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Kimberly Ortloff ck6375pz@go.minnstate.edu

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Implementation of Training to Address Staff Perceptions of Co-Teaching

by

Kimberly Ortloff

A Starred Paper

Submitted to the Graduate Faculty of

Saint Cloud State University

in Partial Fulfillment of the Requirements

for the Degree

Master of Science in

Special Education

August, 2020

Starred Paper Committee: Bradley J. Kaffar, Chairperson Jennifer E. Christensen Teresa Washut Heck

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Chapter 1: Introduction

Co-teaching has become a common practice in many schools and teacher education programs. Special educators can be effective in helping students to become successful in the general education classroom by working in tandem with the general education teacher. The pair can combine content expertise with effective strategic instruction. Co-teaching is an instructional method that allows schools to integrate special education students into the general education classroom without losing quality in the services that they receive.

As a teacher in a Montessori charter school where a general education teacher and a special education teacher are co-teaching, I was assigned to the same physical classroom with the same students as another teacher. In my first year, I was the general education teacher in a mixed classroom of fourth, fifth, and sixth graders. This past school year I have served as a special education teacher in a middle school classroom with seventh and eighth grade students. In both classrooms over fifty percent of the students had a diagnosed condition that affected their learning. Most had Individualized Education Plans (IEPs). My experiences in both years brings me to the hypothesis that many teachers have negative or apprehensive attitudes towards the practice of co-teaching and that most teachers need training and support to reach their potential as partners.

Scope of the Paper

In reviewing the literature available about co-teaching, teachers have varying experiences and attitudes towards the practice. Teachers report benefits and challenges to co-teaching. Their approach, their training, and the support they receive from administration impact their attitudes and experiences towards co-teaching.

Research Question/Focus of the Paper

The purpose of this paper is twofold; (1) to collect and examine the experiences with coteaching that teachers report, and (2) to determine what training might address the challenges that co-teachers face. This information will be used to implement better training for co-teachers in order to maximize the effect of this instructional approach.

Over the past 2 decades a great deal of research has been done on co-teaching, with many articles providing research-based advice. Using the St. Cloud State University library, the term "co-teaching" was used to find resources. The search was limited to peer-reviewed articles published since 2009. The reference sections of these resources were also used to identify leading scholars in the field, and to access additional sources.

This paper will examine recommendations from leading researchers in the field based on case studies completed. Many case studies are based on the early research of Dr. Marilyn Friend (2008) who is one of the most respected authors and presenters in this field and has served in various positions in the field of education. Dr. Wendy Murawski (2012) is also an author and presenter who trains teachers in co-teaching methods. Dr. Richard A. Villa has written nine books and more than one hundred articles about inclusion in the general education classroom. The work of these authors and those who have completed case studies and literature reviews will be examined in this paper.

There are many benefits that have been identified in the research. In a survey completed by Dr. Greg Conderman students with disabilities reported that they felt they were more supported in a co-taught classroom (2011). Behavioral issues, especially those involving students with emotional and behavioral disorders, are minimized (Burks-Keeley & Brown, 2014). Small

group instruction can be achieved with less effort, and students learn to collaborate with others and the classroom can become a place where social and emotional learning is a focus. Most teachers are willing to overcome obstacles to provide these benefits to their students.

Challenges are also reported by teachers. Team teaching may challenge the existing norms and routines, requiring teachers to work outside of their comfort zone. Both teachers need to have an active role in the classroom, they must co-plan the content to teach and how it will be taught. Many teachers feel that they do not have enough time for this type of planning.

Some of the challenges facing co-teachers can be minimized with training before, during, and after their first year as partners. Topics to include in teacher preparation and in-service training include communication techniques, conflict resolution, knowledge and practice of various co-teaching instruction models, and logistics of co-teaching (Sileo, 2011).

Communication is the most important factor for success in co-teaching relationships.

Teachers need to openly discuss their teaching philosophies and styles. Brown et al. (2013) provide a "Beliefs Survey and a Responsibilities Checklist" that can be used to identify philosophical differences and assign primary responsibilities. Co-teachers can be successful even if they have differing philosophies. In this case, they need to have explicit conversations about their differences and use their strengths to complement each other. They do need to agree on how they will provide differentiation, accommodations, and modifications.

Conflict Resolution involves recognizing and accepting differences in values, beliefs, educational philosophies, and teaching styles. Co-teachers need to practice techniques that help them address minor issues. As they increase their ability to resolve conflict, they will build each other's confidence and appreciate differences as opportunities (Ploessl et al., 2009).

Co-teaching instruction models can be used to meet the needs of all students in an inclusive general education classroom. Co-teachers need training to become adept at choosing the appropriate co-teaching structure and implementing it effectively. They need an understanding of how each can enhance a lesson and make it more accessible. They also need to work together to decide the logistics of instructional delivery when planning lessons (Sileo, 2011).

Other logistics involved in co-teaching include a commitment to a structured planning time in which the two teachers can work and communicate. Before entering a co-teaching relationship, it is imperative to define the roles and responsibilities that each will perform. Ploessl et al. (2009) recommend at least 45 minutes each week which can be face-to-face communication or via telephone or computer. Considering both the benefits and challenges posed by co-teaching, the present study seeks to answer the following question:

What training should be offered when teachers implement co-teaching to effectively overcome challenges?

Historical Context

Co-teaching starts with the idea that two teachers who are experts in different aspects of education can work together in the same classroom to provide inclusive education to all students. The idea that all students need to be educated was tested in the courtrooms in Brown vs The Board of Education in 1954 (Francis, 2015). The court ruled that children could not be separated in public schools based on race. This called attention to another group of students who were educated in separate environments. In 1975, The Education for All Handicapped Children Act was passed which required schools to teach students with disabilities in the least restrictive

environment. The United States Department of Education began collecting data on inclusion in 1984 (Conderman & Johnston-Rodriguez, 2009).

The Individuals with Disabilities Education Improvement Act (IDEA) was passed in 1990 and reauthorized in 1997 and 2004 (Burks-Keeley & Brown, 2014). IDEA 2004 made changes in how students with disabilities are educated. Their educators should have high expectations and allow them access to the general education curriculum in the regular education classroom when appropriate. The involvement of general education teachers with students with disabilities has increased and they can expect to play a more active role in developing individualized education plans (Conderman & Johnston-Rodriguez, 2009).

Glossary

- Alternative Teaching Model—co-teaching model in which the classroom is divided into a small group taught by one teacher who includes extra support needed and a large group that receives the regular lesson (Burks-Keeley & Brown, 2014).
- Co-taught Classroom—a classroom in which both students with and without disabilities are instructed by both a general and special educator (Burks-Keeley & Brown, 2014).
- **Co-teaching**—an arrangement in which a general education teacher and a special education teacher collaborate on the planning, delivering, and assessment in a single classroom (Brown et al., 2013).
- **Learning Strategies**—principles, procedures, or rules for solving problems and independently completing tasks (Conderman & Hedin, 2013).

- One Teach/One Assist Model—co-teaching model in which one teacher serves as
 the instructional lead while the other circulates through the classroom to aid and
 support (Burks-Keeley & Brown, 2014).
- Parallel Teaching Model—co-teaching model in which each teacher teaches the same lesson simultaneously to half of the class (Burks-Keeley & Brown, 2014).
- Parity—the state of being equal. In co-teaching, it is an arrangement in which each
 teacher is responsible for sharing an equitable load of instructional duties (BurksKeeley & Brown, 2014).
- Station Teaching Model—co-teaching model in which students move through lessons in which learning takes place in groups that are led by one of the two teachers or they are engaged in independent learning (Burks-Keeley & Brown, 2014).
- **Team Teaching Model**—co-teaching model in which both teachers teach the same lesson together and take turns presenting the material together (Burks-Keeley & Brown, 2014).

Chapter 2: Review of the Literature

Co-teaching is an approach for helping students with disabilities access a rigorous general education curriculum in the least restrictive environment while receiving support from two certified teachers, one general education teacher and another who is a special education teacher. The main reason for co-teaching is to provide special education students with instruction in the general education classroom. A general education teacher and a special education teacher collaborate to provide instructional services to students with identified disabilities and others at risk of failure as a result of the negative consequences of environmental events.

The goals of co-teaching include increasing instructional options for students, enhancing participation of disabled students within the classroom, and improving the performance of students with disabilities. Although the benefits are known by most teachers, many find it difficult to overcome the challenges of sharing responsibilities for all students within a common space. In order to maximize the benefits of the collaboration between a general education teacher and a special education teacher, the pair must have training in co-planning, co-instruction, and co-assessment.

Teacher Experiences that Shape their Attitudes Towards the Practice

Solis et al. (2012) examined six studies on the collaboration between two teachers within the classroom. One focus of their research was to determine what attitudes, beliefs and perceptions had been shared by teachers. Research indicates that teachers' beliefs about coteaching have changed over time. One study completed by Avramidis and Norwich suggested that teachers are more motivat5ed to use inclusive instruction when they can plan for collaboration (Solis et al., 2012).

The research collected and analyzed revealed that teachers' attitudes became more positive over time and with experience. However, in surveys completed by teachers before 1994, researchers found that most teachers did not favor inclusion. The authors cited a 2002 survey completed by Avramidis and Norwich in which teachers were less supportive of inclusion as a student's age increases and there is more emphasis on subject matter. This study indicated that teacher support for inclusion varies according to the intensity and severity of students' needs. Teachers were more positive about the inclusion of students with physical and sensory impairments and less supportive of the inclusion of students with learning or behavioral disabilities (Solis et al., 2012).

Later surveys showed that attitudes changed with experience. Teachers have more positive attitudes when collaborative instruction is carefully planned. Those surveyed by Scruggs et al., in 2007 believed there were social benefits for students in co-taught classrooms. In addition, teachers believed cooperation between students improved in these classrooms. Only 40% of teachers believed that full-time inclusion was better than pull-out resource programs. These teachers feel that students should have adequate academic and behavioral skills for co-teaching to be effective (Solis et al., 2012).

In the 146 case studies analyzed by Solis et al. (2012) teachers reported that the most typical model for implementing inclusion was one in which the general education teacher provided most of the instruction while the special education teacher, typically in the subordinate role, provided support to students and suggestions to teachers. Teachers involved in the studies expressed a concern that co-teaching should not be forced upon them by administration but

rather should be voluntary. However, they think that co-teaching will result in small gains when implemented appropriately and significant changes with specialists coordinate curriculum.

Experience prior to co-teaching. Sharon Pratt (2014) worked with ten teachers who had little experience with co-teaching. These teachers expressed having mixed feelings about starting a co-teaching relationship. Their feelings ranged from hesitation to anticipation, with some feelings were associated with prior experience, and others related to lack of experience. When teachers felt their colleague was compatible or could contribute equally, they anticipated forming a peer mentoring relationship. Teachers used individual strengths to complement each other and achieve compatibility.

Nichols (2009) proposed using co-teaching models to replace pull-out teaching. His research included a study conducted by Keefe and Moore in 2004 that indicated that teachers reported a more positive working arrangement if they chose their co-teaching partner. Their view of co-teaching was more positive, they felt they had a more enhanced relationship, and they exhibited better communication skills. This study showed that elementary teachers had a more positive attitude toward co-teaching than did secondary teachers. Most special education teachers were uncomfortable with their role due to a lack of core content knowledge, and students tended to view the special education teacher as an assistant rather than as a teacher (Nichols, 2009).

When examining how experiences shape attitudes towards co-teaching Nichols (2009) found that several factors created a negative experience. In the three case studies that they examined, surveys revealed that teachers reported that they either had to meet before or after school to plan the curriculum and determine the roles of each teacher, in some cases needing a minimum of 45 minutes per day to plan for co-teaching. A few of the regular education teachers

reported very little change in their routine and really wondered why the special education teacher was present. Moreover, special education teachers reported concerns about class sizes. Teachers indicated that they did have staff development prior to co-teaching, but only one indicated that school administrators were present. Many reported that programs were initiated without proper staff development (Nichols, 2009).

Planning and instruction without adequate training and knowledge of the five models of co-teaching. In further analysis of the relationship between co-teachers, Dr. Jane M. Sileo (2011) provided an example in which the general education teacher did not want to share instructional design and delivery. As a result, the special education teacher reported that they felt underappreciated. The special education teacher wanted the opportunity to demonstrate their skills and knowledge and to share instructional responsibilities.

One area of training that many teachers are unprepared for is the use of various instructional methods that can be utilized when co-teaching. Experts in the field such as Marilyn Friend and Wendy Murawski have constructed a list of five different instructional models that can be used when there are two or more adults collaborating. Friend (2019) describes One Teach/One Observe, Station Teaching, Parallel Teaching, Alternative Teaching, One Teach/One Assist, and Teaming. When reviewing case studies in co-teaching Solis et al. (2012) concluded that general education teachers who were surveyed reported that they preferred whole-class strategies.

In a pilot study, Burks-Keeley and Brown (2014) studied student and teacher perceptions regarding the five co-teaching models. They determined that there is a perceived difference between the five models from both a student and a teacher's perspective. Based on data collected

in a school district in the southeastern United States, the One Teach/One Assist model was significantly less effective regarding classroom management than the Station and Parallel Teaching model. The One Teach/One Assist model was ranked statistically lower in the perception of learning and confidence than all other models.

Joanna Brendle (2017) completed a qualitative study in which she investigated the way in which special education teachers and general education teachers shared the responsibilities of lesson planning, instruction, and assessment. She found that co-teachers lacked knowledge of the co-teaching models and did not use them appropriately. Some reported experience in co-teaching classrooms, but knowledge of co-teaching models was minimal. Many felt that they were unprepared for their roles as a co-teacher due to lack of training.

The teachers that were observed predominately used the One Teach/One Assist model. They reported that they rarely worked together to determine the logistics of instruction and assessment. No evidence was reported by researchers in classroom observations of a collaborative effort to plan for the lesson. It seemed that they planned independently and rarely implemented an identified co-teaching model. In interviews they reported that they had discussed the observed lesson prior to class, and that co-teaching methods were not discussed prior to instruction.

The study completed by Brendle (2017) showed that special education teachers provide accommodations and modifications. One of the teachers involved in the study worked only with Special Education students and indicated that she was willing to share the classroom and instructional responsibilities, even though both teachers in that classroom claimed to want to

participate more in co-instruction. In this case the general education teacher was making all the instructional decisions.

Benefits to Address in Training

When Burks-Keeley and Brown (2014) examined the effectiveness of co-teaching, they identified many benefits to using this instructional method. The most obvious benefit for students was the availability of two licensed teachers in the classroom, leading to a smaller student-teacher ratio and minimizes behavior issues. They presented statistically significant evidence that the nearly 9000 students surveyed in their study perceived that behavior is minimized with two teachers.

Brendle (2017) stated that co-teaching is an effect method for teachers to provide a diversified classroom with engaging and differentiated instruction. She claims that all students benefit from additional instructional support from two teachers, and students also benefit from more involvement with an adult and an enriched curriculum. Students with disabilities can perform in the general education classroom, where they are provided with more opportunities for social skills development with peers. Brendel also pointed out that two certified teachers with different perspectives and a wider variety of instructional approaches. She concluded, when teachers share ideas, they can maximize their instructional effectiveness.

Conderman and Hedin (2012) also believe that two teachers working together can capitalize on each other's experience. Students in co-taught classrooms have more access to support and are more likely to have needs met, especially social needs. They also believe that both teachers benefit from mentorship and reflection. Furthermore, Pratt (2014) pointed out that benefits for these students include peer mentoring for teachers in a new instructional method.

The professional benefits listed by Burks-Keeley and Brown (2014) include professional satisfaction and opportunities for personal growth, as well as support and collaboration. They see support for novice teachers who are paired with experienced teachers and immediate feedback for each other. Sileo (2011) list opportunities to share professional expertise as one of the benefits to co-teaching. The general education teacher serves as a master of content while the special education teacher is described as a master of access. Nichols (2009) asserts that two teachers create a more enriched curriculum that leads to higher levels of achievement and that novice teachers can be paired with experienced teachers.

Burks-Keeley and Brown (2014) state that when two teachers are present in the classroom, it is easier for them to monitor behaviors more closely. Having special education students in the general education classroom has specific social benefits for those students. For example, it reduces the stigma associated with receiving special education services and helps them develop stronger relationships with their general education peers. When interviewed by Burks-Keeley and Brown, students in a co-taught English/Language Arts classroom reported having more positive feelings about themselves. Students felt like they always had an advocate in the classroom, and their teachers reported that they were operating at a higher level academically. Brown et al. (2013) agree that teachers can develop a classroom environment where all students feel valued.

Challenges to Address in Training

While there are many benefits that make co-teaching an attractive model for inclusion of students receiving special education services, there are also challenges that teachers must overcome. One obstacle that many general education teachers and special education teachers

struggle with is a lack of parity. Pratt (2014) revealed that special education teachers often act as assistants. She believes this may be caused by inequities regarding content material. A successful co-taught classroom needs both teachers to actively instruct, manage the classroom, and assess student learning.

Conderman and Hedin (2013) believe that special educators are often unsure of how to meaningfully contribute in their co-taught classroom. They lack content knowledge, have not received co-teacher training, or have not observed exemplary co-teaching practices.

Interventionist/Special Educators input can also be hampered if they do not have adequate/enough planning time with the general education teacher.

Interpersonal differences can also interfere with the relationship between co-teachers. Pratt (2014) suggested that these differences can be caused by incompatibility, differences in attitudes toward the inclusion of students with disabilities, gender, personalities, communication styles, or conflict styles. Ploessl et al. (2009) pointed out that the co-teaching relationship does not always come naturally. Teachers are at a disadvantage if they are not prepared to shift from the set of skills that are used when teaching alone. Co-teaching requires a commitment to an equal partnership. Sileo (2011) suggested that difficulties between adults can negatively affect students in co-teaching settings. Disagreements between co-teachers can be complex and problematic for students with information-processing difficulties. She feels that savvy students can recognize an uncomfortable and tense relationship and may use a rift between teachers to manipulate a situation to their advantage.

Co-teaching requires teachers to develop and use new skills and to share a classroom.

Pratt (2014) points out that it can be difficult to go into someone else's territory. Both teachers

must establish new routines and classroom structures. In their study of team-teaching experiences Ulrich and Nedelcu (2013) discovered that when paired with another teacher, teaching students felt out of their comfort zone and were challenged to change their perspective and routines.

Training to Implement in Co-teacher Professional Development

Researchers have made many recommendations based on the evidence collected in various case studies. Co-teachers need professional development specific to building a relationship, collaborative and communication skills, instructional methods utilizing two teachers, and assessment. Sileo (2011) and many other researchers are adamant that training is essential.

Pratt et al. (2016) stress the importance of collaborative planning. Conderman and Hedin (2013) proposed that the special education teacher assumes the role of strategy leader to provide a clear role and purpose for co-teaching. Pratt (2014) has defined three phases for building effective collaborative relationships: initiation, symbiosis, and fulfillment. According to Ploessl et al. (2009) clear, open, and continuous communication is vital to successful planning and to implementing a shared curriculum.

Instructional training. Research by Conderman and Hedin (2013) shows that coteachers rely predominantly on the One teach/One assist model. This model of instruction does not utilize the skills of both teachers, and does it differentiate student learning. It does not allow for parity in the co-teaching relationship. Both teachers need to take an active role in the classroom instead of one teacher consistently instructing and the other teacher consistently

assisting (Pratt et al., 2016). Good co-teaching involves two teachers who are actively teaching and monitoring students (Ploessl et al., 2009).

Co-teaching responsibilities are not limited to planning and instruction. The task of assessing students, both formative and summative, should be shared by both teachers. According to Conderman and Hedin (2012), purposeful assessment provides more accurate and informative data than one teacher can collect.

Chapter 3: Conclusions and Recommendations

Despite the challenges that teachers working in a co-taught classroom face, the benefits for both students and teachers are significant. The co-teaching relationship must be taught and nurtured to maximize these benefits. Administrators should take a lead role by implementing co-teaching training and providing ongoing support to teachers regularly. Sileo (2011) cited a study completed by Scruggs et al. in 2007 in which they made the conclusion that co-teachers believe personal compatibility is the most important factor for co-teaching success. When teachers are paired, administrators should consider personal compatibility as well as the affective relationship that teachers must develop. They should also oversee the establishment of the foundations of a co-teaching relationship.

Establishing a Co-teaching Relationship

Pratt (2014) explored co-teaching relationships in an urban school in Eastern Iowa. She identified four components for building effective collaborative relationships: professional development, communication skills, interpersonal skills, and teaching philosophies.

Professional development should be individualized to the content or the relationship.

Pratt recommends that co-teachers learn about the other person's habits and classroom behaviors through conversation and observation. They should get to know the personality and teaching style of their partner. They should discuss and put into writing their expectations and goals. It is also important to have open conversations, allowing co-teachers to share and plan for differences in classroom management styles and expectations for student performance. Through conversations the co-teachers develop an understanding of each other's perspective and validate that perspective and one another's opinion (Pratt, 2014).

To establish effective communication co-teachers must be open, honest, and professional, requiring pairs to be open-minded and to find common ground. These conversations can be time consuming and difficult. Beninghof (2014) provided prompts that may help facilitate these conversations; his recommendations include phrases such as, "Help me understand...." or "What I think you are saying...". When planning he suggested using the phrase, "What has worked in the past...." or "What if we try this for a week....". These problem-solving approaches can provide direction for productive communication. Clear, open, and continuous communication is vital to successful planning and to implementing a shared curriculum.

Ploessl et al. (2009) describe five types of conversations that co-teachers should have. They should start with "Relationship Talk", which includes the details that help them get to know each other such as information about their personal details, family, education and training, and hobbies. Once they feel that a friendly working relationship is developing, they can move on to "Possibility Talk". This means sharing their visions, goals, objectives, and plans. When they have found common ground on abstract ideas, the pair are ready for "Action Talk". This includes discussions on how to achieve goals, developing curriculum, creating shared lesson plans, and establishing a behavior management system. For lesson plans the co-teachers should choose a lesson plan template with space in which they can describe their shared goals. Lesson planning should also describe how responsibilities will be divided and what task each teacher will perform during the lesson (Keefe et al., 2004). Lesson plans should also include co-teaching models. The fourth type is "Opportunity Talk" that occurs when teachers define their roles and responsibilities, they can also list the choices and resources that are available to them. The final

type of conversation is the "Follow-up Talk", where co-teachers reflect on what works with lessons and units, and what should be changed to better serve the students.

Pratt (2014) urges co-teachers to be selfless and ask their partners how they can help. This relationship, much like a marriage, requires each partner to consider how decisions might affect the other person. It also requires frequent communication guided by effective speaking and listening skills. A co-teaching relationship begins with self-examination, where co-teachers should start with an online self-inventory. Pratt also recommended that pairs journal about co-teaching interactions and reflect on which communication tactics helped or hindered interactions. This reflection may assist in identifying triggers that might derail the relationship. Personality assessments and communication style inventories can also be used as a means of self-discovery. Co-teachers must learn how to interact across communication styles.

Pratt (2014) also suggested that honest self-examination through journaling, self-assessment or conversations with others is the first step toward improving important communication skills. Co-teachers must identify their strengths and needs by considering their own attributes and experiences. Many different tools can assist co-teachers with self-assessment, including Venn Diagrams highlighting strengths and needs, and areas for growth. Self-assessments should highlight complementary skills and strengths and work toward achieving a common belief system. It is helpful to have a shared work ethic.

Another way to improve communication skills is to analyze patterns of communication (Ploessi et al., 2009). Brown et al. (2013) assert that it is necessary to make purposeful plans to communicate. Although communication habits are hard to change, both co-teachers should record interactions, analyze dialogue and focus on tone. This can be done using technology such

as Google, email, and texts. Co-teachers should create a preset agenda for meeting times. At the beginning of the working relationship, it is important to share perspectives on shared roles. This is also the time to share perspectives on shared roles. In addition, it is also necessary to discuss and identify discrepancies in shared areas such as behavior management and lesson plan delivery. Once identified problem-solving techniques may be necessary to address them. A "Beliefs Survey" completed by co-teachers can be used to support this. Surveys and discussions should be done at the beginning of each year and prior to instructing students; it can also be a tool used for reflecting on lessons throughout the year. Responses can be compared to create a unified philosophy and to determine if students are learning.

According to Pratt (2014) co-teachers need to believe that they are equals working to establish parity, trust, and rapport. Some ways to accomplish this include sharing required instructional preparation, establishing guidelines to encourage respect and care for one another, and opportunities to build rapport (Pratt, 2014). A relationship built on equality, reliability, and harmony is both professionally and personally satisfying. Interpersonal skills must be developed to maintain an effective co-teaching relationship. Maintaining these skills requires pairs to developing a relationship where there is a mechanism for resolving challenges as they arise. Many teachers use humor to help support one another as they work together and model collaboration for students. Successful co-teachers often have similar philosophies and approach working together with the same goals in mind. They use their individual expertise to become interdependent; this synchronicity is accomplished by working through any differences. Co-teachers can complement each other, their differences in expertise and teaching styles and work together to balance strengths and limitations (Pratt, 2014).

Ploessl et al. (2009) claimed that conflict resolution is a part of the communication process tested during the co-teaching relationship. One way for co-teaching pairs to begin is by recognizing and accepting their differences in culture. It is important to make time to share personal stories and narratives and to identify values and beliefs driven by culture. The "Relationship Talk" described earlier helps to build a safe and trusting climate. When conflicts arise, they should be addressed, even if the issue seems minor. It is important to diffuse the situation with verbal techniques that resolve conflict, such as paraphrasing. Conversation techniques that can be used include asking questions, asking for clarification, and restating important points. Conflict resolution also involves monitoring nonverbal cues such as nodding occasionally and waiting to speak. Differences can become opportunities if both teachers learn to control impulsivity, to speak and to act with integrity and focus on building each other's self-esteem and confidence.

Brown et al. (2013) recommend developing a process for conflict resolution that is proactive, fair, and equitable. The first step is to identify the issue. Then both parties can develop alternative courses of action. Sileo (2011) adds that the two teachers should acknowledge their shared goals to generate various solutions. They can discuss each and analyze the risk and benefits of each course of action. After they act on the agreed upon solution, the final step is to evaluate the effectiveness of the intervention. Each teacher should reflect on the process to determine if they were able to remain calm, respond without being defensive, and project positive body language. It is important for each to assume responsibility for the consequences, correct potentially negative consequences, or re-engage in the decision-making process.

Efficient Co-planning

Once teachers have made headway on the affective relationship that underlies their success, they should begin building their foundational relationship. This includes the roles and responsibilities that they will assume and the logistics of how they will work together.

Nichols (2009) asserted that co-teachers are supposed to be equals in that both teachers are responsible for student learning and should discuss grading and assessment. General education teachers should not be the dominant teacher; it jeopardizes the collaborative relationship. Each teacher must understand the goals for students' learning, the standards set by the state or school, and the design of the curriculum. Both teachers must be involved in behavior management and should plan the techniques that will be used in the classroom.

Brown et al. (2013) suggest that teachers use a "Responsibilities Checklist" to define and divide the responsibilities involved in the classroom. It should be an equal distribution in which both teachers share some responsibility for grading, communication with parents, and classroom management. The checklist should be revisited at least two times throughout the year to be adjusted. Not only does each teacher have a clearly defined role, but more can be accomplished with less effort.

Pratt et al. (2016) stress the importance of collaborative planning. Once teachers have determined which responsibilities will be shared, and who will have sole responsibility for the remaining tasks, they must build co-planning routines. A common planning time must be established. Ploessl et al. (2009) assert that at least forty-five minutes a week of uninterrupted planning time is needed. Administrators should oversee the first meeting to help establish the protocols for co-planning periods. Moreover, an agenda should be prepared, and both teachers

should stick to it. The first item of business should be to agree on expectations for participation and dialogue. Teachers should be expected to adhere to the agenda and come prepared for the meeting. Goals should be defined, and pairs can expect to discuss and resolve at least one issue during each meeting. Planning sessions should end with an evaluation of the results of the session. Planning forms and platforms must also be identified or developed. Google suite, which includes shared documents, spreadsheets, calendars, chat, and video conferencing, is one example of a tool that has enhanced the productivity of teachers. Administrators can provide support by facilitating the time and tools needed for meetings to be efficient and effective.

Initial planning can be used to examine long-term goals, subsequently dividing them into weekly and daily goals and objectives. This is also the time to address differing philosophies, instructional approaches, and priorities and agree on how to approach components of the curriculum. Both teachers must define what will occur during each lesson including the instructional models that are used, accommodations that will be necessary, and modifications that can be made. Both teachers must understand their roles and responsibilities regarding each lesson prior to co-instructing in the classroom (Brendle, 2017).

Brown et al. (2013) provide a step-by-step procedure to follow when planning lessons. They suggest using co-teaching lesson plan formats, and then deciding which co-teaching instructional model to use. Teachers must also decide how to group students and how to arrange the classroom. Then, they create an activity for the lesson and develop an assessment. The final step is a review of the lesson to determine if it addresses the academic and behavioral needs of the students.

Effective Co-instruction

The most constructive co-teaching involves two teachers who are actively teaching and monitoring students (Ploessl et al., 2009). There are several models that co-teachers can follow to provide effective instruction; the following are the six most common.

- One Teach/One Observe: In this model in one teacher provides large group
 instruction while the other observes, usually to collect data. It can be effective during
 the first few weeks of school to gather information about students and make decisions
 about how to best support their learning needs, and can also be used by the special
 education teacher to collect data and monitor progress toward IEP goals.
- One Teach/One Assist: This is a similar model in which the general education teacher
 provides content instruction while the special education teacher drifts through the
 classroom to assist students who need additional support (Burks-Keeley & Brown,
 2014). The mobile teacher can provide brief periods of individualized instruction and
 check for student understanding.
- Station Teaching: This is a model in which the content is divided into parts that each teacher is responsible to teach. Students can be separated into two to four equally sized groups that rotate from one station to the next with the two teachers and a paraprofessional. The third or fourth station is for independent work.
- Parallel Teaching: This occurs when the class is separated into two groups and each
 teacher delivers the same content simultaneously. This method increases teacher
 interaction with students and participation in a lesson because the teacher can work

with a smaller group. There is more opportunity to provide individualized instruction and hands-on learning.

- Alternative Teacher: This is a model where one teacher works with a small group to re-teach, supplement, extend, or pre-teach, while the other teacher presents content to the large group. This model is effective for providing more intense and individualized instruction when needed. It allows one of the teachers to provide explicit instruction.
- Team Teaching: This is a model where both teachers take turns presenting content information to a large group. This is a practical method to present new material. It allows two teachers to deliver instruction simultaneously to the same group of students. These five methods enhance learning when used appropriately.

Ploessl, et al. (2009) warned that co-teachers should limit the use of "One Teach/One Assist" and "One Teach/One Observe" and maximize the use of "Station Teaching", "Parallel Teaching", "Alternative Teaching", and "Team Teaching". Co-teachers should determine prior to the lesson who will cover each area of instruction (Sileo, 2011). Instructional materials should be prepared and organized before instruction.

The objectives for the lesson should be considered when choosing and instructional method. It should also be remembered that it is required by law to monitor the progress of students, especially those with special education services. Teachers should use data to make decisions. Therefore, special education teachers can be helpful in collecting performance evaluations and offering guidelines for interpreting results. Co-teachers need to work together to appropriately group students, make accommodations, make modifications, and provide alternative assessments before and during the lesson.

Conderman and Hedin (2013) propose that the special education teacher assume the role of strategy leader in order to provide a clear purpose for co-teaching. It is part of their job description to develop and meet IEP goals. They can accomplish this by brainstorming ways in which the IEP goals can be integrated into the curriculum. It should be their responsibility to enhance classroom instruction with evidence-based practices. This gives the special education teacher the role of researcher whose mission is to find the strategy instruction that is most effective for the students with disabilities that will be served in their classroom. Their contribution is to share and model applicable strategies and to infuse them into the general education curriculum.

Research and training for special education teachers should provide knowledge of a few strategies that have been proven successful for special education students. One of these strategies is task analysis. Teachers should identify difficult skills for students and provide step by step prompts or instructions, as well as cues and reminders. They should explicitly teach steps that are unfamiliar or do not transfer from other skills. It is also vital to check in after each step until the student has mastered the transitions. In addition, graphic organizers are a tool that can be used to facilitate this strategy (Conderman & Hedin, 2012).

Emphasis strategies should also be added to the special education teacher's instructional repertoire. Condermann and Hedin (2012) provide several examples of how to implement this strategy. One method is to use color-coding to mark text to emphasize details, which helps students to locate key information that may not be obvious to them. Teachers can be taught to use mannerisms such as gestures, repeating words, and stressing certain words. Organizational

cues including sharing the agenda, numbering points, and summarizing information can be integrated into each lesson and be daily habits in the classroom.

Another area in which special education teachers can provide practice is in general study skills. Mnemonic strategies such as acronyms, acrostics, keywords, mimetics (pictorial representations), and peg words (rhyming words) can also be incorporated into lessons. Students can practice test-taking and study skills. They can get support with taking notes, creating outlines, time management, and using planners. Special education teachers can also become experts in content area reading strategies that activate prior knowledge and use textbook supports. Finally, the special education teacher can implement the instruction and use of metacognitive skills such as planning tasks, staying on task, self-monitoring performance, and coping with frustration (Conderman & Hedin, 2012).

Co-assessment

Co-teaching does not end with the delivery of instruction. It is important to measure the effectiveness of instruction. Brown et al. (2013) claim that assessment is an integral part of the classroom environment. Hence, both teachers are needed to monitor student progress. They recommend that both take turns observing students during instruction and that both teachers review completed work.

Assessment should include both formative and summative assessments. Conderman and Hedin (2012) describe the types of assessments teachers may use, and how they can complete the learning process. They present seven different types.

(1) Norm-referenced assessment compares a student's score to others in the same age or grade. Different levels of the same reading materials are matched to student scores.

- (2) Criterion-referenced assessment uses a predetermined standard to determine success. Different levels of the same reading materials are matched to student scores. Criterion-referenced assessment uses predetermined standards to ascertain a student's level of success.
- (3) Individual-referenced assessment measures individual student growth over time. A current score is compared to a student's score on a previous performance.
- (4) Curriculum-based assessment is used to calculate a student's knowledge of the skills or information presented in the curriculum.
- (5) Performance-based assessment is based on authentic projects and problems and allows students to apply skills or knowledge to real-life situations.
- (6) Self-assessments involve students writing goals and reflecting on their projects.
- (7) Finally, alternative assessment employs different methods for students who do not participate in state assessments. It may also involve creating a portfolio to demonstrate progress.

Purposeful assessment provides more accurate and informative data than one teacher can collect. In the early stages of their co-teaching relationship, the two teachers should discuss their assessment philosophies and practices. They should survey the skills, knowledge, and experience in using various types of assessments. When teachers are lacking in knowledge or experience in diverse forms of assessment, administrators should offer professional development. Once learning goals and lessons have been created both teachers should identify what choices are available and what limitations might exist regarding assessment. Co-planning time is the appropriate forum to discuss assessments to use before, during and after instruction. They can

also be a time to review data from assessment. Standardized test scores identify class strengths and needs, so teachers can differentiate skill instruction for individuals and small groups.

Assessment does not have to be the conclusion of the lesson. Lessons should begin with the activation of prior knowledge. Some tools that can be used include a KWL chart, warm-ups, admit slips, quick writes, and bell ringers. During instruction teachers can promote engagement by asking questions, using communication tools such as technology or dry erase boards, response cards, clickers or personal response systems. The lessons should also end with either formative assessment or summative assessment. Formative assessment can be accomplished through exit slips, summaries, or strategies in which the student uses metacognitive skills to assess their learning. Summative assessment can include portfolios, checklists, rubrics, rating scales, commercial products, projects, grades, and student conferencing.

Reflection and Growth

Reflection is an essential element of teaching. Of course, it is also important after lessons and units to discuss student achievement. However, co-teachers have a unique opportunity to reflect on their own experience, share their observations of a colleague's work, and hear a peer's evaluation of their own progress. This can lead to conflict or distrust if it is not handled in a structured manner. It is crucial to building the relationship and the self-esteem of one's teaching partner to provide specific praise when a lesson or unit is completed. Like providing feedback to a student, the teacher should provide their teaching partner with at least two positive statements for each critique or constructive statement. Feedback should focus on shared goals and teachers should use data to measure their own performance.

Summary

Co-teaching can be a beneficial situation for students and teachers, but like many aspects of teaching it requires training and practice to become proficient at it. Administrators can provide professional development, evaluations, planning time and tools, and support needed. A general education teacher and a special education teacher can provide the best possible education in the least restrictive environment for all students.

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Appendix A

Table 1Summary of Chapter 2 Findings

Authors	Study Design	Participants	Procedure	Findings
Burks- Keeley and Brown (2014)	Qualitative	Thirty-seven students from a co-taught English/Language Arts classroom.	Participants completed an exploratory survey about their perception of co-teaching methods.	Students expressed that they believe that behavior is minimized when two teachers are in the classroom. Classroom management is not significantly improved with the One Teach/One Assist model.
Krammer, Rossman, Gastanger and Gasteiger- Klicpera (2018)	Qualitative	Three-hundred twenty-one secondary teachers at New Middle Schools in Austria participated in the study. They all teach Language Arts, either German or English. All have experience with co-teaching.	Teachers were given a survey in which they answered questions about co-teaching experiences.	The authors found that teachers know who they are most able to co-teach with. They tend to choose teachers with a similar co-teaching style. Teachers report more satisfaction when they are working with another teacher that they have chosen.

Table 1 (continued)

Legutko (2015)	Qualitative	Nine secondary education teachers with and without co- teaching experience.	Participants completed an open-ended questionnaire about their perspectives on co-teaching.	Less than 20% think coteaching is a good experience. Half of the respondents see their co-teacher as a teacher's aide.
				Half believe that students do better when there are two teachers in the room.
Ulrich and Nedelcu (2014)	Qualitative	Forty-seven students in a cotaught teacher preparation program.	Participants were observed and interviewed about their experiences.	Students felt the experience was beneficial. They felt a connection to their peers. They performed better in teaching teams that were
				self-selected. They reported that differences in motivations and expectations made team teaching difficult.