere of openness, trust, and dependability…” (1976, p. 3).

Adhering to the hallmarks of Bagley and Larsen’s (1976) study, collaboration has proven to be difficult. Ten years after Bagley and Larsen’s study, challenges of implementing collaboration illuminated by Pugach and Johnson (1989) were not expected to be as daunting as they are in actual practice. Pugach and Johnson “recognized that collaboration can occur only when all participants have a common understanding of their strengths and weaknesses and demonstrate a willingness to learn from each other” (1989, p. 235). All parties including psychologists and general and special educators must acknowledge each other’s expertise and share ideas and information (Pugach & Johnson, 1989). Additionally, almost ten years after the passing of EAHCA in 1975, Stainback and Stainback (1984) continued to call specifically for the merger of special and general education. It was not until IDEA (1997) that it was stated that
general education must collaborate with special education; albeit no framework or model was mandated (Wright & Wright, 2008).

Similarly, to this slow-paced evolution of special education, the issues of collaboration of special and general education remained consistent over an approximate thirty year period. The literature suggests that issues identified by McKenzie (1971) and Wade and Knight (1976) continue to be problems in more recent studies. Like McKenzie and Wade and Knight, Hallahan (1994) cited a general lack of role identification, administrative support, time, planning, resistance from general educators, and the lack of collaborative skills from both general and special educators as being reasons for failure of collaborative efforts for inclusion programs.

IDEA of 2004 ensured that all children with disabilities have access to a free appropriate public education designed to meet their unique needs in the least restrictive environment. (Wright & Wright, 2008). The least restrictive environment clause requires schools to educate both disabled and non-disabled students together “to the maximum extent appropriate” (Wright & Wright, 2008, p. 23). Meeting the needs of all students presents a challenge to general educators. General educators, unlike trained special educators, may not have the training and educational background to identify and employ educational interventions for disabled students.

**History of Inclusion Models**

The inception of collaboration between general and special educators for the purpose of inclusion support was first noted by McKenzie’s (1971) consulting teacher model. McKenzie discussed the educational benefits of the interface between regular educators and the consultant teacher sharing their opinions and coming to an agreement within the consulting teacher model. As noted by McKenzie, the consultation teacher model is not a direct service; the decided upon interventions are delivered and measured by the regular education teacher. The results of Miller
and Sabatino’s (1978) study claimed that the consultative model helped regular education teachers instruct disabled students at the same achievement level as the direct services model where supports are delivered in a separate setting.

Wade and Knight (1976) provided an analysis of the effectiveness of the consult teacher model developed by McKenzie (1971). They found that the historical split between special and regular educators rendered it difficult for collaboration to take place. This was evident from the reported resistance that frequently was received by consulting teachers (Wade & Knight, 1976). Further analysis found that consulting teachers require administrative, institutional, and political support (Wade & Knight, 1976). Additionally, the philosophical differences between regular educators and consulting teachers played a role with successful or unsuccessful consultative models (Wade & Knight, 1976). The problems of a lack of administrative support, a lack of professional development, and the mismatching of common educational philosophic beliefs between general and special educators identified by Wade and Knight (1976) continues to be cited as a problem of practice described in the literature spanning over twenty five years (Mckenzie, 2009; Carter et al., 2009; Smith & Leonard, 2005; Knackendoffel, 2007).

As the evolution of the consultation model progressed, Birch and Johnstone (1975) examined the consultation teacher model and introduced and defined “mainstreaming” as “progressively including and maintaining handicapped pupils in regular classes while providing top quality special education for them” (p. 5). “Mainstreaming” became a ubiquitous term in the literature described as a service that required a collaborative approach (Brann, Loughlin, & Kimball, 1991). The results of Leyser and Tappendorf’s (2001) empirical study of educator attitudes towards mainstreaming found general educators not supportive of the concept. “The rationale behind the concept of mainstreaming is that handicapped children, excluding the
severely and profoundly handicapped, will progress better in regular education classrooms than in segregated special settings” (Boyd & Jiggets, 1998, p. 165). Leyser and Tappendorf (2001) noted that the survey analyzing the most problematic issues of the two school districts indicated the difficulty of collaboration between general and special education was reported frequently.

As mainstreaming regularly became the practiced norm by schools, other collaborative models followed mainstreaming including Brann et al.’s (1991) guidelines for developing an effective collaborative model of cooperative teaching. Cooperative teaching is the joint planning of instruction shared by general and special educators (Brann et al., 1991). Due to the complexities of two teachers charged with the duty of instructing an array of learners, an effective cooperative teaching model must have common planning time, sharing of the lead teacher responsibilities, maintaining flexibility, trying different teaching approaches by collaborating with each other and building a relationship fostering compromise (Brann et al., 1991).

Similar to cooperative teaching, Friend and Reising (1993) defined co-teaching as an instructional model involving the shared planning of the delivery of instruction between a general and special educator. Co-teaching allows the special education services to be brought to the students in need, rather that removing and separating the disabled student from the general education setting (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). Cook and Friend (1995) advanced the co-teaching approach and offered different models of where one person teaches while the other assists, one leads and the other circulates to assist each student, station teaching arrangement dividing the content between each teacher with students changing stations, the parallel teaching model with both teachers jointly planning the instruction and each teacher instructing half the class, the alternative teaching approach where one teacher educates on
remedial skills to a small group while the other teaches the rest of the class, and lastly the team teaching model has both teachers taking turns delivering instruction.

As the literature used “mainstreaming” and “inclusion” interchangeably, Weiner and Murawski (2005) found that there was a division between special and general educators with the inbuilt belief that disabled students were the responsibility of special educators. To address this division between special and general education, Weiner and Murawski suggested a collaborative effort was best supported with the use of a framework such as a three tiered system that identified roles and responsibilities of all teachers and provided the professional development that supports the collaborative effort.

Birch and Johnstone (1975) made a distinction of the responsibility of the education of handicapped students falling under regular educators with the support and consultation of special educators. Since the acknowledged “historical split” between special and regular educators identified by Wade and Knight (1976), the subsequent literature continues to indicate the divide persists as made evident by the call for a merger of the two parties to collaborate. Stainback and Stainback (1984) provided a rationale for the merger of special and regular education to provide all students the right to an equal opportunity of education without separation from peers. This call for ending the dichotomy of education brought out Will’s (1985) theoretical article suggesting that the responsibility of educating disabled students was the duty of both the regular and special educators. Will suggested that “programs must be allowed to establish a partnership with regular education to cooperatively assess the educational needs of students with learning problems and cooperatively developed effective educational strategies for meeting those needs” (1985, p. 415).
In addition to forming partnerships, special and general educators need to address school reform. In the face of school reform, Friend and Cook (1990) stated that “collaboration is the theme which unites the various dimensions of school reform and that the potential for school reform success can be analyzed by examining the extent to which the conditions required for collaboration can be created in schools” (p. 69). IDEA (1997) recognizes collaboration as a necessary measure for disabled students to access a free and appropriate education (Henderson, 2003). “The law requires collaborative activities in a number of areas, including collaboration between regular and special education professionals…” (Henderson, 2003, p. 383).

**Difficulties of Collaborating in Co-teaching**

In a vast review of literature, Friend, Cook, Hurley-Chamberlain, and Shamberger (2010) and Darrow (2009) found that most of the studies focusing on the problems of collaboration between general and special education focused on the relationship and perspectives of co-teacher roles and the logistical issues such as common planning. Barnes (1999) cited a major obstacle to collaboration between co-teachers was finding the time in the daily school schedule to plan for modifications of content and assessments as well as to devise strategies to teach struggling or disabled learners. Wasburn-Moses and Frager (2009) assert that the differences between general and special education are so great that they may never find common ground to effectively be interwoven. Pedagogy learned in pre-service programs as well as beliefs about social justice of inclusion have proven to be the major issues that cause a divide between general and special education (Wasburn-Moses & Frager, 2009).

As early as the mid-seventies, the problem of blending special and general education was made known by Wade and Knight (1976) who identified possible solutions to create collaborative relationships between general and special educators. They included professional
development that met the needs of the staff and selection of specific teachers to match their common educational philosophic beliefs. The lack of collaborative skills of general and special educators continues to be reported with current research to the point where Knackendoffel (2007) offers strategies on how to manage resistance from co-teachers who are unwilling to collaborate. The offering of strategies to overcome resistant co-teachers depicts the difficulty of implementing a co-teaching program (Knackendoffel, 2007).

Executing collaborative activities in the face of obstacles is difficult when the participants do not have the prerequisite skills. Friend and Cook (1992) asserted that most teachers received training and were accustomed to working in isolated classrooms and may not have developed collaborative skills. Holding the expectation of teachers collaborating effectively without support is a recipe for failure (Friend & Cook, 1992). An added layer of difficulty to the collaboration between general and special education co-teachers is that the special educator does not have the content qualifications as the general education teacher (McKenzie, 2009). McKenzie (2009) suggests that the efficacy of a co-teaching program is better assessed by viewing the trust and interdependence that co-teachers have with each other rather than assessing whether or not the co-teacher possess the professional knowledge of the other teacher. In a review of the mandates of IDEA 2004 and No Child Left Behind (NCLB) 2001. Arthaud, Aram, Breck, Doelling, and Bushrow (2007) suggest that pre-service teacher programs need to provide opportunity for both general and special educators to develop collaborative skills to work effectively in co-teaching settings.

In addition to a lack of collaborative skills through professional development, Hallahan (1994) identified some of the obstacles that manifest when a collaborative effort between special and general educators was implemented. Hallahan discussed reasons for failure of collaborative
efforts including a lack of role identification, administrative support, time and planning to facilitate collaboration, assertiveness and experience of special educators, resistance from general educators, and collaborative skills from both general and special educators. These problems continue to pervade school district as reported by Nichols, Dowdy, and Nichols (2010) who surveyed twenty four districts and found that co-teaching models were “intitiated without proper staffing development for regular education teachers, special education teachers and educational leaders” (p. 651).

Carter et al., (2009) took note of the importance of collaboration and joint planning for interventions with the current emphasis of accountability and student progress of diverse learners. Carter et al.’s study examined the collaborative process between general and special educators and found that the sharing of educational philosophies was an important aspect for successful collaboration. “When teachers encountered philosophical differences, they did not resolve them in a way that allowed these teachers to work together” (Carter et al., 2009, p. 68). Additionally, Carter et al. offered that teacher preparation programs and administration needed to support any given successful collaborative effort.

Leatherman’s (2009) qualitative study examined some of the challenges of co-teaching by interviewing hired and student teachers in an educator preparation program in partnership with a school district. The results indicated that scheduling challenges prevented common planning time, teacher characteristics played a significant role in whether co-teaching was successful, and professional development on how to deliver co-teaching was also recognized as an integral missing component (Leatherman, 2009).

The relationship between co-teachers is inherently complex because it requires two teachers to deliver content in one classroom. Co-teachers require a high level of collaborative
competence for success (Friend & Cook, 1990). McKen zie’s (2009) study examined the educational preparation programs and found that “although the majority of special education majors take a collaboration course, most are not expected to collaborate in any field experiences with general education majors of whom virtually none have had a collaboration course” (p. 389).

Establishing collaborative relationships in traditionally isolated classrooms is challenging. McKenzie (2009) and Pugach and Johnson (1989) claim to attempt it with staff who may not be adequately prepared creates even more of a daunting challenge. McKenzie’s findings identify “the splinter manner in which collaboration is addressed in many pre-service programs not only hinders, but also likely precludes the production of skilled collaborators” (p. 391). Ill-prepared educators with the lack of collaborative skills further complicate the effort to form effective inclusion programs. McKenzie’s study indicates the need for coursework to develop the skills required to foster a culture of collaboration in a co-teaching model. Sims (2008) claims that many new teachers are unprepared for taking on the role of a co-teacher. Sims (2008) suggested that “lack of training, lack of planning time, and a lack of choice in co-teachers can lead to disaster” (p. 59). An additional factor of the special education teacher not having the rigorous background to the academic knowledge as required to teach a given course was found to interrupt the co-teaching relationship with the special education teacher likely to take on the role of an aide (Mastropiere, Scruggs, Graetz, Norland, Gardizi, & McDuffie, 2005). Pugach and Winn’s (2011) review of both qualitative and quantitative literature found that “co-teaching and teaming have not yet demonstrated their full potential either to build collaborative, inclusive school communities for special education teachers that could reduce the attrition of novices or to support significant curricular and instructional innovations” (p. 45).
Components of Successful Co-teaching

The challenges of implementing collaboration illuminated by Pugach and Johnson (1989) were not expected to be as daunting as in actual practice. Pugach and Johnson “recognized that collaboration can occur only when all participants have a common understanding of their strengths and weaknesses and demonstrate a willingness to learn from each other” (p. 235). All parties, including general and special educators, must acknowledge each others expertise and share ideas and information (Pugach & Johnson, 1989). The call to provide general and special educators opportunities to collaborate as highlighted by Pugach and Johnson (1989) continues to be cited in more current literature. Musanti and Pence (2010) examined professional development designed to enhance teacher collaboration and found that allotted time for mutual exchange between teachers built into professional development was imperative. The identified need for time to discuss co-teacher roles, responsibilities, and teaching each other how to work through the delivery of content were all beneficial components in supporting a co-teaching model (Musanti & Pence, 2010).

Ripley (1997) suggested that the goal of collaboration was to combine the knowledge and expertise of both general and special educators as part of the planning process in developing individualized instruction that teaches multiple learning styles. Ripley identified the need for common planning time as being paramount for success. This recommendation of the need for common planning time continued to be a challenge for co-teachers to achieve as cited by more recent publications from Villa et al. (2008) and Beninghof (2012).

Friend (2000) posited that the need for collaboration would only increase in education due to factors such as the complexity of the needs of disabled students, the high volume of literature about teaching and learning, and the frequency of issues regarding reform efforts.
Friend also suggested that components of collaboration be separated to identify successful approaches. Lastly, Friend offered that collaboration should become a regular topic of study for schools to examine their practices in order to make improvements unique to the given districts.

A key component to establishing a co-teaching relationship is to develop trust among colleagues. “The most productive collaborative relationships are characterized by mutual trust, respect and open communication” (Knackendoffel, 2007, p. 1). Inherent in the collaborative relationships, Knackendoffel suggested that participants must have four beliefs including all teachers hold equal status, all educators can learn new and better methods of instruction, instructional innovations need to be continuous, and educators maintaining the belief that they benefit from a collaborative approach. These beliefs characterize effective collaboration and add to a comfortable and collegial environment. However, the unwillingness of parties involved with collaboration will thwart progress and compromise a given plan.

Knackendoffel (2007) found that an assessment that evaluates a colleague’s readiness to collaborate is useful when determining the needs of how to develop a relationship with a prospective collaborating colleague. The assessment tool will help identify the underlining problem in a relationship and then find the strategies that will eradicate or circumvent the disrupting issue that is preventing collaboration to start or continue (Knackendoffel, 2007). In addition, Evans (2001) states “To change an organization’s structure, therefore, one must attend not only to rules, roles and relationships but to system beliefs, values and knowledge as well” (p. 17). Along with the adoption of an effective approach to co-teaching, effective collaboration requires planning time, a demonstrated willingness to work together, and administrative support to troubleshoot issues and provide ongoing professional development (Carter et al., 2009).
Due to the complex nature of the co-teaching relationship, issues frequently arise between communicating parties. Knackendoffle (2007) suggested highly refined communication skills were required for effective collaboration. Palloway, Patton, and Serna (2001) found that teachers claimed they needed to learn how to collaborate with other staff members. Special educators were not exposed exclusively to the professional development necessary for effective collaboration to take place in schools (McKenzie, 2009). “The under use of special educators is likely attributable to the interrelationship of the performance expectations of their collaborative role and the limitations of their training.” (McKenzie, 2009, p. 380). Added to this, Carter et al.’s (2009) study examined the planning processes of collaboration. Carter and colleagues found that teachers not only lack in the ability to demonstrate collaborative skills but also had difficulty applying correlating strategies for addressing the educational needs of students receiving special education services.

McKenzie’s (2009) study revealed that educational preparation programs do not require general educators to take collaborative courses. “Although the majority of special education majors take a collaboration course, most are not expected to collaborate in any field experiences with general education majors of whom virtually none have had a collaboration course.” (McKenzie, 2009, p. 389). A basis for collaborating is difficult to establish with a traditional model of isolated classrooms and becomes a daunting challenge with staff who may not be adequately prepared. Mckenzie’s findings identify “The splinter manner in which collaboration is addressed in many pre-service programs not only hinders but also likely precludes the production of skilled collaborators.” (p. 391). Education preparation programs need to address the issue of preparing prospective educators by embracing the collaborative spirit implied in the provisions of IDEA (2004) and NCLB (2001). Mckenzie’s study indicated the need for the
coursework to develop the skills required for fostering a culture of collaboration. A lack of educational support for a collaborative effort can be an insurmountable task when special educators attempt to introduce models of collaboration with general educators.

**Strategies of Collaborative Efforts for Co-teachers**

When establishing a collaborative effort, special educators need to identify potential hurdles that can arise. An impediment of collaboration commonly takes the form of an educator unwilling to engage in the collaboration process. Palloway et al. (2001) recommended that after roles and responsibilities were discussed, educators should discuss collaboration impediments. Villa et al. (2008) developed a checklist for co-teachers that outlined required skills during each developmental stage to co-teaching including the forming stage, functioning stage, formulating stage, and lastly the fermenting stage. This progression of stages include skills such as being prompt, following through on agreed plans, paraphrasing to clarify understanding, and being able to criticize ideas without criticizing the co-teacher (Villa et al., 2008). “Whether teachers were able to work around their differences was influenced by their apparent philosophies of learning disabilities, perceptions of their students’ specific challenges, and perspectives of the instructional needs of students with disabilities” (Carter et al., 2009, p. 64). A refusal to collaborate would ostensibly thwart the growth of a collaborative effort. This kind of action requires interventions that address the various approaches of employing unwilling collaboration participants. A strategic approach such as conflict resolution is required when attempting to problem solve. Knackendoffel (2007) suggested the need to identify the problem with the intent of profound understanding, generating solutions, examining foreseeable problems, and deciding on mutually acceptable solutions. This approach permits an equal voice to all parties involved in the collaborative processes.
Another approach to facilitating collaboration designed by Fisher, Ury, and Patterson (1991) addresses the complex nature of collaboration and the need to employ strategies that attempt to hear the concerns and motives of all participants with the hope of establishing a partnership and/or de-escalating deteriorating partnerships. Fisher et al. (1991) developed four principles of a merit based negotiation method consisting of separating the people from the problem, identifying and honing in on interests, determining a mutually satisfactory option that reflects needs, and insisting on an objective standard to evaluate the idea. These strategies can be used to get results that last due to the inclusive nature of the approaches. All stakeholders and their respective options, goals, and concerns are considered.

In addition to the previously mentioned approaches, Knackendoffel (2007) outlined effective strategies for overcoming resistance. They included offering an incentive to the invited collaborating party, identifying and addressing the other’s underlying needs, encouraging others with planning, and soliciting feedback. Like conflict resolution and merit based negotiation, these strategies empower the reluctant person in the collaboration process. This empowerment is designed to address the perceived impediments of collaboration and disarm any threats that may arise from the exchange.

Along with strategies aimed at improving collaboration between co-teachers, Simmons, and Magiera’s (2007) study evaluated three high schools in one school district and found that co-teachers lacked training to deliver a shared teaching model with consistency. Additionally, the study made recommendations for keeping effective co-teachers together as a tandem for future planning, provide common planning time, monitor student outcomes in co-teaching models, and permitting the inclusion of special educators to attend content based department meetings (Simmons & Magiera, 2007). Dieker and Murawski (2003) made similar recommendations and
included the need for co-teachers to discuss and tease out roles and responsibilities for grading, making accommodations inherent with the delivery of instruction, and how behavior management needs to be handled between the two co-teachers.

Education preparation programs need to address the issue of preparing prospective educators by embracing the collaborative spirit implied in the provisions of IDEA (2004) and NCLB (2001). Mckenzie’s (2009) study indicated the need for coursework to develop skills required for fostering a culture of collaboration. A lack of educational support for a collaborative effort can be an insurmountable task when special educators attempt to introduce models of collaboration with general educators (Mckenzie, 2009). In an effort to facilitate collaboration between general and special educators, Pugach and Blanton (2009) recommended the development of common language among practitioners employing co-teaching models to eliminate some of the communication barriers or misunderstanding that pull co-teachers apart.

Collaborative practices between general and special educators benefit from the exchange of ideas that offer further understanding of the established practices and developing knowledge of learning issues for students with disabilities (Mckenzie, 2009). To meet the unique needs of all students, both educators must call on the expertise of special educators due to their training to develop specially designed programs for learning disabled students. This specific instruction should be shared with general educators. The danger of remaining in isolation is “the failing of education and human conduct spring as a rule from our disengaging a single link and give it special treatment as though it were a unit in itself, rather than part of the chain” (Pestalozzi, 1969, p. 32). Education requires a teamwork approach to meet the specific needs of all students and to take on new challenges (Knackendoffel, 2007).
Cook and Friend’s (1995) five models of co-teaching were designed to make the collaboration between co-teachers structured and effective in delivering specially designed instruction for all students. However, Friend, Cook, Hurley-Chamberlain, and Shamberger (2010) found that there was not much research on student outcomes of co-teaching models. Most of the literature on co-teaching focuses on the co-teaching relationship and issues around roles and responsibilities between co-teachers. Contrary to the positive student outcome findings of Nevin et al. (2008) and Weichel, Murawski, and Swanson (2001), the little amount of evidence on student outcomes of co-teaching is largely inconclusive as no real increase in student performance on standard assessments or overall improvement in academic achievement has been found (Friend et al., 2010).

Examining the success of co-teaching was noted as being difficult to develop into a firm conclusion. Volonio and Zigmond’s (2007) review of research on co-teaching suggested there was little evidence that the scaffolding, overall support for learning and/or behavior management offered by the special educator co-teacher, improved student learning. The limited evidence of co-teaching improving student learning is due largely to the variations of how co-teaching is implemented: “actually co-taught classrooms differ widely from the theoretical models” (Volonio & Zigmond, p. 298), rendering it being too “difficult to study the effectiveness of co-teaching apart from carefully designed experimental studies that monitor implementation of the co-teaching models proposed in the literature” (p. 298).

**Summary.** This literature review highlighted a brief history of special education legal mandates that prompted school districts to develop inclusion program that evolved into co-teaching models that correlated to the changes to the mandates (Villa et al., 2008; Beninghof, 2012). The literature progressed into discussing the benefits of co-teaching while identifying the
most commonly cited models offered by Cook and Friend (1995). The same problems of implementing co-teaching include a lack of common planning time, lack of administrative support, co-teachers lack of collaborative skills, and a lack of identification of roles and responsibilities where identified throughout the literature over a twenty-year span. Lastly, the literature review ends with a discussion of strategies and successful attributes of co-teaching.
Chapter III: Research Design

Research Questions

The main research questions of this study are as follows:

1. What are the perceptions of the co-teachers of the feasibility of implementing each of the five co-teaching models with the special education teacher focusing on skills and strategies and the general education teacher teaching content?

2. How might the adoption of co-teaching models with the special education teacher teaching skills and strategies and the general education teacher teaching content affect the teachers’ perceptions of their co-teaching relationship?

3. How do the adopted models of the five co-teaching models affect the support that students with special needs and struggling learners receive?

These questions were qualitative in nature and crafted to investigate the perceptions of the feasibility and logistics of co-teaching through the co-teachers’ experience.

The follow-up sub-questions directed an inquiry and viewed the problem of practice through the lens of CHAT as it allowed a probe into the condition of the inclusion environment based on educator skills, external educational demands, and how these factors affect the relationship between the co-teachers. The application of the theory of CHAT helped identify the effectiveness of the interventions as perceived by the co-teacher who implement these methods. These questions were built on the premise that the extent of the benefit of a given intervention was equal to the extent that co-teachers found value in implementing them. Suggested interventions must be perceived as feasible to be executed with full fidelity.
Methodology

This inquiry, as directed by the research questions, was best supported by a case study. The investigation of the perceptions of co-teachers implementing Cook and Friend’s (1995) co-teaching models and how it affects student performance and the co-teacher relationship was best served by a qualitative design. Yin (2009) suggested that case studies were effective in generalizing theoretical propositions and the study investigated the expansion of Friend and Cook’s theory of co-teaching models in practice at the Smith Middle School. A case study permitted the deep exploration of “a program, event, activity, process of one or more individuals” (Creswell, 2009, p. 13). Due to the complicated nature of the social interactions of an inclusion classroom and the time that interventions require to process, a case study has the ability to analyze this process. Yin (2009) cited Schramm (1971) indicating that case studies “try to illuminate a decision or a set of decisions: why they were taken, how they were implemented, and with what result” (p. 17). Additionally, the nature of this inquiry intended to describe the theory based intervention by the implementation of the five co-teaching models as described by the co-teachers who employed them in everyday classroom settings (Yin, 2009).

Site and participants. The research site is located in Massachusetts. Smith Middle School is a regional middle school serving three suburban towns. The middle school has two grades including 7th and 8th with minimal diversity. Most of the enrolled students are from white upper middle and lower middle class families. This site was chosen due to reported problems with the co-teaching program.

The participants for this study were comprised of general and special educators in co-teaching settings. Three tandems of co-teachers from Smith Middle School took part in this study. Due to the intricate nature of co-teaching, the need for a model(s) to execute negotiation
and collaboration skills is paramount. It was expected that at this chosen site participants would have a higher need and the most to gain from co-teacher interventions and models.

Maxwell (2005) suggested that in qualitative studies “you are not only sampling people, but also setting, events and process” (p. 87). To do this, the employment of a criterion-based selection with the intent of “selecting those times, settings and individuals that can provide…” the needed information pertinent to this inquiry is important (Maxwell, 2005, p. 88). The criterion-based selection was the best method due to the small sample of special and general educators of Smith Middle School. These professionals are reflective of the “typical settings” and thus maximize the range of variation to be explored. Additionally, this criterion-based selection was the best representative way to study and compare the applied theories. This design focused on the feasibility of implementing the interventions at Smith Middle School.

Data Collection

In the spirit of a qualitative design, this research employed an approach allowing room for flexibility. Depending on the feedback from participants and as the data developed, the method of data collection could change from the original outset. This research employed three methods of collecting data: interviews, observations, and document analysis. Observations and interviews provided recorded data in the form field notes. The field notes were verified by the participants to check for veracity and validity. The aforementioned method of collecting data allowed for an in-depth and wider understanding of the issues under investigation (Maxwell, 2005).

The interviews were conducted independently. Teachers were able to report freely as their co-teacher and other participants in the study were not present to influence the data. Before the interview process, participating teachers had the option of using reflective journals to report
for the interview. During the interview, participating teachers responded to open ended questions. All interviews were recorded and transcribed.

Field notes were taken during the scheduled observations with each co-teaching tandem. Participants were observed on their implementation of the five models of co-teaching as it related to the motive of co-teachers working to improve the delivery of instruction and thus improve the relationship between the co-teachers (Yin, 2009).

Lastly, this research worked to attain documentation that evidence of collaboration with the execution of any of the five models of co-teaching worked. Documentation included emails, lesson plans, and any post lesson documented annotations discussing the lesson. This design took on the characteristics of triangulation, as multiple sources were recorded to identify the “converging lines of inquiry” (Yin, 2009, p. 115).

**Data Analysis**

This qualitative inquiry focused on the perceptions of both general and special education co-teachers employing the five models of co-teaching as introduced by Cook and Friend (1995). The study probed for deeper understanding of the feasibility of employing the models and to assess how co-teachers believed the co-teaching models affected the co-teaching relationship. Lastly, the study investigated how the models affects student outcomes.

The analysis of this qualitative inquiry is well served by strategies “to treat the evidence fairly, produce compelling analytic conclusions and rule out alternative interpretations” (Yin, 2009). The second strategy was employed to examine rival explanations (Yin, 2009). This included the attempt to discover other influences and or explanations to the presented data (Yin, 2009). Additionally, identifying real life rivals to the presented proposition ensured the confidence in the findings.
The collected data was analyzed using an analytical strategy such as Yin’s (2009) pattern matching that “compares an empirically based pattern with a predicted one” (p. 136). Yin (2009) suggested that if the results correlate, then the internal validity of the study might improve. Additionally, the cross-reference analytical strategy was beneficial to multiple case studies because it found common patterns across the case studies (Yin, 2009).

The coding of the data generated themes across the three cases. NVivo assisted with the categorization of data and rendered it easier to draw conclusions on common themes of the data. The data analysis included the frequency of the reported commonalities of data, a tabulation of the relationship of the data, the data presented in a variety of time sensitive order, and charts and graphs for the presentation of data (Yin, 2009).

Validity and Credibility

As the Coordinator of Special Education Services of Smith Middle School, the researcher is aware of biases that could affect this study. The researcher was an instrument of the research because the relationship with the teachers influenced the research. The researcher played an active role through the course of the research and must account for how this presence might influence outcomes reported by staff members. Yin (2009) suggested that a full disclosure of the participant opinions should be used solely for gaining an understanding of this problem of practice and not for the purpose of teacher evaluation. Additionally, the researcher made it know that in no way the study would be used for the evaluation of any of the participants during and or after the activities. The researcher will acknowledge beliefs and biases and contend with them by providing an in-depth description of contrary explanations offered by participants (Yin, 2009). During the data gathering stage, conclusions will be tested by asking colleagues for alternative
explanations and subsequently report on them and offer full disclosure of any possible data biases in the table (Yin, 2009).

The validity of this inquiry incorporated Yin’s (2009) construction validity, internal validity, external validity, and reliability. During the data collection process, all of the evidence was recorded to establish a story. The triangulation of observations, structured interviews, and open ended interviews provided multiple perspectives to ensure the accuracy of the data.

Additionally, the data was checked with feedback from the participants on the suggested claims as the data was interpreted. Participants checked the accuracy of proposed claims by agreeing or disagreeing with the information presented. Participants had an opportunity to review transcriptions of their interviews and was done individually to rule out participants influencing others with their views.

**Protection of Human Subjects**

This study protected the participants by gaining their trust through efforts of establishing integrity and ensuring safeguards against misuse of power or reported data (Creswell, 2009). Inbuilt efforts included the disclosed purpose of the study and the informed consent form signed by each participant.

The study was designed to provide the researcher, participants, other co-teachers, prospective co-teachers, special education advocates, parents, and administrators with new information about the delivery of the five co-teaching models (Cook & Friend, 1995). Additionally, the study worked to determine how co-teachers might improve the education of all students enrolled in inclusion classes. Within the disclosure of the purpose of the design, all participants signed an informed consent. The content of the consent letter covered the purpose, benefit, disclosure rolls, participant risk, confidentiality guarantee, participant selection,
participatory activities, and detailed an exit if the participant chose to discontinue the study (Creswell, 2009).

As part of the methods of collecting data in the natural setting, the observations took place during class time with the students. Every effort was made to not obstruct the natural flow of the class and disturb the learning and teaching that needed to take place. Observations were recognized as a normal occurrence due to the common practice of this school district having frequent visitors including administrators and other teachers observing classes for professional development. Lastly, an Institute Review Board (IRB) application was submitted and approved. The IRB process ensured that all elements of participant protection was included.

**Conclusion.** The review of literature suggested that co-teaching was a very difficult model to deliver due to inherent difficulties of establishing and maintaining an effective relationship between general and special education programs. The implementation of the five models offers the co-teachers roles and responsibilities from the models and this inquiry assessed how it affected the relationship and the delivery of instruction. The intent of this proposed study was to discover the perceptions of co-teachers who implement the five co-teaching models (Cook & Friend, 1995). The overarching questions asked how the implementation of the models affects student outcomes and the co-teaching relationship between general and special educators.
Chapter IV: Research Findings

Introduction

The sample size of this case study consisted of three tandems of co-teachers. The tandems were comprised of a special education teacher and a general education teacher. All of the participants were given pseudonyms to ensure anonymity. Tandem number one: the general education teacher is a science teacher named Mike and the special education teacher is named Donna. Tandem number two: the general education teacher is a history teacher named Shane and the special education teacher is named Carla. Tandem number three: the general education teacher is an English teacher named Mary and the special education teacher is named Alice.

All three tandems of co-teachers taught at Smith Middle School in a regional school district serving three communities of southern New England. The school had an enrollment of 453 students. The findings of the Annual Yearly Progress (AYP) report indicated that Smith Middle School is a Level 2 school making adequate progress with student outcomes as measured by the standard assessment Massachusetts Comprehensive Assessment System (MCAS).

Smith Middle School has two grades of seventh and eighth graders. Each grade is divided into teams named Red, White, and Green. Each team has a cluster of students with an assigned group of teachers for English, math, science, and history, as well as a special education teacher who traveled with an identified cohort of students who received special education services. The aforementioned model applies to two of three tandems in the sample where the special education teacher is assigned to co-teach all four subjects. In tandem number two, the special education teacher functions as the primary instructor for English and travels with the cohort of students to co-teach in the general education setting for history and science. The reason for this comes from
The “Language Based Program” that offers a substantially separate setting for math, English, and reading.

The entire staff of Smith Middle School took part in a two-hour professional development seminar that the researcher held at the beginning of the school year. The goal of the professional development seminar was to review the five commonly known models of co-teaching as defined by Friend and Cook (1995). Additionally, the staff was coached about having the special education co-teacher take the role of focusing on skills and strategies while the general education instructor maintained the responsibility of the content. It was discussed that this could be a good strategy to implement when using the five co-teaching models.

All of the special education co-teachers were invited to take part in the study. However, only three out of the six expressed an interest in participating. The three other special education teachers chose not to take part. Additionally, the three special education teachers who expressed an interest in participating had a general education co-teacher who was willing to participate.

This chapter presents and discusses the key finding of the feasibility of implementing the five models of co-teaching through their experience with predetermined roles as measured by interviews, observations, and the review of documents. This study aimed to illuminate the complexities of co-teaching and to understand the inner workings of implementing five proven co-teaching models with a focus on special education teachers honing teaching skills and strategies of the lessons and the general education teacher focusing on teaching content.

The study consisted of one announced observation of each co-teaching tandem and one interview per teacher. The study intended to complete a document review; however, it was not completed due to the absence of materials or evidence from the participating teacher. None of the teachers had any evidence of collaborative planning and or student outcomes as it related to the
study. The findings of this chapter offer testimonial evidence of that lack of planning between co-teachers that took place during the study.

This chapter is divided into two sections. The first section offers a brief description of the study participants. The second section presents the findings. Section two is subdivided into the three research questions and the themes are identified within those research questions. The research questions driving this case study are:

1. What are the perceptions of the co-teachers of the feasibility of implementing each of the five co-teaching models with the special education teacher focusing on skills and strategies and the general education teacher teaching content?
2. How might the adoption of co-teaching models with the special education teacher teaching skills and strategies and the general education teacher teaching content influence teacher perceptions of their co-teaching relationship?
3. How do the adopted models of the five co-teaching models affect the support that students with special needs and struggling learners receive?

Participants Profiles

**Tandem 1: Mike and Donna.**

*Mike.* Mike holds a Juris Doctorate and is currently licensed to practice law in Massachusetts and New Hampshire but no longer does. Mike earned his teaching certification through the no longer existing program called Massachusetts Initiative for New Teachers (MINT). The certification to teach science was earned through the MINT program while teaching science in Lawrence over five years. Mike has ten years of experience teaching science and holds a license to teach Biology 5-12, general science 5-8, and political science 5-12. He has been working in Smith Middle School for five years. Mike’s reported experience with co-
teaching consists of two years with the same co-teacher. Before the installation of co-teaching, a para-professional was in the classroom to offer students support.

The researcher knew Mike for less than one year. The relationship can be described as collegial and professional. There were only few occurrences of professional interaction before the study as the research was new to the district. An observation took place in Mike’s classroom and an interview in the researcher’s office. Mike’s participation was well received as he was very pleasant to work with during both the interview and observation.

**Donna.** Donna was a “pre-medical” student for her undergraduate education. She holds a Bachelor’s of Science degree in Biology and a Master’s of Science in Communication Sciences and Disorders. Additionally, she holds the American Speech-Language-Hearing Association certification and is a Certified Clinically Competent Speech and Language Pathologist (CCC-SLP). Lastly, she holds a Massachusetts Department of Secondary and Elementary Education (DESE) Professional Educator’s license in Speech, Language, Hearing Disorders (all levels), and Initial Special Education Moderate Disabilities license (K-8).

Donna’s work experience includes eight years as a Speech and Language Pathologist for the current school district and the last two years she has been working as a special education teacher instructing students with language learning disabilities. She currently teaches sub-separate math classes and co-teaches a science class in the general education setting. Prior to her middle school experience, she had been assigned to co-teach with elementary school general education teachers and special education teachers for four years as a Speech and Language Pathologist. She has been working with the same co-teachers for the last two years.

The researcher knew Donna for less than a year. The relationship can be described as being mutually respectful professionals. There were many collegial interactions between the
researcher and Donna during the school year unrelated to this study. The interactions were based on issues as they pertain to individual students who receive special education. The interactions helped forge a professional work relationship. The observation took place in Mike’s class since Dona travels to his class to fulfill her co-teaching duties. The interview took place in the researcher’s office and she was very open to the experience.

**Tandem 2: Shane and Carla.**

*Shane.* Shane grew up in Southern England and spent most of his childhood in Surrey England. Shane attained a Masters with first class honors in Social Anthropology from St. Andrews University in Scotland in 2002. His teaching experience includes three years of teaching English as a Second Language in Suncheon, South Korea. During his time in South Korea, Shane also spent two years as a co-teacher of a middle school English as a Second Language classroom. During his last year in South Korea, Shane served as a university instructor of English as a foreign language. After immigrating to the United States, Shane earned his certification to teach history and enjoyed two years as a history teacher of both 7th and 8th grade at a middle school in Eastern Massachusetts. Shane is now in his second year of teaching history to 8th graders at Smith Middle School where he works with a special education co-teacher for one class per day.

The researcher knew Shane for less than a year. The interactions between the researcher and Shane commonly took place during special education team meetings. The relationship can be described as positive. The observation took place in Shane’s classroom and the interviews took place in the researcher’s office. Shane was a pleasure to work with as excited about participating in the study.
**Carla.** She holds Bachelor of Science in Education and a Master’s in Education in Moderate Special Needs. She is licensed as a certified Moderate Special Education Teacher (K-8). Carla has been teaching at Smith Middle school for four years where she has been a special education teacher for the “Language Based” program in which she teaches English in a substantially separate class and co-teaches the history class in the general education setting. Prior to this experience as a special education teacher in the Language Based program, Carla was a para-professional for ten years working in an elementary school in the district. Carla has four years of experience with co-teaching with three different teachers. She is currently working on her first year of co-teaching with Shane.

The researcher has known Carla for less than a year. The relationship between Carla and the researcher can be described as cordially professional. There have been many interactions between Carla and the researcher unrelated to the study. The interactions throughout the school year were necessary to provide students with the appropriate special education services. The activity helped build a professional relationship based on mutual respect. The observation took place in Shane’s classroom and the interviews took place in the researcher’s office. Carla was a pleasure to work with and excited about participating with the study.

**Tandem 3: Mary and Alice.**

**Mary.** Mary received her Bachelors of Arts in English at Boston College in 1993. She went to law school and practiced law for the District Attorney’s office for the State of Massachusetts until 2002. She sought a job change and took the opportunity to enter the field of education. In the summer of 2002, Mary accepted the position of 7th grade English teacher. She has taught English for twelve years at Smith Middle School. During this time, Mary has taken graduate courses in English through Salem State University. For the last five years, Mary has
served as team leader for her teaching team. Mary has worked with a co-teacher in her English class for ten years. She had the current special education co-teacher, Alice, for the last two years.

The researcher has known Mary for less than a year. There have been some professional interactions between Mary and the researcher during the past school year. The interactions were mainly through the formal special education team meeting where all the pertinent school staff meet with the parents and develop an appropriate IEP. The interactions were positive and collegial. Mary was happy to participate with the study. The observation was completed in her classroom and the interview was done in the researcher’s office. Mary was forthcoming with information.

Alice. Alice graduated from Russell Sage College with a degree in Sociology. She worked in the mutual fund industry for a number of years and then transitioned to the field of education. Alice began working as substitute teacher at the local elementary school in 1999. Soon thereafter, Alice took on the role of a long-term substitute in music, special education, and regular classrooms. Additionally, Alice organized a program for Kindergarten students with fine motors skill difficulties and managed parent volunteers for two years. Alice has worked as a para-professional at the local elementary and middle schools for eight years. While working as a paraprofessional, Alice completed a Master’s in Education with a focus in Moderate Disabilities at Cambridge College. Alice has currently been a co-teacher for three years. Her co-teaching experience spans 7th and 8th grades and the subjects include English, math, science, and geography.

The researcher has known Alice for less than a year. Alice was happy to participate in this study although she felt that the role she adopted as special education co-teacher was better described as a support teacher. With that mentioned caveat, she willingly participated in the
study. Throughout the course of the school year, Alice and the researcher developed a solid working relationship, often interfacing during team meetings to determine student eligibility for special education services and or to develop IEPs for disabled students. Alice attended the interview in the researcher’s office and participated openly.

**Research Question 1.** What are the perceptions of the co-teachers of the feasibility of implementing each of the five co-teaching models with the special education teacher focusing on skills and strategies and the general education teacher teaching content?

The themes that emerged from the interviews and observations are listed in Table 1.

Table 1

*Themes of research question 1: What are the perceptions of the co-teachers of the feasibility of implementing each of the five co-teaching models with the special education teacher focusing on skills and strategies and the general education teacher teaching content?*

<table>
<thead>
<tr>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>More Time</td>
</tr>
<tr>
<td>Only One Class is a Co-taught Class</td>
</tr>
<tr>
<td>“on the fly” Planning</td>
</tr>
<tr>
<td>Default Lead and Support</td>
</tr>
<tr>
<td>Tried Models</td>
</tr>
<tr>
<td>Feasible Models</td>
</tr>
<tr>
<td>Would Not Be Feasible</td>
</tr>
</tbody>
</table>

**More time.** Participants were asked how much time does it take when you add the layer of employing the co-teaching models of Team Teaching, Alternative Teaching, Station Teaching, Parallel Teaching with the focus of the special educators teaching skills and strategies and general educator focusing in on content? As cited in table 2, table 3, and table 4, all six participants in this study claimed that more time was needed to plan for co-teaching using the
models with the general education teacher focusing on content and the special educator focusing on skills and strategies.

Table 2

*Tandem 1 Planning time*

<table>
<thead>
<tr>
<th>Tandem 1</th>
<th>Planning Time</th>
<th>Needed Planning Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mike</td>
<td>No time to plan</td>
<td>Two 50 minute periods per week</td>
</tr>
<tr>
<td>Donna</td>
<td>No time reported on planning</td>
<td>45 minutes per day</td>
</tr>
</tbody>
</table>

Table 3

*Tandem 2 Planning Time*

<table>
<thead>
<tr>
<th>Tandem 2</th>
<th>Planning Time</th>
<th>Needed Planning Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shane</td>
<td>No set planning time</td>
<td>Half hour to an hour a day</td>
</tr>
<tr>
<td>Carla</td>
<td>One time per week for 35 mins</td>
<td>A half hour a day per co-teacher</td>
</tr>
</tbody>
</table>

Table 4

*Tandem 3 Planning Time*

<table>
<thead>
<tr>
<th>Tandem 3</th>
<th>Planning Time</th>
<th>Needed Planning Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary</td>
<td>Two fifty minute periods per week</td>
<td>None specified just more</td>
</tr>
<tr>
<td>Alice</td>
<td>None reported</td>
<td>Need more time non specified</td>
</tr>
</tbody>
</table>

Alice claimed that the demands of the schedule negatively impact her ability to plan. The day consists of a period in [a math class, English class, geography class and a science class and] one academic support period, short homeroom period at the end of the day just to make sure everyone has their materials for their homework, or studying (Interview 5, p. 1).

Alice offered that the difficulty in planning also relates to needs of the students receiving special education service in the general education setting. Alice said: “…but the planning time
in that as it pertains to these youngsters, individuals, it takes lot of time” (Interview 5, p. 19).

More specifically, Alice offered that “…in the beginning it takes a lot of time” (Interview 5, p. 19). [For the effective delivery of co-teaching it is a] “time thing, and I’ve been spending some time the last two weeks thinking a lot about this. It’s the time thing, and I hate to make that as an excuse” (Interview 5, p. 18).

Alice’s co-teacher Mary reported and confirmed the planning problem. The problem of the shortage of time was further described as Alice is charged with the responsibility of planning lessons between four different teachers along with their corresponding curriculum of math, science, history, and English. Mary said:

So if she were gonna plan or prep with us, that would be the one period she has to prep with all of us. This team planning time is more for parent meetings and things like that and team planning time, although I supposed we could use some of that time to do common planning too. (Interview 6, p. 1)

Additionally, Mary offered another solution to the planning time problem. “…I think it’s feasible …the golden thing that everyone wants is more time. I think we could do it so much better with more time. Or just a rearrangement maybe of the time that we have” (Interview 6, p. 1). Mary stated:

So we also then have a 45-minute team period where we get together, we can talk about, you know, discussing issues that come up with kids, that’s when we meet with parents. But if we’re not meeting with parents or there aren’t any pressing issues with kids, I supposed we could use some of that time to do some, you know, planning time with the special ed teachers. (Interview 5, p. 2)

Mary affirmed that it is feasible to implement the given models within the given
planning time. However, due to the nature of the special education teacher being spread across four subjects, Mary suggested that employing the models with the aforementioned assigned responsibilities was not feasible due to the special education teacher Alice “…being spread in so many different directions” (Interview 6, p. 3).

Like Alice, Carla reported that her schedule negatively impacted her planning time to co-teach. “It’s slated for one team period a day; however, that’s interrupted often with special education meetings. That doesn’t include check-ins or, you know, unofficial times or that sort of thing” (Interview 1, p. 1). Carla claimed that the amount of planning time was inadequate and said, “I don’t think it was enough time” and “ideally I’d like a lot more time” (Interview 1, p. 1).

Carla suggested that she would like to see the planning time occur once a day. “However, in special ed because it’s not possible with all the jobs and meetings that we have, I think a half hour would be doable” (Interview 1, p. 2). Furthermore, Carla claimed that “…if we had had more time and we often talked about that, if we could build in more planning time, it could get into a true team teaching” (Interview 1, p. 8).

Mike went further than Carla and said, “I don’t think we have any common planning time really. No. Because I either team time or my individual prep so and there’s no I would say there was no structure in place time due to our own team” (Interview 4, p. 1). Shane offered that the most impactful reason for the lack of planning time was “…the schedule doesn’t really give us any time for that other than shared lunch where we can talk about it” (Interview 2, p. 1).

While discussing the need for more planning time, Shane referenced station and parallel teaching. Due to Shane’s reference to team and station teaching, the interviewer asked Shane how much more planning time was needed for station and parallel teaching when compared to
leading support teaching. Shane answered:

Station teaching and parallel teaching…can be quite time intensive in the creation phase, just because essentially with stations you’re coming up with… three different tasks and it has to go a certain way and …you’re dividing the time onto that lesson, plus your goals for each station are completely different. In my opinion …with the parallel teaching, you focus on skills and strategy… one half of the room. The other half you’re focusing more on content. Stations you can also set it up like that. It is still time intensive [with] the planning, those ones. (Interview 2, p. 7-8)

Shane recommended sufficient planning time

would really have to be at least an hour of shared planning time a day [to] at least to get on the same page, because then I would anticipate doing one or two hours or maybe more at home to create the meat and bone so that we could work it the next day.

(Interview 2, p.11-12)

Shane also claimed that the planning process was described as the “talk about the mechanisms of delivery [of co-teaching models] before creation [of lessons takes time]” (Interview 2, p.11).

**Only one class co-taught.** All six participants claimed that the inhibiting factor to planning and delivering co-taught classes was that the structure of the class schedules negatively impacted the co-teaching practice. The three general education teachers and two special education teachers cited that teaching one co-taught class out of the four classes during the school day made things difficult to plan and deliver a co-teaching model.

Donna also cited this as being a problem because of her co-teacher’s general education schedule, “So he teaches four science classes a day, those 7th graders and I’m only in there
for one. So the fact that I’m in there for one class” (Interview 3, p. 7). Donna’s general education co-teacher Mike agreed with Donna. Mike said:

...Because I also only have Donna in there for one class so if we ever move the model where we would both be teaching let’s say... she was in there all day with me that’s her science and I only have her have complete ownership over that than we would probably want to meet more often to discuss... [However], she’s only there one class she’s only 25% of what I do. (Interview 4, p. 2)

Mike’s reason for calling this a problem was that he did not want one out of four classes during his day to run differently. Mike responded: So “…we wouldn’t want that class to run different…” The problem is that “just trying to do that first period and then have the next few periods going back to being alone in the room” (Interview 4, p. 2) was perceived as too difficult to implement daily. Mike suggested that “four consistent class periods” with the same co-teacher would help the delivery of the models.

Shane described the same line of thought of needing consistency with a co-teacher. This scenario was presented as problematic by Shane because “it would really be more work simply because I’ve got the three lessons where I don’t have a co-teacher in my class” (Interview 2, p. 4). Shane sees himself as the primary instructor as it pertains to planning and delivering instruction for all his classes. Shane claimed that “it’s on me... it’s hard to plan something completely different for that” (Interview 2, p. 17).

Like Mike, Shane said that “It would be great if we had four lessons – like, if every lesson, so you were planning for every lesson. Otherwise,...it’s just tough” (Interview 2, p. 25). Shane elaborated on his concern with co-planning lessons:

But in terms of time, right now with just the way the schedule the way it is, it’s daunting
to me to think that I’d have to plan a co-teaching lesson every day. That would scare me. That kind of scares me just because even though that’s still my goal, and if I can I will, but I know I’m not always able to build my lesson completely with that in mind. (Interview 2, p. 33)

Mary claimed that co-teaching “… was new. But I think also just her being spread in so many different directions. So it’s hard to just focus on that one lesson with me when she’s got the other classes to think about as well” (Interview 6, p. 3). Alice confirmed this as she took the special education teacher perspective and cited that working with “…4 teachers it makes it more challenging to figure out…” (Interview 5, p. 20).

“On the fly” planning. Due to the limited amount of reported planning time, the phenomenon of “on the fly” planning was employed. All six teachers reported that most of their planning was “on the fly.” Alice claimed the nature of the interruptions to the daily planning time were because “It’s very often teased apart by other demands” (Interview 5, p. 2). The allotted prep time “isn’t used because of responsibilities or meetings. And then one prep period. Sometimes I would meet with the teachers during the prep period and other days I don’t” (Interview 5, p. 1). As a result, Alice said that most of the planning was done ‘on the fly’.” Alice cited an example of “on the fly” planning during a lesson saying “at one point actually the teacher and I swapped groups. I don’t remember now why we decided to do that because that wasn’t the original plan, and then we did” (Interview 5, p. 5).

Alice further described the “on the fly planning” as practiced and said: “With one teacher we had explicit conversations about it.” “…Do you want to do this particular lesson, “on the fly” you know, in the morning [before the class]? This is what we’re doing today, [I would ask] what do you think, where do you want to go with that, that sort of thing”
Carla offered that it was not feasible for planning with only one hour a day with all the other duties. She said it was not enough to carry out sufficient planning so that a teacher could follow the five models of co-teaching. Carla described “on the fly” planning and used the descriptor of “bare bones” for describing the planning process. Like Alice, Carla further explained that the planning takes place about once a week and it takes the form of a “check-in in the morning when I went to class or something like that” (Interview 1, p. 37) Carla said that this situation often caused a scenario of entering the class and not knowing what was to come and “so I’ll go in cold, not knowing what’s going to be covered that day” (Interview 1, p. 37). [This process] “takes me a few minutes to get up to speed… and I don’t feel as confident, sometimes. I’ll go in and interject myself and so I get a sense of where they’re at” (Interview 1, p. 37).

Donna described her experience collaborating with her co-teacher as “… the teachers were readily accessible whenever …during prep or after school, or during lunch…” (Interview 3, p. 2). Donna claimed that she and her co-teacher Mike have “…one period a day really as a team, but generally that’s for team issues and concerns so we have a lot of time to collaborate. Obviously we do a lot ‘on the fly’” (Interview 3, p. 1). The “on the fly” planning takes place “when it’s lunch time or when we go and prep at the same time as well so I would shoot down to his room. This kind of planning would consist of 45 minutes per week” (Interview 3, p. 1). Donna said that she interfaces with her general education co-teacher after the general education teacher planned the lessons for the week and then she has an idea what she needs to interject during the lessons so that the students have what they need to complete the assignment.
Donna claimed that she inserts herself into lessons “on the fly.” “I’m more… aware of language and the crowd and if they’re not getting it and you try to think another way and to support them that way” (Interview 3, p. 12).

Mary’s description of “on the fly” planning was similar to Donna’s description. Where we talk about what’s going on, you know, in my particular classroom. We use whatever time we can get too, in the hall or if I wanted to – if there some kind of lesson that I’m thinking of doing and I want her input, we sort of fit that time in whenever we can. (Interview 6, p. 2)

Within the aforementioned “on the fly” planning process, Mary was asked if the planning process was assisted with the special education teacher focused on skills and strategies and did it help with the planning process? Mary offered that she and her co-teacher did not specifically separate the skills and strategies from the instruction as in practice “it just molded all together” (Interview 6, p. 8-9).

Mary’s special education co-teacher Alice confirmed the lack of planning to the point that she was unsure if she focused on skills and strategies. Alice claimed:

Frankly I didn’t look at it through that lens. I was looking at it as a way to have two groups of students being able to get through ease of reading an assignment or working on comprehension of the reading assignment. So consciously I wasn’t looking at it through the lens of skills and strategies, I was looking at it... I guess I was then, I was looking at it through the lens of [skills and strategies.] (Interview 6, p. 4-5)

Mike also confirmed that the planning was done “on the fly”. He claimed that the special education teacher, Donna, helped with the modification of assignments as well as tests.
and quizzes. This process was described by Mike in the way that he gave out the “...standard directions or I do this “on the fly” [and] you make any modifications you want to it” (Interview 4, p. 16). Mike offered that he gave his special education co-teacher Donna the latitude to make the necessary modifications for her students. Mike said “[Donna is] the one in charge of that and if … I said writing two paragraphs and [Donna wanted] them to write one [paragraph, Donna has] complete freedom” (Interview 4, p. 16).

Like Mike’s description of “on the fly” planning,” Shane described the lack of time affecting the planning process and thus he employed an “on the fly” approach. Shane said I found this year, I mean, I didn’t have the time to plan with Carla, so I would plan and I would do it and then I would inform Carla what we were doing that day and Carla being a good sport, you know, and also she liked it. She’d jump in and do it. (Interview 2, p. 8)

In the middle of a lesson, Shane said that Carla gives him feedback “on the fly”. He reported that Carla was say “oh my God, this is good. What do you think about this and I’ll go back and rework it. So that’s kind of how it’s worked” (Interview 2, p. 9).

Additionally, Shane said that:

So she would look at my lesson goals and what I wanted. I would make accommodations to familiarize myself with the students on IEPs. And then at times when Carla was in there, trying to bring her into the conversation sometimes, something I wasn’t that good at, to be honest because I’d just get so into what I was doing

(Interview 2, p. 18)

In supporting the “on the fly” approach, Shane described the planning process as finding time before classes began or to meet in the morning if they could. Shane said that they might
convene to talk about social issues in a class and or other issues that could affect students during instruction. Shane submitted, “it’s not that I was necessarily getting her feedback on the lesson, because I didn’t really have time to” (Interview 2, p.19). The three observations provided evidence that supported the claim by all participants that the instruction was done “on the fly” by all three tandems.

The results of the observation of tandem one, Mike and Donna, is presented in Table 5.

Table 5

*Observation Results of Tandem 1*

- Special education teacher prepared the sideboard to be ready while the general education teacher was instructing. This action demonstrated that a level of planning took place because the sideboard was instrumental with the highlighting of difficult words for the students to see with a quick definition. However, she did not have previous access to the difficult words before the class. Donna highlighted the words as the general education teacher was instructing and Donna made a judgment call “on the fly” to what she thought would be the difficult words for the students in the class.

- General education and special education teachers convened to share input on the lesson. Both teachers checked in with each other to discuss each segment of the class. The general education teacher did most of the direct instruction and the general education teacher reported what he was going to do with the lesson. Donna the special education teacher reflected on what the general education teacher said and found ways like using a the chalk board to highlight unknown words.

The observation on tandem number two: Shane and Carla, is presented in Table 6.

Table 6

*Observation Results of Tandem 2*

- Just before the start of class, Shane reported to the observer that “not a lot of planning went into this” “as it was difficult to practice the co-teaching models extensively.”

- On the day of the observation, Carla arrived to the classroom four minutes after it began. Carla had to travel to Shane’s classroom.

- Like in tandem one, tandem two checked in with each other. Shane asked “Should we do another five minutes on this and then switch?” We will want to have a discussion at the
end of class.” Carla said “Yes, I like that.” While the students were working the special education teacher and general education teacher meet again for the second time special education teacher “how will this be carried out into tomorrow?”

The results of the observation for tandem 3: Mary and Alice were similar to both tandems one and two.

Table 7

*Observation Results of Tandem 3*

- Mary the general education teacher started the class with verbal commands.
- Alice the special education teacher arrived two minutes late for the class due to travel time.
- There was no evidence of specially designed instruction interwoven into the lesson plan; all was reactive support with Alice offering individual help to some students.
- Like tandems one and two, the special education teacher Alice and the general education teacher Mary convened to discuss what they should do with the reading poetry while the students were working.
- While Mary was offering direct instruction to the whole class, Alice “on the fly” “Google” searched a Rousseau painting. This was done to compliment the referenced of Rousseau that the general education teacher cited.

The evidence from both the interviews and the observations suggested that the general education teacher was the primary instructor who planned the lessons and the special education teacher tried to integrate himself or herself into the lesson “on the fly.” As evidence of the observations, only tandem one, Mike and Donna, demonstrated any resemblance of planning and use of the special education teacher as the primary instructor.

**Default lead and support.** Because of the tandems needing “more time,” difficulty collaborating, and “on the fly” planning,” the reported default mode was the lead and support model. Alice reported, “in terms of co-teaching on this team, most of it is in the lead support so
there wasn’t a lot of planning that was done” (Interview 5, p. 2). As result of this model, Alice said, “kids would say to me, well the helper teacher. Well we’re not the helping teacher, but that’s the perception of this approach. So you’re not really a teacher…” (Interview 5, p. 20). Alice asserted that lead and support “It’s just not the strongest approach” (Interview 5, p. 25).

Carla said that she really likes the Team teaching approach because it permits the teachers to feed off each other. However, “it doesn’t always happen. We are in one of the lead support groups here” (Interview 1, p. 5). Carla offered that “I think we didn’t have enough planning time to truly do the team teaching. Because of that it sort of [defaulted] to lead and support” (Interview 1, p. 8). Carla described her experience with co-teaching as positive but limited with common planning as it related to her focusing on skills and strategies within the five co-teaching models. Carla said:

For example, I would know what was going to be going on every class, I could come into that class and it wouldn’t matter if the co-teacher was there or not, the class would still run the same. We always try to say to ourselves, you know, if you had to leave or if I had to leave, could say pick up right where the other left off seamlessly and the kids would not really notice a difference. That was our goal. So there were, you know, because of the time constraints, we ran into problems and we did end up with a more lead support because of that. (Interview 1, p. 8)

This same kind of scenario was reported by Donna only she cited an additional “go to” model. “I think the Lead and Support and the Team Teaching support where it happens most frequently” (Interview 3, p. 4). Donna suggested that the implementation of other models would require more planning time. Donna claimed: “…I think probably the Stations require some more prep time” and “As previously reported the lack of planning lead to the default lead and support”
(Interview 3, p. 4). Donna also reported that “…my background in science” [helped with her knowledge with the instruction, but, in practice “the lead and support is just easy to fall into” (Interview 3, p. 5).

Like Donna’s claim of going to a lead and support model because it required less planning, Mary offered that the practice of default to lead and support was followed because it was easier to implement (Interview, p. 6). Mary agreed with the statement of “compared to a team teaching or a station teaching it required less planning, more “on the fly” kind of thing” (Interview 6, p. 4). However, Mary claimed “Although some of those other models we can do on a fly as well… and that’s kind of been the common practice for some many years, I think that’s why it makes it easier to be the default” (Interview 6, p. 4).

Mike reported “…lead in support is most of what we do” (Interview 4, p. 3). However, this year Donna has “definitely taken over a lot of helping me with the modifications so she does that on her end and then we get together quickly and she says, how’s this” (Interview, 4, p. 4). It was suggested by Mike that the evolution of them practicing the lead and support model brought the tandem to practicing team teaching.

The [models] that I fall back on [are a version of an] evolving lead and support she’s doing a lot of modification so that it [is] heavy support. And then the team teaching that’s evolving... We haven’t come to the [other models] yet. (Interview 4, p. 7-8) Mike described the practice as:

Yeh so she’s really focusing on… she’s made modifications, she’s rephrasing things in ways that you know she has more knowledge of that area so she’s able to rephrase things in a way that maybe I wasn’t thinking about. So she’s really doing a lot of like active management of her students in the class. But she, like I said, she typed up notes
and study guides in a way that they would understand in a way that I wouldn’t have thought about. You know I like to try and simplify notes and she knew how to present it on the paper. Yeh so she does a lot of support in that respect both the heavy-- heavy modifications support for me. (Interview 4, p. 14)

Shane also described their practice as a heavy use of lead and support. “Well, throughout the years simply I think probably as a result of not having shared planning time, I was the direct teacher and Carla would be more support in the room” (Interview 2, p. 5). This practice was due to lead and support being easier to implement with “on the fly” planning. Shane claimed that “lead support was the most feasible” (Interview 2, p. 13). “…I am anticipating in my second year, because we’ve done these lessons together, that it would be less leading support. But maybe we’ll have more opportunity, because less time is needed” (Interview 2, p.13). Shane viewed the special education position as a natural calling for a lead and support model. He suggested that “… I felt like she was… assisting her students to connect with what I was doing” (Interview 2, p. 18).

The three observations provided evidence that supported the claim by all participants that lead and support was the default model by all three tandems. Table 8 provides the observations of Tandem 1: Mike and Donna.

Table 8

Observation Result Tandem 1

- The start of class was presented by the general education teacher Mike with the special education teacher Donna supporting and assuring that students were engaged and checked with students to verify that they understood the directions. These actions are the hallmarks of lead and support.

- Mike continued to be the lead instructor and asked the students “What I want you to do while I check homework is to follow these direction up on the board (do now)”.


• Mike called on students and directed the lesson. Donna cued and assisted individual students with language clarification and helped them get organized. Students worked in pairs (do now).

• Mike checked homework. Donna worked with individual students “what do you guys think about this problem?” “Try and come up with more than one solution” Donna circulated around all the student groupings.

• Mike continued to lead the main lesson and raised his hand to signify silence. Donna wrote out a pass for the child who needed to go to the office.

• The delivery of instruction evolved a bit to more of a team teaching model. Both teachers were at the front of the class but only Mike asked and answered questions to and from the students. The special education teacher tended to some minor behavior issue.

• Donna wrote on the board highlighting pertinent vocabulary; “scenario, 2000 deer, over-eating” while Mike was reading an excerpt and discussed a bar graph. Donna put out the data table on a projector so that she could teach the skill of reading the data table. (Team teaching) The special education teacher taught the whole class how to read the table.

• Donna used prior knowledge to scaffold the lesson to how it relates to predation and starvation. Special education used a dipstick technique: “how is everyone feeling on reading graphs?”

• Special Education teacher gave directions for the next part of the assignment.

• Special education teacher had 10 minutes of instruction time for a 50-minute class period.

• Students worked in small groups and both teachers went to check in with each group.

The observation for tandem 2: Shane and Carla offered evidence that supported a default model of lead and support was in fact practiced; however, the class did migrate into a parallel teaching model.

Table 9

*Observation Results of Tandem 2*

• The class was divided into two heterogeneous groups. The general education teacher Shane announced the warm-up and gave directives to the entire class. Shane took attendance. The special education teacher Carla offered a supportive role and asked probing questions for the students to think about as they read an excerpt, “where is New Guinea?”
Shane took the lead as he offered the official directive for the lesson. Carla ensured that the students understood and offered clarification for individual students. Then both teachers supported the students to help them answer some questions on a short reading.

The Warm-up took about 12 minutes.

General education teacher called out to the class to end the activity and to begin whole group instruction. General education teacher called out questions and special education teacher had some follow-up questions to the lead questions.

The observation for tandem 3: Mary and Alice provided further evidence of the common and default practice of lead and support.

Table 10

*Observation Results of Tandem 3*

- In this class the general education teacher, Mary posted goals for the class: 1 complete grammar book exercises, and 2 read poetry. Mary made all the announcements and directions in the class. For example, Mary announced “we will finish-up yesterday’s grammar lesson and then we will read and write poetry.”

- Alice, the special education teacher, approved the seating arrangements for the students.

- Mary continued to lead the grammar lesson while the special education teacher helped a few students individually with clarification of directions and organizing materials. As students worked independently, both teachers circulated to each student.

- Gen education teacher “I am going to collect what you have done.”

- Special education teacher helped collect the materials.

- Gen education teacher wrote on the board. “Title – predictions” and “Look at literal meaning and theme.”

- General education teacher began the discussion with “let’s make some predictions about the title” Gen education teacher discussed the literal and figurative meaning differences.

- Special education teacher’s role was unknown, as she remained inactive and silent.

- No preview of vocabulary and or definitions.
• General education teacher read the poem.
• General education instructor mentioned a review for “rhyming scheme.”

**Tried models.** All three tandems referenced a type of evolution or natural flow toward the team teaching model as the co-teaching relationship developed. The “tried model” of team teaching, station teaching, parallel and alternative teaching were done with an “on the fly” approach. Table 11 illustrates the employed models as reported by all three tandems.

Table 11

*Employed Co-teaching Models*

| Tandem 1 Mike and Donna | Lead and Support Teaching  
Team Teaching          |
|-------------------------|--------------------------|
| Tandem 2 Shane and Carla| Lead and Support Teaching  
Team Teaching  
Station Teaching  
Parallel Teaching      |
| Tandem 3 Mary and Alice | Lead and Support Teaching  
Team Teaching  
Alternative Teaching |

Mike’s experience with trying various models began with lead and support and it evolved to team teaching. Mike suggested that Donna’s role, for a co-teacher, changed to taking on more responsibility as she became “more comfortable with jumping in. She stands in front of the room instead of sitting in the back…even if I’m talking, she’s up there chiming in…” (Interview 4, p. 5). Mike would take time to proclaim that “she’s the biology expert [and
that] she actually has a better background than I do… so we naturally over the year… started to form more of a [team teaching] model as opposed to lead and support” (Interview 4, p. 5). Mike cited that the “…[the lead and support] model… [was] evolving naturally” (Interview 4, p. 8).

Mike’s co-teacher Donna, recalled that she felt it was important to” just get right up in front of the classroom right away and started my place up there as a Resident Teacher” (Interview 3, p. 9-10). Donna claimed the keys to her success as a co-teacher were fueled by the attitude of asserting herself into the lesson and saying “I’m going to be up here” [and that it was] “important in the very beginning saying nope I’m up here and start writing on the board behind,” [the co-teacher assisting the note taking process] (Interview 3, p. 10).

Donna also cited a strategy to get herself inserted by using the team teacher model. Donna said:

I think just communicating what my expectations were at the beginning, what my experience for teaching had looked like before and just what I was expecting from him and what he could expect from me. It was very helpful. In terms of planning for Team Teaching, it just kind of happened naturally, Team Teaching. (Interview 3, p. 11)

Donna thought that this method was pivotal in securing about 25% of the direct instruction time that focuses on skills and strategies for students to access the curriculum (Interview 3,)

Mary stated that she likes the team teaching. “I think that I can definitely see an improvement in that area because I feel like that’s probably an area where… we tried it out a little bit more” (Interview 6, p. 5-6). The personalities of the teachers were reported as being crucial for “bouncing (ideas) off of each other and going back and forth a few times and I really like that” (Interview 6, p. 5-6).

Mary also referenced that outside of the general education English class “alternative
(teaching) happens a lot during that academics core period. Especially prepping for tests and things like that” (Interview 6, p. 7). The academic core period occurs in the morning where all students can receive extra help on any of the core subjects. Mary describes her version of alternative teaching during an academic core period.

[The] teacher might have a large group preparing for a test and asking questions whereas the special ed teacher might have a smaller group [and they would work with students to] fine tuning some things, specifics and things like that that they need more help on. (Interview 6, p. 7-8).

Mary’s co-teacher, Alice, confirmed her claim of practicing team teaching and said “My English teacher and I felt comfortable enough with one another that we did use the team approach in a number of instances. [We] were able to Ping-Pong off of each other’s thoughts” (Interview 5, p. 7). Alice claims to have “been able to read the [class’] body language and interrupt her thoughts to clarify when I can see the kids aren’t getting it. “I would interrupt and shift the conversation temporarily to clarify something for kids in the room (Interview 5, p. 7).

Carla described her experience with co-teaching as employing a version of team teaching due to the “on the fly” planning that took place.

I particularly love being a part of the entire class in a co-taught model… I also love reaching all students and not just the kids who are identified as special needs services. So I like that class to be presented as a seamless sort of thing so that the students are also looking to the special ed teacher and the content teacher as being able to answer questions on any subject. (Interview 1, p. 4-5)

As a tandem, Carla and Shane also sampled some station teaching. Carla liked the
flexibility that it offers. She suggested that “It takes a little more planning because you obviously have to design the station and the outcome that you want and you want to be careful that it doesn’t turn into a melee” (Interview 1, p. 26). More specifically, Carla said “we did do a lot of station work and [made it possible] to plug into the station where we [worked on] skill[s] and… you could plug yourself into that pretty easily” (Interview 1, p. 8).

Carla’s co-teacher Shane also reported positive experiences with parallel, team, and station teaching. Shane found different uses for the given models and switched from various models in one class period. Shane said:

One class that we did, we started with team teaching, because it was a warm up, and it was able to engage the students fifty-fifty with discussion. We then split into [parallel] teaching. I like that model for that particular lesson. Again, it depended on the content and the goals that we defined. I mean, I’m most comfortable at this point with stations and parallel teaching. (Interview 2, p. 14)

Additionally, Shane said “I think again it really kind of challenged the skill of us as teachers” (Interview 2, p. 14). Shane cited the lack of experience of employing the parallel teaching model negatively affected the smooth delivery of instruction.

Mike and Donna (Tandem 1) only cited the use of lead and support. However, results did find that both Mike and Donna took the lead role at times. The observation for Shane and Carla (Tandem 2) offered evidence of a flow of co-teaching models. After the movie clip, two groups had one teacher assigned to half the class. Parallel teaching was employed. Shane designed the lesson for both groups. Carla followed the scripted lesson offering clarification of directions and emphasis on the key parts of the activity that consisted of a “Google search” of the witch trials. The skills of how to use “Google” effectively was the focus by asking “How you know that the
website is credible?”. Shane did the same with the other group and clarified the instructions for students. This group had a focus on content by determining what life was like for people during the witch trials. The identified skill was how to find supporting facts to support a conclusion. The groups switched and the teachers taught the same thing to the new group.

Tandem 3 with Mary and Alice gave evidence of some team teaching in addition to lead and support. Alice called on a student to tell the class about rhyming scheme, while Mary was writing out an example of a rhyming scheme on the board “AADCADCD.” Alice and Mary continued to share the role of direct instruction as Alice asked the students “do we have the same amount of lines?” and the third stanza?” Mary followed up that question with “why do you think a poet would do it?” and Mary continued on to discussed imagery. Mary followed up with questions such as “Explain why you think the imagery supports your conclusion. The question were loaded with previously taught material and previously taught vocabulary such as metaphor, alliteration, onomonopia were reintroduced from past lessons. Both teachers were calling out with questions for students to answer. Alice asked for students to “Explain music reference?” Even though the teachers asked questions seamlessly between each other, the teachers frequently looked at each other for reassurance for their actions; no planning was evident beyond “on the fly” planning.

**Feasible models.** All of the participants were asked how they perceived the feasibility of a new tandem of co-teachers with the special education teacher focus on skills and strategies for planning and delivering instruction as a starting point. All participants referenced personality or having “a very similar wave length… [and or having] two like-minded people [as being paramount]” (Interview, 4, p. 29). However, both Shane and Carla referenced that this approach would help the special education teacher establish “credibility in the classroom with
the [co-teacher]” (Interview 1, p. 12). Additionally, Carla thought that “…clearly skills and strategies is something that the special education teacher brings to the table already” (Interview 1, p. 3) and it provides the special education teacher an “entry point.” Lastly, Mary reflected and described the approach as “a great entry point” (Interview 6, p. 20) and a good way for special education teachers to help with planning the “bag of tricks” (Interview 6, p. 19, p. 20) built into instruction.

The participants were asked how they perceived the five models of co-teaching with the special education teacher focusing on skills and strategies and the general education teacher focusing on content. All of the participants perceived team teaching as well as lead and support being feasible. Alice, Shane, Donna, and Carla suggested that station teaching was feasible as well. However, Shane and Mike were skeptical of splitting the skills and strategies from the content. Shane said “I kind of build that into my lesson. So maybe that’s taking away [from my instruction]” (Interview 2, p. 27). Additionally, Mike had dubious thoughts regarding the attention of middle school aged student while other activities took place. Mary, Donna, Alice, and Carla all thought that parallel teaching was feasible. Shane did not think parallel was feasible during the interview but he demonstrated the use of parallel during the observation. Alice was the only teacher who stated that alternative teaching as being feasible.

Would not be feasible. Donna, Mike’s special education co-teacher, described her experience with Mike as positive; however, Donna claimed the she “…worked in elementary schools and I’ve seen all these models worked fabulously and seamlessly and I think when it gets to the higher grade then they don’t seem to, I don’t know maybe don’t use them” (Interview 3, p. 8). Donna also suggested that trying the five different models correlates with the “comfort level to as what the teacher is willing to do…” (Interview 3, p. 7). Mike agreed with his co-teacher
Donna stating that:

I can see that happening in the lower grades because their already used to stations but
seventh grade I think if you divide a classroom they’re going to be looking at their friends
and waving and that might be a tough grade to do it in. (Interview, 4, p. 12)

Due to Mike’s belief of the students in the sixth and seventh grades being unable to maintain
attention while multiple task are going on concurrently, he perceived the implementation of
stations and parallel teaching as having a “low feasibility.” For example, he felt station teaching
would be distracting. Mike thought that if he split the class into two groups and he did something
less engaging and “she’s doing something flashy while my kids are just sitting there and you can
see their eyeballs are going to be on the other table” and students would be distracted (Interview
4, p. 25-26). The roles of the special education teacher focusing on skills and strategies were not
noted as a way to increase the perceived feasibility. Mike summed this up by saying “the models
other than the lead and support and the co-pure co-teaching, team-teaching, sorry any models
other than that are very hard to see working (Interview, 4, p. 19).

In the same way Mike reported his concerns about the feasibility of executing the
models, Shane also questioned the feasibility of implementing all five models. However,
Shane previously described that he used station teaching, team teaching, and parallel teaching.
The difference between Mike and Shane’s perceptions of the feasibility of delivering the
models is that Shane felt that the special education teacher’s role of focusing on skills and
strategies was not feasible. Shane claimed that he found it very difficult to separate the
content from the skills and strategies (Interview 2, p. 4). Shane thought “if that were to be
shared between the teacher, you know, the main teacher and the co-teacher. I think that would
be more work for me” (Interview 2, p. 4). Shane also admitted that he needed more
experience with it to become proficient:

… I’m neglecting the fact that I’ve got this huge tool which is Carla [the special education teacher] there too. I think that I’ve learned it’s a lot of work just for the current schedule. I don’t think, I mean… it doesn’t feel feasible to me at this point.

(Interview 2, p. 16)

In summary, seven themes emerged from the findings: more time, only one class is a co-taught class, “on the fly” planning, default lead and support, tried models, feasible models, and would not be feasible. All participants employed “on the fly” planning, defaulted to lead and support, and tried models beyond lead and support consisted of an “on the fly” version of team teaching. Additionally, all the participants offered that the other models would be feasible if they had more planning time beyond once a day with their respective co-teacher. Only one group reported that they tried station and parallel teaching and no group implemented alternative method.

**Research Question 2. How might the adoption of co-teaching models with the special education teacher teaching skills and strategies and the general education teacher teaching content influence teacher perceptions of their co-teaching relationship?**

The identified themes borne from the interviews and observations are listed in Table 12.

**Table 12**

*Themes of Question 2: How might the adoption of co-teaching models with the special education teacher teaching skills and strategies and the general education teacher teaching content influence teacher perceptions of their co-teaching relationship?*

- Improved Relationships
- Control and Interjection
**Improved relationship.** All participants reported that the distinguished roles within the practiced models helped improve their relationship as co-teachers. Additionally, all participants claimed that they had an existing positive relationship before the study and that they had a “willing partner” and or comparable personalities to distinguish the roles.

Carla described her relationship with her co-teachers as being very good. She said,

I’m fortunate that the person that I do work with is very accepting of me in the room… he asks me questions, the kids ask me question, not just skills and strategies questions, they’Il ask me content questions as well. (Interview 1, p. 6)

Carla suggested that the imperative ingredient to establishing a relationship with co-teachers was that

there were no ego issues… So that helped us to enact pretty much any model. I think we could have done any model that we chose, to be honest with you. I think we just let it flow naturally and we just settled on this more team teaching approach.

(Interview 1, p. 11).

Carla also thought that with a solid relationship the co-teachers “…just naturally got into a rhythm…” [and] “… the students just naturally look to both teachers for any kind of support…” (Interview 1, p. 11). Carla claimed that in a given class one teacher “can easily punt it off to the next teacher” (Interview 1, p. 11) “[and the fact that] we have the same philosophies [helps]” (Interview 1, p. 13).

Carla agreed with the statement that her experience with focusing on the skills and strategies helped the relationship develop in a positive way. However, the necessary factor when arranging for two co-teachers is that “they really do have to look at matching personalities and you really do have [to] be receptive as a collaborator” (Interview 1, p. 20).
The relationship being strong helped them through what Carla described as “…a little bit of a period where it was rocky until we got a sense of … how our personalities were going to mesh” (Interview 1, p. 21). Carla described the beginning stage as “a trial and error period until we all got a feel for how the classes would work” (Interview 1, p. 21). She further described the relationship with an example offering that her co-teacher Shane looked for feedback or collaboration on how a lesson went. Carla would ask her co-teacher Shane:

… well what can I do better to support you then in that lesson. Maybe, you know, there was way that we could tweak the lesson. It wasn’t a bad lesson or a bad way to describe the certain subject, but maybe there’s a way we can tweak it and make it more beneficial. So there was a lot of reflection throughout the year. We’re always looking to grow and change the dynamics of the students. (Interview 1, p. 21-22)

Carla thought that both the relationship and the special educator focusing in on skills and strategies helped with the communication and collaboration. She described the collaborative process as being a product of their mutual respect. Carla said:

…we respect each other’s opinions and we try to honor each other’s opinions. I think frankly there would have also have been a deficit because first of all the special ed kids would not have gotten the modifications and the support they need. And also I would like to think that the general ed population saw me as a support and included me and asked me and, you know, looked to me to answer questions. So I think it was a win win. (Interview 1, p. 22)

Carla suggested that the role of a special education co-teacher focusing on “skills and strategies is a good way to do it with the goal… that you’re gonna get more content and have input with the content” (Interview 1, p. 34). Carla further explained about her co-teaching
experience as moving from skills and strategies focus to teaching content as well. Carla said:

I think you need to state those goals and expectations early on. You know, even if it’s just the teacher saying, I really want to help with the co-taught approach, can I take the materials home? Can I, you know, bone up on some of these things? And I did that and I think that’s important as a learner too. You’re a learner in that classroom too just as well. So you want to get the information that is gonna be taught. So you can interject yourself slowly and gain that credibility. (Interview 1, p. 34)

When asked about how the employed models affected the relationship, Carla said, “So yes, skills and strategies and station model I think is a good way for two new teachers to establish their relationship” (Interview 1, p. 35). Additionally, Carla claimed, “Stations are a good entry point. It makes it easier for the special ed teacher to insert themselves, either in the skills and strategies or content where they feel comfortable, because they’re not doing any direct content” (Interview 1, p. 35). Carla thought that the use of stations helped the teachers’…feel comfortable [answering] the questions [that are to] your strength… but you [can] certainly obviously fall back on the skills and strategies” (Interview 1, p. 35).

However, Carla suggested that the focus on skills and strategies was not as important as needing a positive relationship with a co-teacher. Carla said that effectiveness of the co-teaching depended “on the relationship with the person. I mean, the chemistry between the two teachers is key…” (Interview 1, p. 9). Carla emphasized that “…if the chemistry is not there, it’s not going to really be effective and then you end up with a more lead support model, just by default. “And if you have that, I think all of the models are possible” (Interview 1, p. 9). In support of the need for chemistry, Carla offered,

Personalities really have to be looked at to be successful with this and the mutual
respect, lower egos, being able to take constructive criticism, and really work together for what’s best for the kids. And constantly keep in mind that I’m not looking to see how much that other person knows, I’m not looking to prove myself in any way, shape, or form. But when it works, yeah, we get a lot of ah-ha moments. (Interview 1, p. 38 p. 39)

Like Carla, Donna described the relationship with her co-teacher as a cohesive tandem supported by “Mike[‘s] and my personality of the team teaching we just bounce off of each other and it just flowed nicely” (Interview 3, p. 5). Donna also thought that “the three main ones [lead and support, team teaching, and version of team teaching] that we employed they were all effective for all the students and it’s not [perceived as] burdensome” (Interview 3, p. 14). In fact, Donna suggested her focus on skills and strategies helped develop the relationship in a positive way. However, Donna’s experience was different than Carla’s because “whenever I brought up, you know, Stations even, but mostly Parallel and Alternative that, ‘oh why would we do that? [Mike would ask.] [We would have to] do it in all my classes’” (Interview 3, p. 11). The other factor influencing the development of the relationship through their practice of implementing the models was that “… planning time was limited” (Interview 3, p. 16).

In contrast from the experiences of Carla and Donna, Mary claimed that she and her co-teacher Alice did not formally discuss roles and responsibilities and that the relationship naturally developed through the school year. The critical piece she said was “it’s necessary for us to communicate, definitely.” “I know that it’s important to communicate what’s happening, what’s going to be happening, ideas. Things like that. So I think that’s key. But I think it just naturally happens” (Interview 6, p. 10). This was a marked difference in the approach as Donna focused her practice on skills and strategies and Carla, although she reported it was
difficult to separate the skills and strategies from the content, was able to have it as a focus.

There were no pronounced feelings from Mary that suggested the tried models of co-teaching strained the relationship. Mary offered that “I’ve got a second person that I want to make sure I get all this. It’s not just me printing this lesson out, ready to go. I get that responsibility, but I don’t know that I’d call it burdensome” (Interview 6, p. 12). Mary described her experience [collaborating with a co-teacher as] “it’s just something else to do” (Interview 6, p. 12).

Mary reported that her special education co-teacher Alice had less of a role in planning. Mary’s version of how the skills and strategies for a given lessons were melded into the overall lesson plan. Continuing, Mary said and the special education teacher provided “an extra set of ears, eyes, [to review everything] everything, and I think there are definitely things that I would miss if I didn’t have that input” (Interview 6, p. 12). Mary declared that the most imperative component to a successful co-teaching relationship was the fact that the comparable “personalities just clicked and I think we’ve always clicked…” [and] “so it just worked. And that probably helped, I think” (Interview 6, p. 13).

Mike also reported a natural flow to the co-teaching relationship as they employed the co-teaching models. Mike offered that “you can see it evolve you know as… she become more comfortable with those lessons themselves, we’ve had a year together. Now that she sort of knows where I’m going with it and now that she feels more comfortable…” (Interview 4, p. 10). Donna confirmed Mike’s claim and thought that the growth of the professional relationship was helped by building on the rapport from the previous year as it took a couple of months for the general education teacher to accept the presence of the special education teacher involved with the delivery of instruction (Interview 3).
Mike further described the role of personality with the development of the co-teaching relationship and offered the following,

…Donna wanted to assume more of a role. Before I would usually make modifications and do all the grading and things like that but she came in and… she wanted to go over she said let me see your quiz, let me see this and she took it back and she redesigned some things and would come back to me. So it happened pretty naturally. I think we have a similar personality and we’re both just we like to meet each other or meet in the hall right after class what do you want me to do and this and that. (Interview 4, p. 13)

Mike suggested with the implementation of the tried models of co-teaching that comparable personalities was necessary for success. He thought that since the relationship clicked from the outset, the implementation of the models also improved the relationship (Interview 4). Without a solid relationship between co-teachers, a situation could arise with “tensions that bubble slowly over time” (Interview 4, p. 17). Otherwise, a solid relationship between co-teachers can help with lessons that did not go well.

Mike reported that the development of the relationship transcended the separation of skills and strategies and the content of the class was seen as another mechanism to demonstrate competency between the teachers. Mike referred to his co-teacher “as the expert” [and] “that was easy for them to buy into so it didn’t seem like a weird shift” (Interview 4, p. 17). Lastly, Mike reported on how the role of grading impacted their relationship. Mike claimed that his special education co-teacher Donna “graded the quizzes for her kids.” “She created them and graded them …and it was great, it was a lift” (Interview 4, p. 15).

Like Mike and Donna, Shane found that having the special education teacher focus on skills and strategies helped reinforce the relationship but personalities were the most important
ingredient. Shane said: “…it helps that we think alike…You’re lucky when you meet someone that you feel that you can work with… I’m just imagining this co-teaching model if you don’t have that, then it could be really tough” (Interview 2, p. 24).

Due to the positive relationship, Shane reported that the feedback provided from Carla, the special education teacher, was a positive influence on their work relationship (Interview 2). Shane further explained that at times he was willing to share instruction time with Carla. Shane noted “it’s easier for us to know what our roles are… [which are] just more defined… which is good” (Interview 2, p. 16). Based on past experiences, Alice felt that the relationship where the special education teacher taught skills and strategies and the general education teacher provided content, was not helpful in making a connection with the non-collaborating teacher, especially if lesson planning was not shared.

**Control and interjection.** Another common theme discussed among the participants was “control” and the reluctance to given up the planning and delivery of instruction time. As a result, the special education teachers found themselves trying to “interject” themselves into the lessons. Alice reported on past experiences with general education co-teachers “who are threatened by another adult in the room. And they’re threatened by a loss of control” (Interview 5, p. 8). Alice described her experience with a non-collaborating co-teacher. Alice said,

I think the teachers who were threatened don’t understand that’s the role of the special ed teacher. So they need to be educated that the role of the special ed teacher is not lead and support, it’s skills and strategies. And they may say they understand that, when push comes to shove they don’t embrace that. And I think part of the problem could be that they have one class every day that has, one or two classes, that have disabled kids in them. And so they’re on a roll and then all of a sudden another adult shows up and says,
well wait a minute you know, I want part of that control, I want part of the input on how things are delivered. And I think that makes it hard. (Interview 5, p. 8-9)

Alice further described her strategy when dealing with a non-collaborating teacher by “interjecting” herself during the lesson. “I assigned them an alternative project which gave them some of the content that they would have gotten from the group, and gave them the experience that they needed” (Interview 5, p. 15). Alice agreed that the role of planning and teaching skills and strategies by itself did not overcome the resistance with the non-collaborating teacher. However, Alice did report that a positive relationship with her English co-teacher was enhanced by the identified roles and responsibilities. Alice asserted that the identification of her role focusing on skills and strategies would help with building a relationship because the delegation of roles dispels the control issue (Interview 4). Alice also reported that her experience with some co-teachers would not permit allocation of instruction to Alice and that kind of experience leads her to stay in a “lead and support” model as a support teacher. However, Alice said “but as things moved I would jump up to the board and insert myself. And sometimes I would be given a look of do you know what are you doing, depending on the teacher” (Interview 4, p. 13).

Carla offered a review of her experience with some difficult co-teachers. Shane said that “I think teachers can sometimes get very possessive of their rooms and their students and their content and special ed teachers can get very possessive of their kids and their IEP’s” (Interview 1, p. 20). Carla thought that it was very difficult to work as an effective co-teacher if both teachers did not respect each other professionally. Carla thought that the difficult part was that sometimes general education teachers give me the sense that special ed teachers are perceived as to not being on the same level because they don’t always teach or they don’t
know the content necessarily, or they don’t have as much credibility as the content teacher. (Interview 1, p. 20)

However, Carla reported a different experience with her current co-teacher. Carla illustrated a description of her experience as “it was [our] classroom, these were [our] students, even though there were special kids in there. They were all [our] students” (Interview 1, p. 12). She further described her willingness to interject with all students. Carla said: “So if I saw a general ed student get out of hand, I feel comfortable disciplining that student and I didn’t feel as though I was stepping on any toes. So the model sort of morphed into its own” (Interview 1, p. 12). The reported common practice was that Carla was afforded the opportunity to “interject” herself” when needed (Interview 1).

Like Carla, Donna agreed when she put herself in a position to deliver direct instruction in an assertive fashion by using skills and strategies to support the content, the result was positive (Interview 3). However, Donna also reported that the general education teacher thought that he had no use for the Parallel and the Alternative Teaching models and that the would not give up control to try them. Donna said “it’s his classroom and it’s his content” (Interview 3, p. 13). However, Donna suggested that “I think I was lucky with who I was paired with because he’s a pretty easy going guy to work with” (Interview 3, p. 13).

As a general education co-teacher, Mary also acknowledged that teachers are protective of their control in class. Mary said:

I think teachers as a whole are very protective of their lessons, they’re very protective of their classrooms… But there are some teachers who don’t feel comfortable kind of, I think, allowing someone else into that lesson or giving them a certain amount of control and so forth as well. And I think that relinquishing any kind of – that’s going to be hard
for some people. (Interview 6, p. 21)

Along with the “protective approach” to planning and teaching, Shane supported it as being necessary. Shane said that “it’s on me as the teacher to go and create and build [the lesson]. “[T]he workload, it falls on me and I wouldn’t expect that to fall on Carla [the special education teacher]” (Interview 2, p. 21). Shane frequently used language that distinguished ownership when describing the roles and responsibilities of the class. Shane said that Carla has “got the knowledge of ‘her kids’… in the co-taught class and [this is] “my class” (Interview 2, p. 23).

In reflection to his personal development as a teacher, Shane said “for me to grow as a teacher, I felt like I needed that ownership piece at that point” (Interview 2, p. 24). Shane expressed the need “…to see the big picture and create it myself, but if I had the time and Carla is the type of person that I could easily do that with, I think” (Interview 2, p. 25). Shane gave insight to what he thought was at stake in giving up control. “…the risk and the scare is, what if I give up… control in my room and my relationship with my kids by allowing a different personality and we don’t complement each other well. That could maybe have an adverse effect” (Interview 2, p. 35).

Shane was asked if the special education teacher focused just on the skills and strategies, whether this would kind of hamstring or limit the delivery of co-teaching? Shane responded by saying,

It would hamstring it only in the sense that you’d have to form a lesson based around… [having a co-teacher] and… you’d have the base the lesson in such a way that they have a perfect balance between skills and strategy being done in one way and content in another way. (Interview 2, p. 36)
However, Shane claimed that “…it’s possible…it just depends on your ability to plan that lesson” (Interview 2, p. 36).

Shane was asked if the special education teacher focused on skills and strategies, while the general education teacher concentrated on the content, whether that would be a good entry point for implementing co-teaching. Additionally, Shane was asked if the assigned roles helped with the planning and the delivery of instruction. Shane responded,

I don’t know if it could be that rigid. I feel like it almost has to work out what the learning goals were, first of all. What the essential questions were. What the nature of the project was. And then how could your two complementary skill sets best be used in helping the students get to those learning goals, and to reach that essential questions. (Interview 2, p. 37).

Shane suggested a way the co-teaching models could be used was with him listing out the ways that he would be teaching things and “then she would interject and then there would be like a creation of, you know, we both know how to tackle it and we both know which co-teacher model, which would work best” (Interview 2, p. 12).

The observation of Donna and Mike reported in table 13, supported that the previous responses of Mike being the general education teacher and that it was his class.

Table 13

Observation Results of Tandem 1

- General education teacher had his name on the board in his class. Special education teacher name was not posted anywhere. The special education teacher travels to this class for one period a day.

- Posted agenda written by the general education teacher.

- Flow of the class was led by the general education teacher who told Donna “raise your hand if you need one more minute.”
• Gen education teacher passed out the assignments packets.

• Special education teacher passed out calculators while the general education teacher was with one group at a time. Gen education teacher had the loudest voice in the class.

• The “posted to do now” list was run by the general education teacher and that took 25 minutes out of the 55-minute class.

• General education teacher dismissed the students at the end of the class.

The observation of Shane’s and Carla’s co-taught class also reinforced the claims of the class being general education “controlled.” Table 14 offers evidence that the general education teacher was the dominant teacher delivering instruction to the class while the special education teacher took a submissive role.

Table 14

*Observation Results for Tandem 2*

• General education teacher gave time limits and employed a clapping noise that indicated the need for the students’ attention to review the warm-up. The general education teacher asked questions of the whole group and the special education teachers asked follow-up questions of the whole class. All questions were content oriented.

• Gen education teacher announced that the class would be watching a movie clip.

• General education teacher took the lead through the class and framed all of the activities.

• General education teacher “we got two minutes.”

Lastly, the data from the observation of the class co-taught by Mary and Alice had a theme of the general control of the class activities being executed by the general education teacher.

Table 15

*Observation Results for Tandem 3*

• A student asked “if they had to write the sentences out?” Gen education teacher responded, “no, just write the italicized word.”
In summary, all participants suggested that their experience with implementing the models they tried helped improve the co-teaching relationship. All three special education teachers described their practice as having to “interject themselves into instruction.” The general educators reported that they did not want to give-up their roles of being in “control” of instruction.

Research Question 3: How do the adopted models of the five co-teaching models affect the support that students with special needs and struggling learners receive?

The third and last question focused on student outcomes. Three themes emerged because of this inquiry. Table 16 outlines the themes of the following section of this chapter.

Table 16

Themes to Question 3: How do the adopted models of the five co-teaching models impact the support that students with special needs and struggling learners receive?

- Positive Student Outcomes.
- Instant Feedback Informing Instruction.
- No Stigma Reported.

Positive student outcomes. Carla reported that the use of co-teaching models with her focus on skills and strategies helped with student learning. Carla claimed “…these kids clearly did gain more mastery than they would if they were in the in their rows interacting with each other and the teachers” (Interview 1, p. 28). Carla offered that the use of Station Teaching helped students “share” their knowledge “And so yes, I think there was a direct correlation to their learning and again, we weren’t focused on assessments so much as we were focused on mastery”
(Interview 1, p. 28). Carla further explained that the use of station teaching helped all of the students in the class, including the non-disabled students, who may also struggle with academic tasks. Because of the use of station teaching, Carla suggested, “it did reduce referrals [for special education evaluations]” (Interview 1, p. 32).

Like Carla, Donna also thought that her focus on skills and strategies helped with data related to the obligated documentation required for students receiving special education services. Donna said that the focus on skills and strategies helped with writing the quarterly progress reports on IEP goals (Interview 1). Additionally, Donna offered that with team teaching she “…can see them more and more and more with a second set of eyes and input...” (Interview 1, p. 9).

Mary also had some positive results to report with student outcomes. When asked if the models that were tried in the classroom established roles of special education teacher focusing in on skills and strategies help improve test scores and or the completion of homework, Mary said “that it’s hard to say without actual data, I feel like. However, I cannot imagine where it would hurt test scores. Homework I definitely think that it helps” (Interview 6, p. 14). Additionally, Mary claimed that there were no referrals for special education made and she agreed that team teaching helped struggling learners so that they did not need to be referred for special education (Interview 6).

Like Mary, Mike’s general perception of student outcomes with the employed co-teaching models found improved student outcomes. Mike said:

I [noticed] improvement in my special needs students this year in the homework coming in, the quality coming in and the test scores compared to last year. But still on average a little lower of course than the general population average. (Interview 4, p. 21-22)
Student engagement was also seen as an area of improvement. Mike asserted “there was more engagement because seventh grade can become a little like the game whack the mole and a lot of its crowd control” (Interview 4, p. 22). He thought the lead and support model and the team teaching model were instrumental in having “one teacher in one place and the other teacher on the other side of the room, not only do you have proximity helps but… the kids who will come and ask the teacher that’s right there” (Interview 4, p. 22).

Mike said that with the addition of a co-teacher using team teaching or lead and support models he “bet you… you might have some kids that might have been referred to special education or education referral having not been in a classroom with support built into it” (Interview 4, p. 27). Lastly, Mike offered with “Team teaching and Lead and Support [that] there are no negatives to the other students in the room” (Interview 4, p. 27).

Shane reported that he liked using the station teaching and parallel approach. Shane claimed the benefit of station teaching was because it offered an opportunity for a smaller “ratio, teacher to students… that’s a big plus because they get more, …they get one on one or small group supervision… in a station setting” (Interview 2, p. 28-29). Shane also thought that station teaching and parallel teaching “allows from an instructional point of view or from a planning point of view, you can incorporate more… UDL or different strategies in those stations” (Interview 2, p. 28-29). Because of this, Shane declared that both station and parallel teaching helped the struggling students in the class (Interview 2).

Shane was then asked if there were any correlation to improved test scores or work samples or homework completion and or any other perceived benefit with the execution of the tried models. Shane responded,

[Some] …students who may struggle when they’re a bit more disengaged. I definitely
notice a higher engagement which would transfer to better quality of work produced if
given activities that engage them. Station activities tend to engage them, just through the
nature. And also it’s more engaging having a smaller group with a specific focus.

(Interview 2, p. 31)

**Instant feedback informing instruction.** All participants reported that the use of the
models they tried helped with “instant feedback” that enabled them to change their instruction.

Alice agreed that the students and the teachers breaking down the class into small groups
allowed the teacher to get more feedback from students and led to the opportunity to tailor-fit
needs of instruction (Interview 5). Alice also agreed that splitting the class into thirds helped
maximize engagement because of the now smaller student-teacher ratio (Interview 5). Even
though Alice did not focus intently on teaching the skills and strategies of the lessons, she
thought this “gives you the ability to have a better understanding, really what their needs are,
absolutely” (Interview 5, p. 28) [and it helps] “you see some of their weaknesses more”
(Interview 5, p. 29). Alice also agreed that that station teaching could help further expand on
student’s skills for those who excel in class by stating “…everybody is going to get a little more
attention” (Interview 5, p. 23). Alice suggested that “being in a small group you may have a
student who is reluctant to ask a question in front of 20 peers, but if they could ask that same
question among 6 peers they may feel more comfortable” (Interview 5, p. 23).

Like Alice, Carla offered that the models with her focusing on skills and strategies helped
with forming her instruction. The difference between Alice and Carla is that Carla actually tried
to implement the focus on skills and strategies albeit the planning did not take place to fully
implement the approach. Carla said “…clearly it gave me insight into the students that I was
supporting in that room and it did enable me to align the skills and strategies I saw from those
students to help inform the instruction” (Interview 1, p. 9). Carla claimed that it helped her write her progress notes and that” it enriched my knowledge of the kids and enabled me to do my job better” (Interview 1, p. 9). Carla claimed “… grouping with stations is huge. They all have their strengths and weaknesses and we try to build on those. They’ll learn their strengths but also help their weaknesses by keeping them in these groups” (Interview 1, p. 24). Additionally, like Alice, Carla agreed with the idea that the small student to teacher ratio helped the teacher interact with the students and focus on the development of skills (Interview 1). Carla said “there’s always something for a special education teacher to do in a station model” (Interview 1, p. 25).

Carla also shared that she thought the benefit of using stations was that students learned from students. “You can also – the kids know that they’re responsible for their work and they learn from each other…[and] kids learn best from each other…” (Interview 1, p. 26). Lastly, Carla reported on station teaching as it helped with struggling readers. Carla offered that the small group setting that station teaching permitted created a safe learning environment where students did not have to read in front of the whole class (Interview, 1). Carla claimed that station teaching also helped with the needs of a non-disabled struggling learner who was a “low reader [and] I could identify that easily, I would just – when it came his turn to read I would just nonchalantly walk over to find him and just be able to give him some cues” (Interview 1, p. 33).

Like Carla, Donna suggested that it was very “powerful” for “kids to learn from kids ” (Interview 3, p. 15). Donna felt that her focus on skills and strategies not only helped the students receiving special education services but also helped higher performing students because it provided the opportunity for having them “talk about their strategies and being able to model them for kids at school” (Interview 3, p. 15).

Mary noted that
…team teaching, bouncing off one another, when one is speaking the other is looking and I just think that is extremely helpful, to see things, to see what kids are doing, being able to walk around and look at their actual work and maybe even help someone on the side while someone else is taking over at that point. (Interview 6, p. 13)

Mary also reported that the models she tried helped with student engagement. Mary suggested that “it’s harder for kids to hide or to blend in when you’ve got two teachers” (Interview 6, p. 14) [And that] “it’s more engaging for kids too when there are two teachers that are up there and kind of presenting a lesson…” (Interview 6, p. 14).

**No stigma reported.** All of the participating teachers reported that there was no notable “stigma” attached to the special education teacher focusing on skills and strategies. Alice claimed that the role of skills and strategies would not perpetuate the “the helper teacher perception.” “And the other thing I think that would help with that approach is the disabled students don’t feel that stigma you know” (Interview 5, p. 20).

One of Alice’s employed models was team teaching and she said when you’re team teaching you know the special [education] teachers are talking to the entire group. So there’s no longer that red arrow flashing down on the disabled student, [and the use of the] … the team approach, [is beneficial to all students] because you’re ping-ponging, it’s just seamless. (Interview 5, p. 21-22)

Alice further explained:

…anytime you’re able to share skills and strategies with a whole group you’re going to impact those students who desperately need those skills and strategies, that they can see that other kids are benefiting from that as well. So that’s going to help their self-esteem. (Interview 5, p. 22)
However, Alice reported that the lead and support model could have a negative outcome because all the students could see a particular student(s) always getting help and that could identify them as disabled. (Interview 5) In an effort to counter this, Alice said that she “...will purposely work with a student who’s a straight ‘A’ student just to draw attention away from these other kids” (Interview 5, p. 25).

Shane also recognized a problem with the lead and support model. Shane suggested that “leading support tends to, I think, can create barriers” (Interview 2, p. 29). Shane further described that “I just felt [that] it makes them feel like they have more power and control when they’re in that station [and that] …they’re just being more engaged” (Interview 2, p. 29-30). However, Shane also thought that “if that [approach] was [taken] everyday, they might get bored of it” (Interview 2, p. 30).

Carla offered that the models used were perceived by the students in a positive way. Carla offered “if I don’t know the answer, I certainly defer to the content specialist… so the kids see us as equals and I think that’s important, so that particular class you observed…” (Interview 1, p. 6). Carla further explained that the duality of team teaching “made me feel confident as a teacher and it gave the kids a sense of confidence that I was going to give them that support they needed” (Interview 1, p. 6). Carla agreed with the role of the special education teacher focusing on skills and the general education teacher focusing on content had no negative effect in class and that the students would not necessarily know the difference between the two teachers.

Like Carla, while practicing team teaching, Donna said that in some ways “the kids don’t know that I am the special education teacher” (Interview 3, p. 6). However, the students know “he’s the science teacher so they kind of assume I am the special education teacher” (Interview 3, p. 6). This knowledge was not perceived as a negative feature as reported by
Donna (Interview 3). More specifically on the idea of students perceiving the co-teachers as equals, Mary thought that team teaching helped the students “see us as equals [and] both teachers are… equally as knowledgeable and can provide the equal support to all the students. I like that it doesn’t single any students out. We’re just kind of working together as a team” (Interview 6, p. 6). However, Mary thought that the kids know who the special education teacher is and who the general education teacher is at the start of school. Mary thought “it’s possible for it to be hard to tell who is leading. But I just think in reality they know [who the special education teacher is.]” (Interview 6, p. 23). This was not reported as being a negative aspect to team teaching by Mary (Interview 6).

The observation of Mary and Alice revealed some conflicting results when compared to the interviews. The bulleted points of table 17 help illustrate the contradiction on the “no stigma claim” in the interviews with the observation.

Table 17

*Observation Results for Tandem 3*

- Special educator almost exclusively worked with two students who appeared to be the most disabled students.
- The same students that the special education teacher helped at the beginning of the class only addressed the special education teacher even when the general education teacher asked the questions.
- Special education teacher helped the students same students with materials.

Mike felt like the students understood the difference between the teachers. However, with team teaching, Mike claimed that Donna spent time “helping all the kids. She’s not singling you know there’s no special needs kid… student rather being singled out or maybe feeling singled out. She’s helping everyone. All the kids know her, she knows all the kids” (Interview 4, p. 8).
Mike recognized that “If we start separating people on need, I do feel especially in seventh grade that kids are going to feel very self-conscience, maybe exposed” (Interview 4, p. 8). However, the way Mike described their practice of team teaching suggested that team teaching allowed Donna to be in front of the class more. “It allowed the kids to see her. A lot of the kids see me take a more of a support role” (Interview 4, p. 9). Mike was asked if the role of Donna, the special education teacher, focusing on teaching skills and strategies would lend itself to exposing more kids receiving special education services on an IEP. Mike said, “So her teaching the skills that exposed these kids that might need more help that aren’t necessarily on an IEP” (Interview 4, p. 11).

In summary, all participants expressed that their experience with the delivery of the models they tried produced positive student outcomes, offered instant feedback informing instruction, and no stigma was reported as negatively affecting students. All participants reported positive outcomes for students because it helped present instruction in a positive way even though there was a discrepancy between what was observed and what was reported by a tandem.

**Summary of the Findings**

The researcher presented the findings of interviews and observations using the three research questions that drove this study. Common threads of language were identified which in turn produced themes found upon review of the transcripts and documented observations. This chapter reported the themes through the structure of the three research questions. The primary research question: *What are the perceptions of the co-teachers of the feasibility of implementing each of the five co-teaching models with the special education teacher focusing on skills and strategies and the general education teacher teaching content?*

The findings of this primary question produced eight themes consisting of more time,
only one class is a co-taught class, “on the fly” planning, default lead and support, tried models, would be feasible if, feasible models, and would not be feasible. All participants reported that they engaged in “on the fly” planning, defaulted to lead and support, tried models beyond lead and support consisted of an “on the fly” version of team teaching, and all the participants offered that the other models would be feasible if they had more planning time with co-teaching beyond once a day with their respective co-teacher. Only one group reported that they tried station and parallel teaching and no group implemented alternative teaching.

The second research question: How might the adoption of co-teaching models with the special education teacher teaching skills and strategies and the general education teacher teaching content influence teacher perceptions of their co-teaching relationship?

This question provided the themes of improved relationships and control and interjection. All participants suggested that the models practiced with the roles of the general education teacher teaching the content and the special education teacher focusing on skills and strategies helped improve the relationship. All of the special education teachers said they used “interjection” strategies to get involved with the general educators’ roles of “control of instruction.”

The third and last question: How do the adopted models of the five co-teaching models affect the support that students with special needs and struggling learners receive?

This question found the themes of positive student outcomes, instant feedback informing instruction, and no stigma reported. All participants reported positive outcomes for students as well as it helped inform their instruction in a positive way.
Chapter V: Summary of Findings and Recommendations

The goal of this case study was to discover the perceptions of the feasibility through the co-teachers’ experience of employing the five co-teaching models (Cook & Friend, 1995) with the distinguished roles of the special educator teaching the skills and strategies of the curriculum and the general education teacher instructing on the content. This inquiry investigated how the implementation of the five models with specified roles affected the co-teaching relationship and how it influenced student outcomes as perceived by the participants. The analysis of the data gathering from interviews and observations found that the given planning time, as practiced by the participants, was most impactful to the perceived feasibility of implementing the models with the identified roles.

The case study uncovered the issues preventing the staff from using the five models of co-teaching beyond the lead and support model and also offered evidence for the feasibility of having a special education teacher delivering the skills and strategies portion of instruction and the general education teacher planning and delivering the content. The presented evidence found that two of three general education teachers did not completely perceive the distinguished roles as being feasible to carry out during daily instruction. One general education teacher and all three special education teachers believed the distinguished roles as being feasible and having a positive effect on the co-teaching relationship and student outcomes.

This case study explored the problem of the practice of ineffective co-teaching where the special education teacher assumes the inferior role while the general education teacher dominates the planning and delivery of instruction (Scruggs, Mastropieri, & McDuffie, 2007). The majority of the findings of the study indicate a consistent problem as reported in Kloo and Zigmund (2008) who offered “the special education teacher should not be not be helping student get
through the curriculum or complete their homework assignments but instead should be actively
teaching fundamentals to a small group of students” (p. 16). Some of the evidence of the case
study found that the special education teachers functioned as assistant teachers and that
“classroom instructional practices have not changed in response to [the instillation of] co-
teaching (Scruggs, Mastropieri, & McDuffie, 2007). Sims (2008) suggested the problem of co-
teaching was the lack of planning and offered “no teacher should ever come to class not knowing
what will be happening in class that day…” (p. 63). This study also confirms that the problem of
a reported lack of planning time forced the practice of “on the fly” planning.

This case study echoed the findings of Volonino and Zigmond’s (2007) review of co-
teaching and found that general education teacher was the primary instructor of the class while
“the special educator, at best, provides scaffolding and support to help learners access the
content, and at worst, serve as the behavior manager” (p. 298). This study confirmed the
challenges found in Leatherman’s (2009) study that identified themes of “scheduling challenges,
team-teacher characteristics, and modeling and support…” as being imperative for successful co-
teaching.

The problem of studying co-teaching was confounded further by not having a way to
ensure the co-teachers consistently practiced a model of co-teaching that allowed for assessment
with a standard method (Volonino, Zigmond, 2007). This case study was designed to offer
participants the distinguished roles of the special education teacher instructing on skills and
strategies and the general education instructor responsible for content. The identified roles, as
practiced within the five models of co-teaching, offer a consistent way to employ the models. In
addition to this study confirming the result of the body of literature, it found new information to
add to the literature on co-teaching.
The Findings in Relationship to the Theoretical Framework

This section will discuss the findings through the lens of the theoretical framework of CHAT. Roth (2002) suggested that CHAT focused on “the structural aspects of praxis [and] a focus on the structural aspects of human activity is inherent in the way [CHAT] cuts up reality” (p. 10). This case study helped the participants with the opportunity to practice co-teaching in a structured way as outlined by distinguished roles in the five models of co-teaching.

Within this theory, Enquestrom (2001) presented the evolution of CHAT into three generations of activity theory. The progression of CHAT was established on the first generation that took into account how culture affected action and moved toward how the community affected actions of individuals that became the second generation (Enquestrom, 2001). The third generation of CHAT addressed the need to distinguish the cultural “…diversity and dialogue between different traditions or perspectives…” (Enquestrom, 2001, p. 135).

The findings of this case study offered evidence that the culture of the school affected the decision making of the participating co-teachers. All parties reported that they employed an “on the fly” approach that led to a default model of “lead and support” for delivering instruction. The findings of the study connect to this theoretical framework. The framework is built on “as its basic value the primacy of human agency [and] this agency, or power-to-act, includes the capacity of individuals to participate in creating their lived-in world rather than merely being determined by it” (Roth, Tobin & Zimmermann, 2002, p. 2). The case study found that some co-teaching tandems did practice particular co-teaching models beyond “lead and support.” The reported practice was that it most frequently defaulted to “lead and support.” Through this lens, the findings indicate that the capacity of the co-teachers did not extend significantly enough to practice the additional models of co-teaching beyond the “lead and support” model.
Additionally, through the lens of both the second and third generation of CHAT the “community” [which are the co-teachers] and perspective taken by the co-teachers working together are plugged into a formula to reveal their influence on the activity. The findings of this case study and the reported positive relationships between the co-teachers indicate that co-teachers “working together, that is, changing from individual to collective subject… brings about change in the activity system, and therefore, because the change affects the entire system, in the outcomes” (Roth, 2002, p. 12). However, Mike suggested that they had difficulty with executing some of the models such as station teaching and he did not recognize this model as feasible.

Shane offered a dubious opinion regarding the focus on skills and strategies being taught by the special education teacher. Roth (2002) suggested that “there are new possibilities for acting and learning whenever people work together, which arise from the relationship between generalized action potential (collective room to maneuver) and [the] specific, concrete, and more limited way of realizing it” (p. 12).

In this case study, both Donna and Carla represent special educators and both had opposing opinion from their respective co-teachers Mike and Shane. Donna reported that she could not get Mike to implement station teaching because he did not permit a “collective room to maneuver.” Shane expressed the willingness to employ four of the five co-teaching models. However, Shane reported that he wanted to maintain the control of designing the lessons and did not want to relinquish delivering the skills and strategies instruction to a special education teacher. Once again, the “collective room to maneuver” limited the special educator’s participation with the delivery of instruction.

Limitations
There are limitations with this case study that need to be discussed so that the findings are fully understood. The sample size of six participants making up three tandems of co-teachers negatively affected the ability to generalize the findings beyond Smith Middle School. The second limitation of this study is the fact that the researcher held the position of Special Education Coordinator at the time the study took place. While the research did not hold supervisory status over the participants, it could be expected that the researcher held a bias during the collection and analysis of data. Additionally, it could be possible that the participants were cautious about reporting their opinion because the researcher held the position of Special Education Coordinator. The final limitation of the case study is the fact that the study took place in one location in a southeastern New England town and included one Regional Middle School serving grades seven and eight. Many of the middle schools in the region serve three grades (including a grade six) thus limiting the potential to generalize the findings to other middle schools in the region. It should be acknowledged that the given location of the study has its own social economic features that span three distinguishably different communities that make up the regional district. Thus final limitation negatively influences the ability to generalize beyond the Smith Regional Middle School.

The Findings in Relationship to the Literature Review

*Components of co-teaching.* Commensurate with the literature review, this case study confirms that common planning time is required for meaningful participation, establishing and maintaining a positive relationship is crucial for effective co-teaching, and that co-teaching can support positive student outcomes. All of the co-teachers reported the need for additional time to plan with their respective co-teacher. As cited by Carter et al. (2009) the need for common planning time is essential for effective co-teaching. The results of the study found that two thirds
of tandems reported discrepant common planning time from their respective co-teacher. The planning time was inconsistent and as a result the participants did not have a robust focus on roles of the general education teacher teaching the content and the special education teacher teaching the skills and strategies as it pertains to lesson planning and rather it was done “on the fly.” When asked about the time they would need to collaborate, it ranged from thirty minutes per day to one hundred minutes per week.

The case study reveals that the implementation of Friend and Cooks (1995) models of co-teaching with the special education teachers focusing on teaching skills and strategies and the general education teachers focusing in on the delivery of academic content, did not improve the special educator’s participation with the delivery of instruction with the given planning time the participants claimed they had. The intervention was not adequate with the reported time to collaborate. However, the perception of the roles between the co-teachers thought of as positive and that it would be a good starting point for establishing the practice of a new tandem of co-teachers. Provided with adequate planning time, it was reported in this study that the aforementioned roles would help the special education teachers build instructor “credibility” in the classroom. Additionally, it was reported by Carla that the special education teacher brings these skills to the class and the established role helps the tandem of co-teachers find use for the special education teacher as an instructor and not just the reported “support teacher” as Alice identified herself.

The findings of this case study also indicated that participants all defaulted to the “lead and support” model (Beninghof, 2012) suggesting this is the easiest model to employ because it is less dependent on a plan. The general education teacher plans and delivers instruction while the special educator supports the struggling students. This case study revealed that the “lead and
support” model evolved into an adapted version of the team teaching model. The implementation of this model was done “on the fly” in response to a limited amount of planning time. All of the tandems reported that they employed an “on the fly” version of team teaching. One out of three observations of the co-teaching tandems indicated that there was a team approach with the special educator teaching skills and strategies and the general education teacher instructing on content. The other observation results depicted a “lead and support” and a parallel teaching model that fell back to “lead and support.” This evidence suggests that co-teachers perceived the “lead and support” and a version of team teaching models as feasible interventions.

The literature review previously stated that it was common for general education teachers not to have the full training and/or understanding on how to employ co-teaching components. In this literature review (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010) offered that the identified roles and responsibilities of co-teaching practices and the concept of co-teacher parity within the classroom was crucial for successful co-teaching. This case study found that almost all of the teachers perceived all models as feasible if additional planning time were in place and if the relationship was good with their respective co-teacher. However, Mike did not perceive station and parallel teaching as feasible and Shane did not perceive the special education teacher instructing on the necessary skills and strategies of a lesson as feasible. These findings suggest that additional professional development in the area of employing all the models of co-teaching as well as role development would be beneficial. Moreover, both Shane and Mike reported that they did not want to give up the skills portion of the instruction. They reported that they wanted to maintain the “control” of the lessons. This is evidenced by a lack of parity among the co-teachers in their classrooms. In fact, Shane admitted that he did not know how to use his special education co-teacher at times and Mike reported that he wanted to keep Donna involved as long
as it supported what he was doing. The results of this case study suggest that the participants could use additional professional development on the importance of parity among co-teachers and how it can help with the planning and delivery of instruction.

**Collaborative co-teaching relationship.** As previously stated in the last section and as cited in the literature review, the identification of roles and responsibilities are imperative for successful co-teaching. The findings of the study reveal that the identified roles of the general and special educators helped improve the relationship between the co-teachers. However, these findings suggest that the identified roles and how they were practiced with the five models did not supplant the need for a good relationship. A good relationship was reported by all participants as being established before the study began. The intervention of the identified roles of co-teachers alone would not improve the delivery of co-teaching without the pre-existence of a positive relationship between co-teachers.

In addition to the previously established co-teaching relationship, both the literature review and the case study reported the need for having philosophies that are the same or at least complement each other for successful co-teaching. The results of the case study indicate that the intervention improved the relationship and thus a more robust delivery of instruction can be attained because co-teachers work together and do not quarrel. The improved relationship among the participants helped with the “evolution” or shift from “lead and support” to a version of “on the fly” team teaching. However, the improved relationship due to the identified roles and responsibilities did not extend help stretch Mike beyond his comfort zone of practicing the five co-teaching models. With the structure of the identified roles, Mike was unwilling to employ the station and parallel models. Shane did not want to lose the creative control and content delivery
responsibility. Therefore, the case study found that the intervention did not reduce Shane’s belief in the need for control of the instruction.

The last finding of how the models of co-teaching affected the co-teaching relationship was the use of language by participants. Although all the participants reported that a positive relationship existed between their respective co-teachers, all the general education teachers reported that it was the “general education teacher’s class.” The general education teachers of the case study used language such as “my class,” “my instruction,” and “her kids” in reference to the three female special education teachers of the study. This kind of language supports a lack of parity among the special educators and general educator co-teachers.

**Co-teaching outcomes.** Volonio and Zigmond (2007) reported that it was difficult to measure the outcomes of co-teaching. The difficulties result from the inconsistencies of the co-teaching delivery and the lack of fidelity with the practice of co-teaching. The results of this case study indicate that not all of the teachers employed all of the models and two out of the three tandems reported that they had difficulty with the special education teacher maintaining a focus on skills and strategies. Moreover, none of the participants reported that they planned collaboratively on a consistent basis. The findings should be considered with the caveat of varying models and ways they were practiced by the tandems as being inconsistently employed due to time constraints as it negatively affected the common planning. Therefore, it is difficult to assess the reported outcomes by the participants of the study and definitively correlate the five models of co-teaching with the identified roles and responsibilities with given outcomes. It is through the lens of this limitation the results as reported by the participants can be better understood. The most commonly used model was the “lead and support” followed by a version of team teaching. All participants reported positive feedback as it pertained to student outcomes.
The results of the study indicate that the models they used helped students with homework completion and improved test scores.

A new finding revealed by this case study not previously cited in the literature was that the station teaching helped develop the instruction for special education teachers. It was reported that the nature of station teaching inherently reduced the student to teacher class ratio and that helped the process of the special education teacher receiving student feedback on their access point with the instruction. More specifically, it helped the special education teacher know how to adjust instruction based on student needs. Additionally, station teaching also had the possibility of accelerating the learning of non-disabled students due to the reduced student to teacher ratio.

Lastly, the literature review cited by Rozalski (2010) described the co-teaching models as offering opportunity for disabled students to receive an education in the least restrictive environment. This kind of inclusive service reduces and or eliminates the stigma of disabled students being removed from the general education population to receive education. The results of the case study indicate that there was no known negative stigma reported with the practiced models. However, during an observation of a class within the case study, the way the “lead and support” model was practiced could have stigmatized the disabled students. The special education teachers tended to a group of disabled students in the class and as it was reported that the disabled students were dependent on the special education teacher to participate with the class activities. The nature of this kind of support could offer a stigma to the students receiving the help as the other nondisabled students would witness the proximity and intensity of support by the special education teacher. In addition to this evidence borne out of an observation Shane, a general education teacher, cited the limitation of the lead and support model and claimed that the use of “station teaching” supported more “engaged” learners.
Future Studies

This case study has identified key factors adding to the existing body of literature on co-teaching. However, the given scope, purpose, and limitations of this case study affect the results in a way that prohibits an elaborate transferability of the finding to other settings. Therefore, further research that increases sample size, type of sample, needs of co-teachers, educator preparation program practices, and further scrutiny of each of the five co-teaching models is recommended.

Given the small sample size of this study it is recommended that further research expands the sample size to increase the validity of transferring results to other settings. Also, the expansion into urban school districts may offer additional or conflicting results due to the environmental and socio-economic factors that can affect these settings. A qualitative review of co-teaching practices with this increased and diverse sample size may provide new information to assist with the delivery of co-teaching models.

A survey completed by general and special education co-teachers could offer statistical data to help inform the depth and breadth of co-teacher needs. A discrepancy between the participating general and special education teachers could help develop professional development that is needed for a school district that practices co-teaching.

A review of the current practices of teacher preparation programs would be a valued study in the area of co-teaching training. This would help gather how co-teaching is taught to general and special educators. A review of teacher preparation programs could illuminate any differences with what these programs offer in comparison to what is reported as impacting how co-teaching is practiced in the schools.
Lastly, further scrutiny on how general education teachers of middle or high school have implemented station teaching, parallel teaching, and alternative teaching is necessary. This kind of qualitative review could help illuminate successful strategies on how to employ the models that were deemed inappropriate in this study.

**Implications for Practice**

The findings of this case study demonstrate that co-teaching is a demanding and complex delivery of instruction. Compatible personalities, common planning time, and a willingness to share direct instruction time in different formats are all the factors that affect the delivery of co-teaching. The results of this case study indicate that the overall co-teaching experience was positive. The practiced models had a positive effect on the co-teaching relationship and with student outcomes. However, there are some significant challenges that continue to undermine the practice of co-teaching. These results can be used to inform professional support training for co-teachers. Additionally, a given practitioner could take the applied approach of having the special education teacher take on the role of planning and teaching necessary skills and strategies of a given lesson with the general education teacher focusing on content delivery.

Like what was reported in the literature review, the findings of the case study indicate that the general education teachers had a difficult time integrating the special education teacher into the instruction on a consistent basis beyond the “lead and support” model. The evolution of the leading and support model for moving to a team teaching model demonstrates a positive step in reaching the required parity among co-teachers. The implication of the study is that five out of six participants thought that the focus on skills and strategies was a good starting point for co-teachers. This identified role gave a focus for the co-teachers to work from rather than employing the various models without any direction.
While the body of literature noted the need for like personalities to be matched for successful co-teaching relationship to take place, this study also found that the practiced models helped improve the co-teaching relationship. Special education teachers reported that they gained credibility that loosened the grip of the general educator being the sole provider of direct instruction. The implication is that the suggested structure of assigned roles amplified the positive co-teaching relationship.

Lastly, the findings of the case study revealed that the practice models provided positive outcome for both students and co-teachers. The implication of this finding is that aspiring co-teachers could adopt this approach within the delivery of the five co-teaching models with the aim of getting a further depth of understanding of student learning and to increase the likelihood of the level instruction meets the unique needs of disabled students who would otherwise have to receive instruction in a sub-separate environment.

**Conclusion** As previously stated in the problem of practice and literature review of this case study, the lack of effective collaboration between general and special educators has been a problem since the inception of special education. This challenge has come to a climax with co-teaching due to the intimate nature of two teachers working together to deliver instruction in one classroom. It is evident that the complexity of delivering an effective co-teaching model continues to be a problem at Smith Middle School. It is this researcher’s intent that this discussion will help other co-teachers use the findings to develop their practices and find new ways to collaborate and deliver a co-teaching model.

The purpose of this case study was to explore the feasibility of implementing the five co-teaching models (Cook & Friend, 1995) with the general education teacher delivering the content of the class and the special education teacher teaching the skills and strategies necessary to
access the content. The aim of the case study was to learn about the challenges of implementing this kind of approach and understand the perspective of both general and special education co-teachers regarding the extent to which these models were feasible with the planning and delivery of instruction. This approach may help new tandems of co-teachers establish an effective delivery of co-teaching that help develop the co-teaching relationship and may assist in improving student outcomes with the quality of work that is completed at home and in the class.
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*Intervention in School and Clinic, 40*, 260-270.


*The Banff International Conference on Behavior Modification*. Calgary, Alberta, Canada.


Appendix A: Request for Consent

Signed Informed Consent Document

Northeastern University, Department, Student Investigator Name: Michael Jarvis
Principal Investigator: Sara Ewell, PhD.

Title of Project: Feasible Interventions: Bridging the Gap Between Co-teachers.

Informed Consent to Participate in a Research Study
We are inviting you to take part in a research study. This form will tell you about the study, but you may also ask the student investigator any questions that you have. You do not have to participate if you do not want to. After thinking about your participation in this study, you may inform the student investigator of your decision. If you decide to participate, the student investigator will ask you to sign this statement and will give you a copy to keep.

Why am I being asked to take part in this research study?
You are being asked to take part in this study because you are a general or special education co-teacher.

Why is this research study being done?
The purpose of this research is to assess the feasibility of co-teachers implementing each of the five commonly practiced models of co-teaching by assigning specific roles and responsibilities to each co-teacher. The data compiled by the student investigator will contribute to current research in special education by providing new evidence-based research to support the efficacy of the five models of co-teaching in an inclusive classroom. This research is being conducted in partial fulfillment of the student investigator’s Doctor of Education degree from the School of Professional Studies at Northeastern University. The research will be used to meet the research requirements of the student investigator’s doctoral dissertation.

What will I be asked to do?
This research will employ three methods of data collection: interviews, observations, and document analysis. Interviews will be conducted individually. One participant will be interviewed at a time, and there will be only one interview per teacher. During an interview, the participating co-teacher will be asked to respond to open-ended questions. The interview is expected to last about an hour. The interview will be recorded to ensure any information used will be presented accurately. Additionally, the participant may choose to keep a reflective journal over the three-month span to share at the interview and present a summary of his/her experiences. The participant will also be able to report to the student investigator via email if he/she neglects to report appropriate information during the interview session. Using the interview as a data-collecting strategy creates a safe environment for the participant to disclose his/her personal perspectives on the co-teaching experience.
The student investigator will also conduct classroom observations. These observations will consist of data recorded by the student investigator in the form of field notes. After the student investigator records the field notes, participants will verify the validity of the data recorded in these notes.

Lastly, the student investigator will collect and analyze any written documentation that provides evidence of collaboration by the co-teachers that uses any of the five models of co-teaching. This documentation may include emails, lesson plans, and any post-lesson annotations written by the teachers that discuss both positive and negative aspects of the lesson.

Activity summary:
- The student investigator will interview each participant once, in a one-to-one setting, for about one hour. The interview will be recorded.
- The student investigator will observe each tandem of participating co-teachers. There will be one observation per tandem. All of the student investigator’s field notes from these observations will be verified by the corresponding participants via email.
- The student investigator will collect any written documentation that may contribute to the study within the three-month research period.

Where will this take place and how much of my time will it take?
The interview between the student investigator and participant will be conducted in a place mutually agreeable to both parties. There will be only one interview per participant. Interviews are expected to take one hour.

Will there be any risk or discomfort to me?
Because of the intricate nature of the co-teaching relationship, the student investigator recognizes the role of debriefing during the interview session. The participants should know that any personal problems or conflicts between the co-teachers may be disclosed during the interview. While participants are expected to maintain a professional demeanor, they are encouraged to be open and honest in the interview setting. The content of the discussion will not be used in any way beyond the scope and purpose of the research nor will any identifying data be made into public knowledge. All discussions will remain confidential. Participants can confidentially follow up with the student investigator one-on-one to express any concerns they have as participants.

Will I benefit by being in this research?
There will be no direct benefit for your participation. As a participant in this research, you may learn about the function of and strategies used in the five models of co-teaching. Any self-reflection of these co-teaching practices may help the participant learn more about his/her teaching habits when using any of the five co-teaching models. The participant may also learn more about how he/she relates and collaborates with the other co-teacher.

Who will see the information about me?
Your role in this study is confidential. Only the student investigator and the principal investigator of this study will see the information about you. No reports or publications will use information that can identify you in any way.

Participants must understand that, during the data collection period, no data will be released to administration, non-participants, or other participating tandems in the study. The data recorded
from the interview will be transcribed by a transcription company. The transcription company will employ the commonly practiced confidentiality standards to protect the participants. Only the student investigator will have access to the data from Pentucket School District. Each participant will verify the transcribed data via email and will only have access to the data that came from the participant. No participant will see any other participants’ transcribed data. All of the material from the interviews, field-notes, document and data collection as well as any electronic information will be stored on the student investigator’s removable thumb drive in a zip-file located in a secure place. The interviews are only recorded to ensure accuracy of the data provided. The removable thumb drive, the zip-file, and the recorded interviews will be stored for three years in a secure location in the student investigator’s home and will be destroyed after the three years.

What will happen if I suffer any harm from this research?
No participant is expected to be harmed in any way—physically, psychologically, socially, financially, or other ways—during this study.

Can I stop my participation in this study?
Your participation in this research is voluntary. You do not have to participate if you do not wish to participate. Even if you begin the study, you may terminate your participation at any time. If you do not participate or if you decide to cease participating, you will not lose any rights, benefits, or services that you have as an employee at Pentucket Regional Middle School.

Who can I contact if I have questions or problems?
Please contact the primary investigator, Michael Jarvis, via email at jarvis.mi@husky.neu.edu or at 978-282-0734 (home) or at 978 479 5238 (mobile).

Principal Investigator: Sara Ewell at s.ewell@neu.edu

Who can I contact about my rights as a participant?
If you have any questions about your rights in this research, you may contact Nan C. Regina, Director, Human Subject Research Protection, 960 Renaissance Park, Northeastern University, Boston, MA 02115. Tel: 617.373.4588, Email: irb@neu.edu. You may call anonymously if you wish.

Will I be paid for my participation?
There will be no compensation.

Will it cost me anything to participate?
There are no intended or predictable costs that will be incurred by the participant for his/her participation in the study.

Is there anything else I need to know?
The student investigator, Michael Jarvis, is a staff member at Pentucket Regional Middle School.

I agree to take part in this research.
Signature of person [parent] agreeing to take part  

Date

Printed name of person above

Signature of person who explained the study to the  
participant above and obtained consent  

Date

Printed name of person above
Appendix B: Invite to Participate Email

From: Jarvis, Michael  
Sent: Tuesday, February 05, 2013 12:50 PM  
To: pentucketmiddleschoolstaff@prsd.org; Jarvis, Michael  
Subject: Recruiting for co-teaching study

Good afternoon staff,

Please accept this email as an invitation for co-teachers to participate in a study on co-teaching. The study will fulfill the requirements for my dissertation from Northeastern University. I am looking to recruit tandem co-teachers as participants for this study. Both the general education and special education teachers that work together would have to be willing to participate to be included in the sample.

Please see Michael Jarvis for more information on participating in this study. Please consider participating as it is an opportunity to add to the body of literature on the implementation of co-teaching and the results may be useful to help you improve the co-teaching service.
Appendix C: Interview Questions

Interview Protocol Questions

Interview Questions:

- How much time do you have to collaborate in common planning time? How much time does it take when adding the layer of employing the co-teaching models? Is it feasible to implement the models with the given planning time? Could it be expected that it will improve over time with more knowledge of models and how they can be used? Explain? Is there one model(s) that require more time to plan? Explain? What models are more feasible than others to execute? Explain why? Do you have a favorite model? Why? Is there a model that you could not find a use for? Why? Assess the overall implementation of the models. What is needed to help with the implementation of the models? Did the execution of the models help with identifying additional data for progress reports on IEP goals? Explain the process of identifying roles and responsibility around co-teaching. Did the process better or challenge the work relationship? Who does what with regard to roles and responsibilities of the general class? Is it fixed or will it change? Why? Was a consensus reached or was there a compromise or a mutually agreeable arrangement was gained and established? Explain? Did the planning process stress the work relationship? Was it difficult for the general education teacher to give up control i.e. responsibilities of teaching time? How did that impact the relationship? Were the models perceived as burdensome or ineffective? If so how did it impact the work relationship? Did the implementation of the models improve the relationship? Explain?

- Did struggling learners and or disabled learners get their needs met by using the models? Explain? Test scores? Engagement to task? Did the low student to teacher ration inherent in some models help the struggling learners and or disabled students? Did the models help reduce referrals for special education that you would have previously submitted for referral? Did you have more data to discuss progress reports on goals? Did you have a better understanding of the students’ needs and or strengths?