

THE CO-TEACHING JOURNEY: A SYSTEMATIC GROUNDED THEORY STUDY
INVESTIGATING HOW SECONDARY SCHOOL TEACHERS RESOLVE
CHALLENGES IN CO-TEACHING

by

Sharon Gerst

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

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ABSTRACT

The purpose of this systematic grounded theory study was to explain how problems inherent in co-teaching relationships are resolved by secondary school special education and general education teachers at an urban school district in Eastern Iowa. The participants were general and special education secondary school teachers involved in effective co-teaching partnerships. Data was collected from five partnerships, utilizing focus groups, interpersonal behavior theory questionnaires, classroom observations, and individual interviews. The researcher analyzed the data using systematic grounded theory procedures of open coding, axial coding, and selective coding to develop a theory grounded in the data collected about the process by which teachers overcome problems in co-teaching. The theory, Achieving Symbiosis, reflects three main stages of this process. In Initiation, a co-teaching relationship begins. Then, teachers work at becoming effective in the Symbiosis Spin. Finally, Fulfillment is achieved when all the pieces fit together to create an effecting co-teaching partnership. The theory is presented as a hypothesis for future research to explore later. Insight gained from this study supports co-teachers as they work through the process of creating effective co-teaching partnerships, as well as administrators who support co-teachers in their buildings.

Descriptors: Co-teaching, general education, special education, collaboration, grounded theory

Dedication

I dedicate this dissertation to my Heavenly Father who has led and guided me on this journey of faith. This past year I have learned that what God leads us to begin, He helps us finish. “Behold, I am the Lord, the God of all flesh: is there anything too hard for me?” (Jeremiah 32:27). Often, in the last few months, I have been reminded of the promise in Psalm 37 that when we commit, trust, and delight in Him, He gives us the desires of our hearts. Following God’s will and leaning on His grace brings peace, knowing that it will go according to His plan.

During my doctoral journey, each time when I was in need of strength or grace to accomplish the next step, God provided in the most perfect way at the most perfect time. I learned that when I became weak in myself, I became strong through Him. As Habbakuk (3:19) stated, “the Lord God is my strength, and he will make my feet like hinds’ feet, and he will make me to walk upon mine high places.”

As I share my work with others, my prayer has been, and continues to be, that the honor and praise is given to God. Without His mercy and love, this dissertation would not have been completed. In whatever we do, I pray that we “are enriched by Him, in all utterance, and in all knowledge” (I Corinthians 1:5). To God be the glory!

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CHAPTER ONE: INTRODUCTION

Historically, the relationship between general education teachers and special education teachers has been one of isolation and separation (Dufour, 2004; Englert & Tarrant, 1995; Johnson & Pugach, 1996; Robinson & Buly, 2007; Timmons, 2006; Winzer, 1993). Teachers addressed the needs of students with disabilities in separate classrooms. Although each teacher addressed the needs of students in the way he or she knew best with good intentions, students' education was often disconnected rather than integrated (Tannock, 2009). This disconnect was confusing to students with disabilities and did not promote the achievement of high goals. Recent federal laws encourage teachers to approach the instruction of students with disabilities more collaboratively (Johnson & Pugach, 1996; Leatherman, 2009). The No Child Left Behind (NCLB) Act, passed in 2002, holds all students, including students with disabilities, accountable to the same proficiency levels (Paulsen, 2008; Winzer, 2009). Additionally, the reauthorization of the Individuals with Disabilities Education Act (IDEA) in 2004 mandated that students with disabilities be instructed in the least restrictive environment (LRE). Therefore, collaboration is becoming a necessary component of meeting all students' learning needs within the general education classroom.

Co-teaching is one model that schools are using to address the requirements of NCLB (2002) and IDEA (2004) (Friend & Cook, 2010). Co-teaching involves two teachers instructing students in the same classroom. Most often, co-teaching includes one general education and one special education teacher to address both the content area expertise and the mandated accommodations in a student's Individualized Education

Program (IEP). However, co-teaching is not an easy process and requires creative solutions to mediate challenges inherent when educators from different disciplines work together.

Background

The historical context of special education and the journey to obtaining free, appropriate education for students with disabilities is an important piece in understanding the current climate of evolving collaborative practices between special education and general education (Mostert & Crockett, 2000; Winzer, 1993). Additionally, the research on collaboration and co-teaching, specifically, has addressed the reasons teachers collaborate, roles of teachers, benefits for students and teachers, challenges found in co-teaching, necessary components for effective co-teaching, and stages of collaboration.

Historical Context

Societal perceptions of disabilities have greatly affected the care and education provided for people with disabilities (Crissey, 1975; Winzer, 1993, 1998). Emergent themes from the history of special education include isolation, segregation, integration, and inclusion (Winzer, 1993). People with disabilities were generally isolated in early societies. Perceptions of disabilities were spiritual in nature, with beliefs that disabilities either came from God as a divine revelation or from the devil. With these beliefs, education and care for people with disabilities was relatively nonexistent until the Renaissance period when a few glimpses of hope emerged in the education of people with disabilities.

However, society did not see people with disabilities as educable and treatable until the Enlightenment period, when public perception of knowledge drifted towards a

nurture viewpoint rather than a nature viewpoint (Crissey, 1975; Winzer, 1993, 1998). Still, however, people with disabilities were segregated from the rest of their communities as institutions developed to provide education and medical treatment for people with disabilities. In the twentieth century, parents and advocates for people with disabilities formed organizations to promote court cases that prompted subsequent legislation for people with disabilities (Stainback, 2000; Winzer, 1993, 2009). Their efforts culminated in 1975 in federal law, Public Law 94-142, that mandated that public schools provide students with disabilities a free, appropriate education with their general education peers as much as possible (Boyer, 1979; Gartner & Lipsky, 1987; Kavale & Forness, 2000; LaNear & Frattura, 2007; McLaughlin & Henderson, 2000; Mostert & Crockett, 2000; Murphy, 1996; Winzer, 1993, 2009).

Although students with disabilities were integrated into public schools alongside their peers, segregation still remained the normal mode of instruction with students in self-contained classes taught primarily by special education teachers (Stainback, 2000; Winzer, 1993, 2009). This separation promoted the isolation of both students and teachers in special education. Proponents of the Regular Education Initiative (REI) in the 1980's viewed this isolation as detrimental to the social and academic development of students with disabilities (Gartner & Lipsky, 1987; Stainback & Stainback, 1984; Wang & Walberg, 1988). They promoted inclusion of students with disabilities into the general education classrooms by eliminating the dual system of special education and general education. However, REI failed to garner support of general educators to make this inclusion movement successful (Fuchs & Fuchs, 1993; Kavale & Forness, 2000). While there is mixed support for full inclusion, recent legislation has promoted the LRE to a

more inclusive degree than previously implemented in schools (Cronis & Ellis, 2000; LaNear & Frattura, 2007; McLaughlin & Henderson, 2000; Murphy, 1996; Sailor & Roger, 2005; Winzer, 2009; Yell, Rogers, Lodge Rodgers, 1998; Zigmond, Kloo, & Volonino, 2009).

Reasons for Collaboration

Although, historically, general education teachers and special education teachers taught their respective students in isolation, the current trend in special education is for students to be taught in the LRE (Bowen & Rude, 2006; Friend & Cook, 2010; Turnbull, 2005, Winzer, 2009). According to IDEA (2004), students with disabilities should be instructed in the general education classroom with the core curriculum as much as possible to meet their learning needs. These changes in federal law have made it nearly impossible for special education teachers to teach students with disabilities in self-contained classrooms (Paulsen, 2008). Rather, special education teachers are often working with general education teachers to provide instruction and accommodations for students with disabilities in the general education classroom.

Another reason for collaboration has been the federal requirements of NCLB (2002) for both highly qualified teachers and student achievement (Carpenter & Dyal, 2006; Hardman & Dawson, 2008; Sayeski, 2009). Special education teachers are now held accountable for content-area knowledge. It is difficult for teachers to be certified in all areas, particularly in middle schools and high schools, where specific content certifications are required. Therefore, special education teachers are teaming with general education teachers certified in the content areas to provide services to students with disabilities in the general education setting. Students with disabilities are also held

to the same requirements for academic growth as students without disabilities under NCLB (2002) (Arthaud, Aram, Breck, Doelling, & Bushrow, 2007). In order for students to perform well on the assessments, they must have access to the general curriculum. Co-teaching provides a way for teachers to meet these federal requirements.

Roles of Teachers in Co-Teaching

Within a co-taught class, teachers need to address their instructional roles for students with disabilities (Tannock, 2009). While both teachers bring their differing expertise and training with them to the partnership (Iowa Department of Education, 2009), co-teachers must also consider parity of roles for both to feel fulfilled in their careers (Scruggs, Mastropieri, & McDuffie, 2007). Special education teachers are responsible for ensuring that accommodations for students with disabilities are being served in the classroom. Conversely, general education teachers are responsible for ensuring that the core curriculum is taught in an accurate manner that supports student learning.

It can be difficult for teachers to blend their expertise to ensure both teachers feel responsible for planning and instruction. Research on co-teaching roles indicates special education teachers often feel like an assistant within classrooms (Bessette, 2008; Eisenman, Pleet, Wandry, & McGinley, 2011; Harbort, Gunter, Hull, Brown, Venn, Wiley, & Wiley, 2007). This is not the most conducive model for co-teaching, as special education teachers' knowledge and expertise are not utilized in the classroom (Scruggs et al., 2007). More effective co-teaching methods include station teaching, parallel teaching, or one teaching while one observes for planning or mentoring purposes.

Benefits for Students & Teachers

Although the research on benefits for students has mixed results (Boudah, Schumacher, & Deshler, 1997; Volonino & Zigmond, 2007), most current research on co-teaching demonstrates both academic and social benefits for students (Estell, Jones, Pearl, & Van Acker, 2009; Hang & Rabren, 2009; Kohler-Evans, 2006; McDuffie, Mastropieri, & Scruggs, 2009; Scruggs et al., 2007; Wilson & Michaels, 2006). Students believe they learn more when two teachers are present in their classes and would willingly participate in co-taught classes in the future (Wilson & Michaels, 2006). Additionally, teachers in Wilson and Michaels' (2006) study reported that students had fewer behavior problems when they were in co-taught classes. Studies of students' academic achievement also have demonstrated positive effects of participating in co-taught classes (Hang & Rabren, 2009; McDuffie et al., 2009). Students without disabilities experienced the same benefits as students with disabilities in these studies.

Not only do students benefit from co-taught classrooms, but teachers benefit as well. One of the most cited benefits is the professional development that occurs through peer mentoring in co-teaching relationships (Brownell, Adams, Sindelar, Waldron, & Vanhover, 2006; Kohler-Evans, 2006; McDuffie et al., 2009; Murawski & Hughes, 2009; Scheeler, Congdon, & Stansbery, 2010). Teachers learn from their colleagues' expertise in either content knowledge or meeting student learning needs. As they learn new methods for addressing student learning needs within inclusive classrooms, co-teachers have opportunities to implement these strategies with peer support. Peer feedback during implementation of learned strategies can be an effective method for ensuring integrity and fidelity of research-based teaching practices (Scheeler et al., 2010).

Challenges Found in Co-Teaching

While co-teaching can be beneficial to both students and teachers, it is not an easy process for teachers to build effective partnerships with parity of roles in the classroom (Brownell et al., 2006; Carter, Prater, Jackson, & Marchant, 2009; Friend & Cook, 2010; Leatherman, 2009; Paulsen, 2008; Santoli, Sachs, Romey & McClurg, 2008). Challenges teachers often face in co-teaching relationships include insufficient time for planning, lack of administrative support, interpersonal differences, and teacher attitudes. In order for teachers to be able to share instructional roles within the classroom, they need co-planning time (Leatherman, 2009; Santoli et al., 2008). Finding a common planning time is difficult to achieve, especially when special education teachers work with more than one general education teacher. Another problem with finding a common planning time is lack of administrative support for scheduling this time for co-teachers (Carter et al., 2009). Administrators sometimes do not understand the pressures and stress teachers go through when building co-teaching partnerships. This lack of understanding and support can be detrimental for co-teachers. Additionally, interpersonal conflicts can occur with differences in gender, personalities, communication styles, and conflict styles (Conderman, 2011; Conderman, Johnston-Rodriguez, & Hartman, 2009; Cramer & Stivers, 2007; Gately & Gately, 2001). Another barrier to effective communication are differences in teacher attitudes towards inclusion of students with disabilities in the general education setting (Brownell et al., 2006; Leatherman, 2009; Paulsen, 2008). Listening to another's viewpoint and making compromises can be difficult for teachers, especially for the general education teacher who feels special education teachers are entering his or her classroom space.

Necessary Components for Effective Co-Teaching

Researchers have made suggestions for effective co-teaching relationships based on their study of the current nature of these relationships (Carter et al., 2009; Idol, 2006; Leatherman, 2009; Scruggs et al., 2007). Identified components for building effective co-teaching partnerships include teacher training, administrative support, common planning time, common philosophies, and reflection (Carter et al., 2009; Jang, 2006; Paulsen, 2008). Teachers need training not only in skills necessary for implementing co-teaching effectively in the classroom, but also in communication skills (Carter et al., 2009; Friend & Cook, 2010). Typically, communication skills are not addressed in teacher education classes, but interpersonal conflicts can be avoided when teachers communicate effectively with one another. Administrative support is necessary for scheduling professional development sessions and common planning times for teachers (Leatherman, 2009; Santoli et al., 2008; Scruggs et al., 2007). Additionally, teachers have more successful co-teaching relationships when they have similar philosophies about teaching and inclusion of students (Brownell et al., 2006; Leatherman, 2009). Reflection enables teachers to improve not only their co-teaching relationship, but also their instructional practices to meet students' learning needs (Jang, 2006; Roth, Masciotra, & Boyd, 1999). These components all play a part in the outcome of co-teaching partnerships.

Stages of Collaboration

Relatively few authors have considered the process by which teachers develop effective collaboration. Phillips and Sapona (1995) explored the stages of collaboration that teachers go through as one school developed inclusive practices, involving both co-

teaching and collaboration. They identified these stages as anxiety, managing logistics, identifying teachers' roles in the classroom, co-planning, seeing the benefits, using a continuum of options for students, and evaluating the progress in collaborative partnerships (Phillips & Sapona, 1995). Gately and Gately (2001) also wrote about the stages of collaboration from a developmental point of view (i.e., beginning, compromising, and collaborating). However, although both of these articles presented characteristics of teachers' behaviors and experiences at each stage, they did not consider the process by which teachers overcome problems experienced in collaboration. Additionally, the case study conducted by Phillips and Sapona (1995) was in a school that had just begun inclusive practices. Therefore, future research needs to address the process by which co-teachers overcome challenges of collaboration in current education settings where inclusion is a common practice.

Connection of the Literature to This Study

The literature covers the current nature of co-teaching, particularly since the passage of federal requirements under NCLB (2002) and the reauthorization of IDEA (2004) (Scruggs et al., 2007). Studies have considered the factors that impede successful collaboration and what components would improve co-teaching partnerships. However, only one study in this literature review addressed how teachers are attempting to resolve these challenges as they build co-teaching partnerships (Leatherman, 2009). Leatherman (2009) looked at possible solutions co-teachers have used to overcome problems in collaboration at the elementary level with a case study design ($N = 14$). Leatherman's study described solutions that the participants used to overcome challenges, but did not provide a theory to explain the process by which co-teachers overcome problems inherent

in collaboration. This study extended the literature by addressing this process for secondary general education and special education teachers in co-teaching relationships.

Situation to Self

The topic of collaboration between general education and special education teachers is of professional interest to me because I am situated between both disciplines in my position as a Title I teacher in an elementary school. I work with both general education and special education teachers to provide timely interventions for students, thereby reducing the number of students needing special education services. Throughout my interactions with both types of teachers, I have observed the unintended dichotomy of perspectives and instruction for students provided in general education and special education settings. My experiences have influenced my thinking about teachers needing to collaborate more effectively. Although I have participated in three co-teaching relationships with general education teachers, I have not been able to continue these partnerships due to decreased Title I staffing in my school.

The paradigm that guided my thinking on this study is constructivism, which considers meaning being created as people work together (Lincoln & Guba, 2004). Additionally, the philosophical assumption underneath this paradigm that oriented my study is an ontological assumption (Corbin & Strauss, 2008; Lincoln & Guba, 2004). This assumption asserts that there are multiple realities subjective to each person's experiences. In this study, I considered both general education and special education teachers' experiences and perceptions of reality. I did not assume that both teachers in a partnership had the same perception of their relationship or the purpose of co-teaching.

In this study, I sampled participants from my school district, but did not select participants from the elementary level in which I work. Not having previous relationships with participants might have encouraged participants to respond without consideration of what they believed I might have wanted them to say. During the study, I took the position of a non-participant observer during classroom observations in order to see the natural setting (Patton, 2002).

Problem Statement

The problem addressed in this study was how secondary school co-teachers in an urban school district in Eastern Iowa overcame challenges inherent in co-teaching. Co-teaching is not a simple process because it involves the merging of two teachers from different perspectives (general education and special education) into one classroom to provide instruction to students with and without disabilities. Traditionally, the fields of general education and special education have not collaborated together, but have each taught their own respective students in self-contained classrooms (Van Garderen, Scheuermann, Jackson, & Hampton, 2009; Wasburn-Moses & Frager, 2009; Winzer, 1993). This merging of different perspectives, attitudes towards inclusion, personalities, and teaching styles can be difficult for teachers (Bowen & Rude, 2006; Friend & Cook, 2010; Hardman & Dawson, 2008; Turnbull, 2005). Often teachers experience conflicts that cause dissatisfaction with their classroom roles and responsibilities (Scruggs et al., 2007).

Many schools are using co-teaching as the means to address federal regulations of NCLB (2002) and the reauthorization of IDEA (2004), including instructing students in the LREs and highly qualified teachers in content-area subjects (Paulsen, 2008).

Although isolation has historically been the case and is still present in some academic settings today (Dufour, 2004; Friend, 2000), it is no longer practically possible if schools are to meet NCLB (2002) increasing proficiency levels in students' academic achievement (Cook & Friend, 2010). Therefore, co-teaching is becoming less optional and teachers must learn how to overcome challenges they encounter in these relationships.

The research on co-teaching presents the nature of co-teaching relationships in light of the challenges teachers encounter and the necessary components that make co-teaching successful (Bouck, 2007; Damore & Murray, 2009; Hang & Rabren, 2009; Jang, 2006; Kritikos & Birnbaum, 2003; Leatherman, 2009; Scruggs et al., 2007; Wilson & Michaels, 2006). However, little research has looked at how teachers are overcoming challenges inherent in co-teaching to make the partnership successful for both teachers and students (Leatherman, 2009). In order to help teachers create effective co-teaching partnerships, it is necessary to build an understanding of the process teachers go through to resolve problems found in co-teaching.

Purpose Statement

The purpose of this systematic grounded theory study was to explain how problems inherent in co-teaching relationships are resolved by secondary school special education and general education teachers at an urban school district in Eastern Iowa. Co-teaching relationships were generally defined as a style of interaction between a general education and special education teacher who are engaged in shared decision making for attaining the common goal of instructing students with and without disabilities.

Research Questions

In order to study the process by which secondary school co-teachers in an urban school district in Eastern Iowa resolved problems inherent in co-teaching relationships, the central question for this study was: How do secondary school co-teachers from an urban Eastern Iowa school district resolve problems inherent with collaboration? The following sub-questions guided this study:

Research Sub-Question 1: How do co-teachers address differences in attitudes towards inclusion?

Research Sub-Question 2: How do co-teachers address differences in philosophical perspectives of general education and special education?

Research Sub-Question 3: How do co-teachers resolve interpersonal conflicts?

Research Sub-Question 4: How do co-teachers address external factors that impede successful collaboration?

In order to understand the central question of how co-teachers address problems inherent in collaboration, it was necessary to consider different areas in which co-teachers often encounter challenges in building effective co-teaching partnerships. Teachers have personal opinions and attitudes towards inclusion that affect the compatibility of the partnership (Santoli et al., 2008). Additionally, general education and special education teachers have often been taught differently in their respective disciplines in teacher education and continued professional development (Van Garderen et al., 2009; Wasburn-Moses & Frager, 2009). This training is generally focused on the characteristics of general education or special education and does not often cross over into the other discipline. Another area of challenge often encountered is interpersonal

conflicts including differences in personalities, communication styles, conflict styles, and teaching styles (Conderman, 2011; Gately & Gately, 2001; Leatherman, 2009; Scruggs et al., 2007). Additionally, external factors can be challenges for co-teachers, including common planning time or administrative support (Carter et al., 2009; Idol, 2006; Kritikos & Birnbaum, 2003; Leatherman, 2009). The research sub-questions helped focus the study on answering the central question of the process that co-teachers go through to overcome challenges and build effective co-teaching relationships.

Significance of the Study

This study is significant to the topic of collaboration between general education and special education teachers, specifically co-teaching, because research has not addressed the process by which teachers overcome challenges to achieve effective co-teaching partnerships. Rather, researchers have focused on the nature of co-teaching relationships and components that would improve these relationships (Bessette, 2008; Bouck, 2007; Conderman & Johnston-Rodriguez, 2009; Damore & Murray, 2009; Eisenman et al., 2011; Hang & Rabren, 2009; Harbort et al., 2007; Idol, 2006; Jang, 2006; Leatherman, 2009; Naraian, 2010; Scruggs et al., 2007). Co-teaching has become an important model for general education and special education teachers to address student learning needs in inclusive environments (Friend & Cook, 2010; Iowa Department of Education, 2009). However, there are challenges that impede successful co-teaching relationships (Carter et al., 2009; Paulsen, 2008; Santoli et al., 2008; Scruggs et al., 2007). In order to build effective partnerships, co-teachers must address these challenges in ways that effectively resolve them to the mutual benefit of both parties.

This study provides a necessary theory, grounded in data collected in natural settings, for how teachers overcome challenges inherent in co-teaching relationships to build effective partnerships. Using a systematic grounded theory method provided “a powerful means both for understanding the world ‘out there’ and for developing action strategies that will allow for some measure of control over it” (Strauss & Corbin, 1990, p. 9). Teachers who are co-teaching will benefit from learning how effective co-teachers have achieved this process in order to improve their own co-teaching partnerships. Students may also benefit from this study through improved instruction in their classrooms. If teachers use the findings of this study to improve their collaboration, instruction could also improve (Scruggs et al., 2007). Students may also benefit from models of effective collaboration for interactions with peers in collaborative class assignments (Gately & Gately, 2001; Stevenson, Duran, Barrett, & Colarulli, 2005). Administrators could also use this information to provide professional development that effectively addresses the challenges present in co-teaching and supports teachers in working through this process.

Delimitations

Delimitations I made for this study included sampling only participants who were in effective co-teaching partnerships in secondary schools. Each co-teaching partnership was composed of one general education and one special education teacher. The reason for limiting this study to secondary school teachers was to avoid using participants from elementary schools whom I would already know through district trainings and collegial relationships in the elementary school where I work. Additionally, co-teaching relationships are more often found in secondary schools where teachers are content-

specific and need certification in the content area to have responsibility for teaching the content matter (Carpenter & Dyal, 2006; Hardman & Dawson, 2008; Sayeski, 2009). Special education teachers address this legal requirement by co-teaching with general education teachers who are certified in the various content areas.

Additionally, because this study addressed how teachers overcame challenges inherent in co-teaching, I focused on effective co-teaching relationships to provide this information. If teachers are working together effectively, most likely they have already addressed problems that occurred in their partnership and found solutions to these challenges. I used the following criteria to select effective co-teaching partnerships for this study: (a) co-teaching partnerships consisting of one general education and one special education teacher, (b) they have co-taught for at least one year in order to have experienced challenges and had time to resolve them, and (c) utilization of effective co-teaching instructional relationships. Effective co-teaching instructional relationships were defined as both teachers having equal roles in shared decision making and instruction of students. Equal roles meant both teachers were involved in the instruction of students in the classroom, rather than one teacher consistently taking an assistant role as is often cited in the literature (Bessette, 2008; Bouck, 2007; Harbort et al., 2007; Naraian, 2010; Scruggs et al., 2007; Vannest & Hagan-Burke, 2010). However, if the teachers took turns instructing and assisting, they were included in this study.

Research Plan

This qualitative study employed a systematic grounded theory design to answer the research questions about how secondary school co-teachers overcome problems inherent in co-teaching relationships. A systematic grounded theory design was

appropriate for this study because the research question involved understanding a process participants go through to achieve an outcome (Strauss & Corbin, 1990). The research on co-teaching has provided evidence of the common challenges experienced in co-teaching and the necessary components for effective co-teaching (Carter et al., 2009; Leatherman, 2009; Santoli et al., 2008; Scruggs et al., 2007), but little research has explored how teachers overcome challenges to build effective co-teaching relationships. Corbin and Strauss (2008) stated understanding a phenomenon should go beyond merely describing participants' experiences to also understanding the process whereby outcomes are achieved. During this study, I gathered data from participants about their experiences in overcoming challenges in co-teaching relationships. Through this process, I built a theory grounded on the data from participants gathered in the field. Using grounded theory methods for analyzing data and building a theory, stated as a hypothesis, provided the systematic procedures needed for this study (Glaser & Strauss, 1967; Strauss & Corbin, 1990, 1998).

CHAPTER TWO: LITERATURE REVIEW

A review of the current literature provides an understanding of what co-teaching is and how it can be used effectively in schools. Important theorists of collaboration state that research shows collaboration has been generally positive in school reform efforts (Dufour, 2004; Friend & Cook, 2010). However, when barriers to collaboration are not appropriately addressed, its success can be limited. This literature review addresses the following components: (a) theoretical framework for this study, (b) definitions of collaboration and co-teaching, (c) the historical context of special education and inclusion, (d) the need for co-teaching, (e) collaboration and co-teaching models, (f) roles of participants, (g) benefits of co-teaching, (h) challenges present in co-teaching, (i) necessary components of co-teaching, (j) stages of collaboration, and (k) implications for research.

Theoretical Framework

The theoretical framework that informed this study comes from two different theories, including the stages of group development by Tuckman (1965; Tuckman & Jensen, 1977) and interpersonal behavior theory by Schutz (1958, 1966, 1984). Tuckman's (1965; Tuckman & Jensen, 1977) model of group development has been discussed as a model for development of teacher collaboration (Friend & Cook, 2010), but has not been studied specifically in this area. Schutz's (1958, 1966, 1984) theory for interpersonal behavior enlightened this study in consideration of the expressions and desires individuals have for interpersonal relationships.

Stages of Group Development

Tuckman (1965) first proposed his theory for stages of group development after he reviewed the research on how groups form and evolve. The four stages he first outlined in his theory included forming, storming, norming, and performing. Tuckman and Jensen (1977) later revised Tuckman's (1965) initial model to include a fifth stage, adjourning. The first stage of group development, forming, is when the group begins and members orient themselves to the group's purpose (Tuckman, 1965). In the second stage, storming, differences emerge between members and conflict arises. The differences between members' personalities and perspectives generally constitute conflict as members strive to maintain their feelings of safety. The conflict can become emotional and hinder group performance. The third stage, norming, is when the group becomes more cohesive as members adopt roles and develop relationships. The members create norms that specify expectations they hold for each other. In the fourth stage, performing, the group becomes interdependent of each other to accomplish their group's purpose. They become more flexible in their roles and responsibilities as they work together to accomplish their goals. The addition of the fifth stage was based on subsequent research that studied Tuckman's (1965) group development model (Runkel, Lawrence, Oldfield, Rider, & Clark, 1971; Tuckman & Jensen, 1977). In this stage, the group is terminated because either the goals of the group have been met or the time allotted for the group has expired.

Tuckman (1965) stated that all groups must go through these stages in order to become an efficient, productive group that meets its goals. He also acknowledged that the setting affects the group's development, so the length of time groups spend in a

specific stage varies. Runkel, Lawrence, Oldfield, Rider, and Clark (1971) conducted a quasi-experimental study with undergraduate college students to determine if Tuckman's (1965) model was relevant to educational settings and collaborative group work. The researchers confirmed Tuckman's (1965) hypothesis that the length of time groups spend in the stages varies with the dynamics and setting of individual groups. However, all of the groups went through all of the stages as expected according to Tuckman's (1965) model.

Because these stages have generally been confirmed in subsequent research on group development (Bonebright, 2010; Runkel et al., 1971), Tuckman's (1965; Tuckman & Jensen, 1977) model has been widely used throughout the literature as a model of how groups develop and as a means for training new groups (Bonebright, 2010; Gilley, Morris, Waite, Coates, & Veliquette, 2010). However, some researchers have discussed limitations in Tuckman's (1965; Tuckman & Jensen, 1977) model (Bonebright, 2010; Cassidy, 2007; Runkel et al., 1971). These limitations include the vague definition of the storming stage for educational contexts (Cassidy, 2007), whether all groups progress through these stages linearly as Tuckman's (1965; Tuckman & Jensen, 1977) model proposed (Bonebright, 2010), and the need to look at interpersonal factors that influence group development (Runkel et al., 1971). Cassidy (2007) researched group models in the literature from 1990 to 2001 to determine how Tuckman's (1965; Tuckman & Jensen, 1977) model fits therapy, business, and educational contexts. She discovered the storming stage was not clearly defined in Tuckman's (1965; Tuckman & Jensen, 1977) model for contexts outside of therapy. Conflicts in groups arise from many reasons, including independence, need for control, feelings of losing autonomy, and

disagreements about the group's task or goals. Cassidy (2007) believed group development models should move from more behavioral outcomes to addressing concerns that hinder group performance. Bonebright's (2010) review of the literature on Tuckman's (1965; Tuckman & Jensen, 1977) model of group development noted group development is difficult to put into a linear model. It is more complex than a simple model can portray for all groups. Instead, she proposed group progression might be more interactive than linear. Interpersonal needs and stages influence the complex, interactive process of group development. Runkel et al. (1971) believed it was necessary to also look at interpersonal stages of a group to fully understand group development.

Despite these criticisms of Tuckman's (1965; Tuckman & Jensen, 1977) group development model, this model is still widely discussed in the literature as the process in which groups develop (Bonebright, 2010). Additionally, although this model has not been researched in the area of co-teaching, it has been used as an explanation for the stages teachers progress through as they adopt collaborative practices (Friend & Cook, 2010). In order to address the missing dimension of interpersonal behavior in Tuckman's (1965; Tuckman & Jensen, 1977) group development model, it is necessary to include an interpersonal behavior theory, namely Schutz's (1958, 1992) theory.

Interpersonal Behavior Theory

Schutz (1958) developed a theory addressing interpersonal behaviors to explain how people interact and work together. He first published this theory in 1958 and reprinted it in 1966 with only minor changes. More significant changes to the theory and related instrument were made 20 years later (Schutz, 1992). Schutz (1958) stated interpersonal needs are similar to biological needs, because they can be unfulfilled or

overcompensated. Each person needs to strive for a proper balance of interpersonal needs, whether conscious or unconscious. Subsequent revisions to this theory stated the interpersonal dimensions are wants, rather than needs (Schutz, 2009). The theory was changed from a fixed viewpoint to reflect the evolving nature of interpersonal relations (Schutz, 1984, 2009).

Initially, the three interpersonal dimensions of Schutz's (1958) theory were inclusion, control, and affection. However, later revisions changed affection to openness (Schutz, 1984, 1992). Confusion had prevailed about the application of the affection dimension to other relationships that were not as intimate in nature. Additionally, inclusion and affection were considered to be too similar as described in the original theory (Dancer & Woods, 2006; Furnham, 1996; Hurley, 1990; Mahoney & Stasson, 2005). As one interacts with others, these three concepts need to be at a satisfactory balance for all parties. Inclusion is considered to be at the initial stage of relations, while control and openness are in the maintaining stages. Additionally, inclusion and openness are behaviors which one models what one hopes to receive from others. Conversely, what one models in the area of control is not necessarily what one hopes to receive from others.

Inclusion is the desire "to establish and maintain a satisfactory relation with people with respect to interaction and association" (Schutz, 1958, p. 18). One wants to feel that he or she is a significant member or worthwhile to a relationship or group. Inclusion involves behaviors of how people associate with each other and communicate whether one is welcome in a relationship or group. This interpersonal desire also considers how an individual establishes his or her identity in a group. Additionally,

inclusion reflects the commitment a person has to a relationship or group. Individual levels in this area can vary as “we all differ as to how much we desire to be with other people and how much we wish to be alone” (Schutz, 1992, p. 923).

The interpersonal want of control considers how people balance the desire to “establish and maintain a satisfactory relation with people with respect to control and power” (Schutz, 1958, p. 18). Individuals strive for balance between not controlling the behavior of others to controlling all of their behavior. For each person to feel fulfilled in their relationship, he or she wants to believe that others perceive him or her as a competent, responsible person. Control also includes how people make decisions together, how they influence others, and how dependent or interdependent they are with each other.

The third interpersonal area, openness, considers the amount of closeness people desire in interpersonal relationships (Schutz, 1984, 1992). Some people desire to be open with others, while other people desire to be more private in sharing their thoughts, feelings, and secrets. Typically, this dimension varies with the type of relationship being analyzed. Schutz (1992) stated “everyone has some desire for open relations and some desire to keep their relations more private” (p. 923).

Schutz (1958) developed an instrument to measure the interpersonal needs expressed and desired by people, the Fundamental Interpersonal Relations Orientation – Behavior (FIRO-B). The instrument was later revised to reflect criticism in its construct validity (Dancer & Woods, 2006; Furnham, 1996; Hurley, 1990; Mahoney & Stasson, 2005) and address changes made to the theory (Schutz, 1992). The instrument’s name was changed to Element B to clarify the difference in the instrument as one part of

understanding human behavior. Additionally, two other instruments were created, including Element F and Element S. Element F describes feelings people have in interpersonal relationships and Element S measures one's self-concept (Schutz, 1984; 1992). Element B is a self-report questionnaire that can be given with relatively few instructions and takes approximately 15 minutes to complete. This instrument asks individuals to report how they act in interpersonal contexts (Do), what behaviors they receive from others (Get), what behaviors they see in their relationships (See), and what behaviors they want from others (Want) in the three interpersonal dimensions (inclusion, control, and openness). Thus, each person receives a total of 12 scores (three Do, three Get, three See, and three Want) based on a 0-9 numerical scale. Any discrepancy between See and Want scores can measure dissatisfactions individuals might have with their interpersonal relationships.

As these three interpersonal dimensions are addressed in relationships, the measure of compatibility is the degree of mutual satisfaction parties have in regards to inclusion, control, and openness (Schutz, 1958, 1966). Schutz (1958) discussed compatibility in regards to reciprocal, originator, interchange, and need aspects. In reciprocal compatibility, the expressed and wanted behavior of one person complements the expressed and wanted behaviors of the other person. Originator compatibility refers to who initiates and who receives the behavior. Interchange compatibility is how much inclusion, control, and affection is expressed in a relationship. Need compatibility refers to personal needs or problems in the interpersonal areas and whether these needs are met in a relationship. If any of these aspects of compatibility are not met, conflict can ensue between one's expectations of an ideal relationship and the reality of that relationship.

Schutz (1958) also discussed how different situations or relationships require compatibility at different levels in regards to inclusion, control, and affection. Some areas may be more imperative for compatible relationships than in other contexts. The FIRO-B was created to predict interpersonal compatibility and Schutz claimed that it was successful in doing so (Schutz, 1992). However, other researchers expressed concern with its ability to predict compatibility or the accuracy of the compatibility formula (Copeland, 1980; Frandsen & Rosenfeld, 1973). Less emphasis is placed on measuring compatibility in Element B. Rather, it looks at the difference between the behaviors one uses in relationships (Do) and the behaviors one receives from others (Get) as well as the behaviors one perceives to be occurring in relationships (See) and the behaviors one desires in relationships (Want) (Schutz, 1984, 1992).

Schutz (1958, 1966, 1984) also looked at group development in light of the interpersonal wants of inclusion, control, and openness. Generally, groups go through the stages of inclusion, control, and openness respectively. However, cycles of the stages repeat as groups include new members or new goals. While all phases may be present at one time, one phase can be predominant at a particular time. In the inclusion phase, people are concerned about where they fit in a group and they learn about each other. In the control phase, issues of decision making and power are addressed. Conflicts can occur in this phase if people feel they do not have enough or have too much influence or responsibility. The openness phase is when people feel a part of the group and delineate power. In this phase, people consider how close they want to be to others and how open they want to be in sharing personal feelings or desires. As groups terminate, they typically go through these stages in reverse, from openness to control to inclusion.

Research on Schutz's (1958, 1966) interpersonal theory and FIRO-B questionnaire present mixed results (Dancer & Woods, 2006; Frandsen & Rosenfeld, 1973; Furnham, 1990, 1996, 2008; Gluck, 1979, Hurley, 1990; Mahoney & Stasson, 2005; Salminen, 1988). Criticisms center primarily on the weak construct validity of the FIRO-B questionnaire because of the overlap of the three interpersonal constructs, particularly inclusion and affection (Dancer & Woods, 2006; Furnham, 1996; Hurley, 1990; Mahoney & Stasson, 2005; Salminen, 1988). Additionally, reviewers critiqued the ability of the instrument to measure interpersonal behaviors based on intrapersonal methods (Hurley, 1990). The use of a self-report instrument should always be interpreted with some caution as participants can score items based on the score they hope to achieve (Furnham, 1990; Salminen, 1988). However, other researchers indicated the instrument holds good construct validity (Gluck, 1979) and provides a unique perspective on interpersonal behaviors that no other instruments have replicated (Furnham, 2008).

Schutz (1992) addressed these criticisms in revisions of the theory and the instrument by changing the interpersonal dimension from affection to openness. This dimension proved to have less overlap with inclusion than affection did, thus improving Element B's construct validity over FIRO-B. Additionally, the widespread use of the instrument indicates the usefulness of the scores in understanding interpersonal behaviors. Even with mixed opinions and research results, current studies continue to use FIRO-B (Ahmetoglu, Chamorro-Premuzic, & Furnham, 2010; Bertolini, Borgia, & Siegel, 2010; Farley, Timme, & Hart, 2010; Panwar, Manas, Paul, & Ramachandran, 2010; Sayeed, 2010; Siegel & Schultz, 2011). These studies have covered a wide field of research, including leadership capability (Ahmetoglu et al., 2010), leadership styles

(Sayeed, 2010), interpersonal needs of people working in isolated areas for prolonged periods of time (Panwar et al., 2010), perceptions of women who gossip in workplace settings (Farley et al., 2010), and interpersonal preferences of internal auditors and tax professionals (Bertolini et al., 2010; Siegel & Schultz, 2011). While this theory and instrument may not be a perfect representation of interpersonal behaviors, it provides a piece to understanding the process of developing interpersonal relationships and the compatibility of individuals.

Application of Theories

These two theories address different aspects that informed the research on collaboration between general education and special education teachers in co-teaching relationships. Tuckman's (1965; Tuckman & Jensen, 1977) model of stages of group development is informative for the process by which groups are initiated, handle differences, and resolve them for the achievement of group goals. In a co-teaching relationship, teachers will encounter differences in their personalities and perspectives that might cause conflict (storming stage). According to Tuckman's (1965; Tuckman & Jensen, 1977) model, teachers would need to develop norms that would outline their expectations for their relationship and delineate their roles within the classroom (norming stage). Once the norms for interactions and roles within the classroom are established, teachers can move to the performing stage.

Schutz's (1958, 1966, 1992) interpersonal behavior theory provides the perspective on interpersonal wants researchers indicated is a necessary part of understanding group progression (Runkel et al., 1971). Schutz's (1958, 1966, 1992) theory of interpersonal wants for inclusion, control, and openness explains how teachers'

interpersonal wants affect the development and outcome of their co-teaching relationship. Every teacher desires to feel that he or she is a significant member of the partnership (inclusion) and that the other person is also committed to their co-teaching relationship. Additionally, the aspect of control provides an explanation of the desire teachers have to be involved in decision-making and instruction. The balance of how much control every teacher has needs to be mutually satisfying, or conflict will arise in the co-teaching relationship. The area of openness reflects how much confidence teachers would like to have in each other in respect to sharing personal thoughts and feelings. Kohler-Evans (2006) compared a co-teaching partnership to a marriage, because teachers have to learn to work together in a shared setting. Thus, co-teachers often share their feelings, thoughts, and goals with each other in a companionable friendship.

Blending parts of Tuckman's theory (1965; Tuckman & Jensen, 1977) and Schutz's theory (1958, 1966, 1992) provides a perspective for collecting data about how co-teachers overcome problems inherent in collaboration between special education and general education. Tuckman's (1965; Tuckman & Jensen, 1977) model explains the sequence of group development and Schutz's (1958, 1966, 1992) theory considers the interpersonal wants to address in a co-teaching partnership. However, neither of these theories explains the process by which co-teachers overcome problems in collaboration. Therefore, a grounded theory model helps explain this process and enlightens co-teachers on how they can successfully overcome problems in co-teaching relationships. Additionally, a review of the literature provides a basis for understanding collaboration and co-teaching in the classroom, the historical context of co-teaching, as well as current research on these relationships.

Definitions of Collaboration & Co-Teaching

Collaboration can take on many different implications and meanings in professionals' perceptions. It is a term frequently used in educational circles and commonly accepted as a necessary component of effective working relationships (Dufour, 2004; Friend & Cook, 2010; Murawski & Hughes, 2009). However, there are very few clear definitions in the literature and this can lead to confusion of what a study hopes to accomplish (Connolly & James, 2006; GAngieda, 2004). This study will use the following definition of collaboration as stated by Friend and Cook (2010): “Interpersonal *collaboration* is 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. 7). This definition of collaboration emphasizes the point that all members must be considered equal in order for collaboration to be effective.

One application of collaboration is co-teaching (Murawski & Hughes, 2009). When teachers teach together in the same classroom, collaborative skills are necessary for planning, implementing, and assessing instruction. Special educators often support students with disabilities in the general education setting. For the purposes of this study, co-teaching will be defined as a style of interaction between a general education and special education teacher who are engaged in shared decision making for attaining the common goal of instructing students with and without disabilities.

Other terms often get confused when defining collaboration and co-teaching, including inclusion and integration (Cook & Friend, 2010). Inclusion is a philosophy that recognizes all individuals as members of the school community and the broader community. Integration refers to grouping practices of students, including blending

special education and general education services. However, Cook and Friend (2010) emphasized collaboration is a style professionals can choose to use when they are working with others that highlights shared goals, responsibilities, and respect for one another. Therefore, co-teaching is one application of a collaborative style.

Historical Context of Special Education & Inclusion

In order to fully understand the current context of special education and why collaboration occurs, it is necessary to have an understanding of the history of special education (Mostert & Crockett, 2000). To make progress in improving the education of students with disabilities, decisions about whether a practice will be effective should be based on evidence from past practices. Collaboration and co-teaching have evolved over a long and complicated journey of meeting the needs of students with disabilities (Friend & Cook, 2010; Winzer, 1998). Alexander Graham Bell was the first person to use the term “special education” in 1884 at a National Education Association meeting, when he referred to an organization for educating people who were deaf, blind, or had intellectual disabilities (Winzer, 1998). The care for people with disabilities and the progression of special education services has generally followed the pattern of meeting the needs of people who were deaf first, those who were blind second, and those with intellectual disabilities last. The perceptions of society, across the centuries, towards people with disabilities have greatly influenced how children with disabilities have been treated and educated. This section presents the history of special education through the following four themes discussed by Margret Winzer (1993, 1998, 2009) on the history of special education: (a) isolation, (b) segregation, (c) integration, and (d) inclusion.

Isolation

Early society's perceptions of disability were spiritual in nature (Crissey, 1975; Winzer, 1993, 1998). People believed disabilities were either a cause of evil in a family's life or a divine gift. Therefore, society thought it was impossible to educate or medically intervene for those with disabilities. People with disabilities lived very difficult lives because they had no jobs to provide financially for themselves and they had limited interactions with other people. Indeed, the lack of medical care and societal concern made it hard for people with disabilities to survive. Few early laws considered protection for people with disabilities, such as the Hebraic law (Winzer, 1993). Instead, most placed limitations on people with disabilities, as in the Roman's Code of Justinian.

Leading figures in the Greek and Roman cultures categorized disabilities into insanity, deafness, and blindness (Winzer, 1993). Hippocrates and Galen, prominent physicians of the time, disputed superstitious views of disabilities and saw them as physiological in nature. In philosophy, Aristotle had the largest influence on society's views of disabilities. He believed one had to learn through the senses. Thus, if one had a limitation of a sense it would be impossible to learn.

As the fall of Rome created an unstable society and hard life for many, monks in monasteries created institutions to protect people with disabilities (Winzer, 1993). Although, this was the beginning of a Christian outreach to people with disabilities, early Christians sent inconsistent messages about spiritual equality. While they reached out in physical care for people with disabilities, they often denied them full church membership. The notion of disabilities being evil or divine still permeated society's thoughts and played a role in the witchcraft trials during the fifteenth century. People with disabilities

were also persecuted and killed during this time period, because society believed a possession of devils or evil spirits caused their disabilities.

The Renaissance period in the sixteenth century brought more humanistic perceptions towards people with disabilities (Winzer, 1993), but there were only marginal improvements. Institutions were not places of care as the hospices had been in monasteries, because they kept people with disabilities away from society's view to protect them from harming others. However, glimpses of hope could be seen as a few individuals attempted to educate people who were deaf, including Ponce de Leon in Spain (Winzer, 1993). In 1578, Ponce de Leon taught boys who were deaf so they would be able to inherit their families' estates. There were also some, although not widespread, attempts in England to educate people who were deaf. It would take the ideas presented in the Enlightenment period to change society's perceptions of disabilities and their care of people who had them.

Segregation

The Enlightenment period in the eighteenth century ushered in a belief in the goodness of mankind, versus a sinful nature (Winzer, 1993). John Locke's philosophies, published in 1690, had the most influence on changing public perception towards the education of people with disabilities (Crissey, 1975; Winzer, 1993, 1998). Locke disputed the idea that knowledge is innate and proposed that people should be educated in a nurturing environment. This was the beginning of a long controversy over nature versus nurture (Crissey, 1975; Moore, 2006; Peebles-Wilkens, 2007, Winzer, 2009). Those who held the nature position saw intelligence as fixed and unchangeable, while the nurture viewpoint saw intelligence being ameliorated by a stimulating and caring

environment. Society began to see people with disabilities as educable and established institutions for different types of disabilities that were more caring than ones in previous centuries.

Success in the early education of people who were deaf and blind initiated interest in educating people with intellectual disabilities (Winzer, 1993). One notable case was Jean Marc Gaspard Itard's endeavor in 1800 to educate a wild boy, Victor of Aveyron (Crissey, 1975; Kanner, 1960; Winzer, 1993). Although others had determined Victor was uneducable, Itard believed he was a case of neglect that could be rectified by providing him a nurturing and stimulating environment. While Itard was unable to achieve all his academic goals for Victor, he still "proved that even a severe mental defective could be improved to some extent by appropriate training" (Kanner, 1960, p. 4). However, the continued connection of intellectual disabilities to insanity by the public made the pursuit of medical treatment primary to their education (Winzer, 1993). While the movement that initiated this was philosophical, it ended with more practical applications. People established institutions with the main goal of managing disabilities.

In the nineteenth century, institutions grew as society took initiative to provide people with disabilities appropriate care (Crissey, 1975; Winzer, 1993). Three themes emerged in this century: "protection, separation, and dependence" (Winzer, 1993, p. 79). Particularly in America, evangelical ideals and philanthropy embodied a spirit of concern and care for people with disabilities to protect themselves from the harshness of life. Nevertheless, institutions provided a very segregated method of care with the belief the problem rested in the individual, not the system. People believed that those with disabilities were dependent on the care of others and institutions perpetuated this thought.

As philanthropists tired of the work in institutions, they became an established part of the state's social-welfare system.

Institutions remained an important, although separate, part of the public school movement. The Common School Movement promoted by Horace Mann provided free education to children (Winzer, 1993). However, the common schools found it difficult to meet the needs of all students, particularly those with exceptionalities (Winzer, 2009). People thought children with disabilities were too different to educate in the public schools and needed special care that could only be provided in separate institutions (Winzer, 1993). Even if students with disabilities were educated in the common schools, they were placed in segregated classes to help teachers maintain order (Winzer, 2009). Education progressed with the general trend from deaf, to blind, to those with intellectual disabilities. Education of children with emotional or behavior disabilities promoted the correction of morals and values, rather than an academic focus alone.

Several pioneers, noted for their efforts in educating those with disabilities in the United States, include Thomas Hopkins Gallaudet, Samuel Gridley Howe, and Dorothea Lynde Dix (Kanner, 1960; Winzer, 1993). Gallaudet is known to special education, particularly education of the deaf, as Horace Mann is to the Common School Movement (Winzer, 1993). Gallaudet formed and promoted education for the deaf and, later, for other disabilities as well. Samuel Gridley Howe was the superintendent of the first national school for children who were blind in the United States and promoted education of the blind with his philanthropic spirit. Howe also championed educating people with intellectual disabilities by starting public schools for them (Crissey, 1975; Kanner, 1960; Winzer, 1993). He advocated for state support for the schooling of children with

intellectual disabilities and “was able to convince his contemporaries that the training and education of the feeble-minded was a public responsibility” (Kanner, 1960, p. 7).

Dorothea Lynde Dix helped to change public perceptions of people with disabilities and exposed cruelties inflicted on them in prisons and asylums (Van Drenth, 2005; Winzer, 1993). She also spoke to state legislatures in Illinois about the state’s responsibility to care for people with disabilities.

Unfortunately, the care of people with intellectual disabilities was still more custodial than educational (Winzer, 1993). Institutions perpetuated the belief that people with disabilities were distinctly different than others and segregation was advantageous to their educational success (Crissey, 1975; Stainback, 2000; Van Drenth, 2005; Winzer, 1993). The curriculum was clearly separate and different than the public school curriculum (Winzer, 1993, 2009). Trade teaching was seen as a necessary way to promote independence in these children as they grew into adulthood. The pupils learned trades that also helped provide financial revenue for institutions (Crissey, 1975; Winzer, 1993, 2009). Therefore, literacy instruction was not initially promoted.

As the institutions received more governmental support, the training became more literacy focused for deaf and blind students (Winzer, 1993, 2009). However, the curriculum for those with intellectual disabilities remained functional and trade focused. Though, many parents could not afford the board and tuition costs to send their children to institutions, regardless if they were more educational than residential. Reformers sought to provide free education for students with disabilities by persuading state legislatures to appropriate funds and pass compulsory attendance laws. Much work still remained in improving the education of people with disabilities.

This need for further improvement was also evidenced in the regression of care for people with disabilities that emerged during the late nineteenth and early twentieth centuries, as new scientific thoughts of Social Darwinism and eugenics took hold (Crissey, 1975; Paul, French, & Cranston-Gingras, 2001; Winzer, 1993, 2009). Social Darwinism promoted the idea that abilities were innate and inherited (Winzer, 1993, 2009). This marked a return to the belief that intelligence was from nature, rather than nurture (Crissey, 1975; Moore, 2006; Peebles-Wilkens, 2007; Winzer, 1993, 2009). The nurture viewpoint of the Enlightenment period saw intelligence as changing and education making a positive difference (Crissey, 1975; Peebles-Wilkens, 2007; Winzer, 2009). However, the nature viewpoint saw intelligence as fixed, with treatment and intervention having no effect. Thus, education to improve and ameliorate disabilities would have limited results (Crissey, 1975; Paul et al., 2001; Winzer 1993, 2009). Winzer (2009) stated “because human development and competence was seen as not malleable but predetermined and inevitable – the result of a biological master plan – education for exceptional children could, at best, only ameliorate or contain the unfortunate conditions that frustrated development” (p. 90). Also, eugenics became politically and publically more acceptable as a means to prevent the spread of disabilities in society (Winzer, 1993, 2009). Unfortunately, even leaders within the special education field promoted eugenics, including Samuel Gridley Howe in blind education and Alexander Graham Bell in deaf education. Both leaders believed people with disabilities should not be allowed to procreate to limit the increase of people with disabilities.

Society feared the increase of intellectual disabilities, or feeble-mindedness, as it was called at that time (Winzer, 1993, 2009). The reported increase in intellectual

disabilities was most likely due to many factors, including the overuse of IQ tests based on norms of the white middle class, compulsory attendance laws requiring more children to attend school who had previously been unnoticed, and the blending of many cultures and languages with increased immigration. The IQ tests, although originally designed to help individual children, became a mass instrument to segregate and control people with disabilities (Crissey, 1975; Van Drenth, 2005; Winzer, 1993, 2009). The IQ tests were misused and often poorly administered, resulting in an undue number of children being labeled as mentally retarded. The IQ test was used to continue the eugenics movement of ridding society from the fear of feeble-mindedness. Those who scored lower on the IQ tests were placed in specialized, separate classes within public schools in order to prevent the spread of intellectual disability in future generations of the American population.

Integration

Separate classes for students with disabilities grew even as efforts were made to integrate students with disabilities into public schools (Winzer, 1993, 2009). As states passed compulsory attendance laws, school districts were forced to serve students they previously expelled. They solved this problem by creating special schools or segregated classes within public schools for students with disabilities. Funding from state and local governments slowly increased in meeting the higher costs of special education. The training and professionalism of special education teachers also became higher priorities, as the need for these teachers increased. More college classes were offered for instructing students with special needs. Additionally, educators started professional organizations for teachers of students with disabilities, including the International Council for Exceptional Children in 1922.

As more students were identified to have learning difficulties, new labels emerged to categorize and address different types of disabilities (Winzer, 1993, 2009). While these labels became more positive (e.g., deaf replaced deaf and dumb), the labels also carried the message that students with disabilities needed specialized instruction in separate classes in public schools. The growth of labels also promoted an increase in identification of more students with disabilities, thus increasing the number of students in special education classes. In particular, the category for learning disabilities was formed, which is the largest category in special education today. Once children with learning disabilities were identified separately from those with intellectual disabilities, special education teachers developed instructional methods that attended to those students' difficulties in learning, including multi-sensory techniques.

Special education flourished in the 1920's as people saw it as a positive way to educate students with disabilities (Winzer, 1993, 2009). The first national recognition of special education was the 1930 White House Conference on Child Health and Protection, in which reports were given on special education and recommendations for its future. However, public perception continued to support segregated classes as a way to keep students with disabilities from hindering the learning of other students in the public schools. The segregation of special classes also kept special educators and regular educators from interacting with each other. Both groups thought the other taught in different ways than they did in their own classrooms. Additionally, these segregated classes engendered a growing stigmatization from other pupils. This early separation became a division that educators are still trying to overcome today (Dufour, 2004; Englert & Tarrant, 1995; Friend & Cook, 2010; Johnson & Pugach, 1996; Robinson &

Buly, 2007; Timmons, 2006).

Still, many children with disabilities did not attend public schools, even through the early twentieth century (LaNear & Frattura, 2007; Winzer, 1993, 2009; Yell et al., 1998). Although all states had compulsory attendance laws, children with disabilities were still excluded from public schools. State supreme court cases from 1893, to as late as 1969, upheld exclusion of students with disabilities from public schools in cases where students' needs were difficult to attend to in public school classrooms. In the 1940's, parents formed organizations to lobby for legislation that allowed (permissive) or required (mandatory) school districts to educate children with disabilities. Family members and caring professionals advocated for these individuals to change public perception and improve the care of people with disabilities (Crissey, 1975; Paul et al., 2001). After World War II, the care and treatment of people with disabilities improved in medicine, education, and technology (Winzer, 1993). Public perceptions about the capabilities of people with disabilities improved, thus increasing the influence parental groups had on legislation. Nevertheless, it took the Civil Rights movement in the 1960's to really transform the field of special education.

The Civil Rights movement paved the way for rights for students with disabilities (Crissey, 1975; Stainback, 2000; Winzer, 1993, 2009; Yell et al., 1998). In particular, the *Brown v. Board of Education of Topeka* (1954) case brought parents the opportunity to seek rights for their children with disabilities. This case set the legal precedent that segregation in dual systems was not fair and education is "a right that must be available to all on equal terms" (McLaughlin & Henderson, 2000, p. 42). Within this context, the concept of normalization was promoted to push for rights for the disabled (Winzer, 2009;

Wolfensberger, 1970, 1983; Wolfensberger & Tullman, 1982). Winzer (2009) defined normalization as “the belief that all individuals who are exceptional, no matter what the level and type of disability, should be provided with a living environment and education as close to normal as possible” (p. 107). Wolfensberger (1970, 1983) stated normalization should minimize the differences amongst people and provide maximum integration in both physical placement and social interactions. These ideals were furthered by the work of advocates for people with disabilities.

An advocate for people with disabilities, particularly intellectual disabilities, was found in Gunnar Dybwad (Pace, 2001). He believed society must respect and extend rights to every individual, including those with disabilities. In an address to the National Association for Retarded Children in 1962, Dybwad (1962) stated the equality of human beings “is an idea which is deeply inherent in the Christian philosophy and is reflected in the Declaration of Independence which is a most basic document in the development of American democracy” (p. 3). Dybwad was influential in lawsuits that sought civil rights for people with disabilities, including *Pennsylvania Association for Retarded Citizens (PARC) v. Commonwealth of Pennsylvania* (1972) (Pace, 2001). This case, as well as *Mills v. Board of Education of the District of Columbia* (1972), were landmark federal cases in the litigation process towards integration of students with disabilities into public schools (LaNear & Frattura, 2007; McLaughlin & Henderson, 2000; Winzer, 2009; Yell et al., 1998). These two cases made exclusion of students based on their abilities illegal. The *PARC* (1972) case resolved the state must provide an education for children with intellectual disabilities from 6 to 21 years of age similar to the education provided to those without disabilities. The *Mills* (1972) case stated that the District of Columbia

school board must provide a public education to all children with disabilities and established due process for families. These landmark cases sparked other cases in various states and subsequent state legislation allowing access to a free, appropriate education.

In response to these landmark federal cases, states started to pass laws in the late 1960's and early 1970's (Yell et al., 1998). Parents and advocates used both litigation and state laws to advocate for federal laws (Gartner & Lipsky, 1987; Stainback, 2000; Yell et al., 1998). Early federal legislation for children with disabilities included Section 504 of the Rehabilitation Act of 1973 and its amendment in 1974. Section 504 (1973) mandated discrimination of people with disabilities to be illegal in federally funded programs, including schools. However, Section 504 (1973) and its amendment (1974) were not enforceable due to lack of funding from the federal government. Additionally, state laws were inconsistent in regards to how students with disabilities were included in their public schools. Parents formed advocacy groups that lobbied for a federal law to make a free education available to all children with disabilities and their efforts produced the Education for All Handicapped Children Act (EACHA, Public Law 94-142) in 1975 now known as the Individuals with Disabilities Act (IDEA) (Boyer, 1979; Gartner & Lipsky, 1987; Kavale & Forness, 2000; LaNear & Frattura, 2007; McLaughlin & Henderson, 2000; Mostert & Crockett, 2000; Murphy, 1996; Winzer, 1993, 2009; Yell et al., 1998). This was the first federal law mandating appropriate education for children with disabilities. It provided the necessary funding to enforce all children received a public education. Children with disabilities were to be educated with public money, rather than parents bearing the financial burden of private tuition or institutional fees. PL

94-142 (1975) established guidelines for referral, evaluation, and placement decisions for special education. Schools were required to write an IEP that provided systematic instruction to meet each student's learning needs and monitor his or her progress towards established learning goals. This law also created the right of parent involvement in making decisions about their children's education and established due process for disagreements between families and schools.

While PL 94-142 (1975) was successful in getting access to public schooling for all children, separate systems for special and general education strengthened after this law (Gartner & Lipsky, 1987). PL 94-142 (1975) required students with disabilities receive an appropriate education in the LRE on a continuum of services. Included on this continuum of services were mainstreaming and normalization, in which students were included in the general education classroom as much as was feasible (Gartner & Lipsky, 1987; Kavale & Forness, 2000; LaNear & Frattura, 2007; McLaughlin & Henderson, 2000; Winzer, 2009; Wolfensberger, 1970; Wolfensberger & Tullman, 1982; Yell et al., 1998). However, on the continuum of services to meet students' needs, the resource model became the norm. Although the integration of students with disabilities into the public schools was accomplished, students with disabilities were often still separated into special classes within their schools. Differences were still evident in the education they received and their interactions with other students (Thomazet, 2009). Students with disabilities were often integrated socially outside of the classroom during lunch and recess, but not inside classrooms.

Inclusion

It was this separation, and the stigmatization students experienced because of it,

that prompted parents and educators to seek more inclusive practices in the 1980's (Gartner & Lipsky, 1987; Stainback & Stainback, 1984). They claimed the dual system of special education and general education, strengthened by PL 94-142 (1975), looked at whether the child fit the system, rather than making the system fit the child (Gartner & Lipsky, 1987). This move to include students with disabilities in general education settings became known as the Regular Education Initiative (REI) (Kavale & Forness, 2000; Murphy, 1996; Zigmond et al., 2009). Proponents of REI claimed general education and special education should be integrated for the following two reasons: (a) there was no need for a dual system to meet students' needs and (b) to improve efficiency (Gartner & Lipsky, 1987; Stainback & Stainback, 1984; Wang & Walberg, 1988; Winzer, 2009). They claimed there was no evidence to support success of a separate educational system for students with disabilities and few students ever exited special education. Proponents of REI believed the students' needs in general education and special education were not that different, rather they were on a continuum of intellectual, physical, and psychological ability. The following quote by Stainback and Stainback (1984) illustrates the proponents' view of differences being on a continuum that should be served in the general education setting:

The issue is not whether there are differences among students. There obviously are differences, even extreme differences. It is also clear that because of these differences some students may need adaptations or modifications in their educational differences. However, this should not be used as a justification to label, segregate, or maintain a dual system of education. With careful planning, it should be possible to meet the unique

needs of *all* students within one unified system of education – a system that does not deny differences, but rather a system that recognizes and accommodates for differences (p. 109).

REI supporters stated that there was not a group of students who needed individualized instruction (Stainback & Stainback, 1984; Wang & Walberg, 1988). Rather, all students needed differentiated instruction. Good instructional practices would benefit all students, not just those with disabilities. They also claimed that isolation of special education and general education teachers within a dual system hindered their cooperation. REI advocates believed integrating all services within one, unified system would be a more efficient use of resources and expertise. They advocated for a shared responsibility for all students, so that help was given when it was needed instead of waiting for students to fail in order to qualify for additional academic support.

While the ideals and philosophies behind REI was a step towards inclusion of students with disabilities within general education settings, REI failed to garner sufficient support to move it forward (Kavale & Forness, 2000). Opponents of REI believed the all or nothing approach to inclusion was not in the best interests of all students (Mostert, 1991; Kauffman, 1989; Winzer, 2009). They stated REI advocates denied that some children are different and their special needs may require specialized instruction outside of the classroom. Opponents stated REI was proposed as a moral obligation rather than a practical solution (Mostert, 1991; Kauffman, 1989; Winzer, 2000, 2009). Advocates for REI did not accept viewpoints of inclusion along a continuum, because they saw inclusion as a moral duty. Additionally, opponents of REI criticized the connection of inclusion to the Civil Rights movement because disabilities cannot be removed like

prejudice can be removed. Rather, as the following quote by Kauffman (1989) illustrates, opponents of REI believed disabilities affect people's abilities and futures, unlike skin color, because they need accommodations throughout their lives:

Separate education may indeed be inherently unequal when separateness is determined by a factor irrelevant to teaching and learning (e.g., skin color), but separateness may be required for equality of opportunity when separation is based on criteria directly related to teaching and learning (p. 262).

Opponents of REI also stated the assumption that all needs could be met within a general education setting was impossible (Mostert, 1991; Kauffman, 1989; Winzer, 2000, 2009). They believed it is not just a matter of changing instructional practices within a general education setting, but that severe disabilities can only be accommodated so much. Ignoring these differences would deny children of appropriate accommodations and likely reduce available services for students with disabilities. Opponents stated that making general education special for all ignored the fact that general education had not been able to meet the needs of all students in the past. Concern should be taken to give students with disabilities the most effective education possible while considering the place where instruction occurs to be a lesser concern.

Overall, REI was a special education initiative that had strong opinions on both sides of the issue (Kavale & Forness, 2000). It failed to garner enough support from general education, and even special education teachers, because it lacked research evidence and details for how it would be accomplished (Fuchs & Fuchs, 1993; Kavale & Forness, 2000; Winzer, 2009). The use of research evidence by proponents to support

their position for the lack of progress in special education was questionable and, in reality, REI did not change general education substantially. Collaboration between special education and general education needed to be initiated from both sides to be successful.

However, the philosophies of REI have not dissolved completely within the educational system (Thomazet, 2009; Winzer, 2009). Inclusion is still being promoted by legislation and mandated by litigation. Courts have generally upheld including students with disabilities in general education classrooms (McLaughlin & Henderson, 2000; Murphy, 1996; Yell, Ryan, Rozalski, & Katsiyannis, 2009). *Daniel R.R. v. State Board of Education* (1989) determined students should receive maximum inclusion where it provided educational benefit and schools had to make sufficient accommodations (Murphy, 1996). Schools had to make every attempt to provide inclusion as much as possible. Another prominent case was *Sacramento City Unified School District v. Rachel Holland* (1994) in which the court used a four-prong test to determine if Rachel, who had an intellectual disability, should be included full time in a general education classroom (McLaughlin & Henderson, 2000). The court looked at: (a) academic benefits for Rachel in the general education setting, (b) nonacademic benefits for Rachel in the general education setting, (c) negative effects for peers if Rachel was included in the general education setting, and (d) the cost of including Rachel in the general education setting with appropriate supports. The court ruled in favor of fully including Rachel in the general education setting with appropriate supports.

Revisions in the reauthorizations of IDEA (1990, 1997, 2004) have only strengthened the concept of inclusion through the LRE (Cronis & Ellis, 2000; LaNear &

Frattura, 2007; McLaughlin & Henderson, 2000; Murphy, 1996; Sailor & Roger, 2005; Winzer, 2009; Yell et al., 1998; Zigmond et al., 2009). IDEA (1990) promoted people first language with renaming EACHA (1975) to Individuals with Disabilities Education Act and allowed funding to be used for special education services in a general education setting to encourage more inclusive practices (LaNear & Frattura, 2007; Winzer, 2009; Yell et al., 1998). Alternate assessments could be used for students with more severe disabilities and these changes encouraged more collaboration amongst teachers to provide both LRE and meet accountability requirements (McLaughlin & Henderson, 2000). IDEA (1997) promoted LRE by stating students with disabilities should be educated with their peers who were not disabled and only pulled out of the general education setting when needed (Cronis & Ellis, 2000; Murphy, 1996). LRE does not mandate inclusion for all; rather, it supports inclusion based on whether it is appropriate for each student. Additionally, inclusion was supported in IDEA (1997) through requiring students with disabilities to participate in state and district assessments with appropriate adaptations and accommodations (Yell et al., 1998; Zigmond et al., 2009). IDEA (2004) provided more access to students with disabilities to the general education curriculum and reinforced district and assessment requirements from NCLB (2002) (LaNear & Frattura, 2007; Zigmond et al., 2009). The accountability measures of NCLB (2002) also promoted integration by including all children in assessments (Bowen & Rude, 2006; LaNear & Frattura, 2007; Sailor & Roger, 2005; Winzer, 2009; Zigmond et al., 2009). Students with disabilities are reported as a subgroup in disaggregated data, which holds schools and districts accountable for these students' yearly progress.

The consideration of inclusion has involved parents' perspectives as they either

see the benefits or are concerned about their child's progress in a general education setting (Brucker, 1994; Carr, 1993, 1995; Myles & Simpson, 1990; Taylor, 1994). Some parents advocate for full inclusion, because they see their student's needs being met in a general education setting with their peers (Brucker, 1994). They believe separate special education classes have not worked and full inclusion offers a system that could work for everyone. However, other parents expressed concern that their child's needs cannot be fully met in the general education setting and that they need specialized, individualized instruction offered in a resource room setting (Carr 1993, 1995). They state it is impossible for the general education teacher to meet all students' needs in the general education classroom and the LRE should be considered. Overall, parents agree to including their children in general education classrooms, if they believe appropriate accommodations are available to make it a successful learning experience for their children (Myles & Simpson, 1990).

While debate will continue over whether full inclusion is appropriate for all children, a balanced viewpoint looks at determining the benefits to each student based on appropriateness rather than access (Cronis & Ellis, 2000; Kavale & Forness, 2000; Murphy, 1996; Winzer, 2000, 2009; Zigmond et al., 2009). Regardless of the position one takes on the argument for or against full inclusion, inclusion needs to be looked at as a school-wide, rather than a classroom model (Sailor & Roger, 2005; Winzer, 2009). Inclusion is a way of doing practice, rather than a setting. Winzer (2009) purported that inclusion is about "the opportunities made available by the setting, not the setting itself" (p. 220). Team teaching offers a way to meet the needs of students with disabilities in a way that benefits all students and shares the accountability for all students amongst both

general and special education teachers.

Need for Collaboration

With the historical context of special education in mind, a review of the literature indicates why school districts, administrators, and teachers have looked at co-teaching as a means to fulfill current educational pressures in improving instruction and meeting accountability requirements of federal law (Bowen & Rude, 2006; Cooper-Duffy, Szedia, & Hyer, 2010; Van Garderen et al., 2009). Additionally, as the student population in the United States becomes more diverse, schools have looked at ways to meet these needs in a more efficient and responsive manner (Conderman & Johnston-Rodriguez, 2009; Murawski & Hughes, 2009; Pugach & Johnson, 1995). This section of the literature review focuses on the need for collaboration and specifically co-teaching in light of these reasons.

Improving Instruction

The historical isolation of teachers often had a negative impact on their professional development and the quality of instruction given to students (Dufour, 2004; Englert & Tarrant, 1995; Van Garderen et al., 2009; Wasburn-Moses & Frager, 2009). When teachers work in segregation from each other, they are unable to benefit from peer-modeling and mentoring. Teaching by one's self limits the amount of resources and ideas available to problem solve students' needs. Teachers often feel frustrated and inadequate when they are unable to meet the students' learning needs (Johnson & Pugach, 1996). In an isolationist model, services for students with disabilities are provided in self-contained settings. This contributes to the belief that accommodations and adaptations of instruction or curriculum are highly complicated and technical (Van

Garderen et al., 2009; Wasburn-Moses & Frager, 2009). Thus, general education teachers often feel as though they are unable to meet the learning needs of students with disabilities in the regular education classroom (Timmons, 2006). In fact, general education teachers often express the desire to collaborate with their special education colleagues in order to successfully meet students' learning needs. Therefore, one of the most important reasons for collaboration is to expand the repertoire of instructional knowledge and skills of general education teachers (Santoli et al., 2008). Improving the instruction provided to students with disabilities should be a primary goal of all schools (Timmons, 2006) in order to appropriately support these students in increasing their academic achievement (Scruggs et al., 2007). Improving instruction in general education classrooms can also prevent larger numbers of children from needing specialized services. Murawski and Hughes (2009) stated "the more teachers collaborate and share the strategies on which they have been trained in their respective fields, the more likely that students in the general education classroom will truly benefit from a strong research-based instruction" (p.271).

Required by Federal Law

In order for students with disabilities to meet the high standards of NCLB (2002) and mandated provisions of IDEA (2004), teachers are looking for more collaborative instructional methods. The mandates of NCLB (2002) and IDEA (2004) require that students with disabilities have access to the general education curriculum in the general education classroom as much as possible. This was to counteract the historical trend of lower expectations and requirements for students with disabilities. With IDEA (2004)'s mandate of inclusion in classrooms, collaborative teaching and planning is necessary for

the successful inclusion of students with disabilities in the general education classroom (Carter et al., 2009; Causton-Theoharis & Theoharis, 2009; Kritikos & Birnbaum, 2003; Paulsen, 2008; Sailor & Roger, 2005; Turnbull, 2005; Weiss & Lloyd, 2002). The idea of inclusion does not just mean a physical placement of students with disabilities in the general education classroom, but also their active involvement in the curriculum. It would be very difficult for a general education teacher to meet the needs of all learners within a general education classroom without appropriate support from special education teachers and other school resource staff (Tannock, 2009).

Additionally, it is proving to be difficult for special education teachers to meet LRE requirements and students' learning needs in a self-contained model (Carpenter & Dyal, 2006; Sayeski, 2009). Special educators are now being held accountable for content knowledge and this is difficult to achieve across many subjects, particularly at the secondary level. Co-teaching with general education teachers who are certified in specific content areas helps resolve this issue. Therefore, the move from services being provided in a self-contained model to more inclusive models requires the need for collaboration between general education and special education teachers (Arthaud et al., 2007).

Additionally, there are higher academic accountability requirements under both IDEA (2004) and NCLB (2002). NCLB (2002) requires that students with disabilities show academic progress and close the gap between their performance and their peers' performance on standardized assessments. Hawkins (2007) reported a longitudinal study of schools in Rhode Island that demonstrated schools receiving rankings of "low

performing” or “in need of improvement” all failed to demonstrate acceptable progress of the subgroup of students with IEPs.

While NCLB (2002) looks at group performances, IDEA (2004) considers the needs of individual students. IDEA was reauthorized in 2004 to align with NCLB (2002) requirements (Turnbull, 2005). In particular, IDEA (2004) mandated that students with disabilities participate in the same assessments as their peers. Students’ IEP teams must now decide how a student will participate in assessments, not whether they will participate (Yell et al., 2006). Although school administrators and teachers may have been able to ignore the performance of students with disabilities in the past, this option is no longer possible with current NCLB (2002) accountability standards and consequences that could be enacted for failure to meet performance requirements (Hardman & Dawson, 2008).

Increasing Student Need & School Reform

Other reasons cited in the literature for collaboration between general education and special education teachers include the increase in students at risk for academic failure, the increasing diversity of school-age children, and current school reform efforts (Friend, 2000; Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010; Gable, Mostert, & Tonelson, 2004; Pugach & Johnson, 1995). As the minority population in schools increases, there is an increased need for a variety of resources and expertise to meet these needs (Conderman & Johnston-Rodriguez, 2009). Additionally, the learning needs of students continue to rise as higher standards are established in schools. School reform efforts focus on higher standards for teacher excellence in accountability and achieving academic progress for all students (Carter et al., 2009). Many of these school reform

efforts look at shared problem-solving amongst teachers (Friend & Cook, 2010) with collaboration as a common theme (GAngieda & Koliba, 2007). One reform movement in particular is a proactive, rather than a reactive, approach to intervention. This reform movement has been called Response to Intervention (RTI) (Fuchs, Fuchs, & Compton, 2012; Murawski & Hughes, 2009). RTI focuses on providing support for students when they need it, rather than after there is a large enough discrepancy between their aptitude and their achievement. All of these factors point to the need for professional collaboration, including co-teaching, amongst general and special education teachers to meet the rigorous demands in education today.

Collaboration & Co-Teaching Models

There are many different models of collaboration in today's educational field and in the literature (Friend & Cook, 2010). These different models have derived from not only meeting federal legislation requirements, but also meeting students' needs. Collaboration is often divided into two general models, collaborative consultation and co-teaching (Austin, 2001; Idol, 2006; Iowa Department of Education, 2009; Vaughn, Hughes, Schumm, & Klinger, 1998).

Collaborative Consultation Model

In a collaborative consultation model, special education teachers support general education teachers by co-planning accommodations for students to be successful with the general education curriculum (Damore & Murray, 2009; Eisenman et al., 2011; Iowa Department of Education, 2009). Emphasis is placed on the general education teacher being the primary instructor in the general education classroom, while the special education teacher is not physically present during instruction (Idol, 2006; Iowa

Department of Education, 2009). Some students receive instruction in a self-contained model if the parents and teachers feel specialized instruction is more beneficial outside of the regular education classroom. Although the consultee has more responsibility to implement interventions and strategies, both teachers are involved in the process of identifying and solving problems (Kritikos & Birnbaum, 2003). Eisenman et al. (2011) reported results of a case study of two secondary special education teachers who changed from a resource room model to a collaborative-consultation model and the shared responsibility they were able to create with classroom teachers across the school as they worked together to meet student needs within the general education setting. However, schools must ensure collaborative practices are indeed happening with the consultation model, rather than relying more heavily on the resource room model with little consultation occurring between classroom teachers and special education teachers. A correlational study conducted by Damore and Murray (2009) with 118 elementary school teachers at 20 schools in Chicago found consultation to be the most frequent type of collaboration occurring between special and general education teachers (21% in schools and 20% in classrooms). The researchers indicated teachers needed resources to construct more effective collaborative practices.

Co-Teaching Model

The co-teaching model involves special education teachers teaming with the general education teacher in instruction within the general education classroom (Austin, 2001; Friend et al., 2010; Idol, 2006; Vaughn et al., 1998). Each teacher uses his or her special area of expertise in the classroom to benefit the learning of all students (Carpenter & Dyal, 2006; Kritikos & Birnbaum, 2003). The Iowa Department of Education (2009)

defined co-teaching as “two teachers physically present in heterogeneous classroom[s] with joint and equal responsibility for classroom instruction” (p. 2). Different forms of co-teaching exist, including team teaching, station teaching, parallel teaching, alternative teaching, one teach while one assists, and one teaching while one observes (Friend et al., 2010; Iowa Department of Education, 2009; Scruggs et al., 2007). Team teaching is defined as two teachers both teaching the same content at the same time. Station teaching is when both teachers teach small groups at the same time and students move from station to station. Parallel teaching means both teachers team at the same time in different formats, such as dividing the class into two groups, cooperative learning, or labs. In alternative teaching, one of the teachers instructs a large group and the other teacher instructs small groups. One teaching while one assists is defined as one teacher instructing while the other teacher supports students’ learning. One teaching while one observes is when one teacher teaches and the other teacher observes students to gather data about students’ learning. Choosing the best model for the lesson should be done during co-planning of lessons (Ploessl, Rock, Schoenfeld, & Blanks, 2010). Most importantly, teachers should consider the model that best meets students’ needs and teaches the content well. Which methods are most effective for co-teaching is an area that should be addressed in future research (Friend et al., 2010).

The most common form of co-teaching observed in schools is one teaching while one assists (Scruggs et al., 2007). This form of co-teaching is perhaps used the most often because special education teachers lack some knowledge of the specialized content in the general education curriculum. Also, because general education teachers frequently prefer a whole class instruction model, special education teachers are often limited in

taking more responsibility for instruction. Another reason the one teaches while one assists model is the predominant model is that when special education teachers enter general education teachers' classroom, the general education teachers sometimes feel as though the special education teachers are invading their space (Phillips & Sapona, 1995; Scruggs et al., 2007). It is hard to accept someone else taking control in one's space (Capizzi & Barton-Arwood, 2009). However, this is not the most ideal method to use as a primary approach (Iowa Department of Education, 2009) in order to maximize the expertise of each teacher for the benefit of students. Instead, "good co-teaching involves two teachers who are actively teaching and monitoring students" (Ploessl et al., 2010, p. 164). When both teachers are actively teaching, it is more possible to provide differentiated instruction to meet students' needs (Van Garderen & Whittaker, 2007).

Of the two main models of collaboration, co-teaching and collaborative consultation, neither is particularly better than the other (Kritikos & Birnbaum, 2003). While this study focused on the co-teaching model, each model can be done effectively when educators work together (Damore & Murray, 2009; Hang & Rabren, 2009; Scruggs et al., 2007). Both of these models can provide a way for students with disabilities to have their academic needs met in a LRE (Iowa Department of Education, 2009). Choosing a particular model should be done with the consideration of personalities and teaching styles of the teachers involved (Kritikos & Birnbaum, 2003). All participants should feel comfortable with the model in order for it to be successful.

Roles of Participants

To make collaboration successful for everyone, it is important that both the roles and needs of all participants are clear (Tannock, 2009). The traditional perspective of

separate roles for general education and special education teachers has changed (Carpenter & Dyal, 2006; Causton-Theoharis & Theoharis, 2009; Volonino & Zigmond, 2007) to teachers working together with colleagues. General education teachers no longer have the sole responsibility for teaching the curriculum. Similarly, special education teachers share the responsibility for the education of students without disabilities. In a qualitative survey done by Kritikos and Birnbaum (2003) of general education ($n = 16$) and special education ($n = 16$) teachers, most participants mentioned that the roles of both teachers should be to work as a team. However, only half of the teachers believed it was necessary for them to fulfill this role. Although the sample size was relatively small ($N = 32$), the study still portrays legitimate concerns about the effectiveness of collaboration when teachers do not believe their personal responsibility is to work with others as a team.

Roles of Special Education Teachers

While both members are to be equal partners in collaboration, the roles of each teacher will differ in order to most effectively use each individual's expertise. Special education teachers should lead the development of students' IEPs (Iowa Department of Education, 2009). This includes setting goals, designing instruction, setting accommodations or modifications for instruction and assessment, and progress monitoring students' work towards goals. In addition, special education teachers should also be responsible for providing instruction in strategies or skills that will support students in learning grade level material. Most importantly, in the area of collaboration, special education teachers should consult and partner with general education teachers to

meet students' needs, including both students with IEPs and any who are experiencing difficulties in school (Pugach & Johnson, 1995).

However, the ideal role of a special education teacher is viewed differently from the general education teacher's versus the special education teacher's perspectives (Murray, 2004; Naraian, 2010; Vannest & Hagan-Burke, 2010). In a qualitative multiple case study done by Murray (2004) in the 1999-2002 school years, the ideal perception general education teachers had of special education teachers' roles differed from the current level of support they were receiving. For the most part, general education teachers wanted a higher level of support. Through a professional development process, the general education teachers developed a better understanding of the practical roles special education teachers could play in collaborative partnerships. Although Murray's (2004) study did not address reliability of the findings, it was a preliminary study that offered a beginning understanding of how special education teachers' roles are viewed by their general education teacher colleagues.

Special education teachers often want to have a more equal role in collaborative relationships than they are typically granted by their general education partners (Murray, 2004; Naraian, 2010; Vannest & Hagan-Burke, 2010). Naraian (2010) conducted an ethnographic study of a special education teacher in a first-grade co-taught classroom. The classroom was composed of a 40:60 ratio of students with disabilities to students without disabilities, respectively. This partnership had taught together for four years. The results of this study indicated the special education teacher felt that she assumed more of an assistant role in the classroom and wanted to be on a more equal teaching status with the general education teacher.

Roles of General Education Teachers

General education teachers are also responsible for consulting and partnering with special education teachers to meet student needs (Iowa Department of Education, 2009). General education teachers are primarily responsible for ensuring students make progress with the grade level curriculum and choosing appropriate instructional strategies that will help students learn the content. Another responsibility of general education teachers is to use classroom assessment formatively to adjust instruction for students and summatively for grading purposes.

Co-Teaching Roles

Research on teachers' co-teaching roles in collaborative settings have explored both the perceptions of general education and special education teachers in collaborative partnerships, as well as observations of teachers' roles during co-teaching (Austin, 2001; Harbort et al., 2007; Naraian, 2010; Scruggs et al., 2007; Vannest & Hagan-Burke, 2010; Weiss & Lloyd, 2002). Harbort et al.'s (2007) case study observed two high school co-teaching teams to examine the roles and actions of each member. The researchers videotaped instruction within a three-week data collection period and analyzed the recordings for teachers' roles in co-teaching. Results of this study indicated that there was a significant difference between the amounts of time regular education teachers presented material to students (29.93%) versus special education teachers (< 1%). Overall, the co-teaching roles reflected a one-teach and one-assist model, with the general education teacher teaching and the special education teacher assisting.

Harbort et al.'s (2007) case study used a small sample ($N = 4$), but the findings regarding the roles of teachers in co-teaching dyads have been reported by other

researchers as well (Austin, 2001; Bessette, 2008; Bouck, 2007; Naraian, 2010; Scruggs et al., 2007; Vannest & Hagan-Burke, 2010; Weiss & Lloyd, 2002). Special education teachers generally take the role of an assistant while the general education teacher is the lead teacher. In a mixed method study, Austin (2001) reported survey results of 139 teachers' perceptions about co-teaching. The results showed both general education and special education teachers believed that the general education teacher did more of the instruction within the co-teaching classroom. Scruggs et al. (2007) reported, in a metasynthesis of qualitative research on co-teaching, that researchers found the predominant roles of co-teaching teams were one teach, while one assists. Most often, the special education teacher took the subordinate role of assisting while the general education teacher taught the curriculum. Vannest and Hagan-Burke (2010) confirmed this finding in their causal comparative study of teacher time use in special education. They studied 36 special education teachers in two school districts in central Texas. Additionally, Bessette (2008) found students report the special education teacher to be more of an instructional support rather than an instructional leader in co-taught classes. Bessette (2008) collected drawings from 40 middle school students in two middle schools and 45 elementary school students in six elementary schools of what their co-taught classes looked like during class time. The researcher then asked students to comment on what the students and teachers were doing in their drawings. Classroom and special education teachers reflected on these drawings with the researcher and confirmed the unequal roles general education and special education teachers had in co-teaching partnerships.

Placing the special education teacher in an assistant role greatly limits using the expertise of the special education teacher to benefit students' learning (Naraian, 2010; Scruggs et al., 2007; Vannest & Hagan-Burke, 2010). The ideal of true collaboration is for both teachers to have equal roles within a classroom in order to make substantive changes in classroom instruction. As Scruggs et al. (2007) concluded, "the co-teaching model of instruction is apparently being employed far less effectively than is possible" (p. 412). It would be more effective if teachers used other models of co-teaching, such as station teaching or team teaching. These models would allow for differentiation of instruction to meet students' learning needs within the inclusive, general education classroom. With proper training teachers are able to more effectively share instructional time and responsibilities during whole-group instruction (Bessette, 2008; Bouck, 2007; Boudah et al., 1997). Consideration of the types of professional development that effectively impacts teachers' roles in co-teaching would be a beneficial topic for future research. However, research in this area should be undertaken thoughtfully, as it is difficult to study co-teaching because instructional practice often differs from what is theoretically best practice (Volonino & Zigmond, 2007).

Benefits of Co-Teaching

There are benefits to all involved in the collaborative process (Brownell et al., 2006; Eisenman et al., 2011; Hang & Rabren, 2009; Murawski & Hughes, 2009; Santoli et al., 2008; Scheeler et al., 2010; Scruggs et al., 2007; Van Garderen et al., 2009; Wilson & Michaels, 2006). This section of the literature review focuses specifically on benefits for students and teachers from co-taught classes. Student benefits reported in the literature include both academic and social components (Eisenman et al., 2011; Estell et

al., 2009; Hang & Rabren, 2009; Jang, 2006; Scruggs et al., 2007; Wilson & Michaels, 2006). Teacher benefits generally focus on professional development for teachers (Brownell et al., 2006; Murawski & Hughes, 2009; Scheeler et al., 2010; Van Garderen et al., 2007).

Student Benefits

Although research findings present mixed results about the academic benefits for students from co-teaching (Boudah et al., 1997; Volonino & Zigmond, 2007), most research is positive for students' academic achievement (Causton-Theoharis & Theoharis, 2009; Eisenman et al., 2011; Hang & Rabren, 2009; Idol, 2006; Jang, 2006; Murawski & Swanson, 2001; Santoli et al., 2008; Wilson & Michaels, 2006). In a meta-analysis of co-teaching research, Murawski and Swanson (2001) reviewed 89 studies and chose 6 studies, based on stringent selection criteria, to include in the meta-analysis. To be included in the meta-analysis, a study had to include sufficient quantitative data to calculate effect sizes and utilize a co-teaching model of a general education and special education teacher in the same classroom during instruction. In these six studies, the average effect size of co-teaching on student academic and behavior performance was 0.40, suggesting co-teaching has a potential to positively impact students with disabilities. Other studies have continued this initial research on co-teaching and also found similar results (Eisenman et al., 2011; Hang & Rabren, 2009; Idol, 2006; Jang, 2006; Santoli et al., 2008; Wilson & Michaels, 2006). When students' IEP goals are embedded within the general education lessons, they tend to make greater academic gains than if the skills are taught in isolation (Cooper-Duffy et al., 2010; Hang & Rabren, 2009). In a quasi-experimental study conducted by Hang and Rabren (2009) of 58

students with disabilities across elementary, middle, and high school in one school district, participation in a co-taught classroom provided academic benefits for students with disabilities. Their rate of growth showed a statistically significant increase compared to the year before when they did not participate in a co-taught class. Additionally, students with disabilities grew at the same rate as their peers without disabilities, which is significant given the trend that students with disabilities tend to grow at a slower rate than their peers (Boudah et al., 1997; Hang & Rabren, 2009; Scruggs et al., 2007). The academic benefits for students with disabilities in a co-taught class can be attributed to the ability to meet a range of student needs within a collaborative team (Gable et al., 2004; Pugach & Johnson, 1995). Teacher-student ratios can be decreased to give students more attention, while classroom instruction and methodology can be diversified to meet student need (Capizzi & Barton-Arwood, 2009; Friend et al., 2010; Iowa Department of Education, 2009; Jang, 2006; Murawski & Hughes, 2009). Students reported that they appreciate the different teaching models in co-taught classes (Jang, 2006).

Students with disabilities also benefit from peer models in both academic and behavioral skills (Estell et al., 2009; Hang & Rabren, 2009; Hunt, Doering, Hirose-Hatae, Maier, & Goetz, 2001; Scruggs et al., 2007; Wolfensberger & Tullman, 1970). Research on friendships of students in more inclusive settings has demonstrated positive findings for students with disabilities (Estell et al., 2009). Students with disabilities form more friendships with their peers who do not have disabilities when they are in more inclusive settings, versus self-contained or resource room classes. Hunt et al. (2001) conducted a program evaluation of a collaborative teaming project in an elementary school. In this

model, students specifically benefited in increased academic skills, self-confidence in their abilities, improved social interactions with their peers, and showed pride in their accomplishments. Additionally, Hang and Rabren (2009) found teachers reported an improvement in student behavior in co-taught classes. Although researchers found an increase in behavior referrals from the previous year when co-teaching was not yet implemented, the increase may have been due to increased teacher monitoring within the classroom or the need for co-teachers to clarify their expectations for classroom behavior. Overall, when educators combine their talents and expertise, the instruction for students with disabilities can more effectively meet their needs and help them succeed (Tannock, 2009).

Students without disabilities also benefit from co-teaching because they improve in their cooperation skills (Eisenman et al., 2011; Scruggs et al., 2007). The literature cites social skill benefits for students without disabilities more often than academic benefits. Austin (2001) reported teachers believed students in inclusive classrooms grew in their level of tolerance for and acceptance of differences. Perhaps one reason for this increased cooperation is the opportunity co-taught teachers have to model collaboration skills for students (Gately, S.E. & Gately, 2001; Stevenson et al., 2005). Additionally, if the co-teachers are a mixed gender partnership, students can be shown how men and women can effectively communicate and collaborate. Students without disabilities also benefit from the lower teacher-student ratio and increased attention to improve their academic performance (Hang & Rabren, 2009; Jang, 2006; Scruggs et al., 2007). What benefits students with disabilities also often benefits students without disabilities. This is

reflected in a mixed methods study on student perceptions of co-teaching (Wilson & Michael, 2006).

Although some research has reported insignificant effects of co-teaching for students with disabilities (Boudah et al., 1997; Volonino & Zigmond, 2007), there has been no research to show co-teaching negatively affects students with disabilities. Wilson and Michael's (2006) mixed method study provided a strong case for co-teaching in their quantitative analysis of secondary students. They surveyed 216 general education and 127 special education students to determine if the students saw more benefits or drawbacks to co-teaching, as well as if there were significant differences between the two groups of students. They discovered both students in special education and general education had positive perceptions of co-teaching. They believed they were able to earn better grades in co-taught classes, learned better reading and writing skills, and received more teacher support. The researchers reported that students saw more benefits than drawbacks to co-teaching and would willingly participate in more co-taught classes in the future, if offered. Although this study only looked at student perceptions through surveys and did not evaluate the benefits for students with classroom observations, the research results clearly point to benefits for students in co-taught classrooms. Even if there were not actual academic benefits for students, the student perceptions of improved learning are still important to consider.

While most research on academic achievement focuses on co-teaching, there are some studies that look at broader collaborative efforts between general and special education teachers (Eisenman et al., 2011; Phillips & Sapona, 1995; Pugach & Johnson, 1995). In a quasi-experimental study examining a structured peer collaboration process,

the needs of more students were met within the classroom (Pugach & Johnson, 1995). Thus, the teachers referred fewer students for special education services by 50%. The teachers involved in the peer collaboration process reported a highly successful rate, 88%, for the interventions implemented in their classrooms in improving outcomes for students. Eisenman et al. (2011) also found that when teachers collaborate together in a collaborative consultation model, both students with and without IEPs benefit from additional support in the general education setting.

Teacher Benefits

Teachers benefit from the collaborative process (Dufour, 2004; Scruggs et al., 2007) by learning from colleagues' expertise (Brownell et al., 2006; Glazier, 2004; Hunt et al., 2001; Kohler-Evans, 2006; Kritikos & Birnbaum, 2003; Murawski & Hughes, 2009; Phillips & Sapona, 1995; Stevenson et al., 2005; Van Garderen et al., 2007; Wasburn-Moses & Frager, 2009). Dufour (2004), an acclaimed school reform speaker, proposed collaboration of teachers in professional learning communities as a successful way to reform instructional practice. Hunt et al.'s (2001) study of a school that regularly scheduled meetings to collaborate on meeting students' learning needs found that collaboration improved instruction. Teachers broadened their understanding of students' learning styles and increased their knowledge of instructional methods. They learned from each other's expertise and implemented strategies that they developed together. Austin (2001) also reported that teachers believed co-teaching aided their professional development. Specifically, the special education teachers increased in their content knowledge and the general education teachers increased in classroom management and curriculum adaptation skills.

A quasi-experimental study done on co-teaching used the one teach, while one observes model to improve instructional practice (Scheeler et al., 2010). This study paired general education and special education teachers in a general education classroom. The teachers were trained in a research-based instructional method, three-term contingency trials (TTC). TTC trials are when the teacher provides praise for correct answers or corrects errors. Teachers were also trained in using Bug-in-Ear technology (BIE) to provide immediate, corrective feedback to their co-teaching partner. Data was collected through videotapes of classroom instruction. Teaching partners switched roles during the lesson, so that both partners were instructors and coaches. The results showed using the BIE technology with immediate, corrective feedback improved teachers' completion of TTC trials. In addition, the teachers generalized the teaching behavior to instruction without their co-teaching partners. Although there were only six participants involved in this study, the results provide exploratory findings in understanding how professional development can occur during co-teaching. The study implied peer-coaching during co-teaching on specific, research-based teaching practices can improve instruction and teachers' professional knowledge. This study should be replicated in other settings to determine if similar results can be found.

Challenges in Co-Teaching

Co-teaching is not an easy process. Rather, it takes a lot of hard work and perseverance on the part of all participants to make it successful (Friend & Cook, 2010; Paulsen, 2008). Challenges to successful co-teaching are inevitable (Conderman, 2011; Cramer & Stivers, 2007), both those that are ongoing and those that arise in the course of classroom instruction (Gately, S.E. & Gately, 2001). Several themes resonate across the

research literature in the area of barriers to successful co-teaching, including insufficient time for planning, lack of administrative support, different teaching styles, interpersonal differences, and teacher attitudes.

Lack of Common Planning Time

It is hard to find the time in teachers' full schedules for common planning times (Austin, 2001; Bouck, 2007; Carter et al., 2009; Kritikos & Birnbaum, 2003; McDuffie et al., 2009; Magiera & Zigmond, 2005; Murray, 2004; Paulsen, 2008; Santoli et al., 2008; Van Garderen & Whittaker, 2007). Santoli et al. (2008) conducted a quantitative casual comparative study to determine if 56 middle school teachers, assistants, and administrators' beliefs about inclusion correlated to their experiences with inclusion. They found that time was the predominant area of concern for respondents involved in inclusion. These teachers did not have enough time to collaborate with their colleagues who were also working with their students with disabilities, attend meetings related to their students with disabilities, or fulfill the instructional responsibilities for their students with disabilities. Although this study was done after the first full year of inclusion and different results may have been found if it was conducted again a few years later, these findings are present across all of the research literature reviewed about collaboration between general and special educators (Austin, 2001; Bouck, 2007; Carter et al., 2009; Kritikos & Birnbaum, 2003; Magiera & Zigmond, 2005; Murray, 2004; Paulsen, 2008; Van Garderen & Whittaker, 2007). Both Bouck (2007), in a case study of one co-teaching partnership in a middle school, and Magiera and Zigmond (2005). in a quantitative casual comparative study, reported that teachers lacked sufficient co-

planning time under routine conditions to make co-teaching instructionally beneficial for students with disabilities.

Lack of Administrative Support

In addition to lack of time, teachers often report a lack of administrative support to carry out collaborative efforts (Carter et al., 2009; Jang, 2006; Kritikos & Birnbaum, 2003). When administrators are not supportive, or simply do not recognize the value in rearranging schedules to provide common planning time, teachers find it difficult to successfully collaborate and co-teach. Jang (2006) conducted a quasi-experimental study with two secondary mathematics teachers in Taiwan. The teachers structured their classes to be team-taught during the course of the study using a modified station teaching model of co-teaching. The participants reported that administration support was critical to scheduling the common planning time needed to make their team teaching successful. In addition, teachers often feel pressured with the demands that are placed upon them to meet student needs. Paulsen (2008) stated there are not enough people to share the workload and many teachers find this overwhelming. Administrators can either greatly hinder the success of collaboration or can effectively improve its success by supporting teachers as they work together.

Different Teaching Styles

Several researchers have reported challenges to collaboration when teachers have different teaching styles or philosophies about teaching (Bouck, 2007; Brownell et al., 2006; Carter et al., 2009; Kritikos & Birnbaum, 2003; Paulsen, 2008; Rugotska, 2005; Timmons, 2006; Van Garderen & Whittaker, 2007). Typically, teachers have been trained to work with children, but have not been trained in communicating and

collaborating with adults (Friend & Cook, 2010). Collaboration often involves solving problems and when participants hold differing beliefs or educational philosophies, effective collaboration becomes complex. A willingness to listen to another's viewpoint and change is challenging. Teachers may become defensive or believe a different perspective is a criticism of their current practice. Forcing teachers to work together, who do not have common goals or shared beliefs in educating students, makes effective collaboration nearly impossible (Friend & Cook, 2010). Collaboration is more successful when teachers volunteer to work with one another (Leatherman, 2009; Scruggs et al., 2007).

Another obstacle in different teaching styles is the historical differences and isolation between special education and general education (Van Garderen et al., 2009; Wasburn-Moses & Frager, 2009; Winzer, 1993). Historically, teachers in special education and general education have each been trained in their respective disciplines in college separate from each other (Winzer, 1993). The traditional self-contained model of special education also perpetuated the belief that special education and general education teachers' roles and instruction were more different than alike. Although these differences are sometimes exaggerated beyond reality, researchers have found clear differences in the special education and general education fields (Van Garderen et al., 2009). Van Garderen et al. (2009) reviewed research studies conducted in the special education and math education fields for students who were struggling learners in mathematics. The authors found distinct differences in philosophical perspectives between special education and math education research articles. These differences include a behaviorist focus in special education and a constructivist focus in general education (Wasburn-

Moses & Frager, 2009). Additionally, special education often focuses on individual children, while general education focuses on curriculum and differentiated instruction. Van Garderen et al. (2009) stated, “based on the learning theory from which each instructional practice draws, it is clear that the perspective and emphasis of those practices between each field differ. These concerns may hamper collaborative efforts” (p. 74). While some claim these philosophical differences can be too wide for co-teachers to cross over to understand each other (Wasburn-Moses & Frager, 2009), others contend the differences can be complementary if used positively (Wasburn-Moses & Frager, 2009; Rugotska, 2005). Thus, while differences in training and philosophical backgrounds could be a challenge to successful collaboration, they could also be an asset to improved teaching practices and student performance.

Interpersonal Differences

When people work together, personal differences can affect the style of interaction, the conflicts that arise, and how the conflicts are addressed (Cramer & Stivers, 2007; Friend, 2000; Friend & Cook, 2010; Glazier, 2004; Schutz, 1958, 1966, 1984; Stevenson et al., 2005). These differences can help make a team stronger as they learn from each other or can create significant challenges that impede collaboration. Some of these personal differences include gender, personality styles, communication styles, and conflict styles.

Gender. As co-teachers interact with one another, they bring with them inherent characteristics that define their identity and self-concept. Gender is one characteristic that affects views of life, communication, and conflict resolution (Lupton, 2000; Metcalfe & Linstead, 2003). Research on the effect of gender in teamwork and collaboration is

relatively sparse, particularly in education research. However, literature on the history of gender issues in education and the influence of gender in other fields (Choi, Deek, & Im, 2009; Knights & Kerfoot, 2004; Meliou, Maroudas, Goulas, & Chelidonis, 2010; Metcalfe & Linstead, 2003) can provide some knowledge on the potential effect gender could have on co-teaching partnerships.

During the beginnings of public schooling, men held the majority of teaching jobs (Winzer, 2009). However, as more lucrative employment opportunities opened in business, medicine, and other fields, men left the teaching profession (Berkeley, 1984, Howard, 1902; Winzer, 2009). Women began to seek teaching jobs just as public schools were expanding. The large number of women pursuing teaching jobs allowed school boards to hire them at relatively less pay than men. As school boards attempted to attract and keep male teachers, they used salary as an enticement. Men were often paid two to three times the amount women were paid (Berkeley, 2004; Howard, 1902). It was only when schools faced a time of tighter budgets that equality of pay was achieved (Berkeley, 2004; Taylor, 1900). Education jobs were rank ordered by administration level and all teachers' salaries were reduced to the level of what women were being paid (Berkeley, 2004). However, men's wages were still higher than most women educators, because they held more supervisory or administrative positions.

The history of how women entered the education profession may still affect the perceptions men and women have of each other's roles and responsibilities in education. While research is lacking in the influence of gender on teacher collaboration, research in other fields provide some insights. Stereotypical perceptions of gender roles have carried into many employment fields and affect the formation of relationships within mixed

gender teams (Choi et al., 2009; Knights & Kerfoot, 2004; Lupton, 2000; Meliou et al., 2010; Metcalfe & Linstead, 2003; Simpson, 2004). Choi et al. (2009) conducted a study of dynamics in pair computer programming and determined participants preferred same gender pairs versus mixed gender pairs. They had better communication with one another and satisfaction with the project's outcome. Similar results of gender disconnects were found by Meliou et al. (2010) in a quantitative casual comparative study that explored gender differences in professional attitudes within the mental health clinic setting. Individual interviews and self-report questionnaires were given to 151 participants, including doctors, nurses, and other affiliated health professionals. The sample included 34 men (22.5%) and 117 women (77.5%). The researchers believed cultural stereotypes of male dominance could influence collaboration of mixed gender relationships. Their findings concluded women were more predisposed to collaboration than men. They found stereotypical roles for men and women negatively affected the level of collaboration achieved, thus creating barriers to effective communication and teamwork. Gender differences were noted in attitudes towards communication and decision making. Women reported more equal decision making and participation in collaboration than men. Additionally, women stated they had more mutual trust and respect for their colleagues than the men reported. Overall, females had "more positive attitudes than males toward collaboration and teamwork" (Meliou et al., 2010, p. 809).

The stereotypical roles that hindered effective communication in Meliou et al.'s (2010) study have also been reported in qualitative studies about men's perceptions of working in female-dominated careers, including primary school teaching, flight service, library, nursing, human resource, and clerical positions (Lupton, 2000; Simpson, 2004).

Men reported their masculinity was challenged and they tended to emphasize their masculine characteristics to maintain their self-concepts. Some men were given privileges or more authority than their women counterparts. While these designations of stereotypical male authority benefited some men, others reported the higher expectations made them uneasy. Additionally, some men reported feeling comfortable working with women, while others tended to resist becoming accepted by the women as part of their group. They felt the need to keep their distance from developing close relationships with women colleagues.

Gender differences have emerged in the research on teamwork and men in female-dominated careers to explain mixed gender interactions (Knights & Kerfoot, 2004; Lupton, 2000; Meliou et al., 2010; Metcalfe & Linstead, 2003; Simpson, 2004). Some aspects of collaboration have aligned with more female tendencies, such as communication and relationship building. Men tend to focus more on performance and results, while women focus more on relationships with team members (Knights & Kerfoot, 2004; Lupton, 2000; Metcalfe & Linstead, 2003). Men tend to want control over others, while women express this desire less often (Schutz, 1992). Also, men generally avoid closer relationships with colleagues, as they are uncomfortable exposing personal information and feelings (Metcalfe & Linstead, 2003, Schutz, 1992). In aspects of communication styles, men tend to be more direct than women (James & Cinelli, 2003; Lupton, 2000; Rahim, 1983). Additionally, men believe women tend to avoid getting to the real cause of problems. However, research on these stereotypical characteristics are lacking in the area of teacher collaboration and co-teaching. Research

on whether gender differences affect challenges that arise and how co-teachers resolve challenges related to gender would add to the knowledge in this field.

Personality styles. How people behave in interpersonal situations is often a reflection of their personality (Barbuto, 1997; Digman, 1990, Opt & Loffredo, 2000). Personality has been defined as “a spectrum of individual attributes that consistently distinguish people from one another in terms of their basic tendencies to think, feel, and act in certain ways” (Ones, Viswesvaran, & Dilchert, 2005, p. 390). One’s personality is shaped by inherent tendencies, cultural backgrounds, and family experiences (Glazier, 2004; Jung, 1926). Research on teachers’ personalities demonstrates that each teacher brings his or her own unique personality to the classroom (Rushton, Morgan, & Richard, 2007). As co-teachers work together, these personality differences can cause disconnects in communication and interactions (Clinebell & Stecher, 2003; Cramer & Stivers, 2007; Gilley et al., 2010; McDuffie et al., 2009; Stevenson et al., 2005). Differences in personalities affect one’s tendency to trust others and can interfere with effective collaboration (Mooradian, Rezl, & Matzler, 2006; Stevenson et al., 2005). Teachers need to understand not only their own personality, but also the personality of their co-teaching partner. Taking the time to understand each other’s personalities can improve relationships and work performance (Duhe, 2009; Varvel, Adams, Pridie, & Ruiz Ulloa, 2004). The first predominant theory of personality is attributed to Jung and has been extensively applied through the Myers-Briggs Type Inventory (MBTI) across a wide variety of settings (Barbuto, 1997). Additionally, the five-factor model richens the understanding of personality and how it applies to the work setting (Ashton & Lee, 2007; Costa & McCrae, 1992; Digman, 1990; Goldberg, 1990; Ones et al., 2005).

Jung's (1926) theory of psychological types was developed under the early mentorship of Freud, although later Jung and Freud went separate ways in their thinking and publications (Hall & Lindzey, 1959). Jung is credited with developing a widely used personality theory concerned with people understanding their inner selves (Vernon, 2011). Jung (1926) stated that personality is shaped by past experiences and future ambitions. This perception of personality portrayed a malleable concept, not a fixed entity. Indeed, Jung (1926) believed personalities change as people grow older. Jung (1926) stated that personalities are composed of conscious and unconscious memories, thoughts, and feelings. The ultimate goal is to have all aspects of one's personality in balance, both the inner self and the outward projection of self.

Jung (1926) believed that personalities are primarily made up of two attitudes and four functions. The attitudes include the extravert, which is more outward or socially disposed, while the introvert is inner minded or more private in relationships. Jung (1926) stated that both attitudes are present in an individual, but one is more dominant, or conscious, than the other. It is through this lens that people "understand everything in the sense of our own type" Jung, 1926, p. 9). Within each attitude type, Jung defined four functions, including sensing, intuiting, thinking, and feeling (Barbuto, 1997; Hall & Lindzey, 1959; Jung, 1926; Opt & Loffredo, 2000). Sensing and intuiting explain how people perceive experience or gather information. Thinking and feeling refer to how people process information, with thinking being more logical and feeling being more subjective. Jung (1926) stated that although people tend towards one or two primary functions, they are not fixed types. Rather, Jung (1926) believed that these dimensions reflect continuous aspects of personality.

Jung's (1926) theory of personality was the basis for the MBTI that is widely used by lay researchers and practitioners to measure personality types (Barbuto, 1997; Duhe, 2009; Furnham, Moutafi, & Crump, 2003; Myers, 1987). Using Jung's (1926) idea of primary and auxiliary functions, the MBTI assigns a four-letter type describing one's individual personality (Barbuto, 1997; Duhe, 2009; Myers, 1987; Opt & Loffredo, 2000). The first letter refers to Jung's attitudes of extrovert (E) or introvert (I). The second letter describes how people gather information by sensing (S) or intuition (N). The third letter depicts individual preferences in processing information or decision-making through thinking (T) or feeling (F). The MBTI extended Jung's (1926) theory to include the predominant way that people interact with others through judging (J) or perceiving (P). Jung (1926) viewed the gathering information functions as judging and the processing information functions as perceiving. Myers (1987) stated that the MBTI explores "the valuable differences in people that result from where they like to focus their attention, the way they like to take in information, the way they like to decide, and the kind of lifestyle they adopt" (p. 4).

Although the MBTI has been widely used in research and practice, criticisms have been published about the instrument (Barbuto, 1997; Pittenger, 2005). The two main criticisms include self-report and the dichotomous nature of the personality types. Individuals answer the various questions themselves, which is not always a true representation of reality (Barbuto, 1997). Additionally, the scores on the MBTI treat the four aspects of personality as dichotomous, rather than on a continuum. The scores are computed based on answers to fixed questions, with the higher preference determining the letter in the type. However, Jung (1926) did not view personality as a fixed type, but

rather on a continuum. Some people may be more in the middle of the two aspects used to determine one of the letters on the MBTI, thereby creating a type that is not representative of their true personality (Pittenger, 2005). Additionally, personality types are not fixed, but tend to evolve and change as people grow older (Jung, 1926; Vernon, 2011).

A more continuum-based representation of personality is the five-factor model (Barbuto, 1997). The five factors include (a) extraversion, (b) agreeableness, (c) conscientiousness, (d) emotional stability, and (e) culture or intellect (Clinebell & Stecher, 2003; Digman, 1990; Furnham et al., 2003; Goldberg, 1990). Extraversion refers to more positive emotions, while emotional stability refers to more negative emotions. Agreeableness includes tendencies of being considerate of others. Conscientiousness means one strives for achievement of quality and attaining goals. The culture or intellect factor refers to involving one's self in learning and openness to new experiences. These five factors have emerged across a variety of studies, thus strengthening the convergent validity of the five-factor model (Costa & McCrae, 1988, 1992; Digman, 1990; Goldberg, 1990; Ones et al., 2005). Although the expression of the five factors varies across different cultures, the five factors are still generally present (Costa & McCrae, 1992). While the field of personality research still predominantly uses the five-factor model, current research has also identified a sixth factor of personality (Ashton & Lee, 2007). Further research in other languages besides English and across a variety of cultures found a sixth trait (humility/honesty) to reflect a broad personality construct. Therefore, Ashton and Lee (2007) suggested the model should include the sixth trait to reflect all cultural backgrounds. While the five-factor/six-factor model

addresses the structure of personality through “a useful set of very broad dimensions that characterize individual differences” (Digman, 1990, p. 436), researchers cautioned the over acceptance of the five factor model as the only way to look at personality constructs (Eysenck, 1992). Eysenck (1992) stated that researchers should continue to discuss and explore personality dimensions to deepen the field’s understanding of personality and its effects across various aspects of life.

Research on personalities in the workplace have included the MBTI and the five-factor model as constructs of personality (Clinebell & Stecher, 2003; Furnham et al., 2003; Hannay, Arisholm, Engvik, & Sjoberg, 2010; Mooradian et al., 2006; Rushton et al., 2007; Varvel et al., 2004). These studies looked at the influence personalities have on teamwork skills (Clinebell & Stecher, 2003; Mooradian et al., 2006; Varvel et al., 2004), and job performance (Hannay et al., 2010). While differing personalities were not found to effect job performance (Hannay et al., 2010), personality types did have an influence on how individuals and teams collaborated (Clinebell & Stecher, 2003; Mooradian et al., 2006; Varvel et al., 2004). Those teams that took the time to understand each other’s personality preferences were able to better understand each other and worked together more effectively (Clinebell & Stecher, 2003; Varvel et al., 2004). They had better communication, trust, and interdependence. Thus, while personality types did not have a significant effect on job performance, it was more influential on teamwork behaviors (Hannay et al., 2010). Although theoretical literature on co-teaching discusses the hindrance personality differences can have on effective partnerships (Conderman et al., 2009), there is no research literature available on how personality differences actually affect the development of effective co-teaching partnerships. In particular, research

could consider how personality types influence the communication between co-teachers, as research has demonstrated personality types affect communication styles of individuals in teams (Opt & Loffredo, 2000).

Communication styles. While personalities refer to broad constructs, communication styles are a subset of one's personality (Ivanov & Werner, 2010; Vries, Bakker-Pieper, Siberg, Gameraen, & Vlug, 2009). Indeed "a person's personality traits and personal identity will be expressed to a considerable extent through his or her communication style" (Vries et al., 2009, p. 201). An important component of any collaboration or co-teaching partnership is effective communication (Conderman et al., 2009). Communication involves not only transmitting a message, but also the interpretation of a message (James & Cinelli, 2003). Sometimes what a person says is not necessarily what they mean (Ivanov & Werner, 2010). Thus, the receiver needs to consider the communication style of the message transmitter for effective communication to occur. Additionally, in order for positive relationships to be formed and maintained, communication needs of both people need to be addressed. However, effective communication can be challenged when differences in communication styles arise (Broome, DeTurk, Kristjansdottir, Kanata, & Ganesan, 2002; Conderman et al., 2009; Gatley, S.E. & Gatley, 2001; Gilley et al., 2010; Jourdain, 2004, Phillips & Sapona, 1995). When conflicts arise in collaborative teams, the problem often derives from differences in communication styles (Jourdain, 2004) which "make[s] communication confusing and can lead to miscommunication and misinterpretation" (James & Cinelli, 2003, p. 41) of messages. Communication styles are the ways in which one transmits verbal or nonverbal messages in social interactions (Vries et al., 2009). These styles of

interactions are influenced by who one desires to be or appear to be, how one relates to others, and how one's messages should be understood.

Co-teachers can avoid miscommunication by seeking to understand each other's communication styles (Conderman et al., 2009; Jourdain, 2004). Taking the time to understand another's communication style can help prevent and resolve conflicts, because conflicts can be considered less personal (Jourdain, 2004). When responding to one's co-teaching partner, it is more effective to communicate with them in their personal style rather than one's own. Conderman et al. (2009) stated "the key to collaborating with others who have styles different than your own is to recognize their style and adjust your style accordingly to provide what they need" (p. 6). However, Conderman et al. (2009) cautioned co-teachers not to over-generalize the desires of others by a style or type, because people can vary their communication styles in different contexts and relationships.

Although people use different styles in different situations and most people have some of all styles, there is generally one style that is predominant in an individual (Conderman et al., 2009; Jourdain, 2004). Vries et al. (2009) conducted a study to find the predominant communication styles and reported seven main styles. These styles can be explained with the acronym PRESENT (preciseness, reflectiveness, expressiveness, supportiveness, emotionality, niceness, and threateningness). Preciseness is reflected by clarity, conciseness, efficiency, and composure. Reflectiveness refers to analytical, philosophical, and poetic traits. Expressiveness is demonstrated by talkative, energetic, and eloquent characteristics. Supportiveness refers to accommodating, admiring, supporting, and stimulating behaviors. Niceness is reflected through friendliness,

modesty, and cheerfulness. Threateningness is expressed in abusive, domineering, and deceptive traits. As people interact with one another, these communication styles can either improve or hinder good relationships. Particularly in co-teaching, individuals need to be able to effectively communicate with one another, even if their natural communication styles are different (Conderman et al., 2009). However, it is not easy to consider and use another's communication style preferences.

Conflict styles. Differences in gender, personalities, and communication styles can create conflicts for co-teaching relationships (Conderman, 2011). Furthermore, differences in how co-teachers approach conflict resolution can also cause tensions (Broome et al., 2002). Different conflict resolution styles can be incompatible or can be thought of as complementary to each other. While conflict is inevitable in relationships, it does not need to be negative (Conderman, 2011; Rahim & Bonoma, 1979; Rahim, Garrett, & Buntzman, 1992). Indeed, conflict can promote deep thinking that produces better outcomes. However, in order for this to occur, co-teachers need to learn to understand one another's conflict resolution styles, and learn to work through the conflicts while addressing their individual differences and unique traits (Behfar, Peterson, Mannix, & Trochim, 2008; Conderman, 2011).

Several researchers addressed the individual differences and traits that make up conflict resolution styles (Behfar et al., 2008; Gross & Guerrero, 2000; Rahim, 1983, 1986; Rahim & Bonoma, 1979; Rahim et al., 1992). Across this research, five styles have emerged to describe variance in conflict resolution, including integrating, dominating, obliging, avoiding, and compromising. The determination of one's style depends to some degree on their concern for self or others (see Figure 1). Integrating has

both high concern for self and others; dominating has high concern for self, but low concern for others; obliging has low concern for self, but high for others; avoiding has both low concern for self and others; and compromising has moderate concern for self and others (Gross & Guerro, 2000; Rahim, 1983, 1986; Rahim & Bonoma, 1979).

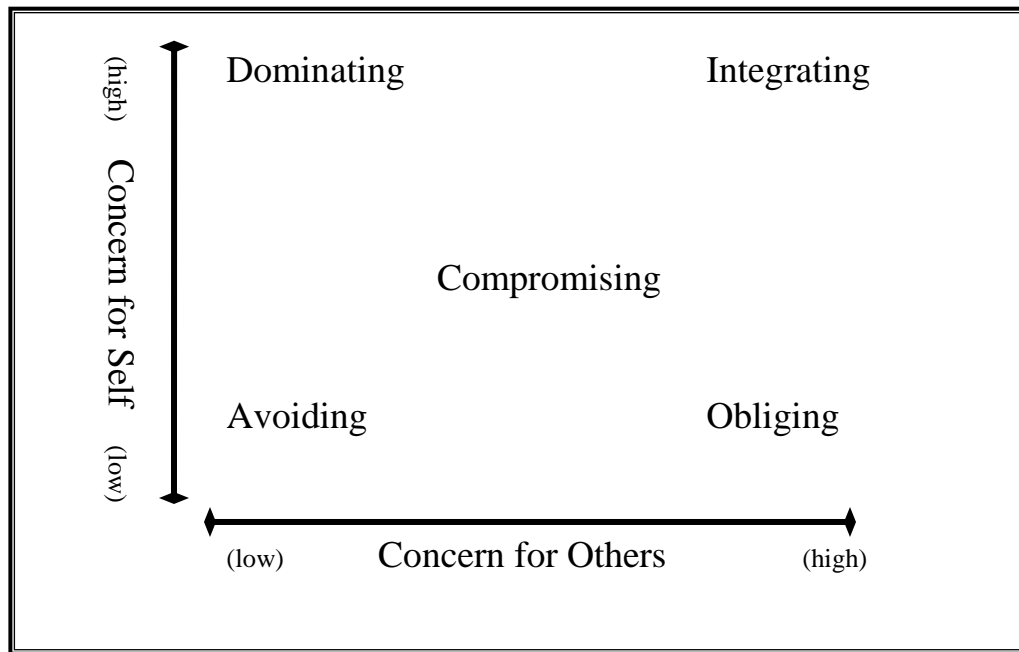


Figure 1. Conflict resolution styles. This figure demonstrates the level of concern for self or others portrayed by each conflict resolution style. Adapted from a visual diagram by Rahim and Bonoma (1979, p. 1327).

Other characteristics also make up these conflict resolution styles (Rahim et al., 1992). Integrating is characterized by open communication and problem solving traits. Dominating is reflected through forceful or controlling behaviors. Obliging is demonstrated by seeking to satisfy others and peace-making behaviors. Avoiding includes withdrawal or denial tendencies that seek to minimize addressing conflicts. Compromising is characterized by concession behaviors. All of these behaviors may be

appropriate at some times, but the level of authority in a relationship and the type of conflict can determine which strategy is most effective (Conderman, 2011; Rahim, 1986; Rahim & Bonoma, 1979; Rahim et al., 1992). Generally, in co-teaching relationships when teachers are on a peer level, integrating and compromising are the most effective strategies to resolve conflicts. Although the mixed use of strategies helps overcome conflicts most efficiently and effectively, people tend to view different conflict styles as more effective or appropriate than others (Gross & Guerrero, 2000).

Competence in conflict resolution styles is determined by whether a conflict style is considered to be effective and appropriate in a relationship (Gross & Guerrero, 2000). Research with undergraduate student dyads demonstrated people could hold different standards for themselves than others in this area. The results of this study indicated integrating was seen as the best strategy over all conflicts, because it was most appropriate and effective. Dominating was seen as somewhat effective, but not as appropriate in all situations. Obliging was seen as effective and useful in some situations, although the participants did not see it as effective for themselves personally. Avoiding was seen as neither effective, nor appropriate. The fifth style, compromising, was seen as sometimes appropriate and effective, depending on the context and type of conflict. As co-teachers encounter challenges and conflicts, differences in conflict resolution styles can be difficult to overcome (Conderman, 2011). Nonetheless, consideration of different approaches to conflict and addressing individuals' unique needs can help teachers overcome these challenges (Behfar et al., 2008).

Teacher Attitudes

Another hindrance to successful collaboration is the beliefs and attitudes teachers have towards students with disabilities (Damore & Murray, 2009; Idol, 2006; Leatherman, 2009; Santoli et al., 2008). In Santoli et al.'s (2008) survey of middle school educators ($N = 56$), although almost all the respondents were willing to make adjustments for students with disabilities (98.2%), the majority of respondents did not believe students with disabilities could be successful in the general education classroom (76.8%). They believed these students lacked the necessary skills to learn grade level material. A negative belief about the success of students with disabilities in the regular education classroom affects the motivation and effort teachers put forth in making adaptations for these students. This may be due in part to the school selected for Santoli et al.'s (2008) study. This school was in the first year of implementing inclusion and this change in school structure could have impacted the teachers' beliefs and attitudes about students with disabilities. In schools that had been implementing inclusion longer than Santoli et al.'s (2008) study, teachers were generally positive about educating students with disabilities in the general education classrooms (Idol, 2006; Damore & Murray, 2009). Idol's (2006) mixed methods survey of eight schools in a large urban, school district in the southwest United States found teachers' only hesitation towards inclusion of students with disabilities in the general education setting was the level of support they would receive in the general education classroom, with most of them stating their preference for having the physical support of a special education teacher or teacher's aide in the classroom to assist with the instruction of students with disabilities. Damore and Murray (2009) found similar reports for teacher attitudes towards inclusion in a

correlational study of 118 elementary school teachers from 20 schools in Chicago. Teachers had positive attitudes towards inclusion of students with disabilities. However, special education teachers had more positive attitudes towards inclusion than general education teachers. This finding was across all levels of schools, including elementary, middle school, and high school. One caution should be stated about these studies, as the results are self-reported by the teachers. Research needs to be conducted that goes beyond not only interviews with participants, but also observations of teachers to see if there is a match between what teachers report about their beliefs towards collaborative practices and how they interact with others in their classrooms.

Necessary Components of Co-Teaching

Simply having a structure in place does not ensure collaboration or co-teaching will be successful (Brownell et al., 2006). In addition, even though teachers possibly desire to collaborate with colleagues, not all participants may benefit equally. Several components found to make collaboration more successful include teacher training, administrative support, common planning time, common philosophies, and reflection (Carter et al., 2009; Damore & Murray, 2009; Magiera & Zigmond, 2005; Paulsen, 2008).

Teacher Training

Teachers often feel unprepared for the collaborative roles they must undertake (Paulsen, 2008). This may be due in part to the traditional model of one teacher in a classroom being far removed from collaborative practices expected in today's educational climate (Friend et al., 2010). Friend et al. (2010) emphasized "it is not reasonable to expect educators to understand and implement it [collaboration/co-teaching] without

specific instruction in the pertinent knowledge and skills” (p. 20). Furthermore, a lack of teacher training can limit the academic success of students with disabilities in the general education classroom (Magiera & Zigmond, 2005; Scruggs et al., 2007; Weiss & Lloyd, 2002). Therefore, it is beneficial for teachers to receive ongoing professional development on how they can effectively teach students with disabilities in collaborative settings (Austin, 2001; Friend et al., 2010; Idol, 2006; Vaughn et al., 1998). Studies of in-service training of teachers in collaborative instruction have shown positive results (Boudah et al., 1997; Scheeler et al., 2010). Boudah et al.’s (1997) quasi-experimental study reported that after teachers were trained in how to effectively use the roles of both presenter and mediator within the co-teaching classroom, they were able to share instructional roles more equally and focus on student learning. It is also important to consider the different needs of teachers when planning professional development (Brownell et al., 2006). In Murray’s (2004) exploratory study on training general education teachers participating in collaborative teaching partnerships, professional development that began with consideration of preconceptions was helpful in addressing the unique desires and understandings of individual teachers. Although the study found it would have been helpful to include the special education teachers in the professional development as well, the researcher reported it was important to address the general education teachers’ perspective and their individual roles in making collaboration successful.

Additionally, teachers need training in communication skills (Carter et al., 2009; Damore & Murray, 2009; Gately, S.E. & Gately, 2001; McDuffie et al., 2009; Ploessl et al., 2010) in order to work together for the benefit of students. Some of these skills

include listening, dependability, cooperation, responsiveness, willingness to consider other points of views, patience, and flexibility (Friend & Cook, 2010; Gately, S.E. & Gately, 2001; Kohler-Evans, 2006; Paulsen, 2008). Damore and Murray's (2009) correlational study of 118 elementary school teachers from 20 schools in Chicago found communication skills to have one of the highest average scores among the necessary components for cases of successful collaborative teaching practices between general education and special education teachers. Although not many teachers possess all of these skills, they are necessary traits that educators need as they work together. It is incorrect to assume all teachers come by collaborative skills naturally. Rather, these skills must be taught and nurtured (Friend, 2000). Providing proper training for teachers in both their collaborative roles and communication skills can aid the success of collaboration.

Ploessl et al. (2010) suggested educators begin with an honest self-examination of their temperaments, strengths, and needs in communicating with others. This allows teaching partners to be open with each other and support one another, thereby building the necessary component of trust in collaboration (Phillips & Sapona, 1995; Ploessl et al., 2010). Trust can only be built when individuals have good relationships with one another (Connolly & James, 2006). As teachers learn to trust one another and consider the needs of the other person, they begin to build rapport in their relationship, which has been considered the ultimate goal of any interpersonal relationship (Gilley et al., 2010). Rapport is an "unconditional positive regard for one another" (Gilley et al., 2010, p. 23), in which one person is concerned for the well being of the other person.

Administrative Support

Leadership is a necessary component of lasting reform (Causton-Theoharis & Theoharis, 2009) and it is no different for creating successful collaboration between general and special education teachers (Damore & Murray, 2009; Jang, 2006; Kritikos & Birnbaum, 2003; Leatherman, 2009; Paulsen, 2008; Phillips & Sapona, 1995; Santoli et al., 2008; Scruggs et al., 2007). Administrators need to understand components of collaboration in order to effectively support teachers in the collaboration process (Friend et al., 2010). Initiating successful collaboration requires quality professional development and that administrators play a role in scheduling trainings for teachers. These trainings should provide clear expectations and goals for the implementation of collaborative practices in a school (Carpenter & Dyal, 2006). Administrators can assist teachers by helping them understand their roles in collaborative relationships. Administrators also need to provide ongoing support to teachers throughout the year. Friend et al. (2010) stated, “initial professional development should be accompanied by coaching and other supports demonstrated to change teaching practice” (p. 40). Because some teachers need more than an invitation to participate in collaboration, school administrators need to provide an impetus for teachers to engage in worthwhile collaboration with colleagues (Carter et al., 2009). Administrators can encourage successful collaborative partnerships by creating a school climate that supports cooperation and trust in one another (Conderman & Johnston-Rodriguez, 2009; Friend & Cook, 2010; Hawkins, 2007).

Idol (2006) found positive results in interviews with school principals and teachers regarding administrative support. These principals stated strong support for

including students with disabilities in the classroom, but also emphasized they would not force inclusion on general education teachers without providing the proper amount of support to make it successful. The teachers, both elementary and secondary, stated that they felt their administrators “were *very supportive* of them” (Idol, 2006, p. 81) and of inclusionary practices in general. Although the sample size was small in this mixed methods study (eight schools), it provides a promising perspective on administrator support. More research should be done in this area to determine if these results can be replicated across other schools.

Common Planning Time

Administrators are also instrumental in providing common planning time. Administrators can support teachers by reorganizing schedules to provide meeting times (Damore & Murray, 2009; Dufour, 2004; Eisenman et al., 2011; Hang & Rabren, 2009; Hawkins, 2007; Jang, 2006; Kohler-Evans, 2006; Kritikos & Birnbaum, 2003; Leatherman, 2009; McDuffie et al., 2009; Paulsen, 2008; Santoli et al., 2008; Scruggs et al., 2007; Weiss & Lloyd, 2002). Common planning time allows teachers to discuss the progress of individual students, create mutual goals, problem-solve classroom incidences, and plan instruction (Gately, S.E. & Gately, 2001; Tannock, 2009). It is important all participants are involved in the planning process and contribute their expertise in meeting students’ needs. Additionally, agendas for meetings can help all members stay focused and engaged in creative problem solving (Ploessl et al., 2010). Ploessl et al. (2010) suggested all meetings should have an outcome of resolving one issue or completing one planning item that uses the shared expertise of the group members. It is helpful for teachers not only to plan future lessons, but to also reflect on the lessons they co-taught in

order to determine what was successful and what areas of their roles need to be adjusted to make it more effective for student learning.

Sufficient planning time allows teachers to more clearly understand their roles and responsibilities in a team-taught classroom (Bouck, 2007; Carter et al., 2009; Damore & Murray, 2009; Hang & Rabren, 2009; Phillips & Sapona, 1995). Bouck's (2007) case study of an eighth-grade history co-teaching partnership found common planning time is necessary for co-teachers to be on equal positions of authority and instruction in the classroom. Although teams of teachers in their first-year of co-teaching may need more planning time than experienced co-teachers, it is necessary that common planning time be scheduled on an ongoing basis, regardless of how long teams of teachers have worked together (Leatherman, 2009). Leatherman's (2009) qualitative case study of collaboration of elementary general and special education teachers found some teachers solved the need for planning time by meeting during lunch times or using teacher aides to cover classrooms while teachers met. Other suggestions in the literature for planning time include using early release or late arrival time, employing substitute teachers to provide release time for teachers, and rotating planning periods for special education teachers to allow them to meet at least once a week with each content area classroom teacher they work with (Carpenter & Dyal, 2006). A last resort suggestion was for general education teachers to plan the lessons and provide an overview to special education teachers of how they will be working with students. Although this suggestion allows the special education teacher to know how the class period will be run, it defeats the purpose of using both teachers' expertise in planning lessons to meet students' needs.

Common Philosophies

Teachers are more successful at collaboration when they possess common educational philosophies (Brownell et al., 2006; Leatherman, 2009; Scruggs et al., 2007; Timmons, 2006). A unity of perspective on students and learning allows teachers to set mutual goals, share responsibilities, and establish equal roles (Capizzi & Barton-Arwood, 2009; Englert & Tarrant, 1995; Friend & Cook, 2010; Kritikos & Birnbaum, 2003). Some of the mutual understandings need to include vocabulary that both general education and special education entities take for granted (Robinson & Buly, 2007; Van Garderen et al., 2009). Robinson and Buly (2007) mentioned that the general education and special education departments in higher education often use different terms to refer to similar concepts. This requires teachers to look beyond assumptions to allow open communication about differences. If there are disagreements between team members, they need to be worked out openly and professionally (McDuffie et al., 2009). Hunt et al. (2001) reported that the teachers in their study were able to overcome personality differences by focusing on students' learning as the primary objective in collaborative meetings. Teachers who accept different perspectives of student learning and achieve a common understanding of the students are better able to collaborate with one another (Carter et al., 2009; McDuffie et al., 2009; Van Garderen et al., 2009; Wasburn-Moses & Frager, 2009).

Most importantly, there needs to be a common philosophy of the entire school staff focusing on the success of each student (Hawkins, 2007; Rugotska, 2005; Santoli et al., 2008). Rugotska's (2005) qualitative case study of a team of teachers in Wisconsin, including one special education and three general education teachers, found differences in

ideologies of inclusion of students to be a hindrance until the teachers openly discussed and resolved these issues. A key finding of Hawkin's (2007) longitudinal study of 60 Rhode Island schools, successful in closing achievement gaps between students with disabilities and their peers, revealed that the prevailing philosophy of the schools was a commitment to each student's success. They believed students could achieve high expectations and provided them the necessary support that would help them reach those expectations. Although this study lacked important statistical data to substantiate these claims, the sample size was large enough to warrant some generalizability. Statistical data would have enhanced the validity of these claims and made the findings stronger.

Reflection

As teachers collaborate, reflection is a necessary component that moves them forward in becoming more effective in their collaborative relationships (Brownell et al., 2006; Jang, 2006; Mueller & Welch, 2006; Pugach & Johnson, 1995; Putnam & Borko, 2000; Roth, et al., 1999). Reflection involves thinking about practices and changing them to produce better outcomes. Researchers demonstrated teachers who utilize reflective practices are more willing to implement and adopt new strategies, such as co-teaching, to meet the needs of students in their classrooms (Brownell et al., 2006; Camburn, 2010; Mueller & Welch, 2006; Putnam & Borko, 2000). Seminal researchers in reflective teaching include Donald Schön and Max Van Manen (Boody, 2008). Donald Schön is credited for establishing reflective practice as an integral part of teaching (Camburn, 2010; Wieringa, 2011). Schön first published about reflective practices in 1983 with his text *The Reflective Practitioner*. This text was well received as a way of addressing teacher knowledge and professional development within the

classroom. Schön (1983, 1987, 1992) was inspired by the theories of Dewey on the synergy of thought and action in reflection. Using Dewey's theory of reflective thought, Schön (1983, 1987, 1992) built a model of reflective practice. This model of reflective practice demonstrates two ways of reflecting, including reflecting-on-action and reflecting-in-action. Reflection-on-action refers to thinking about past experiences and evaluating them to determine future courses of action. Reflecting-in-action involves attending to situations as they occur and making adjustments as necessary.

Van Manen (1995) built upon Schön's (1983, 1987, 1992) model for reflective practice by elaborating on how reflection-in-action practically occurs during teaching. Van Manen (1995) stated, "reflection is central to the life of an educator" (p. 33) because reflection is naturally part of teaching. Teachers constantly observe their students and adjust actions appropriately to promote achievement. However, reflection in the moment of instruction is not as conscious or elaborate as reflection that occurs after the fact. Indeed, reflection during instruction has to be an immediate response. Rather, Van Manen (1995) saw reflection in the moment as a thoughtful state of mind because "teachers must constantly and instantly act in a manner that hopefully demonstrates a thoughtful consideration" (p. 7).

Van Manen (1977) also described reflection in terms of how it relates to three kinds of practical knowledge. Knowledge includes the desired goals or outcomes one wants to achieve, the searches for meaning or interpretations of the process of learning, and reflective action to achieve the goals. These three ways of knowledge work together in a deliberate reflection that is based on values of achieving communication and common understanding between people. This is important for co-teachers as they

consider how they can use reflection to not only improve student learning, but also their collaborative relationship.

Co-teachers should use reflection during co-planning sessions, instruction, and evaluation of lessons after they are taught (Camburn, 2010; Gately, 2005; Jang, 2006; Roth et al., 1999; Wieringa, 2011). As teachers plan together, reflection is a necessary component for thinking about how students will react to lesson activities and how they should be modified to meet diverse student needs within co-taught classrooms. Jang's (2006) study on two math secondary school teachers in Taiwan revealed that teachers could improve their teaching practice by taking the time to plan together and then reflecting on the results of the instruction with students. The teachers in this study believed that they learned from each other not only in instructional strategies, but also in classroom management practices. Other research on peer collaborative dialogue demonstrates teachers can develop successful interventions in the context of reflective collaborative discussions, thus reducing referrals for special education services (Pugach & Johnson, 1995).

Not only does reflection need to occur for evaluating lessons, but reflection can also occur in the moment of actual classroom instruction (Camburn, 2010; Roth et al., 1999; Schön, 1992). Co-teaching affords the opportunity for teachers to learn from one another as they observe the instructional practices of their co-teaching partner and student responses to these practices. Roth et al. (1999) described reflection in the moment this way: "during the ongoing teaching, there are moments for time-out in the sense that one teacher can stand back and watch the one in action, there are moments for reflecting-on-action but to do so in-action" (p. 783). The ability to pause and reflect on how their peer

is teaching in the classroom is essential not only to teachers' individual professional knowledge, but also to the growth of their co-teaching relationship.

In order for reflection to be effective and benefit co-teaching relationships, the culture within a school must value respect, open communication, and strong collaboration (Boody, 2008; Camburn, 2010; Murawksi & Dieker, 2008; Rodgers, 2002). Teachers must be willing to openly discuss issues with one another while not taking these conversations as a personal offense. Furthermore, teachers have to be willing to change their instructional practices or interpersonal behaviors for the better in order to progress to a more effective co-teaching partnership that benefits students.

Stages of Collaboration

As teachers work to collaborate for the benefit of students, they need to develop relationships that involve mutual respect and professionalism. The process by which teachers develop partnerships is not widely researched or discussed in the literature. This review of the literature found one case study (Phillips & Sapona, 1995) and one theoretical article (Gately, S.E. & Gately, 2001) that discussed the stages of teaching collaboration. Phillips and Sapona (1995) conducted the case study in the 1990's to better understand how a school became more inclusive for students with disabilities. The types of collaboration that general education and special education teachers employed in the classroom included co-teaching and consultation. During the first year of this initiative, several stages were identified as teachers moved towards effective collaboration, including anxiety, managing logistics, identifying teachers' roles in the classroom, co-planning, seeing the benefits, using a continuum of options for students,

and evaluating the progress in collaborative partnerships. These stages were identified from interview transcripts with the teachers involved in the process.

Gately and Gately (2001) did not conduct a research study, but wrote about the stages that they identified in their informal work with collaborating teachers. These stages were developmental in nature (i.e., beginning, compromising, and collaborating). Gately and Gately (2001) stated that, in the beginning stage, teachers feel uncomfortable and use distinct roles in the classroom. It can be hard for teachers to move beyond this stage if they do not overcome the barriers to effective collaboration. As teachers become more open with each other and improve their communication, they enter the compromising stage. In this stage they try to address some of each other's needs and begin to build trust. In the collaborating stage, teachers work interdependently and their expertise benefits each other as well as their students. Roth, Tobin, Carambo, and Dalland's (2005) study on how co-teachers demonstrate coordination during teaching falls within this collaborating stage. Roth et al. (2005) reported results from an ethnography study of several co-teaching pairs in an urban high school. Their findings revealed that as co-teachers worked together collaboratively, they became seamless in taking leadership roles during instruction, conversing in the classroom, and sharing physical space in the classroom. Teachers also began to adopt the practices of each other as they taught together, including conversational tones or phrases. This corresponds with the traits Gately and Gately (2001) described for co-teaching teams in the collaborative stage.

Both of these writings (Gately & Gately, 2001; Phillips & Sapona, 1995) outlined the steps to effective collaboration as perceived by the authors. However, the process by

which teachers overcome barriers that they experience in these stages to get to effective collaboration was not identified in these studies, or in Roth et al.'s (2005) study on the collaborative stage of co-teaching. Gately and Gately (2001) described the characteristics of each stage, but not the process of moving to improved collaboration. Phillips and Sapona (1995) also noted the characteristics of teachers' behaviors and experiences in the various stages, but this study presents a dated view of beginning inclusive movements within schools. Additionally, no theory was developed to inform teachers of how they might move from ineffective to more effective partnerships. Further research on how co-teachers overcome problems inherent in collaboration is needed in current educational settings where inclusion has become a more common philosophy and practice.

Summary of Literature Review

Collaboration is a shared commitment on the part of all partners to meet students' learning needs (Dufour, 2004; Timmons, 2006) and help them make the highest academic achievement possible (Arthaud et al., 2007). Meeting the needs of students with disabilities has been a long process over decades of evolving public perceptions towards appropriate ways to identify and treat people with disabilities (Cassidy, 1975; Winzer, 1993, 1998). The origination of special education to instruct students with disabilities created a separation between the fields of general education and special education. Overcoming this separation has not been an easy process and still continues to present challenges to educators as they work to provide the best learning environments and instruction for all students (Friend & Cook, 2010; Stainback, 2000).

Recent federal laws (IDEA, 2004; NCLB, 2002) require all students to meet proficiency levels in the LRE and encourage teachers to collaborate with one another to

provide quality instruction for students with disabilities. Some of the models of collaboration that have been used in classrooms to meet these mandates are collaborative consultation and co-teaching (Iowa Department of Education, 2009; Vaughn et al., 1998). These models benefit both teachers and students (Causton-Theoharis & Theoharis, 2009; Hang & Rabren, 2009; Paulsen, 2008; Santoli et al., 2008; Scruggs et al., 2007; Wilson & Michaels, 2006). In particular, co-teaching provides a way to address the needs for meeting LRE standards and teacher quality standards in NCLB (2002) (Arthaud et al., 2007; Friend et al., 2010; Sailor & Roger, 2005).

However, collaboration is not an easy process and requires all participants to rise to higher standards of communication and cooperation with one another (Friend & Cook, 2010; Kohler-Evans, 2006, Paulsen, 2008). Teachers often encounter challenges in lack of common planning time, lack of administrative support, and differences in ideologies or philosophies about teaching (Brownell et al., 2006; Carter et al., 2009; Leatherman, 2009). Moreover, interpersonal differences in gender, personality traits, communication, styles, and conflict styles can also present barriers to effective collaboration (Conderman, 2011; Conderman et al., 2009; Cramer & Stivers, 2007; Gately, S.E. & Gately, 2001). Research studies on co-teaching have identified these difficulties can hinder co-teaching from accomplishing the benefits teachers and students experience when expertise from special education and general education is blended into a teaching partnership (Bouck, 2007, Damore & Murray, 2009; Eisenman et al., 2011; Hang & Rabren, 2009; Santoli et al., 2008; Scruggs et al., 2007). Identified necessary components to overcome these challenges are professional development, administrative support, common planning times, common philosophies about learning and inclusion, and reflection (Carter et al.,

2009; Damore & Murray, 2009; Jang, 2006; Kohler-Evans, 2006; Leatherman, 2009; Roth et al., 1999; Rugotska, 2005; Santoli et al., 2008; Scruggs et al., 2007). However, the process of accomplishing these components to overcome challenges present in co-teaching is not well understood. Therefore, future research should address this process (McDuffie et al., 2009) to aid teachers as they work to establish effective partnerships.

Implications for Research

As Friend (2000) stated, “the study of collaboration must keep pace with the increasing demand for its practice” (p. 132). Conducting research that measures collaborative practices and their degree of success is hard to gather, as collaboration tends to be an emerging characteristic (Murawski & Hughes, 2009). In order for educators to get more successful at collaboration, they need to already possess some strength in working with others. However, as this review has pointed out, it is necessary to continue to build and refine the research literature on collaboration, particularly co-teaching, of special and general educators in order to inform collaborative practices in schools. This review focuses on several key areas that need to be developed in future research, including solutions to common challenges of co-teaching and improved research methods.

Solutions to Common Challenges of Collaboration

Much of the research on collaboration has identified common challenges that educators and administrators encounter as they seek to implement and refine collaborative practices (Carter et al., 2009; Santoli et al., 2008; Scruggs et al., 2007). These challenges have included lack of common planning time, lack of administrative support, personality differences, and teacher attitudes (Austin, 2001; Bouck, 2007;

Brownell et al., 2006; Carter et al., 2009; Damore & Murray, 2009; Jang, 2006; Kritikos & Birnbaum, 2003; Leatherman, 2009; Magiera & Zigmond, 2005; Murray, 2004; Paulsen, 2008; Santoli et al., 2008; Timmons, 2006; Van Garderen & Whittaker, 2007). The recommendations provided from these research results point to possible solutions to mediate these challenges. However, there has been little research on how these challenges are being resolved by general and special educators as they seek to work together. The only study in this literature review that addressed possible solutions to challenges inherent in collaboration was a qualitative case study (Leatherman, 2009).

Simply identifying problems in collaboration is not enough. To improve collaborative practices in schools, it will be necessary to go further and identify solutions that are being implemented to meet and resolve these challenges. An earlier case study addressed the stages of collaboration for schools adopting more inclusionary practice (Phillips & Sapona, 1995). However, this study involved a broader spectrum of collaborative practice than co-teaching. Future research needs to address the process by which teachers overcome problems in co-teaching relationships within current educational settings in which inclusionary practices are more common. Knowing how effective co-teaching teams resolve problems inherent in collaboration could support teachers who are struggling with co-teaching partnerships.

Another point to address in regards to the literature available about collaboration between general education and special education teachers is the amount of theoretical versus research-based articles. Many experts in the field discuss the benefits, barriers, and necessary components of collaboration, but most of their writings are based on theoretical principles versus research results (Friend & Cook, 2010; Paulsen, 2008;

Ploessl et al., 2010; Timmons, 2006). While there is a need to consider theory in regards to educational practices, making decisions based on ideas alone presents the risk of implementations of collaborative practices being difficult or unrealistic to carry out in real life applications. Therefore, it is necessary to conduct research that develops theories grounded in data collected from the field to provide useful practices and solutions for co-teachers.

Improved Methods

Two key areas need to be addressed in improving the methods used in researching collaboration of general and special educators, including better definitions of collaborative practices and more objective measurements. Cook and Friend (2010) discussed the problems with current research literature on collaboration as a lack of clear definition of what is considered to be collaborative practices. It is difficult to determine which activities are truly collaborative and be able to replicate them in research. Future studies need to address how collaboration is defined, how it translates into effective practices, and the outcome it has for students with disabilities.

Additionally, as mentioned previously in this literature review, there is a need to include more objective measurements in the research data. Several studies have employed surveys and interviews of teachers and students involved in co-teaching (Austin, 2001; Carter et al., 2009; Conderman & Johnston-Rodriguez, 2009; Kritikos & Birnbaum, 2003; Phillips & Sapona, 1995; Santoli et al., 2008; Wilson & Michaels, 2006). However, this poses a concern of reliability from self-reported measures. There is a possibility that participants will report information in ways they think will please researchers, or what they perceive the correct answer should be in ideal situations. Some

researchers have addressed this concern by also combining surveys or interviews with observations in data collection methods (Beasley, 2010; Brownell et al., 2006; Idol, 2005; Leatherman, 2009; Vaughn et al., 1998; Weiss & Lloyd, 2002). Future research should consider including more objective means, including observations, to provide a fuller understanding of collaborative practices in real life contexts.

CHAPER THREE: METHODOLOGY

The purpose of this systematic grounded theory study was to explain how problems inherent in co-teaching relationships are resolved by secondary school special education and general education teachers at an urban school district in Eastern Iowa. For the purpose of this study, co-teaching relationships were defined as a style of interaction between a general education and special education teacher who are engaged in shared decision making for attaining the common goal of instructing students with and without disabilities. The following research questions guided the focus of this study:

Central Research Question: How do secondary school co-teachers from an urban Eastern Iowa school district resolve problems inherent with collaboration?

Research Sub-Question 1: How do co-teachers address differences in attitudes towards inclusion?

Research Sub-Question 2: How do co-teachers address differences in philosophical perspectives of general education and special education?

Research Sub-Question 3: How do co-teachers resolve interpersonal conflicts?

Research Sub-Question 4: How do co-teachers address external factors that impede successful collaboration?

The theoretical framework of the stages of group development (Tuckman, 1965; Tuckman & Jensen, 1977), as well as the interpersonal behavior theory (Schutz, 1958), guided my focus and data analysis. Tuckman's (1965; Tuckman & Jensen, 1977) theory addresses the stages through which groups form initial contacts to the final adjournment of the group. This theory upholds the assumption I made that co-teachers experience

problems inherent in their relationship that they need to resolve in order to be effective co-teachers. However, as Cassidy (2007) stated, the storming stage in Tuckman's (1965; Tuckman & Jensen, 1977) model is not clearly defined for the educational context. While this theory helped establish the perceptions I have of group development, it does not explain how teachers overcome problems in order to move from the storming stage to the norming and performing stages. Additionally, the interpersonal behavior theory (Schutz, 1958, 1966, 1992) considers factors that impact the relationships co-teachers build with one another. However, how teachers consider interpersonal wants in overcoming problems in a co-teaching relationship needs to be better understood.

In this chapter, I discuss the design of the research, questions I answered in this study, and my role as the researcher. I also address the participant selection, data collection, and data analysis methods I used in this grounded theory study. At the end of this chapter, I detail how I established trustworthiness and addressed ethical considerations.

Research Design

I employed a systematic grounded theory design to address the research questions. Glaser and Strauss (1967) developed this qualitative approach to address research questions for which no existing theory fits. The purpose of a grounded theory design is to develop a theory based on data collected in the field. The theory is not built as a hypothesis to make conclusions about data, but rather is generated through data collection in the field. A grounded theory approach was appropriate for this study because there is no theory that explains how co-teachers overcome the challenges incurred in building effective collaborative relationships. While there are theories to explain group

development (Tuckman, 1965; Tuckman & Jensen, 1977) and how groups address interpersonal conflicts (Schutz, 1958), there has not been research to confirm whether these theories fit the process co-teachers go through to create effective collaborative partnerships. Strauss and Corbin (1990) stated that grounded theory can be “used to gain novel and fresh slants on things about which quite a bit is already known” (p. 19). This design was effective in providing a different view on the process of building co-teaching relationships and adds to the existing literature on the nature of co-teaching relationships.

From its inception in 1967 by researchers Barney Glaser and Anselm Strauss, the grounded theory method evolved into two significant approaches, constructivist and systematic (Creswell, 2007). The constructivist approach relies on researcher knowledge and expertise to determine the appropriate steps and methods for data collection methods and analysis procedures (Creswell, 2007), while the systematic approach provides direct guidance on the steps of collecting and analyzing the data (Strauss & Corbin, 1990). For this study I selected the latter approach, as I did not have prior experience with this qualitative design.

In this study, I used the steps of the systematic grounded theory method in collecting data from participants to understand their realities and experiences as they built co-teaching relationships. I conducted a focus group with each co-teaching partnership, an interpersonal behavior questionnaire (Schutz, 1992) with each participant, at least two observations of each partnership co-teaching in their natural settings (one scheduled and one unannounced), and individual interviews with each general education and special education teacher. Using the guidance of Strauss and Corbin (1990), I analyzed the data inductively to build a theory. This included both informal data analysis by memoing

along the way and formal data analysis periods using open coding, axial coding, and selective coding. Through this data analysis process, I built a theory grounded on the realities experienced and expressed by participants. I present this theory in the form of a hypothesis that explains the process by which co-teachers overcome inherent challenges to build effective partnerships. Glaser and Strauss (1967) stated that grounded theories are never finalized, but rather are constantly being revised as new data is found. Therefore, the theory I generated from this data is stated as a hypothesis to allow for future studies to refine it based on more data.

Researcher's Role

It is important for me to share my role as the researcher in this study, as the qualitative researcher's perspective and background influences how he or she approaches research and analyzes the data (Maxwell, 2005). Since it is impossible to separate potential researcher bias from influencing the interpretation of a study, it is necessary to be aware of the researcher's philosophical perspectives and preconceived beliefs about a topic.

I begin this section with descriptions of the paradigm and philosophical assumptions that oriented my research. According to Lincoln and Guba (2004), a paradigm is "the basic belief system or worldview that guides the investigator" (p. 17). The constructivist paradigm is the most appropriate fit for this research topic because this view purports the idea that meaning is created through interactions with others and research is charged with looking for these differing and complex views (Creswell, 2007). In this study, I believed general education and special education teachers create the meaning of what co-teaching is in their interactions with their co-teaching partner.

Through these interactions, teachers work with others who might share differing perspectives. It was my responsibility, as the researcher, to interpret these meanings that teachers have about co-teaching and their resolution of challenges they have experienced.

The philosophical assumption underneath the constructivist paradigm most appropriate for this study is the ontological assumption. This assumption views reality as subjective to the participants and their situations (Creswell, 2007). Different people have different perceptions of reality and this was true in my study with the inclusion of both general education and special education teachers. These teachers brought with them different perspectives from the beginning of their careers in their teacher education programs (Van Garderen et al., 2009). In light of these differing perspectives, I considered how reality was subjective to both teachers in a co-teaching partnership. Lincoln and Guba (2004) advise researchers, who operate under the umbrella of constructivist, ontological assumptions, to understand the subjective and sometimes conflicting realities present in complex interactions. As I analyzed the data and built a theory, I included multiple perspectives and formed a theory that had consensus from all viewpoints.

It is also necessary for me to share my personal background and interest in light of this topic. I have been a Title I teacher in an elementary school for ten years and have worked with students who are experiencing difficulty learning to read or acquire math skills. My position as a Title 1 teacher is considered to be a general education teacher, but I also have the required reading endorsement for being a “highly qualified” reading teacher according to NCLB (2002). While my primary responsibility is to provide effective interventions for students in the general education setting, a significant portion

of my job also includes collaborating with both general education and special education teachers. I often work with general education teachers as they identify students who are struggling in their classrooms. In addition, I collaborate with special education teachers to find strategies for my students in both reading and math. Through these interactions with both general education and special education teachers, I noticed the differing philosophical perspectives and unintentional disconnects between general education and special education. This observation and experience caused me to question how teachers can effectively collaborate and, more specifically, collaborate in the general education setting.

In my review of the literature, I found co-teaching to be the most frequent method used in collaboration of special education and general education teachers. Also, I have three experiences with co-teaching in a kindergarten, first grade, and fifth grade classroom in my school. For all of these co-teaching experiences, I was paired with a general education classroom teacher for one school year. In the kindergarten classroom, we used station teaching to provide flexible small group reading instruction to students. The classroom teacher taught the small group reading lessons from the district reading curriculum, her classroom associate taught vocabulary lessons from an intervention program, and I taught phonemic awareness and writing lessons to the differentiated groups. The first grade co-teaching assignment was a parallel instruction model, in which the classroom teacher worked on phonics skills through making words lessons and I taught the students with lower reading skills using the reading intervention program that correlated with the district's reading curriculum. The fifth grade co-teaching relationship was during their writing block. During this school year, the classroom teacher and I used

different models including one teach while one observes, team teaching, and station teaching. This was the only co-teaching partnership in which I also co-planned instruction with the classroom teacher. While all of these co-teaching relationships were beneficial to classroom instruction, I have not been able to continue these partnerships due to reduced Title I staffing in my school. Previously, there was enough Title I teachers to partner with each classroom teacher in a grade level. However, we now share students across grade level classes for intervention groups, instead of co-teaching.

Based on my personal experience with collaboration and my review of the literature, there were several assumptions I made that affected both the research design and data analysis. First, I assumed co-teaching is a positive model for inclusion of special education students in a LRE. I believe co-teaching can be beneficial to both the students and the teachers. I not only saw the growth of literacy skills in the co-teaching experiences I had in my school, but the research literature also points to the benefits for all involved in co-taught classes (Brownell et al., 2006; Hang & Rabren, 2009; Kohler-Evans, 2006; Murawski & Hughes, 2009; Scheeler et al., 2010; Scruggs et al., 2007; Wilson & Michaels, 2006). Second, I assumed challenges occur in co-teaching relationships and all teachers experience these challenges at some time. A final assumption I made is that, while challenges are inherent in co-teaching relationships, it is possible to overcome challenges for the betterment of the partnerships.

One of the most important aspects to consider in light of my role as the researcher is the human instrument (Strauss, 1987). The experiential knowledge that a researcher brings with them to the study makes them sensitive to the concepts that arise in the data. My extensive literature review and previous experience with collaboration provided me

with theoretical sensitivity to serve as the human instrument in this study. Lincoln and Guba (1985) stated that the human instrument is one of the primary benefits of qualitative studies. In fact, “a contextual inquiry *demands* a human instrument, one fully adaptive to the indeterminate situation that will be encountered” (Lincoln & Guba, 1985, p. 187). In qualitative research, an emergent design requires adaptability to unexpected responses by participants or events that occur in the data collection process. Because I entered into a situation where not everything was known about co-teaching partnerships, I could not use an established instrument. As unanticipated events occurred, I needed to respond to the environment and the people. Additionally, I probed deeper into unexpected responses to better understand the phenomenon of my study.

Setting

The school district involved in this study is located in an urban area in Eastern Iowa. According to records provided by the district in 2012, the district had an enrollment of 16,367 students attending 24 elementary schools, 6 middle schools, and 4 high schools in 2011-2012. Special education students represented 14.5% of the student population. The district received Title I funds for students from low socioeconomic backgrounds, with 46.7% of students qualifying for free and reduced lunch. Minorities represented 24% of students, including 17.2% Black, 3.8% Hispanic, 2.7% Asian, and 0.6% Native American, with Caucasian being 76% of students. The district had English Language Learner programs in several of the schools. The district’s teachers were all highly qualified, according to NCLB (2002) requirements, and 55.8% had a master’s degree or higher.

State records published in 2011 listed the district's NCLB status as a district in need of assistance. The district had an improvement plan in place, working on the implementation of Professional Learning Communities (Dufour, 2004) and incorporation of Iowa Core standards for learning across grade levels and content areas. Additionally, the district implemented inclusive practices for students with disabilities in all the schools by integrating students in general education classrooms as much as possible. Inclusive practices were used more extensively in the secondary schools to meet NCLB (2002) requirements of highly qualified teachers in the content areas. Co-teaching was a significant part of inclusive practices in the district, with a total of 31 co-teaching teams in the middle schools and 25 teams in the high schools. The district was also recovering from a record-setting flood in 2008 that caused major damage to the city and the school district. Because the population shifts that occurred after the flood caused disproportionate distribution of students across the district and district enrollment has steadily declined in the last few decades, the district conducted a boundary study in the 2010-2011 school year and was redoing boundaries for all schools effective Fall 2012, including the closures of two elementary schools.

This systematic grounded theory study included co-teaching teams from two high schools and one middle school. Three of the participating co-teaching teams taught at High School A and one co-teaching team taught at High School B (pseudonyms). The fifth participating team taught at the middle school level.

High School A

This high school had an enrollment of 1,525 students, of which 16.7% received special education services. In High School A, 44% of the students qualified for free and

reduced lunch. Minorities represented 18.6% of students, including 13.2% Black, 2.7% Hispanic, 2.2% Asian, and 0.5% Native American, with Caucasian being 81.4% of students. This school had the most co-teaching teams across the district. Of the 25 co-teaching teams at the high school level, High School A included 14 of these teams with a total of 23 co-taught sections. From these 14 co-teaching teams at High School A, five teams met the criteria for the study and three of these teams agreed to participate. In addition to these three teams, the pilot interview co-teaching team also taught at High School A.

High School B

This high school had an enrollment of 1,766 students, with 12.9% receiving special education services. Those students who qualified for free and reduced lunch made up 25% of the student population. Minorities represented 14.2% of students, including 8.3% Black, 3.3 Asian, 1.8% Hispanic, and 0.8% Native American, with Caucasian representing 85.8% of students. High School B had seven co-teaching teams with a total of 13 co-taught sections. Of the co-teaching teams at High School B, two teams met the criteria and one team agreed to participate.

Middle School

The middle school included in this study had an enrollment of 549 students, including 20.2% who received special education services. The percentage of students who qualified for free and reduced lunch was 65%. Minorities represented 30.6% of students, including 23.3% Black, 4.7% Hispanic, 1.6% Asian, 0.9% Native American, with Caucasian being 69.4% of students. This middle school had five different co-

teaching teams with a total of seven co-taught sections. Of the co-teaching teams at this school, one team met the criteria and agreed to participate in this study.

Participants

To determine the participants for this study, I used the concept of theoretical sampling proposed by Strauss and Corbin (1990) in their discussion of grounded theory methods. Theoretical sampling means choosing participants that have been involved in the phenomenon of the study and who can inform the development of the theory. I used the following criteria to select effective co-teaching partnerships for this study: (a) co-teaching partnerships consisting of one general education and one special education teacher, (b) they have co-taught for at least one year in order to have experienced challenges and had time to resolve them, and (c) utilization of effective co-teaching instructional relationships. An effective co-teaching relationship was defined as both teachers having equal roles in shared decision making and instruction of students. The research indicates one of the common faults with co-teaching is one teacher being in an assistive role (Scruggs et al., 2007). Therefore, I did not include co-teaching relationships in which one teacher consistently had the role of an assistant in the classroom while the other teacher instructed. However, if the teachers exchanged these roles throughout instruction, such as for different lessons or units, they were included in this sample. The school district's secondary curriculum coach for special services assisted in selecting co-teachers that met the criteria. This person helps initiate and train co-teaching partnerships for the district. Thus, she knew the co-teaching models utilized by the co-teaching partnerships in secondary schools across the district.

The participants were from a convenience sample of the school district in which I work. This district has six middle schools and four high schools from which to draw the co-teaching partnerships for this sample. In order to not study teachers from the elementary-school building where I teach, I only drew the sample from the middle schools and high schools in my district. This limited respondent or researcher bias in which participants might respond a certain way or the researcher would interpret the data differently based on prior relationships and experiences.

After obtaining Institutional Review Board (IRB) approval (see Appendix A) and district approval of the study (see Appendix B), I contacted the district's secondary curriculum coach for special services. After gathering her suggestions of effective co-teaching partnerships, I asked her to assist in emailing the appropriate secondary school principals (see Appendix C) for consent for conducting the study in their school and contacting the appropriate co-teaching teams in their school that met the study criteria. Once I received the principals' consent, I then emailed the teachers to request their consent to participate in the study (see Appendix D). In this email, I also included a copy of the informed consent form in order to give teachers an opportunity to review possible risks and benefits before agreeing to participate in the study. Considering teachers often have a multitude of responsibilities, I chose to include a small type of reciprocity to encourage their participation by stating I would share with them the findings of the study to help them learn from other co-teachers across their district. Teachers generally appreciate feedback and suggestions for their own professional development (Bogdan & Biklen, 2003). I also acknowledged the time they shared with me for this study outside

of their contract hours by giving them a gift card to a local restaurant or coffee shop as a token of appreciation.

In determining the sample size, I used the concept of theoretical saturation discussed by Strauss and Corbin (1990) for grounded theory studies. Researchers using the grounded theory method should continue to sample participants until no new ideas or experiences are reported. I planned to continue to draw from the co-teaching partnerships suggested by the district secondary curriculum coach for special services until I reached theoretical saturation. Although the estimated number of participants needed to reach this point was six to eight partnerships, totaling 12 to 16 participants, only five teams consented to participate in this study. Because of this, I contacted three other school districts within rural and urban areas in East Central Iowa. Of these three districts, two consented to the study being conducted in their district, but neither of these districts had participants that met the criteria of the study.

Glaser and Strauss (1967) suggested a homogenous sample could be fairly small, with more participants added only if they could provide additional information for building the theory. Conversely, Creswell (2007) suggested that 20 to 30 participants were needed to cover all aspects of the phenomenon to build a valid theory. Creswell's (2007) position of sample size comes from an open selection of participants, without setting criteria on their experience of the phenomenon. Because I delimited this study to understanding the process of building effective co-teaching relationships, theoretical saturation occurred with a smaller number of participants. Of the five teams that agreed to participate in this study, theoretical saturation was achieved as the fifth team provided replication of ideas already gathered from the first four teams of the study. Additionally,

a smaller sample size allows the researcher to explore the phenomenon more in depth (Taylor & Bogdan, 1998). Taylor and Bogdan (1998) stated there is often an “inverse relationship between the number of informants and the depth to which you interview each” (p. 93). Including fewer participants allowed me to conduct more interviews and observations with each co-teaching partnership.

The participating co-teaching teams came from one middle school and two high schools in my district. During sampling, I considered maximum variation with diverse gender compositions of teams, cultural differences, and years of experience. See Table 1 for information about each participant. Two of the co-teaching teams were both female, one team was both male, and two teams included both male and female teachers. Additionally, cultural differences were present in one team with one of the members being Filipino. Variation was also present in the teaching experience of the teams with some teams including one teacher who was newer to the teaching profession while the other person was a veteran teacher. Other teams demonstrated more equivalent teaching experience. Similarly, co-teaching experience provided variation. The breadth of experience the teachers had with co-teaching in general ranged from 2 to 26 years. The overall experience of the teams ranged from two to five years co-teaching together. Variation in teachers’ backgrounds and experience provided a variety of perspectives on co-teaching and forming co-teaching partnerships.

Table 1

Participant Demographics

Participants	Gender	Ethnicity	Teaching Position	Teaching Experience	Co-teaching Experience
Vicki	F	Filipino	Gen Ed – English	6 years	3 years
Angie	F	Caucasian	Spec Ed	27 years	4 years
Brent	M	Caucasian	Gen Ed – Science	9 years	8 years
Cindy	F	Caucasian	Spec Ed	26 years	26 years
Tyler	M	Caucasian	Gen Ed – English	4 years	2 years
Gordy	M	Caucasian	Spec Ed	9 years	3 years
Thelma	F	Caucasian	Gen Ed – Soc Studies	7 years	5 years
Louise	F	Caucasian	Spec Ed	8 years	5 years
Alex	M	Caucasian	Gen Ed – English	10 years	5 years
Bianca	F	Caucasian	Spec Ed	11 years	7 years

Note. This table describes specific information for each participating teacher and groups it by co-teaching team.

Data Collection Procedures

Before I began collecting data, I obtained IRB approval (see Appendix A), permission from the school district (see Appendix B), principal consent (see Appendix C), and consent from the participants (see Appendixes D and E). After these steps were achieved, I collected data through one focus group per co-teaching partnership, an interpersonal behavior questionnaire (Schutz, 1992) with each participant, a minimum of two observations of each co-teaching partnership instructing their class (one scheduled and one unannounced), and individual interviews with each general education and special education teacher. The data collection period occurred during January, February, and

March of 2012. These different types of data provided information on more aspects of the process by which special education and general education teachers overcome problems inherent in co-teaching partnerships. Glaser and Strauss (1967) stated theory that is based on more than one kind of data provides a better understanding of the process being explored in order to build a more developed theory.

Focus Groups

The first data collection method I conducted were focus groups with each co-teaching partnership. I conducted the focus groups at the school where each co-teaching team works in a room of their choosing. Because this was my initial face-to-face contact with the participants, I explained to them the study's purpose and their level of involvement. I also addressed any questions they had about the study. Through this discussion, I began to build the necessary trust between researcher and participants for a qualitative study (Lincoln & Guba, 1985).

After the initial discussion, I asked participants for permission to record the focus group using a digital audio recorder. Taylor and Bogdan (1998) stated that recording interviews is an accepted norm and "allows the interviewer to capture more than he or she could by relying on memory" (p. 112). To preserve the natural flow of conversation, I wrote notes (i.e., theoretical memos) immediately after the interview while the conversation was still memorable. Using both notes and recordings helped to ensure fidelity of the data.

This focus group used a semi-structured form (see Appendix F) to ensure comparability of data across the participants with the ability to further probe the participants for more detail and clarification (Maykut & Morehouse, 1994). A semi-

structured interview format uses a set of standardized open-ended questions for all participants with the freedom to probe participants during the interview about their responses. I piloted these interview questions with a co-teaching partnership that was not part of the sample of this study and revised wording of the questions based on their responses and suggestions. This pilot group came from the suggested partnerships by the district secondary curriculum coach for special services. The standardized open-ended questions included general questions that opened up the discussion and allowed participants to talk. I then probed participants, as needed, for further information and detail about responses that were unclear or general. I did not assume a position or belief of the participants, but rather probed to find out exactly what they meant (Taylor & Bogdan, 1998). I told initial co-teaching teams I would conduct follow-up focus groups to address any questions or topics that arose in subsequent focus groups, but found the questions I wanted to address would be better suited for the individual interviews.

The questions I included in the focus groups focused on the journey of the co-teachers' partnership from its beginning, through any challenges they experienced, how they resolved those challenges, to its current state. See Table 2 for the list of focus group interview questions.

Table 2

Focus Group Interview Questions

1. To begin our focus group, I would like you to tell me how you started co-teaching together.
 2. What were your initial thoughts about co-teaching and how might have these affected your view of beginning a co-teaching partnership?
 3. What were the initial goals or ideals you held for co-teaching?
 4. What do you believe the purpose of co-teaching should be?
 5. What does a typical co-teaching lesson look like in your class?
 6. What does planning look like for your co-taught lessons?
 7. Tell me about how you address different student needs in your co-taught classroom.
 8. Tell me about administrative support in your building for co-teaching.
 9. There are naturally occurring challenges in any co-teaching relationship as two people work together. Tell me about any challenges you have experienced in your co-teaching relationship.
 10. How have these challenges affected your co-teaching relationship?
 11. How have these challenges affected your instruction in the classroom?
 12. How have you addressed these challenges?
 13. Tell me about any positive aspects you have observed for students or experienced yourself as a result of co-teaching.
 14. What advice would you give others who would be starting to co-teach?
 15. Is there anything else you would like to share about your co-teaching
-

experiences and relationship that we have not talked about so far?

Note. This table includes the questions that were asked in the focus group interviews with each co-teaching team.

These questions were important for answering the research questions of this study. The central research question about how co-teachers resolve problems inherent in co-teaching was addressed through all of these questions as teachers addressed problems that surfaced for them in different points of their collaboration journey. However, questions 9 through 12 specifically explored challenges with co-teaching and the resolution of these challenges. The second research question about attitudes on inclusion was addressed by questions 4, 5, and 7, which looked at what they believe the purpose for co-teaching is, what a lesson looks like in their classroom, and how they meet different student needs. The third research question about differing philosophical perspectives of general education and special education was addressed in questions 2, 3, and 4, which looked at participants' thoughts, goals, and beliefs of the purpose for co-teaching. The fourth research question about interpersonal factors is covered with questions 9, 10, and 14, which looked at challenges to the co-teaching relationship and advice they may give other co-teachers. The fifth research question about external factors that impede effective co-teaching partnerships was covered in questions 6, 8, 9, 10, and 11, with planning time, administrative support, and other external factors raised by the participants during discussion of challenges they experienced.

The questions I included in this focus group semi-structured interview guide were based on the literature on collaboration between general education and special education teachers, as well as research specifically on co-teaching partnerships. Question 1

considered how the participants' co-teaching journey started. The literature discusses the importance of teachers volunteering to participate in co-teaching versus being assigned to co-teaching partnerships (Leatherman, 2009; Scruggs et al., 2007). Teachers who volunteer to co-teach together often have similar teaching styles and beliefs about inclusion. These similarities are factors that make co-teaching more successful. By asking participants to share how their co-teaching journeys began, I sought to find out whether they volunteered to co-teach together or if they were assigned to this position.

The beliefs and goals for which teachers hold for co-teaching affects how they interact with each other and arrange their roles (Leatherman, 2009; Santoli et al., 2008). Questions 2, 3, and 4 addressed the beliefs and ideas co-teachers hold about the nature and purpose of co-teaching. Research indicates that teachers who have a negative belief about co-teaching or inclusion are less likely to interact positively with their co-teaching partners (Santoli et al., 2008). Although this study looked at effective co-teaching partnerships, I wanted to discover if these partnerships were not initially as congenial as their current state.

Looking at the effective ways in which co-teachers address instruction in the classroom was addressed in questions 5, 6, and 7. Question 5 investigated what the instruction looks like during a typical lesson. Research on the models of co-teaching in the classroom have identified six different models, including team teaching, station teaching, parallel teaching, alternative teaching, one teach while one assists, and one teach while one observes (Friend et al., 2010; Iowa Department of Education, 2009; Scruggs et al., 2007). This question gathered data about how teachers structure their lessons and sought to identify models they found to be effective in their classrooms.

Planning for co-teaching is considered one of the most important components for successful collaboration, yet one of the hardest for teachers to schedule (Austin, 2001; Carter et al., 2009; Kritikos & Birnbaum, 2003; Magiera & Zigmond, 2005; Murray, 2004; Paulsen, 2008; Santoli et al., 2008; Van Garderen & Whittaker, 2007). Some teachers have found innovative solutions to creating common planning time (Leatherman, 2009). Question 6 explored how teachers plan for instruction for their co-taught lessons.

Attending to differing student needs is often cited in the research as one of the purposes and benefits of co-teaching (Scruggs et al., 2007; Wilson & Michaels, 2006). Having two teachers in the classroom allows teachers to address varying learning needs of students with and without disabilities. Using the expertise of the general education teacher and the special education teacher makes the lessons more applicable in terms of content and accommodations for learning. Question 7 examined how teachers use co-teaching to address different student learning needs.

Administrative support is also an important factor in how teachers build effective co-teaching relationships and overcome problems inherent in collaboration. Research has demonstrated the negative effect of a lack of administrative support on the co-teaching relationship (Carter et al., 2009; Kritikos & Birnbaum, 2003). Conversely, studies in which administrators demonstrated support for co-teaching found positive results for co-teaching relationships (Idol, 2006; Leatherman, 2009). Question 8 looked at what teachers experienced in terms of administrative support and how they addressed these challenges.

Challenges in co-teaching relationships are often inevitable as two people blend their educational backgrounds, teaching styles, and personalities together in a classroom.

Questions 9 through 12 addressed these challenges and the process by which teachers overcome these challenges. Research indicates that challenges include differing attitudes about inclusion, interpersonal differences, lack of training, lack of common planning time, and lack of administrator support (Brownell et al., 2006; Carter et al., 2009; Kritikos & Birnbaum, 2003; Santoli et al., 2008). Barriers to effective co-teaching could occur during classroom instruction, thus causing co-teachers to determine how to address these challenges in front of students (Gately, S.E. & Gately, 2001). These questions are purposefully left open-ended for participants to express the challenges they experienced, as they might have different challenges not mentioned in the literature. The purpose of this study was to address the process by which teachers have overcome these challenges in order to build a theory to explain this process. Therefore, question 12 specifically asked how teachers have overcome these challenges. Question 14 also addressed challenges and how teachers overcame them by asking for advice they would give teachers beginning a co-teaching partnership.

Co-teaching can be a positive model for teachers and students (Austin, 2001; Scheeler et al., 2010; Wilson & Michaels, 2006). Not only are more student needs met, but teachers can learn from each other through peer modeling and mentoring. Special education teachers can improve their content expertise and general education teachers can improve their skills of making accommodations for students. Question 13 asked teachers to share benefits they have experienced as a part of co-teaching.

The final question used the closing question technique described by Patton (2002) in which the interviewer asks participants for information that was not addressed during the interview. Participants shared aspects of co-teaching that I had not thought to ask

with the prepared questions in the semi-structured interview guide. Qualitative research is about understanding the participants' experiences and process by which they create meaning (Lincoln & Guba, 1985). The responses for this final question brought up further questions for the individual interviews.

Questionnaires

At the conclusion of the focus groups, I asked participants to complete a questionnaire based on the interpersonal behavior theory (Schutz, 1992). An interpersonal behavior questionnaire proved more beneficial to this study than a personality measure because it helped to explain the interpersonal relationship involved in co-teaching partnerships. Indeed, “there are dimensions of interpersonal behavior that cannot be predicted by personality measures alone” (Mahoney & Stasson, 2005, p. 207). Schutz (1958, 1966) created a questionnaire, the Fundamental Interpersonal Relations Orientation – Behavior (FIRO-B), to determine the interpersonal needs of individuals that correlated with his interpersonal behavior theory. He later revised the instrument to reflect changes in the interpersonal behavior theory (Schutz, 1992) and address criticisms related to construct validity of the FIRO-B (Dancer & Woods, 2006; Furnham, 1996; Hurley, 1990). I used Element B, as it provides a more advanced version of exploring interpersonal behaviors. Schutz (1992) also created Element F to explore feelings and Element S to measure self-concept. However, these instruments would not have been as valuable for answering the research questions on the process by which teachers overcome problems inherent in co-teaching relationships. Looking at process involves addressing behaviors, thus making Element B more informative for this study.

Element B asks participants to report how they act in interpersonal contexts (Do), what behaviors they receive from others (Get), perceptions they have of their interpersonal relations (See) and how they would want others to act in interpersonal relationships (Want) for each of the three interpersonal dimensions (Inclusion, Control, and Openness) (Schutz, 1992). The scores can then be used to determine dissatisfactions individuals might have in interpersonal relationships, based on the discrepancy between See and Want scores. The questionnaire focuses on the behaviors of people, rather than their feelings. It provides four scores in each of the three interpersonal wants, with a total of 12 scores. The questionnaire was given with the prescribed directions provided in the instrument, including asking the respondents to answer the questions based on a 0-9 numerical scale. It took approximately 15 minutes to administer this questionnaire and score it using the self-scoring measure provided in the instrument. After teachers completed the questionnaire and we collaboratively scored their interpersonal desires using the self-scoring guide on the instrument, I asked them to reflect on what the results said about their experience of working with their co-teaching partner. I included these conversations as part of the focus group interview recordings and transcripts.

While this instrument is likely not a perfect measure of interpersonal behaviors, it has been found to be helpful as one piece of data in a variety of methods used to better understand interpersonal relations (Furnham, 2008; Schutz, 1992). Element B was used as one part of the data collection process to help explain how teachers overcome problems inherent in co-teaching relationships. Glaser and Strauss (1967) stated that quantitative instruments could be useful in grounded theory studies to provide richer information for grounding the theory in the data. The researcher looks for relationships

in the data that provide information to “saturate the categories further by developing their properties and thereby achieving a denser theory” (Glaser & Strauss, 1967, p. 205).

Observations

It is necessary to use a combination of research methods to best understand the phenomenon being studied (Corbin & Strauss, 2008; Friend et al., 2010; Taylor & Bogdan, 1998). What people say and what they actually do can differ, depending on the situation in which they are placed. A researcher cannot assume what participants say in a questionnaire, interview, or focus group is what they do in the natural setting.

Additionally, Taylor and Bogdan (1998) stated observing participants in the natural setting gives researchers the context that is necessary to understand participants’ perspectives. In understanding a process, observations are helpful in revealing “the subtleties of interaction” (Corbin & Strauss, 2008, p. 151). To address these concerns, I conducted observations of each co-teaching partnership in their classes while they were instructing students. I observed each co-teaching partnership at least twice, one scheduled visit and one unannounced visit. I conducted the scheduled observation first to continue to build trust with the participants and to hopefully limit any effect my presence would have in the classroom on teachers and students. For the second observation, I asked each co-teaching partnership for a two-week schedule noting any disruptions to their co-taught classes. This allowed me to observe them unannounced, but still ensured the observation would include both of them in the classroom during a normal lesson. For four co-teaching teams, I conducted two observations and for one team I conducted three observations. The reason I observed one team for a third time was the first observation

included mostly independent work time and did not portray active instructional roles by the teachers.

During the observations, I used a protocol (see Appendix G) that accounted for both descriptive and reflective notes (Bogdan & Biklen, 2003). The descriptive notes included objective observations with specific details of participants' actions and words. I described the setting, events in the classroom, and activities of the participants. The reflective notes were noted at the end by Researcher Comment as a heading on the field notes and were my interpretations of participants' actions or words (see Appendix for completed example of an observation protocol). I wrote longer theoretical memos (Strauss & Corbin, 1990) after the observation that included reflections on my methods, data analysis, ethical considerations, clarifications of the observation notes, and my own frame of mind during the observation. Strauss and Corbin (1990) described theoretical memos as a way to begin data analysis in the field by discussing properties of the emerging categories around the central phenomenon.

Individual Interviews

The third phase of data collection involved individual interviews with each general education and special education teacher. This allowed the participants to express their thoughts, feelings, and experiences that might be uncomfortable for them to share in the presence of their co-teaching partner. Additionally, because the perspectives of general education and special education teachers can differ towards collaboration (Murray, 2004; Naraian, 2010; Vannest & Hagan-Burke, 2010), separate interviews allowed all voices to be heard. Maxwell (2005) stated that interviews at the end of the data collection phase could be helpful for gathering additional information that might

have been missed during observations or for confirming initial conclusions or hypotheses about the phenomenon.

The format for these interviews was also a semi-structured interview (see Appendix H) in which certain questions were asked of all participants to allow for comparability of data (Maykut & Morehouse, 1994). Moreover, during these interviews, I also clarified any questions I had from the observations or focus groups in regards to specific teachers or co-teaching partnerships. The questions were formulated from the data analysis of the focus groups and observations (Strauss & Corbin, 1990). Glaser and Strauss (1967) emphasized the importance of a theory being built throughout the data collection process. These interviews allowed me to confirm or reject any emerging hypotheses for the developing theory. Additionally, I asked specific questions about the participants to better understand their backgrounds and prior experiences with co-teaching. Because these questions were not part of the initial IRB application and approval, I submitted the individual interview questions at a later point for approval, which was subsequently granted. I piloted the standardized questions with the same pilot group used for the focus group questions and made revisions in the wording as needed. See Table 3 for a list of the interview questions.

Table 3

Individual Interview Questions

1. How many years have you been teaching overall? How many years have you been co-teaching?
 2. What are your teaching certifications, including those you earned in undergraduate and graduate levels?
 3. What have been your professional development experiences for co-teaching? How adequate do you feel those experiences have been?
 4. What is the composition of the classes that you co-teach this year? Number of students, number of students with IEPs, gender, etc.
 5. How are you similar to your co-teaching partner?
 6. How do you complement, or balance out, your co-teaching partner?
 7. Some teams said they are compatible because they are similar, while other teams said they are compatible because they balance each other out. Describe if your co-teaching relationship is mostly similar or mostly complementary.
 8. What aspects do you think co-teaching partners should be similar in? What aspects do you think are helpful if they balance each other out?
 9. Describe your view of inclusion and how this is similar or different from your co-teaching partner's view. If there is a difference, how have you addressed the differences you both hold for inclusion?
 10. Special education and general education teachers are often prepared for their careers differently. Do you feel you bring a different perspective
-

towards teaching and learning to the classroom than your co-teaching partner? If there is a difference, how have you addressed these different perspectives?

11. Describe your communication style preference with students or other adults and if this differs from your co-teaching partner (expressive, emotional, concise, reflective). If there is a difference, how have you handled these differences?

12. Describe how you handle conflict either with students or with other adults in relation to these styles:

1. Integration: open and direct
2. Dominating: forceful
3. Obliging: please others or make peace
4. Avoiding: withdraw or deny
5. Compromising: concession

If your conflict style differs from your co-teaching partner, how have you handled these differences?

13. How would you describe control in regards to your co-teaching relationship? Is there one person who is more dominant in decisions and if so, how does this affect your relationship?

14. Is there anything else you would like to share about your co-teaching experiences and relationship that we have not talked about so far?

Note. This table lists the questions that were included in the individual interviews with each co-teacher.

Based on the pilot group's suggestion, I shared these questions with participants prior to the individual interviews, in order for them to confirm specific statistics for the first four questions, as well as have time to reflect on their personal communication and conflict styles. Participants said it was helpful to have these questions ahead of time in order to reflect on how they would answer the questions during the interview. During the interview, I also probed participants, as needed, for further explanation or clarification of their responses. For some of the initial interviews, I followed up with participants to clarify questions that arose in subsequent interviews.

These individual interview questions were important for thoroughly answering the research questions of this study, including developing a theory for the central research question of how co-teachers resolve problems inherent in co-teaching. In reviewing the data from the focus group interviews and classroom observations, I found areas that needed further detail for the theory to better understand the context, intervening conditions, interactional strategies, and consequences of those strategies on the development of effective co-teaching partnerships (Corbin & Strauss, 2008; Strauss & Corbin, 1990). To fully build these aspects, the research sub-questions about views of inclusion, philosophical perspectives, interpersonal differences, and external factors were addressed in the individual interview questions. Addressing these questions individually provided different perspectives than the teachers shared in the focus group interviews. Question 9 addressed the second research question about attitudes on inclusion, while question 10 addressed the third research question about differing philosophical perspectives of general education and special education that can be brought to the classroom. The concept of compatibility in how people are similar or complement each

other addressed the philosophical perspectives of the third research question, as well as interpersonal factors in the fourth research question. Additionally, questions 11, 12, and 13 explored interpersonal factors with communication and conflict styles, as well as the concept of control between two people in making decisions. The fifth research question, addressing external factors, is covered in question 3 with professional development, while other external factors such as common prep time and administrative support were discussed thoroughly in the focus group interviews, negating the need to further address them in the individual interviews.

The interview questions were not only based on the research questions for this study, but also were grounded in the data analysis from the first two phases of the research, including the focus groups with questionnaires and the classroom observations. In review of the transcripts and observation notes, I noted areas that I wanted to explore with participants in more depth with the individual interviews. The purpose was not only to better understand concepts that affect how co-teachers work together to resolve naturally occurring challenges, but also to allow the opportunity for teachers to share different perspectives when they were in a one-on-one setting, rather than when they were in a joint setting with their co-teaching partner. In creating these individual interview questions, I also considered the theoretical or empirical base available in the literature for both the wording and content of the questions.

The first four questions explored specific data about the individual participants to better understand their educational and career backgrounds. Question 1 asked participants to share the number of years they had been teaching and how many years they had co-taught. A comment made by one co-teaching team in the focus group was

that the point in one's career had an effect on how compatible the teachers were in their relationship, because it influenced how they looked at teaching and learning, as well as how they viewed their position as equals in the classroom. I also wanted to see if teachers had prior experiences with co-teaching outside of their current partnership and how this might have affected their view of co-teaching.

Additionally, the initial data analysis revealed the concept of parity affecting how teachers work through establishing an effective partnership. One factor that contributed to parity was how knowledgeable teachers were in the content area, which was addressed in question 2 by looking at which teaching certifications teachers held. Some of the special education teachers had mentioned during the focus groups that they held certifications in the content areas of their co-taught classes. I wanted to see if this was predominantly true across the partnerships and if it was a factor in how teachers achieved parity within their co-teaching relationship. The idea of teachers being equals within a classroom and achieving parity through instructional roles is cited frequently in the theoretical and empirical literature (Bessette, 2008; Eisenman et al., 2011; Harbort et al., 2007; Scruggs et al., 2007).

The third interview question asked participants to share their professional development experiences for co-teaching in order to better understand how training for co-teaching might have affected the evolution of co-teaching relationships. Some of the participants had mentioned some district professional development experiences for co-teaching, but that it was brief. I wanted to better understand what all participants' professional development experiences had been for co-teaching and how adequate they felt these experiences were for their co-teaching partnership. The theoretical literature

emphasizes the importance of providing professional development to teachers in appropriate co-teaching models as well as collaboration skills (Carter et al., 2009; Friend & Cook, 2010).

Another aspect that arose in the focus groups and classroom observations in regards to individual teachers was the composition of their co-taught classes. Question 4 asked participants to share the number of students in their co-taught class/es, the number of students with IEPs, gender, and any other specifics they felt described their class/es. One team had discussed their concern about the number of students with IEPs increasing over time. They felt this did not provide the best learning environment where students have a range of models both academically and socially to support their learning in an inclusive classroom. The benefits mentioned in the research literature for peer learning and leadership development in inclusive co-taught classrooms (Estell et al., 2009; Hang & Rabren, 2009; Kohler-Evans, 2006; McDuffie et al., 2009; Scruggs et al., 2007; Wilson & Michaels, 2006) are less evident when a range of learners is not present within the classroom. Additionally, research shows the importance of administrative support in not only allowing for co-teaching in a schedule, but also providing the necessary structures and procedures for it to happen effectively in practice (Carter et al., 2009).

The next section in the individual interview questions was on compatibility in a co-teaching relationship and looked at how co-teachers are similar or complement each other (Questions 5-8). These two dimensions of compatibility were shared in some way across all five co-teaching partnerships in the focus group interviews as they expressed their view of meeting student needs, how they plan for instruction, or what a typical lesson would look like in their co-taught classroom. The interpersonal behavior

questionnaire also revealed compatibility in terms of interpersonal behaviors being similar or complementary. Throughout the classroom observations, I noted in almost every lesson how teachers complemented each other in building off of each other's comments during presentation of content or giving directions for activities. The idea of compatibility was emerging as a significant theme in how teachers develop effective co-teaching relationships and I wanted to further explore this concept for the developing theory. Additionally, I wanted to see what aspects teachers thought were important to be similar in (Question 8), because the literature indicates the necessity for comparable views of classroom management and philosophies of teaching or learning (Brownell et al., 2006; Leatherman, 2009)

The next two interview questions, Questions 9 and 10, further explored the philosophical perspectives teachers held for inclusion and pedagogy. In the focus groups, teachers shared what they thought was the purpose and ideal for co-teaching. Teachers mentioned co-taught classes provided students with learning needs the access to regular education curriculum with support. In this discussion, teachers did not mention differences in opinion about how inclusion should be accomplished. However, the research on views of inclusion shows a difference often exists between general education and special education teachers (Brownell et al., 2006; Leatherman, 2009; Paulsen, 2008). Therefore, I wanted to see if teachers would share a different perspective or be more comfortable sharing conflicts that had arisen with their partner in regards to inclusion in the individual interview setting.

I also asked Question 10 about differences in philosophical perspectives towards teaching and learning to see if teachers would share more freely when their co-teaching

partner was not present. The literature on philosophies towards teaching and learning shows there is often a difference between general education and special education teachers' approach in the classroom (Van Garderen et al., 2009; Wasburn-Moses & Frager, 2009; Winzer, 1993). I wanted to see if this was also true for co-teaching teams that have developed effective co-teaching relationships and how they might have addressed these differences.

Interpersonal differences also affect how two people work together (Conderman, 2011; Gately, S.E. & Gately, 2001; Leatherman, 2009; Scruggs et al., 2007). In my classroom observations of the co-teachers, I observed differences in styles of interaction with students, as well as how they handled conflicts in the classroom. In order to better understand how teachers addressed interpersonal differences in co-teaching relationships, I asked them to discuss communication style preferences and conflict styles (Questions 11 and 12). In the focus group interviews, teachers discussed having differences in personalities that helped them address student strengths and learning styles differently. Also in the questionnaire discussions, similarities or differences in interactional behaviors were noted in the co-teaching teams. However, I wanted to explore these interpersonal differences more with teachers in individual settings to see if I could get richer data about how these differences affected their co-teaching partnerships. In particular, communication styles and conflict styles are noted in the research as being points where differences can emerge that must be addressed between people as they collaborate (Broome et al., 2002; Conderman et al., 2009; Gately, S.E. & Gately, 2001; Gilley et al., 2010; Jourdain, 2004, Phillips & Sapona, 1995; Rahim & Bonoma, 1979; Rahim et al., 1992).

Another interpersonal aspect that emerged in the data analysis of the focus groups and questionnaire discussions was control. Control is one of the three interpersonal dimensions proposed by Schutz (1958, 1966, 1992) in his interpersonal theory. As teachers discussed the aspect of control and how their scores compared on the Element B interpersonal behavior questionnaire (Schutz, 1966), they reflected on how they were similar in wanting control in the classroom and how they differed from needing control in interactions with other adults. I wanted to further explore how control affected their co-teaching partnership and how they have addressed parity in making decisions in the classroom or with grading student work. Question 13 addressed control by asking teachers to describe control in regards to their co-teaching relationship and how it has affected their relationship if one person is more dominant in decision-making.

Question 14 used the closing technique described by Patton (2002) by asking teachers if there was anything else they would like to share about their co-teaching experiences or relationship we had not talked about so far. I left this open for teachers to share anything they thought was important to know about co-teaching or their specific relationship, because they were the ones experiencing the phenomenon and would perhaps think of something that I had not asked them to discuss (Creswell, 2007; Lincoln & Guba, 2004; Patton, 2002; Strauss & Corbin, 1990). It also allowed them to reflect across the focus groups, questionnaire discussion, observations, and individual interviews to share anything they thought needed to be clarified or discussed in more detail.

Data Analysis Procedures

After each data collection session, I transcribed the data as appropriate (focus groups and individual interviews) using transcription software (Express Scribe) with a

foot pedal to make it more efficient. I also confirmed the transcription was accurate and then analyzed each piece of data (see Appendix I for sample transcript). Lincoln and Guba (1985) stated the importance of beginning data analysis with the first collected piece of data and throughout the data collection process. Glaser and Strauss (1967) also emphasized the importance of joint data collection and analysis to allow the researcher to pursue hypotheses emerging in the developing theory. I formally analyzed each layer of data (focus groups and questionnaires, observations, and individual interviews) to provide insights for the next data collection phase. Analyzing each layer of data with the constant comparison method before collecting the next layer allowed me to use theoretical sampling to explore undeveloped categories or questions that arose in the data (Corbin & Strauss, 2008; Strauss & Corbin, 1990, 1998). In accordance with the grounded theory method, I used the procedures described by Strauss and Corbin (1990, 1998) to analyze the data, including open coding, axial coding, and selective coding.

Open coding involved looking through each transcript from the focus groups and interviews, as well as questionnaire ratings and observation field notes for categories of data (Strauss & Corbin, 1990, 1998). I used the constant comparison method (Strauss & Corbin, 1990) to find and assign categories, in which each piece of data is examined against current categories and then a new category is added if it does not fit an already established category. Each piece of data was coded for categories (see Appendix J for open coding sample) and I listed these categories on a spreadsheet to keep the categories distinct and identifiable. I analyzed the data through three means including (a) line-by-line analysis in which I closely examined each phrase, (b) looked at the concept in a

sentence or paragraph, and (c) looked across an entire document for similarities and differences to data already analyzed.

The next step in the data analysis process involved connecting the separate categories through axial coding (Strauss & Corbin, 1990, 1998). I looked across all the codes to determine themes or headings under which several categories could fit (see Appendix K for axial coding list). Corbin and Strauss (2008) stated that open coding and axial coding often occur simultaneously, as researchers analyze data with the constant comparison method. As I used open coding and axial coding, I looked across all layers of data: focus group transcripts, questionnaire ratings, observation field notes, and individual interview transcripts. Conducting each data collection method as a separate phase allowed for theoretical sampling to explain how categories were linked and explore undeveloped categories. Looking across all of the categories helped determine emerging themes that are components of the theory developed in the next analysis step. The focus of this analysis was to look relationally at the categories and determine how they were connected through the use of the paradigm model outlined by Strauss and Corbin (1990). The paradigm model looks at the casual conditions that influence the phenomenon, the context for the phenomenon, the intervening conditions, the action/interaction strategies, and the consequences of these strategies on the phenomenon (Corbin & Strauss, 2008; Strauss & Corbin, 1990). See Figure 2 for an understanding of how these properties are related in the paradigm model:

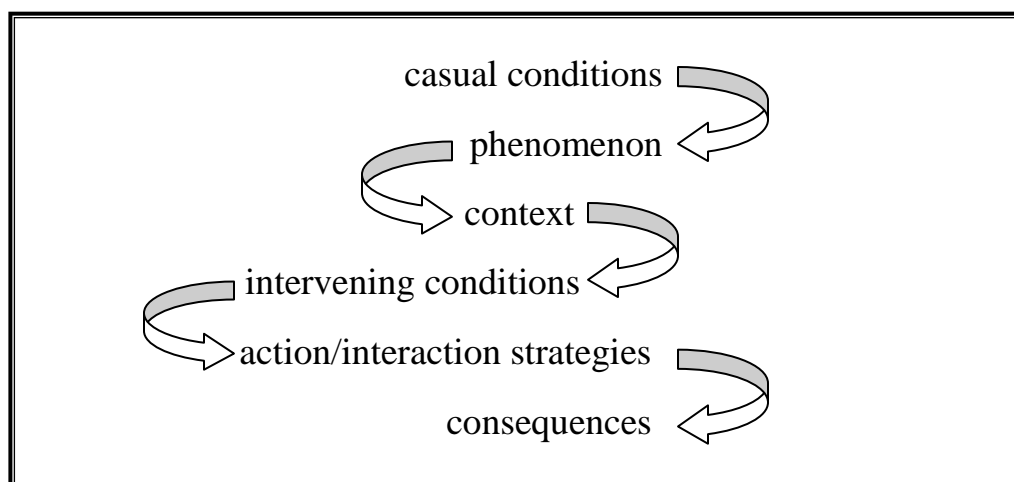


Figure 2. Paradigm model for axial coding. This figure demonstrates the relationships of the properties for each category or subcategory determined within axial coding. Adapted from the paradigm model outlined by Strauss and Corbin (1990, p. 99).

Using the paradigm model helped to link the relationships of the categories and subcategories of the data. I briefly described each aspect of the model in relation to codes that I used in my data analysis and how they led to development of the theory in the selective coding stage of data analysis. The central phenomenon of this study was co-teaching relationships, which were initiated by several types of casual conditions, including teachers volunteering to co-teach, a request that teachers co-teach, or an expectation in which teachers were expected to co-teach. The codes of volunteer, request, and expectation were also underneath a central code of initiation. The phenomenon of the co-teaching relationship was affected by the contexts of whether teachers were veterans with co-teaching, whether they knew each other ahead of time, or if they were familiar with the content. These aspects were subsumed underneath the codes of anticipation and hesitation which related to how teachers looked forward to the relationship, as well as parity of roles where teachers thought about if they could carry

equal weight with the content. Broader contextual dimensions are addressed in intervening conditions of a phenomenon (Strauss & Corbin, 1990), which for co-teaching includes how compatible teachers are with each other; dimensions that are needed in a collaborative relationship such as parity, respect, trust, and care beyond the classroom; as well as external forces such as district support for professional development and administrative support. These intervening conditions were listed as codes including compatibility, needed dimensions, professional development, and administrative support. The next part of the model is action/interactional strategies participants use to respond to the phenomenon (Strauss & Corbin, 1990). In the phenomenon of co-teaching, teachers responded by testing the waters to learn about one another, building a seamless partnership, and reflecting for improvement. In order to do this, teachers used strategies such as open communication, being open minded, and using humor. The codes that relate to these interactional strategies included testing the waters, reflecting, seamless, and strategies. Finally, when all the pieces fit together in which both participants can feel valued in the relationship, the consequence is an effective co-teaching partnership. Codes that fit underneath this step of the model included fulfillment, reflection, and seamless.

The final step of data analysis involved selective coding in which I developed a theory that explains the process (Strauss & Corbin, 1990, 1998) by which co-teachers in a secondary school resolve problems inherent in their co-teaching relationship. This theory is stated as a hypothesis, because it was grounded in the data from the field, but has not been empirically tested to determine its generalizability to other contexts. In developing this theory, I used the paradigm model (Strauss & Corbin, 1990) to tell the story of how co-teachers resolve problems in their relationship to support the theory's density and

specificity. The theory is based on one core category (symbiosis) that is the central idea of the process by which co-teachers overcome challenges inherent in their partnership (Corbin & Strauss, 2008; Strauss, 1987). A core category subsumes all subcategories and unites them to create a story that explains the process of the study.

Furthermore, I developed a visual model to reflect the theory and show how the components are related (Corbin & Strauss, 2008; Strauss, 1987; Strauss & Corbin, 1990). This visual model is in the form of a graphic that explains the connections of the categories and how they influence each other in moving through the process of resolving problems in co-teaching relationships. The process includes movement through three stages, as well as a depiction of how the middle stage is more interactional versus linear (Corbin & Strauss, 2008; Strauss & Corbin, 1990). I present and discuss this model in Chapter Four.

In addition to these formal procedures for analyzing the data, I used memoing throughout the data collection and analysis process to record my thoughts about initial hypotheses and insights into interpreting the data (see Appendix L for sample theoretical memo). Strauss and Corbin (1990, 1998) discussed the importance of memoing during the data collection period for grounded theory studies to make note of insights and thoughts that can be confirmed through further data collection. Memos look at pieces of data and record the researcher's thoughts and initial impressions of the theory that evolves during the study (Corbin & Strauss, 2008; Strauss, 1987; Strauss & Corbin, 1990, 1998). As the study progressed, the memos became more complex and specific to reflect the final stages of data analysis. Maxwell (2005) also stated the importance of memoing during data analysis to "not only capture your analytic thinking about your data, but also

facilitate such thinking, stimulating analytic insights” (p. 96). I wrote a memo in a reflective journal after each data collection session and after each data analysis session. I dated the memos, referenced appropriate data, and linked them to specific codes (Corbin & Strauss, 2008; Strauss & Corbin, 1990).

Additionally, negative case analysis was used throughout the data analysis process to determine if the hypothesis needed to be modified or changed (Lincoln & Guba, 1985). I looked for instances in which the emerging hypothesis was not supported by the research and modified it to include all perspectives and experiences of participants. This also strengthened the credibility of this study, which I discuss in the next section.

Trustworthiness

To establish trustworthiness in this study, I used Lincoln and Guba’s (1985) four principles: (a) credibility, (b) dependability, (c) transferability, and (d) confirmability. These four principles cover the extent to which the conclusions of my study are based on the reality of the phenomenon, how consistent the data collection methods and analysis procedures are in this study, how well the findings can be applied to another setting, and if the conclusions can be verified with the collected data.

Credibility

Credibility was established in this study through seven different methods, including prolonged engagement, triangulation, member checks, peer review, recordings and transcriptions, negative case analysis, and acknowledging researcher bias. Prolonged engagement means the study was conducted over a period of time (three months) to allow me to build trust with the participants and prevent misunderstanding information (Lincoln & Guba, 1985). Maxwell (2005) stated prolonged engagement allows the researcher to

generate and test hypotheses during the data collection period. By conducting three different phases of data collection (focus groups with questionnaires, observations, and individual interviews), I was able to build a relationship with the participants and check hypotheses as they developed over the data collection period.

Triangulation involves using both different data sources and verifying information with other participants (Lincoln & Guba, 1985). I used four different data sources in this study, including focus groups, questionnaires, observations, and individual interviews. This allowed me to confirm a finding across more than one method. Additionally, I had five co-teaching partnerships to confirm findings from more than one participant or partnership. I accepted statements the teachers made in focus groups or interviews to be true, unless I found disconfirming evidence in observations (Maxwell, 2005).

One of the most important methods for establishing credibility is member checks (Corbin & Strauss, 2008; Lincoln & Guba, 1985). Maxwell (2005) stated that member checks allow the researcher to check for bias and misunderstanding of the participants' responses. To accomplish member checks, I asked the participants to review the conclusions I was making both informally, during collection of data, and formally, at the end of the study. During the data collection, I summarized the findings of focus groups and interviews to participants at the end of the sessions and asked them to confirm or correct these summaries. At the end of each individual interview, I formally checked the hypothesized theory with participants by presenting an oral summary of the theory and asking participants to confirm or clarify if it portrayed their perspectives and experiences.

Another method I used for credibility in this study was peer review. I had my local dissertation committee member assist with reviewing my data analysis. She

conducted qualitative research for her dissertation study and has experience with inductive data analysis. I had her review the coding I make on each transcription, questionnaire rating, and field notes document for accuracy in coding. I also had her review the axial coding for the connections that I had made in categories and the conclusions that I drew from the data in selective coding. Furthermore, I had both my dissertation committee chair and another committee member review the visual model for clarity and reflection of the data. Lincoln and Guba (1985) noted peer review preserves the researcher's honesty and provides the opportunity to objectively check next steps in the research. My peer reviewers were a resource for me to discuss ideas and theories that emerged from the data.

Recording and transcribing all the focus groups and individual interviews was another method for addressing credibility in this study. The recordings helped me to remember exactly what the participants said, as well as any expression they used in their responses. I used transcription software (Express Scribe) with a foot pedal to make the process more efficient, but I also rechecked the transcription to ensure its accuracy. Transcriptions of the recordings provide rich data that captures all the specifics of the interviews (Maxwell, 2005). This richness was important for the data analysis stage and writing the results after completion of the study.

As previously mentioned in the data analysis stage, negative case analysis was used in this study to ensure all cases were addressed (Lincoln & Guba, 1985). During the data analysis stage, I looked for instances where the developing hypothesis did not fit and revised it to address all cases. However, it is hard to achieve zero exceptions (Lincoln & Guba, 1985; Maxwell, 2005). I was aware of this concern and considered the strength of

the negative case to determine whether it was enough to modify the hypothesis. Lincoln and Guba (1985) recommended a reasonable level of at least 60% for “substantial evidence of its acceptability” (pp. 312-313) to make conclusions in a qualitative study.

The final method I used for establishing credibility in this study was acknowledging my researcher bias. Although it is impossible to eliminate researcher bias, researchers need to be aware of it (Maxwell, 2005). A researcher’s bias affects what data a researcher focuses on and how preconceived ideas or theories influence both data collection and analysis (Strauss & Corbin, 1998). A previous section on my role as a researcher addressed some of my personal biography and assumptions that could have influenced how I conducted this study and interpreted the data. My peer reviewers also were helpful in noting areas in which my bias might have affected the analysis and interpretation of the data.

Dependability

The second principle of trustworthiness from Lincoln and Guba (1985) is dependability, which considers the consistency of data collection, data analysis, and conclusions drawn from the data. This principle has some overlap with credibility, as the methods for determining dependability are similar in nature. In this study, I used triangulation of methods and a peer reviewer to determine consistency. Triangulation ensured dependability because I used more than one type of data collection method in this study, including focus groups, questionnaires, observations, and individual interviews. During the data analysis, I ensured the conclusions were observed or reported across more than one type of method. Additionally, my peer reviewers helped to ensure the data

analysis methods I used were consistent across the various types and pieces of data (transcripts, questionnaire ratings, and field notes).

Transferability

In order for readers to be able to apply the study findings to their context, I used rich, thick description to describe the participants, setting, and participants' experiences (Lincoln & Guba, 1985). Additionally, I used quotes from the participants to describe the process by which they resolved problems inherent in collaboration. This allows readers to determine if the sample and setting in this study are similar enough to apply the findings and implications to their situation.

Confirmability

The fourth principle for establishing trustworthiness by Lincoln and Guba (1985) is confirmability. This principle addresses whether the study can be checked for accuracy. To ensure others can check the findings and methods of my study, I used an audit trail throughout the data collection and analysis stages (see Appendix M for a condensed version of my audit trail). I recorded the day and time of all of the data collection and analysis sessions. I also wrote brief notes about who participated in each activity, using pseudonyms where appropriate.

Ethical Issues

Before any data collection took place in this study, I obtained IRB approval to ensure the rights and confidentiality of participants was protected. During the course of the study and in all final reports, I protected the participants' identities and information with the use of pseudonyms (Creswell, 2007). When I conducted the focus group sessions with participants, I asked them to choose their own pseudonyms and recorded

the pseudonyms on the informed consent letter to keep the pseudonyms linked to the correct participants. I only recorded the pseudonyms on the field notes, questionnaire forms, and transcriptions, because these were shared with the peer reviewer. In the course of the study, as sensitive information arose about students, no names were recorded on field notes or transcriptions. The information I collected from participants was only used for the purpose of writing this dissertation. In the future, I will use these findings to present at a professional conference and submit an article for publication. All paper copies of data are stored in a locked file cabinet and access to electronic data is protected with passwords. Additionally, the informed consent forms with the pseudonyms on the forms are kept in a separate locked storage area to prevent linkage of participant information with collected data.

To protect participants' confidentiality, after I checked the transcriptions of focus groups and interviews, I destroyed the sound recordings. All paper and digital data will be stored securely in a locked file cabinet for three years from the completion of this study. After the three-year period has elapsed, I will shred all paper records and permanently delete all digital records.

During the course of this study, I worked with co-teaching partnerships and I strove to maintain the trust of these participants, both with me as the researcher and with each other in their collegial relationships. If sensitive information was shared from one teacher about his or her colleague, I was discreet about the presentation of this information in the final report. I did not have any intentions of breaking the trust present in these co-teaching partnerships and have exercised caution to build, rather than destroy their relationships.

The participants included in this sample were not teachers at the school where I work in order to avoid respondent or researcher bias. I chose participants from the secondary schools in my school district, as I did not have prior relationships with these teachers. This enabled participants to feel more comfortable with either giving their consent or declination to participate in the study. Additionally, participants might have felt freer to respond without considering how I might want them to answer questions during focus groups or individual interviews.

Summary

The focus of this systematic grounded theory study was to explain the process by which secondary school co-teachers in an urban district in East Central Iowa go through to overcome naturally occurring challenges in co-teaching relationships. There was no theory available in the literature to explain this process, thus making a grounded theory design appropriate for this study by developing a theory grounded in data collected from the field. Five co-teaching teams, with a total of ten teachers, participated in this study. The data collection methods used in this study included focus groups with each co-teaching partnership, an interpersonal behavior questionnaire (Schutz, 1992) with each participant, at least two classroom observations of each co-teaching partnership, and individual interviews with each participant. I analyzed the data using the steps outlined by Strauss and Corbin (1990), including open coding, axial coding, and selective coding. The theory, described in the next chapter, is stated as a hypothesis, which can be further tested in future research studies.

CHAPTER FOUR: FINDINGS

The central research question of this systematic grounded theory study was: How do secondary school co-teachers from an urban Eastern Iowa school district resolve problems inherent with collaboration? The research sub-questions that further explored this process included (a) How do co-teachers address differences in attitudes towards inclusion? (b) How do co-teachers address differences in philosophical perspectives of general education and special education? (c) How do co-teachers resolve interpersonal conflicts? and (d) How do co-teachers address external factors that impede successful collaboration? In this chapter, I provide narratives about the participating co-teachers to provide a contextual backdrop for the reader. I then describe data collected from participants to answer the research questions through the presentation of a theory grounded in the data collected from the field.

Descriptions of Participants

The participants in this study provided a wide variety of experiences with co-teaching that proved useful to the development of the theory explaining the process by which co-teachers overcome naturally occurring challenges to create effective partnerships. Before beginning the presentation of the data, it is helpful to first understand the background each co-teaching team and participant provided for this study. In this section, I describe each co-teaching team with information about the formation of their co-teaching partnership, as well as specific information about each teacher.

Vicki & Angie

Vicki and Angie co-teach tenth grade language arts at High School B. Their building administrators requested that the two of them participate in a building pilot of co-teaching and they are now in their third year of teaching together. For both Angie and Vicki, the professional development they received in co-teaching was the brief introduction provided by the school district the year they began co-teaching. The composition of the two classes they teach together this year include about 30% students with IEPs. One class has 31 students with 10 students on IEPs and three with 504s. The other class has 26 students with 6 students who have IEPs.

Vicki is the general education teacher and has a Masters of Art in Teaching with a focus on English. She also has a reading endorsement. Teaching is Vicki's second profession and this is her sixth year of teaching.

Angie has been teaching for 27 years as a special education teacher with four years of co-teaching, including one year at a middle school with another teacher before she started co-teaching with Vicki. She has teaching certifications in special education from kindergarten through twelfth grade, including Instructional Strategist One and Two. She is also working on completing a language arts certification.

Brent & Cindy

Brent and Cindy co-teach eighth grade science at a middle school. Cindy was co-teaching eighth grade science with another general education teacher, but, when the schedule changed two years ago, it was necessary for her to start co-teaching with Brent. For professional development, neither Cindy nor Brent received district level training before beginning their first co-teaching partnerships in this district. One of the eighth

grade science sections that Cindy and Brent co-teach has 29 students, 8 with IEPs, and 4 students who are English Language Learners. The other section has 27 students, 6 who have IEPs, and 3 who are English Language Learners.

Brent is the general education teacher and this is his ninth year of teaching. He said teaching is his second profession and he previously worked in business. Brent is certified to teach Biology for six through twelfth graders, as well as endorsed in Earth Science for sixth through twelfth grade. Brent had two previous co-teaching partnerships, with a total of eight years of co-teaching.

Cindy has taught for 26 years, including being a general education teacher at the elementary school level in Texas for 13 years and 13 years in this district as a middle school special education teacher. She also had endorsements in English Language Learners, as well as Talented and Gifted in Texas, but these endorsements were not recognized when she came to Iowa. She has been co-teaching for all of her career, including when she was a general education teacher in Texas.

Tyler & Gordy

Tyler and Gordy are in their second year of co-teaching twelfth grade language arts at High School A. Gordy agreed to co-teach at a special education department meeting and Tyler was asked to co-teach a language arts section. For the district level professional development, Gordy and Tyler attended an initial training that was a half-day, but have not received additional training. The class that Tyler and Gordy teach together has 30 students with 11 students that have IEPs.

Tyler is the general education teacher and has been teaching for four years. Teaching is his second profession, with his first career being professional tennis. Tyler

has a certification in English, with a journalism endorsement, and is also working towards a master's in educational administration.

Gordy also comes to education from a previous career, with this being his ninth year of teaching. His bachelor's degree was in communications and he completed a Masters in Special Education, with endorsements in behavior disorders, learning disabilities, multicategorical special class with integration, and Instructional Strategist Two. He co-taught with another teacher in tenth grade language arts before beginning to co-teach with Tyler. Gordy said his Masters in Special Education did not include a class specifically on co-teaching, but it was embedded within many of the classes.

Thelma & Louise

Thelma and Louise have been co-teaching U.S. History, Government, and Economics for four years at High School A. Both of them volunteered to co-teach and had previous experience with co-teaching. Thelma and Louise both participated in the district's initial training for co-teaching partnerships with their first co-teaching partners, but did not receive any additional training when they began their co-teaching partnership. One of the classes that Thelma and Louise co-teach together has 29 students with 27 students who have an IEP or a 504. The other class has 30 students, including 18 students who have an IEP or a 504.

Thelma is the general education teacher and has taught for seven years, including five years co-teaching. Her bachelor's degree is in history education with certifications in American and World History, as well as other social sciences under the all-Iowa social studies endorsement. Thelma also has a master's degree in educational administration. Before co-teaching with Louise, she co-taught for one year with another teacher.

Louise has been teaching for eight years. Louise has an undergraduate degree in social studies education with endorsements in U.S. History, World History, and Government. She also obtained a Masters in Special Education. Louise co-taught with two other general education teachers at the middle school level before coming to work at High School A. Louise had some training in co-teaching in one of the classes for her master's degree, but not a specific class on co-teaching.

Alex & Bianca

Alex and Bianca have been co-teaching tenth grade language arts at High School A for five years. They volunteered to co-teach when their building began a co-teaching initiative. Both Alex and Bianca participated in the district's initial training for co-teaching, but have not received any subsequent professional development on co-teaching. The tenth grade language arts class they co-teach has 26 students with 19 who have IEPs and 5 other students considered being at-risk.

Alex is the general education teacher and has been teaching for ten years, half of which include co-teaching with Bianca. He is certified to teach general education English. Alex did not have any prior co-teaching relationship.

Bianca is in her eleventh year of teaching and seventh year of co-teaching. She co-taught with someone else prior to co-teaching with Alex. She also currently co-teaches a social studies class at High School A with a different teacher. Bianca has a bachelor's degree in English education, as well as a Master's in Special Education.

Achieving Symbiosis

The central theme that unites all the other themes and concepts of the data collected in this study is symbiosis. As co-teachers work together to create an effective

partnership for the ultimate benefit of students, but also for themselves, they establish a cooperative relationship, or symbiosis. The *Merriam-Webster's Online Dictionary* (2012) defines symbiosis as a cooperative relationship between two people or groups of people. Symbiosis relates well to this study, because the teachers repeatedly emphasized the importance of two people working together, rather than with separate, competing goals in a united physical space as well as it being a process that takes time to achieve. Thus, I am titling the theory that emerged from this data Achieving Symbiosis (see Figure 3) to reflect the journey it takes teachers to reach a relationship that is effective for all involved. In this section, I briefly describe the stages of the Achieving Symbiosis theory, including Initiation, Symbiosis Spin, and Fulfillment. Subsequent sections provide more detail about these different stages and their dimensions.

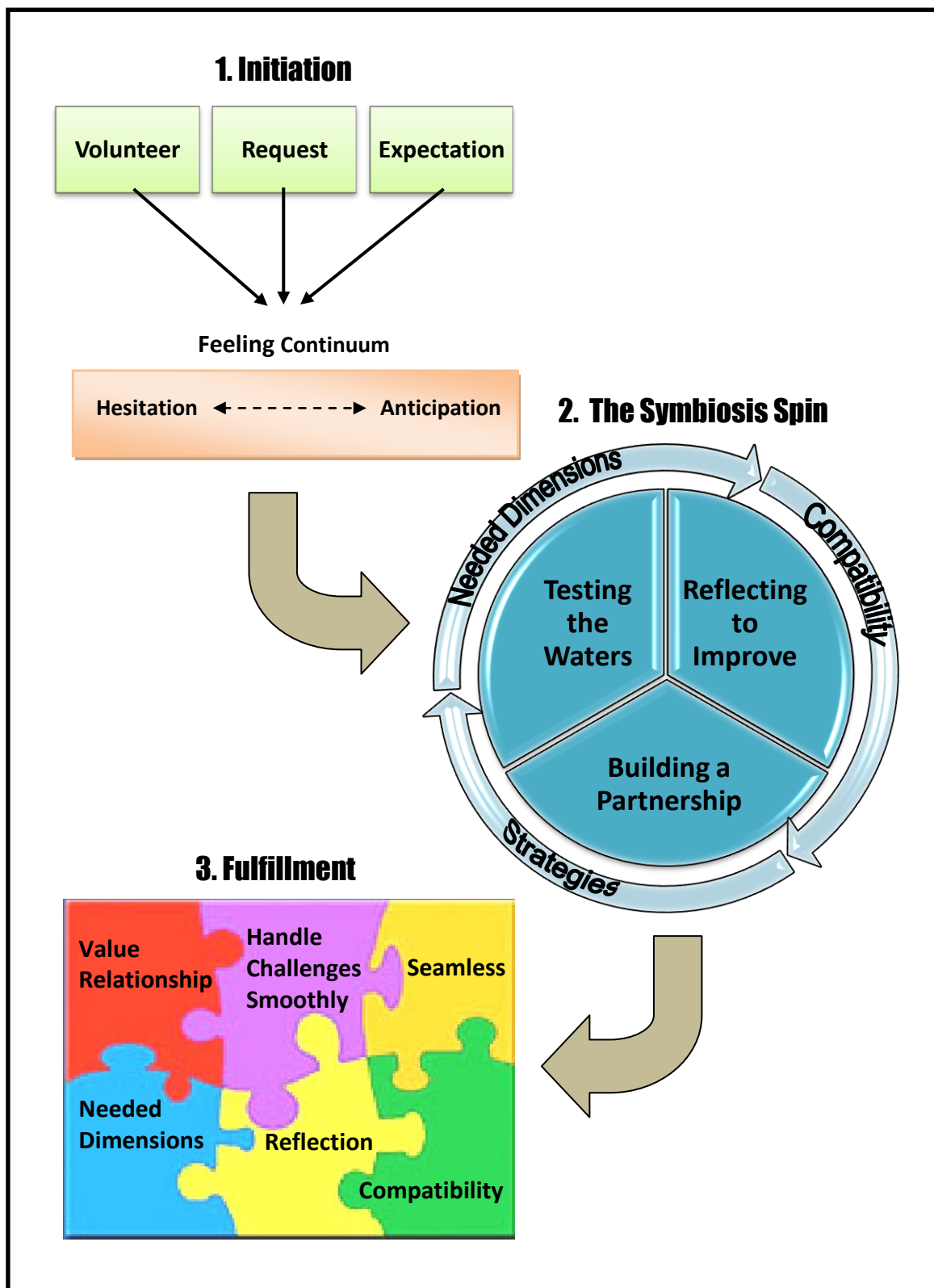


Figure 3. Visual model for Achieving Symbiosis theory. This figure represents the visual depiction of the process co-teachers experience to create effective partnerships.

The three main stages of the theory include (a) the Initiation Stage, where teachers begin a co-teaching relationship; (b) the Symbiosis Spin, where teachers work through becoming effective; and (c) the Fulfillment Stage, where all the pieces come together to create an effective co-teaching partnership. A co-teaching relationship is started in three different ways, including (a) self-initiation, (b) request, or (c) an expectation. Some teachers volunteer to co-teach because they want to work with other adults throughout the school building, as well as other students besides those within their own classroom. For other teachers, their administrators ask them to co-teach a section(s), while some teachers are simply told they need to co-teach. Additionally, in the Initiation Stage, teachers experience two main feelings as they look towards started a co-teaching relationship. Some have feelings of hesitancy because they are not sure how compatible they will be with their co-teaching partner or what each person's roles will be in the classroom. Others anticipate beginning a co-teaching relationship because they believe it will work well or they are excited about trying something new.

In the middle stage of the theory, the Symbiosis Spin, teachers experience three dimensions that cycle as they move through creating an effective partnership. These dimensions include testing the waters, building a partnership, and reflecting to improve. As teachers begin their relationship, they are constantly testing out their partner's teaching style, philosophical perspectives, expectations for students, and their personalities. This time is a matter of learning about one's co-teaching partner and how they can work together through building an effective co-teaching partnership. Also, as part of this spin, teachers reflect on how lessons went and how they can improve their relationship or roles within the classroom.

These three components spin as a result of three forces that influence the evolution of their partnership, including (a) compatibility, (b) dimensions needed in a symbiotic relationship, and (c) strategies teachers use to achieve symbiosis.

Compatibility refers to how teachers work together because they either are similar to one another or they balance each other in a complementary manner. The dimensions teachers need for co-teaching relationships include parity, respect, trust, care beyond the classroom, professional development, co-planning time, and administrative support.

Strategies teachers use to improve their relationship include being open minded, using open communication, finding common ground, humor, selflessness, and offering to help.

These three forces affect how teachers go through the learning process of the Symbiosis Spin, as well as the length of time it takes teachers to reach the Fulfillment Stage.

As teachers work through the process of creating an effective co-teaching relationship and overcoming challenges that naturally occur as two people work together, they have to find ways in which both people can contribute to the relationship in a manner that both feel fulfilled professionally and personally. For some teachers it is a purposeful process of learning how they can work interdependently by using the expertise of both people, while for others it is a matter of trial and error before they find the perfect fit for their co-teaching relationship. Although teachers do not leave pieces of the learning process behind them, such as reflecting, compatibility, and consulting with the other person, they are able to do so in a manner that is seamless. When challenges arise, whether they are interpersonal or from external factors, teachers are able to handle them smoothly because they feel comfortable with one another. Additionally, teachers see this co-teaching relationship as a valued relationship in their professional and personal lives.

The rest of this chapter explains in more detail the various stages of this theory and the dimensions within each stage.

Stage One: Initiation

Within the initiation stage (see Figure 4) of a co-teaching relationship, teachers decide to begin a co-teaching relationship through self-initiation, agreeing to a request, or accepting an expectation. Additionally, teachers have feelings towards starting a co-teaching relationship, including hesitation or anticipation. The way in which a co-teaching relationship began did not seem to have a direct relationship to the feelings teachers experienced before the co-teaching relationship began. Rather, these feelings varied for all three methods of starting a relationship.

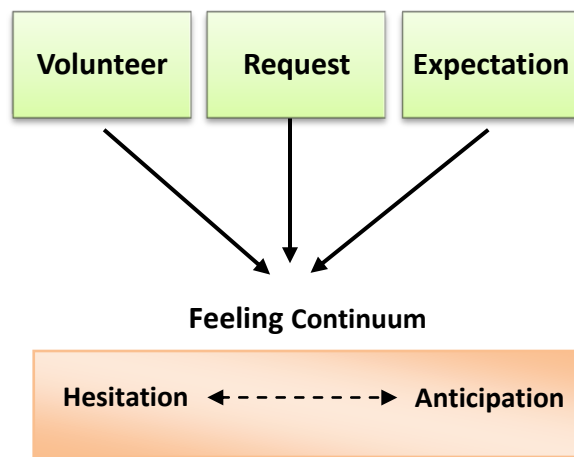


Figure 4. Visual model for Initiation Stage. This figure visually depicts how teachers begin a co-teaching partnership and feelings about starting one.

How the Relationship Starts

The initiation of a co-teaching relationship occurs in three different ways through (a) self-initiation, (b) a request, or (c) an expectation. Teachers who self-initiate a co-teaching relationship look for an opportunity to work with other adults as well as other students. Administrators may request teachers co-teach one or more classes. The third

way teachers begin co-teaching partnerships is fulfilling an expectation of administration to co-teach.

Self-initiation. For those that initiated a co-teaching relationship on their own, teachers said they were looking for an opportunity to interact with other adults or students beyond their own classrooms. The special education teachers often stated this reason because they felt isolated in a SCI classroom or wanted to work with students of varying levels of ability. Louise stated “My first year at [High School A], I did 100% SCI and I didn’t like [it] and I wanted to be out and I wanted to be with gen ed kids” (Focus Group). Cindy echoed this thought when she said, “I know how I felt when . . . I was stuck in a classroom all day and I didn’t get to talk to any adults. It was kind of nice to be able to do that [co-teach]” (Focus Group). Other special education teachers initiated the co-teaching relationship because they wanted to integrate their students and knew that they would need support within the classroom. Gordy described this well when he said: “I was excited for our students to have that opportunity. I just wanted the students to be able to come in and know that there was a level of support there and they weren’t just kind of on an island” (Focus Group).

From the general education teacher’s point of view, self-initiation of a co-teaching relationship occurred because they knew someone in their department needed to co-teach to meet the needs of students and they volunteered to fulfill that role. Thelma said, “I volunteered . . . at one of our department meetings. They’re like okay, we need someone to go co-teach next year. Who wants to do it? I was like, I’ll try it” (Focus Group). Others said they volunteered to participate because they knew it was going to be starting in their school building and they wanted to be able to choose who their co-teaching

partner would be, “we knew we were going to start it and we decided we would prefer to pick who we wanted to work with right at the beginning than have it . . . be told who we were going to work with” (Bianca, Focus Group).

Request. Another way in which teachers begin a co-teaching relationship is through a request by building administration. For some special education teachers, it was opened up at a department meeting as to what area they would like to co-teach so they could choose an area with which they were most comfortable. Gordy said, “we were kind of given options of areas of choice where we preferred to co-teach, whether it be language arts, math, science” (Focus Group). For other teachers, they were asked to specifically co-teach with a certain person, “They [building administration] decided to do a co-teaching kind of pilot for 10th grade and so our building administrator asked Angie and I if we wanted to participate, if we wanted to be a team.” (Vicki, Focus Group). Some teachers also discussed how one of them would go and ask the co-teaching partner if they would be okay with co-teaching together. In all of these situations, it was the special education teacher who asked the general education teacher to co-teach with them. When Thelma’s first co-teaching partner moved, Louise came to ask her if they could co-teach the following year. Tyler also mentioned that Gordy approached him and asked if he would be comfortable trying a co-teaching partnership together the following year.

Expectation. However, some teachers feel it is more of an expectation that they co-teach, rather than a choice. The special education teachers did not feel as though this was the case for them, as they usually wanted to co-teach or were at least asked if they would be comfortable co-teaching. For some of the general education teachers, it was expected they would co-teach because their section/s fit best into the special education

teacher's schedule (Brent, Individual Interview), "and just because of the way the schedule worked out Mr. Brent was the only one teaching science when I could co-teach with him" (Cindy, Focus Group). Even though it was an expectation, the teachers were okay with trying co-teaching and wanted to make it work for both the students and themselves as teachers.

In initiating a co-teaching partnership, the teachers stated forcing co-teaching on someone who is philosophically opposed to the concept would be detrimental to both the students and the teachers themselves. They believed that they had a choice in participating and that honoring one's choice was important. Louise explained,

And they [building administration] have not forced it on anyone who has not been willing and I think that makes a big difference too . . . just like our department asked us if we're willing, what subject we want, all of those things. Whereas if, you know, if Thelma really didn't like the thought of co-teaching, really never wanted to, because there are people in her department that feel that way. They wouldn't have said, well, too bad, here's your co-teacher. Because then that puts everybody in a really awful position (Focus Group).

Even teachers who had felt it was more of an expectation stated that they could have likely refused to participate, but they accepted it without regret. However, teachers acknowledged they had observed where other co-teaching partnerships in their building or in other buildings in their school district failed because the teachers were forced into something they were not comfortable doing. As Louise expressed, some people do not have a desire to co-teach and, thus, forcing them to have a co-taught class does not create

an environment for success for students or teachers (Focus Group).

Additionally, teachers felt that when initiating a co-teaching relationship it is important to carefully choose a co-teaching partner that will be compatible with one's self. Some of the areas that teachers mentioned should be considered when choosing a co-teaching partner are personalities, classroom expectations, and goals for students. Vicki stated, "the individuals who are considering co-teaching should really consider the fact of can I work with this person, okay? Do we have the same goals? What are our classroom expectations?" (Focus Group). Tyler articulated the importance of matching co-teachers' personalities:

You know, the big thing I would say is . . . to the people who are putting the teams together is know who you are putting together, you know, I think our personalities match really well. You know, we do a thing earlier in the year where we talk about personality styles and it was interesting as we were kind of putting ourselves, like I'm kind of over here and Gordy's over here and it was like, oh, that's, that's what you would want, that's how that would be what a good co-teaching team would be . . . Then other co-teaching groups that I've seen it's like did you, did you just like have a dart and like throw it or what was the thought process? (Focus Group).

Another point teachers made in relation to choosing a co-teaching partner was it was important to know the person ahead of time and that "they shouldn't be strangers" (Alex, Focus Group). Alex and Bianca chose to volunteer to work with each other because they knew they would be able to work together and they did not want to be placed with someone they did not know. Additionally, Angie and Vicki knew they would

be able to work together because, as Angie said, she “knew Vicki when she came on board at the district and felt like she was a pleasant person and our personalities would click” (Focus Group).

Feelings. As teachers look forward towards starting a co-teaching relationship, they experience a mix of feelings, including hesitation and anticipation. The feelings teachers experienced did not appear to be related to how their co-teaching partnership was initiated, but rather to one’s prior experience, or lack thereof, with co-teaching. Some teachers had previous experiences with co-teaching that were positive and made them look forward with anticipation to another co-teaching relationship, while other teachers said their previous bad experience/s made them more hesitant, not knowing what their roles in another co-teaching relationship would be. Conversely, other teachers who had a bad experience prior to their current co-teaching relationship said they anticipated starting a new co-teaching relationship because they believed it would be more effective and enjoyable.

Hesitation. Teachers who have feelings of hesitancy are concerned about sharing classroom space, meshing different styles, and carrying one’s equal weight in classroom responsibilities. In sharing equal space, teachers mentioned they were concerned the other person might feel like they were intruding on their territory or vice versa. Brent said, “I think my initial thought was I didn’t know if I would like it or not, because . . . you are letting another teacher into the room and you know there’s feelings with that” (Focus Group). Angie also mentioned she was nervous at first because she was the one going “into someone else’s territory” (Focus Group).

When considering the ability to mix two people in the classroom setting, teachers

shared their feelings of hesitancy in putting two different styles together. They said it takes time to learn someone else's style and until you feel as though you are able to put these two styles together, there are going to be feelings of hesitancy. Vicki said, "as she said the style, so I was worried about, you know, were we really that compatible" (Focus Group). Also part of meshing styles has to do with routines and structures teachers put into place in their classrooms. Some teachers were nervous about whether their co-teaching partner's routines and procedures would be completely different than their own, making it difficult to work together.

On a different aspect, some teachers are concerned about being able to carry one's equal weight within a co-teaching partnership. Special education teachers more often expressed this, as they felt they were not as competent or confident in the content area they would be co-teaching as the general education teacher. Angie stated she was worried that she "would not be enough of a content expert" (Focus Group), while Gordy expressed his concerns about not feeling competent in the content area and wanting to carry his weight (Questionnaire Results Discussion).

The general education teachers also expressed concern of not knowing how competent the special education teacher would be with the content and whether they would be able to contribute equally to planning, instructing, and grading students. As Brent said, "you don't know how much they know about the subject, if they're going to help or interfere or what they're going to do" (Focus Group). It was helpful for them if they knew ahead of time the other person was knowledgeable in the content area, "I knew that she was a special ed kind of guru and expert, but also I knew her as an L.A. expert from her district work, so I probably felt more confident about the partnership than she

did” (Vicki, Focus Group).

Feelings of hesitancy are not limited to those teachers who only have negative experiences or no experiences with co-teaching. Teachers expressed not wanting to end their co-teaching relationship because it was effective and they did not know if it would work as well with another co-teaching partner. Additionally, some teachers said they would always be hesitant when starting a new co-teaching relationship because they did not know how compatible they would be with a different person. Brent said that, in his three different co-teaching partnerships, he has always felt hesitancy at the beginning of the relationship until he saw how well it was going to work (Individual Interview).

Anticipation. Knowing the other person is able to contribute equally and that their personalities will work well together helps teachers to look forward with anticipation to the upcoming co-teaching partnership. Teachers also anticipate co-teaching because they want to form a mentoring relationship with a peer that could deepen and broaden their professional knowledge or teaching skills. Alex said he wanted to learn better ways of teaching language arts to meet student learning needs and interests (Individual Interview). Thelma said, “I kind of looked at it as, okay I am not set in my ways, I don’t have a specific way that I have to do something, so if someone else has suggestions or you know if there are ways to be better and learn something than I am all for that” (Focus Group). Part of the anticipation of learning from others for some teachers was the novelty of trying something new and finding out what it involved, “So I was excited about it just because it was new and interesting . . . it was brand new to me as far as what it entailed and how it looked” (Tyler, Individual Interview).

Summary of Initiation

The Initiation Stage in the Achieving Symbiosis theory explains how teachers begin a co-teaching relationship and the feelings they experience as they look towards starting the partnership in the near future. Teachers mentioned three ways in which a co-teaching relationship begins, including (a) volunteering to participate, (b) accepting a request, or (c) fulfilling an expectation. As teachers look towards starting a co-teaching relationship, they experience a continuum of feelings from anticipation to hesitancy. Some teachers are hesitant because they are concerned about sharing classroom space, meshing styles, or carrying equal weight in the relationship. Other teachers anticipate the partnership because they want to form a mentoring relationship with a peer that could help improve their professional knowledge or teaching practice. As teachers begin a relationship, they start to address these feelings of hesitation or anticipation when they learn about each other's philosophies and teaching styles.

Stage Two: Symbiosis Spin

In the next stage of the process of Achieving Symbiosis, teachers mentioned feeling as though they went through a recursive state in which they cycled through different aspects before reaching a fulfilled relationship (see Figure 5). One teacher even compared it to the first of year of a teaching career, because it is not always easy, "and it's going to be uncomfortable for a year, but if you relate it back to your first year of teaching again, everything was not really comfortable" (Gordy, Focus Group). The themes that emerged in this process included (a) testing the waters, (b) building a partnership, and (c) reflecting to improve. Testing the waters reflects the process teachers described of learning about one another and how they can work together in the

classroom. In this cycle, they also begin building a relationship that is seamless in instructional roles in the classroom as well as building off of each other's comments during instruction. The third aspect of this Symbiosis Spin is reflecting about improving instruction for students and the roles each teacher holds in the relationship.

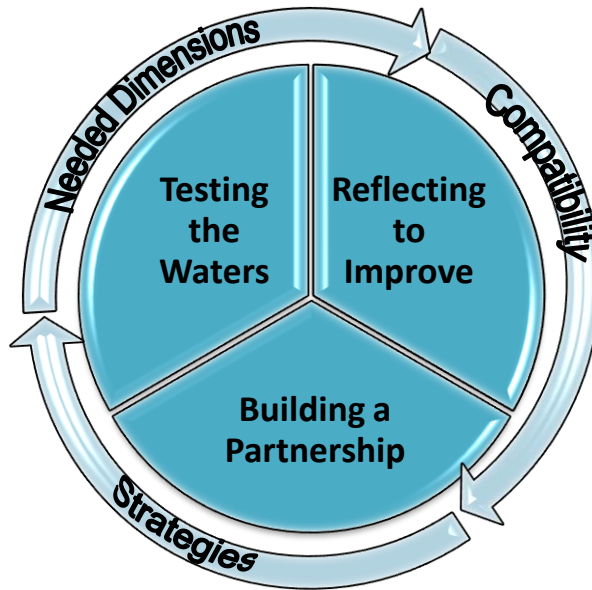


Figure 5. Visual model for Symbiosis Spin Stage. This figure visually depicts how teachers work through becoming effective co-teaching partners.

These three components (testing, building, and reflecting) cycle as teachers work towards becoming an effective partnership. Three forces that make the spin between these components are both external to the two people and interpersonal as well. These three forces include how compatible teachers are, dimensions needed in a symbiotic relationship, and strategies teachers use to become more effective. Teachers mentioned they were compatible because they were either similar to or complemented each other in areas such as views of inclusion, philosophical perspectives, professional knowledge, and interpersonal aspects. The needed dimensions for a co-teaching relationship that

occurred repeatedly in the data include parity, respect, trust, care beyond the classroom, professional development, planning time, and administrative support. As teachers work towards becoming effective in their co-teaching relationships, they use strategies such as being open-minded, having open communication, finding common ground, using humor, being selfless, and asking to help. This section will describe more thoroughly each of the three components in the Symbiosis Spin and the three forces that cycle these components.

Testing the Waters

When beginning a co-teaching relationship, teachers go through a learning process in which they need to take time to learn about their co-teaching partner's personality, teaching style, expectations for students, and goals for co-teaching. As Brent mentioned, it was important to get "to know each other's habits and ways" within the classroom (Focus Group). Teachers learn about each other through observations in the classroom of the other person teaching or through open conversations with each other. Cindy said "I know when we first started, my goal was just to always sit back for a few days and just to see what his style is and if he doesn't want me to . . . speak up when he's talking or doing his lesson" (Focus Group). Tyler and Gordy said they felt as though they had learned about each other's personalities and preferences by openly discussing them with each other and even joking about their differences in front of students (Focus Group).

For some teachers, it also takes some trial and error of seeing what the other person prefers or how they can mesh their styles together in dividing up responsibilities, as well as choosing co-teaching models that will be appropriate for their personalities and content areas. Angie and Vicki both discussed seeing how after they began working

together they could see their styles and personalities within the classroom were compatible with one another (Focus Group). For Bianca and Alex, it was a matter of dividing up some duties within the classroom that would meet each other's styles (Focus Group). For example, Alex makes the handouts or worksheets to go with the lessons because he likes them in a certain format, while Bianca assists with other classroom duties, including grading of student work. Tyler and Gordy discussed the aspect of trying out different co-teaching models to determine what was most effective for their students and for their own personalities (Focus Group). Because of the feedback they received from students, they have learned to do less of a team teaching approach, where they would both be in front of the classroom leading instruction, to a model where they take different chunks of the lesson to lead while the other person monitors student learning.

Also during this time, teachers need to learn the content of the class they are co-teaching. In most cases, it is the special education teacher who has to learn the content, but in instances where the general education teacher is new to a grade level they work through that process together of learning the material and standards for students' learning. Some teachers found the process of learning the content to be time consuming, but knew it was necessary in order to be able to achieve parity in their relationship.

Gordy noted:

As far as the content in and of itself, the first year is like you're a first year teacher anywhere. And that with me was a learning process, it isn't so much that I don't know what's he teaching, as far as not being able to do it, but it's just a matter of what is the content, what areas of emphasis are important given the core standards that he knows he needs to follow. So .

. . it's a huge learning process and curve for me, to know what's expected of a general education students as a 12th grade, plus it's a new curriculum to me (Focus Group).

One strategy co-teaching teams can use to overcome the challenge of both teachers knowing the content is more formal planning in the first year they co-teach together. This often involves meeting together daily during their co-prep time to carefully look over assignments and plan out units. While it did not always take them the full prep period to accomplish their planning, meeting daily was helpful in making sure "it was going in the right direction" (Alex, Focus Group). Teachers spent time ensuring their lesson plans would meet the learning standards of the course and the learning needs of students. They also broke down a lesson and almost scripted how the lesson would go, as far as roles during the lesson, and how they would present material to students. Louise emphasized the aspect of formal planning that was commonly reported amongst the co-teachers in this study:

And as Thelma said, that was the initial year, and it was really time consuming. Let's talk through this lesson. Okay, what does this look like for you? This is how I would start . . . it was almost like when you're in college and you're studying to be a teacher, like okay so five minute intro., then 10 minutes. Like we truly broke it all down and talked it through and figured it out (Focus Group).

This process of formal planning and learning about the other person is time consuming initially, but is necessary to go through. Having patience with the process was mentioned several times by teachers as a needed component of that first stage of a

co-teaching relationship, “I think you definitely have to give it some time and learn about the other person” (Brent, Focus Group). Several teachers mentioned that while this process can be uncomfortable initially at times, it is important to not give up, but be willing to work through the process to create an effective partnership.

Although it is time consuming and not always easy, a benefit of learning about each other early on in a co-teaching relationship is the prevention of future tensions or problems. Cindy believed that the time she spent observing her co-teacher’s styles in the classroom and learning about his preferences for interaction of teachers in the presence of students helped them to begin a more effective relationship (Focus Group). Thelma also mentioned that teachers should take the time at the beginning of a co-teaching partnership to have conversations about one another’s teaching styles or preferences for classroom management, rather than avoiding the conversations and needing to address them later after frustration had grown to a point of contention (Individual Interview). As teachers learn about each other’s styles, personalities, and preferences, they are able to begin building a relationship that is seamless in the classroom.

Building a Partnership

Another component of the Symbiosis Spin is how teachers build a relationship that eventually becomes seamless in the classroom by flexibility in instructional roles and building off one another’s comments. Teachers felt that as they learned about one another they could start to share roles in a manner that minimized interruptions to learning and complemented one another’s styles. This included switching roles of leading instruction or assisting students in staying with the pace of the lesson. Additionally, teachers mentioned that they started to get to the point where if a disruption

occurred because of a student's behavior, the other person could take over classroom instruction to keep the lesson flowing smoothly while the behavior was being addressed. This manner of efficiency was an aspect of the relationship they were building in the classroom. It was not a matter of just physically having two teachers in the classroom, but working to actually make it more beneficial to have two teachers.

As teachers build an effective co-teaching relationship in the classroom, they also look at how they can share their different perspectives or expertise during instruction by building off one another's comments. This includes interjecting to share a concept or idea that one teacher might have missed within a lesson, such as when I observed Bianca sharing how one could interpret a poem differently than Alex was discussing it with students (Second Observation). Several teachers mentioned it goes both ways, because both teachers can cover for the other person when they might miss something during instruction. As Brent said, "if I'm missing something it seems like you [Cindy] can pick it up and if you said something than I can pick up from it" (Focus Group).

While the teachers I observed appeared to be comfortable with switching roles and building off one another's comments during instruction (First and Second Observations), they mentioned during the initial stages of their relationship it was somewhat stilted or superficial as they interchanged roles or interjected comments while the other person was teaching. At times I observed this with one co-teaching team that seemed to be working through the process of becoming more seamless in their interactions in the classroom. During one of the observations, when one person would interject a comment or different perspective in the classroom, the other person would acknowledge or thank them for the contribution. However, they did not necessarily build

off or extend this comment to make it flow within the classroom discussion (First Observation). Additionally, trading roles can be stilted if both teachers do not have the needed understanding of the content to teach it at a confident level. One of the teachers mentioned it was not an everyday occurrence that their co-teaching was seamless as it still cycled for them. They were only in their second year of working together and were continuing to work on their relationship in the classroom. However, when both of them knew the content, they were “very close to seamless” (Individual Interview).

Working on building this effective relationship where teachers interchange roles fluidly and complement one another’s comments in the classroom takes time to achieve in a co-teaching relationship. Several teachers mentioned it was not as smooth for them during their first year of co-teaching as it is in their fourth or even second year teaching together. They said you have to give it time for the development of the relationship and for both people to feel comfortable with the content. While it eventually becomes more seamless, it takes the time and process of actually going through the building stage to later achieve seamlessness, which I discuss in more detail in the Fulfillment Stage section. Additionally, what helps teachers build a seamless relationship is reflecting on how they can improve their roles in the classroom or improve instruction for students.

Reflecting to Improve

As teachers work through creating a symbiotic relationship that benefits themselves as professionals, but ultimately the students in their classrooms, a large portion of improving their teamwork is reflecting. Reflection plays a part in this Symbiosis Spin because, as teachers take the time to think about improving their instruction or their relationship, they move back to learning more about each other in the

testing the waters component or to building a more seamless relationship. Teachers said reflection was an important part of how they became more effective both as teachers in the classrooms and as collaborating colleagues.

Co-teachers in this study took the time to reflect on how they could improve the instruction they provided students as well as how they could improve their roles in the co-taught classroom. They talked about meeting during their co-prep time to discuss how lessons went and how they could better engage students in activities that would be at their level or that they would find more interesting. Thelma shared, “I think we’ve done a good, a really good job of . . . pulling away from that [solely textbook based lessons] and using other activities and just have it in general be more engaging” (Focus Group). Teachers mentioned how they would talk about the assignments and that if something was not working, they would redo the assignment either directly in the moment in the classroom or make notes in their plan books for an alternate activity the following year.

As part of the reflecting component, teachers spoke about getting better at being able to change something during the moment of instruction in the classroom if something was not working well. While this was more difficult at first because the teachers were learning about each other’s styles and preferences, they became more comfortable and flexible at quickly discussing a problem they noticed with an assignment and redoing it to make it work more effectively. Cindy mentioned that they have developed a flexibility which allows them to notice if students are not able to focus on a task at hand or if their behavior is getting in the way of learning, by simply changing the activity to be led in a different manner (Focus Group). For example, she said they changed labs from small group work to be more of a demonstration in front of the classroom with students

assisting so that the teachers could direct the experiments to be more successful. Angie also affirmed the concept of on the spot reflection, “I’ll see something’s not working and sometimes you’ll see that maybe they’re off task and we need to redirect. So, we just work together just that way on an ongoing, developing basis, I’d say” (Focus Group).

Teachers also use reflection to think about how they can improve their relationship to make it more enjoyable for themselves or for their students. For some teams, it means encouraging their teammate to go beyond what is personally comfortable to create a more unified relationship that benefits students’ learning. Cindy stated a general education teacher should get their special education co-teaching partner up in front of students, even if they are not comfortable at first, because it was important for the development of parity within a co-teaching relationship (Focus Group). Reflecting on a co-teaching relationship also includes being open about each other’s personality differences and willingly sharing these differences in front of students. Tyler and Gordy said they do this often as they discuss with each other what they need as individuals to feel competent in the classroom and how their personalities could blend together more effectively (Focus Group).

The constant reflecting and improving of instruction within a co-taught lesson works interdependently with the development of the co-teaching relationship. Teachers said spending time together reflecting on lessons had an influence on their feelings of satisfaction in their co-teaching relationship. Indeed, Angie summed up the concept of reflecting well by simply stating, “you’re always tweaking things” (Individual Interview). Teachers said reflection was important in their co-taught classroom and was not something they left behind as they moved into the Fulfillment Stage of their relationship.

Rather, reflection becomes a more consistent, natural part of their relationship, which I later elaborate on in the Fulfillment Stage section.

Needed Dimensions

In order for a cooperative relationship to be formed in which two people feel they can contribute equally to the relationship, necessary dimensions include parity, respect, trust, and care for the partner as a person. Additionally, in a co-teaching relationship, external factors needed to create a successful relationship include professional development, co-planning time, and administrative support. The degree to which each of these dimensions is present in a co-teaching relationship influences the Symbiosis Spin between testing the waters, building, and reflecting. If a team had less of the dimensions, they appeared to spend more time in the Symbiosis Spin before they could move on to the Fulfillment Stage. If a team already had some of the dimensions established before beginning the co-teaching relationship, they mentioned being able to move through the Symbiosis Spin to the Fulfillment Stage in a timelier manner. This section describes each of these dimensions, both interpersonal and external, in more detail in regards to developing a symbiotic relationship.

Parity. A predominant theme that emerged from co-teachers in the area of necessary dimensions for an effective co-teaching relationship was parity. Teachers believed they became effective because they worked through equally sharing roles and responsibilities within the classroom, including planning, instructing, grading, and classroom management. For those teachers who had previous experiences that were not as effective of partnerships, the hindrances they mentioned were related to unequal distribution of duties both for preparing lessons and instruction in the classroom.

Teachers wanted to feel as though they could share both the difficult and enjoyable parts of co-teaching with their partner. However, it was only when they felt they had become equals in all areas of the classroom that they could achieve the feeling of parity. In particular, because special education teachers were often the ones going into another person's classroom and content area, it often fell on them to work towards achieving parity within the relationship, as this quote by Gordy exemplifies:

To me, it was huge that I wanted to do whatever I could to make sure I was carrying my equal weight, knowing that I didn't, that I was going to be depending so heavily on him to carry me for the first year, and then it's just like anything else, than I can kind of walk more on my own and with my personality is a really hard thing. A really hard thing. Just because I want to be competent from myself and I want to make sure that I am carrying my weight (Questionnaire Results Discussion).

One of the most important parts for parity is having the content knowledge. Even though teachers can complement each other in pedagogy towards instruction, it is difficult to achieve parity of planning and instructional roles if both of them do not have the content knowledge. Special education teachers addressed this by choosing areas to co-teach that were more their area of expertise. For example, Louise stated she preferred teaching social studies or language arts, but she was not comfortable teaching math, "So I said, as long as it's not math I'm fine. I said I would prefer social studies or L.A. Both areas I thought I could, you know, bring something to the table" (Focus Group). All the other special education teachers also mentioned they chose areas they felt they could contribute in some way to the content. For some of these teachers, they had

undergraduate training or certifications in the content area or they had previously co-taught the same course with a different general education teacher.

Another way teachers address the idea of carrying equal weight with content knowledge is taking the time to learn the curriculum and standards for student learning. Gordy stated it was a learning process for him because he did not know the content, important areas to emphasize, or standards for learning that needed to be met (Focus Group, Questionnaire Results Discussion). While it was time consuming to learn the content knowledge, teachers who took the time to do so reported a more fulfilled relationship. Some teams mentioned dividing up units or novels to prepare for instruction. This allowed those who did not have as much knowledge of the content to get gradually immersed into the material and learning standards, in a manner that also achieved parity within the classroom.

Initially, general education teachers understood if their co-teaching partner was not knowledgeable in the content areas. However, conflicts occurred if they felt as though their co-teaching partner did not take the time or initiative to learn the material they were covering in their courses. One teacher mentioned that his/her co-teaching partner wanted to have leadership in instruction in the classroom, but this teacher did not feel as though his/her co-teaching partner was knowledgeable enough in the content to allow for evenly dividing the leadership (Individual Interview). Thus, tensions arose between the two of them when it would have been better to have more shared leadership and instructional roles in the classroom. As they have taught longer together, the parity has increased as both teachers have increased their content knowledge.

Directly related to parity in content knowledge is sharing the roles of planning for instruction. When teachers know the content better, they are able to share in the planning roles in a more equal manner. It is when one teacher does not know the material that the other feels as though he or she needs to handle most of the planning responsibilities. One teacher acknowledged the overburden of planning on one teacher gradually occurred overtime because it became easier to plan lessons on one's own schedule if there did not seem to be the equal sharing of ideas and motivation to prepare materials. This created a conflict that the teachers had to overcome in order to reach the Fulfillment Stage in a manner that established parity in their relationship.

As mentioned previously, teachers would divide up units to establish parity in planning, but they felt it was important that both teachers joined in the day-to-day planning of adjusting schedules or assignments to make it work better for students. Vicki expressed how they divide up planning units while also sharing daily planning, "so we say I'll take this unit and you know you can take the next unit. But, on a weekly or even a daily basis when we have an idea for addition or revision, we feel very comfortable in saying 'let's do this'" (Focus Group). If one teacher started an assignment, they would share it with their co-teaching partner, like Alex described, "I would get the beginning of an assignment created and we would kind of make sure it was going in the right direction" (Focus Group).

As teachers shared the planning responsibilities, they also wanted to share the grading responsibilities with each other. Grading was an area in which special education teachers mentioned it was important for them to share equally with the general education teacher so that one teacher was not burdened with most of the work. Teachers

accomplished this by dividing up work to take home or, as Cindy mentioned, one teacher would quickly grade a formative assessment during class to guide instruction (Focus Group). I observed the sharing of grading in some classrooms as teachers handed back graded homework to students and mentioned how both teachers had reviewed the work. I also observed one team, Vicki and Angie, divide up a homework assignment students turned in that day and grade it during class to give students feedback before the period was over (Second Observation). Louise explained how teachers could address the concept of parity with grading in a co-teaching relationship:

I think sharing everything is really important. Sharing the grading when it comes in or just, there are a lot of times where I will take stuff right out of Thelma's room or right off her desk and she will say "you don't have to grade that." I know I don't have to, but I will grade this and it will be done and taken care of. And that always makes me feel better, because we meet in her classroom, I don't have a classroom to call mine. So we're in her classroom. The little daily things she will often grade those the hour after we meet with the kids, so you know almost if I don't take them she does it. Well, I just think it is important to share as much of the responsibility as you can (Individual Interview).

Within the classroom itself, parity is important for both instructional and classroom management roles. The special education teachers in this study noted how they wanted to feel like a teacher when they were in the co-taught class instead of a paraprofessional. Teachers expressed not wanting to always be the person who assists students in the background or being a babysitter that just monitors students learning.

Bianca stated this well by saying, “I would say making sure both people teach is good, otherwise . . . you’re just a glorified para[professional] is the way to put it . . . I am still a teacher” (Focus Group). During observations, I noticed a clear difference between a paraprofessional’s role in the classroom and a co-teacher’s role. In Cindy and Brent’s classroom two paraprofessionals assisted specific students, but there was a clear distinction between what the paraprofessionals did and the role Cindy held (First and Second Observations). Cindy did not just help students individually and keep them on track with learning like the paraprofessionals, but she also led part of the classroom instruction.

Similarly, the general education teachers stated that they wanted to be able to share instruction and classroom management responsibilities with their co-teaching partner. Brent shared previous experiences in which he felt like he was responsible for all of the instruction and classroom management, “I’ve had ones in the past that I don’t think participated, you know didn’t want to participate and . . . were just there and that’s all and that wasn’t a help at all” (Focus Group). The support teachers received from each other in the classroom was an important aspect to becoming fulfilled in their co-teaching relationships and handling challenges smoothly.

Conflicts arise in a co-teaching relationship when one teacher feels as though the responsibility for instructing and monitoring behavior is one-sided versus shared. Teachers who overcame this tension discussed dividing up parts of the lesson to present to students, regardless of who had more responsibility for planning a unit. Vicki explained this well when she said, “we say ‘okay, I’ve got this. You take this part of the [lesson].’ Or ‘I’ll do the opening and you give them the lesson and then I’ll give them

this.’ We are always in there, so interactive in there, so I think we’re very equal” (Individual Interview). An important theme teachers mentioned and I frequently observed in their co-taught lessons was interactive roles in the classroom (First and Second Observations). Teachers would lead different sections of the lesson, while the other person would move around monitoring student learning or assisting students as needed. Additionally, even though one teacher might be leading a section of the lesson, the other teacher would share in making adjustments with pacing during the lesson or would interject comments to give examples of the concepts being discussed. Another way teachers discussed sharing instructional roles was using group work in which they would divide the class into two groups and each teacher would teach the same material, but in a different manner to meet student learning needs. I observed this occurring in Thelma and Louise’s classroom one morning when they divided the class into two groups to provide a different level of support for an activity that required a significant amount of reading (Third Observation). I also observed both Vicki and Angie floating among small groups working on projects to answer questions or provide support as needed (Second Observation). As teachers in this study mentioned, to establish parity in the classroom it is important for both teachers to share the instructional roles as well as classroom management roles.

Teachers mentioned that the support they received from a co-teaching partner with classroom management was one of the benefits they valued in a co-teaching relationship. Several teachers who had previous experiences that did not work well commented that classroom management was a point of contention between them and their co-teaching partners. Tensions arose if one teacher was more lenient in classroom

management and the other one became the person responsible for upholding classroom expectations. Thelma mentioned her first co-teaching experience (with a different co-teaching partner than Louise) was problematic because the other co-teacher would not “jump in and do any of the management sort of stuff” (Focus Group). Rather, co-teaching teams in this study expressed the importance of sharing classroom management.

When both teachers share in classroom management, conflicts are avoided such as a “bad cop, good cop” situation. One way teachers supported each other in sharing the discipline was to take turns being the person who addressed difficult behaviors or students who repeatedly defied classroom expectations. Teachers mentioned that they would switch roles of being the “the hard one” (Vicki, Focus Group). Thus, if one teacher was having “a rough time with a student” (Angie, Focus Group), the other teacher could step in and support reinforcement of classroom expectations.

Teachers also share classroom management by taking turns leading instruction while the other person monitors student learning. In every classroom observation, I observed teachers sharing the classroom management responsibilities by both addressing student behaviors within the classroom whether it was through making comments aloud to the whole class or to individual students as needed in the course of the lesson. Bianca stated this well when she said “we have a couple of kids that when Mr. Alex is teaching, is doing something, you know, it’s more of a moving through the classroom or he’ll whisper to a kid ‘hey, stop it.’ You know, and it’s just, we just kind of blend in there” (Focus Group). The concept of quietly blending in and keeping students focused for the teacher who was leading instruction was mentioned many times by teachers as a way to keep learning flowing smoothly. Cindy illustrated this point:

He will be teaching and I will see somebody you know that is off task, they are reading a book or something and I can just go over to them and say ‘put it away, we don’t have that out right now, you are supposed to be paying attention to this.’ And you know it helps him because he doesn’t have to stop what he is doing, the other kids don’t have to stop what they are doing (Focus Group).

The process of achieving parity in sharing instructional roles and classroom management roles also affects the perceptions students have of their teachers. Teachers mentioned several times that they wanted students to perceive both of them as teachers in the classroom and not as one being a teacher while the other person was a paraprofessional. For teachers this had to occur not only in saying verbally that both of them were teachers leading the class, but through observable actions as well. Tyler stated this eloquently and simply when he said “there is a difference between us saying it and feeling it, you know” (Individual Interview). Additionally, parity had to occur through actions the students could see and feel, because the general education teacher is the name that is on the roster, rather than both of their names. Bianca stated that Alex insists that she leads something within the first few days of a class so that students clearly know she is a teacher as well (Focus Group). Alex explicitly described the importance of achieving parity in students’ perceptions:

Their parents probably never know . . . there is nothing coded on PowerSchool that includes [special education teacher’s] name. So, I think not only for our professional relationship and friendship, that’s just sort of

needs to be established [parity of roles], but also with the students (Focus Group).

To accomplish the view of parity for students, teachers emphasized the importance of not separating general education and special education roles within the classroom. They made sure the special education teacher was not the one who always helped the students with IEPs, but rather that both were teaching and assisting all students. Brent said, “it has been kind of a balance, you [Cindy] don’t just work with the kids that have special needs. You’re helping with everybody and I think that’s what makes it better, actually. It’s not compartmentalized, you know” (Focus Group). Angie mentioned that when they take a group of students out to work with them in a different manner, they try to vary it so the other person takes the group of students out the next time it occurs. I specifically observed this strategy in Thelma and Louise’s class when they divided the students into two sections for an activity. Louise took the higher level of students even though she was the special education teacher, while Thelma stayed with the other students who needed more support in reading the activity (Third Observation). Thelma described this conscious effort to achieve parity in student perceptions of their roles in the classroom:

And I would say too, that we both make a conscious effort. I don’t want to be seen as a gen ed teacher, where the special ed kids can’t talk to me and I know Louise doesn’t want to be seen as the special ed teacher where the gen ed kids can’t talk to her. So, we really float between those two roles. So, like there’s one day where Louise’s like ‘Oh, I can read that out loud for those who have that accommodation’ and then the next time I’ll

do that so that they never feel like oh, Mrs. Louise deals with special ed and Mrs. Thelma deals with regular ed and so, and I think we always have done a good job on that part of it (Focus Group).

Teachers felt parity was important not only for students' perceptions of them as professionals, but also for the students to receive support from both teachers. Vicki said, "I think the access thing, they can access both of us. I think our students feel comfortable asking both of us, most of the time any question that they have, either about content [or expectations or behavior]" (Focus Group). As Gordy said, "I'm here to help others, I mean we do, we each individually help all students in the class" (Focus Group). I observed students' perceptions of teachers having equal roles within the classroom by how students would ask for help during independent or group work time (First and Second Observations). Students would ask for assistance from either teacher without demonstrating partiality to one person over the other. They seemed to accept the answer without asking the other teacher the same question in order to get a different answer. These observations demonstrate that when parity of roles is modeled and demonstrated to students, students see teachers as equals in the classroom.

Teachers said they both wanted to provide a mentorship for students in which students would see and feel both teachers cared about their success in the classroom and in their personal lives. Several of the teams mentioned they worked hard at getting their students to pass their classes and it was not one person's responsibility to do so, but that both of them would mentor students. Thelma and Louise talked about taking time to work individually with students in reviewing their credits for graduation and encouraging them to finish assigned work to pass classes (Focus Group). Alex and Bianca mentioned

specifically that a student in their co-taught class had “graduated because of us” (Alex, Focus Group).

Parity was important for the development of “their professional relationship and friendship” as Alex (Focus Group) mentioned and teachers achieved parity through sharing roles in planning, instructing, managing behaviors, and grading. Another theme that emerged within the concept of parity was managing control. In order to feel equality in a relationship, teachers need to feel as though they share control in making decisions. It takes time for teachers to share control in all aspects, because as previously mentioned, both teachers need to be confident in the content and material before they can contribute equally in making decisions. Some of the teachers mentioned that until they felt their co-teaching partner was knowledgeable about the content, they felt as though they had to take more control over the planning and creation of assignments, which was not always comfortable for them personally. However, as parity grew in content knowledge, so too did parity in control. Vicki shared:

Especially with new texts or new material, I’ve done more of them, so I have, but she has also. I have also noticed that increasingly, especially when we do texts that only she has done. So, we have no problem taking the control when we’re the expert and then supporting each other and then you know in subsequent years when we both know the material we are pretty co-equal (Individual Interview).

Teachers in the Symbiosis Spin are still working out how to make joint decisions. The goal of shared decision making was described as both discussing decisions together and simply knowing the other person well enough to make decisions without offending

each other. For decisions that were small or needed to be made right in the moment, teachers felt as though they knew each other well enough they could make decisions that would be acceptable to both of them without consultation of their co-teaching partner. Conversely, for larger decisions they took the time to talk together and come to an agreed resolution. For example, Angie shared with me how she and Vicki talked about participating in my study on co-teaching before emailing me back their response (Individual Interview). Thelma explained joint decision-making:

Now there is not a decision that we don't make together or I will make decisions when I am 100% confident that she would agree with the decision. So, again that communication and just knowing each other over such a length of time. It helps with what would Louise do, well I know what Louise would do (Individual Interview).

Additionally, control came up in conversations with teachers about grading and sharing access to the grade book. Teachers mentioned they both have online access to the grade book, which illustrates the parity they feel in making decisions within their relationship. Because of the way the roster is set up in their district, the general education teacher is the only one who automatically gets access to the grade book. They stated conflicts developed for teams in which the general education teacher retained access of the grade book, because the special education teacher did not feel as though he or she was an equal in making decisions. This was one area teachers felt that conflicts could easily be avoided in feelings of inequality of control and that teachers could support each other in sharing the workload. Louise described this well:

Thelma is really good about sharing. I have access to her gradebook.

She's given me the password, I can go in, she has no problem sharing that information with me and in fact is always really thankful when I say 'oh, that is already in there, I got done with it, so you can look if you would like.' And there are a lot of co-teachers that don't share their gradebook passwords, and do not allow each other to have that access, which I find kind of interesting because then you're just not giving up the control which is fine if you like the control, but are also not allowing that person to help you as much as they could (Individual Interview).

When parity is achieved in all aspects of a relationship, including control, teachers start to feel that they are equals within the relationship. Brent noted:

I think that's the key to what you're saying and too is if you both want to be involved and you both want to teach the kids and stuff and that the kids see that too. You know, they see whether there is friction between the two of you or whether there isn't (Focus Group).

If both teachers want to be involved and the students perceive they are equals in the classroom, tension can be avoided within a relationship. Teachers mentioned frequently that one of the ways they avoid tension with each other and in establishing the feeling of being equals was how they treat each other with respect. Angie bridged the concept of equality and respect:

But to recognize that we are equals. Don't expect your special ed teacher to go run your copies and go get you coffee. I mean literally, like a

secretary. That's not the relationship and I think just really letting each other be the teacher you are (Focus Group).

Respect. As teachers work together to establish equality in their relationship, they can only do so by demonstrating respect for each other as professionals. Angie said "I just think honoring each other as professionals . . . and I think in situations where that might not occur, where one feels inferior to the other, that can be really difficult" (Focus Group). Respect was evident in my observations of Angie and Vicki (First and Second Observations) as they demonstrated a manner of engaging with each other that showed respect for each other's professional knowledge and authority in the classroom. Other teachers mentioned wanting to feel as though the other person saw them as competent in their role as a teacher, but past co-teaching partnerships where their experience was questioned was detrimental to the relationship. In my observations of teachers working together in the classroom, I observed how their interactions with each other demonstrated a respect for the other person's knowledge and authority in the classroom. Cindy pointed out something that Brent was doing to work on the concept of plant reproduction for his own personal interest, rather than a specific part of the science lesson (First Observation). As she pointed this out to students, she did so in a manner that validated his interest and expertise in science, thus respecting his content knowledge and professionalism.

Teachers said that they also honored each other as professionals by respecting the other person's teaching style, personality, and opinions or feelings. As Angie had mentioned in their focus group interview, it is important to let a person be the teacher they are, rather than force a different teaching style on them. Cindy also expressed that she tried to learn her co-teacher's style of teaching as she first began working with them

so that she could complement them in the classroom, rather than make them uncomfortable (Focus Group). In the manner of respecting someone's personality that might be different than one's own, Tyler explained how he and Gordy talk openly about how they are different and that they respect these differences (Focus Group). When they are open with each other about what their personality strengths are, they are able to respect how they might approach a situation differently. Thinking about how the other person might feel in a situation was shared as another way of demonstrating respect. Louise said having bad experiences in the past with co-teaching partners perhaps made them more aware of checking with the other person to see if a decision was okay or if they would handle it differently (Focus Group). Bianca also said that she felt in her co-teaching partnership with Alex that he has always been kind to her, even if they disagreed about something (Individual Interview).

When teachers are able to demonstrate respect for one another in their interactions with each other in the classroom, they also model peer collaboration for their students. Teachers exemplify social skills that students need to learn to work well with their peers, through modeling how people can work together as a team or how they can disagree appropriately. Several teachers said teaching social skills become a natural, unconscious part of their lessons as they co-taught in front of students. Louise said "I don't even think that they realize that we are teaching them social awareness and social skills. But, we try to impart that stuff on them. Like, we are more models than we think we are" (Focus Group). Teachers showed students that even if they had a different answer or thought during a discussion, it was not handled in a way that made the other person look inferior. Gordy said they like to take the opposite viewpoint in a theoretical discussion to not only

provide more than one side to an argument, but also to model for students how people can disagree in way that is respectful (Individual Interview). Tyler said they “also kind of showcase we can disagree and be civil, we can disagree and still this is how grownups can have that relationship” (Individual Interview). Bianca and Alex demonstrated this in one of my observations of their co-teaching when they were discussing a poem with students (Second Observation). Bianca interjected when Alex was leading a discussion to validate a student’s response that did not appear to be the correct answer. She commented on how this response could be a different way to look at the point of view in the poem, but she also demonstrated respect for Alex’s perspective in front of students. How Alex reacted to Bianca’s interjection by saying he had not thought about it that way showed he respected her interjection and differing perspective. This modeled for students how peers can disagree in a respectful manner that builds a relationship, rather than straining it.

Trust. Similar to respect, trust is an important dimension in a collaborative relationship. Teachers want their partner to trust their professionalism, competence, and content knowledge. Cindy discussed how she appreciates when her co-teaching partner trusts her to take over lessons when they have a substitute (Focus Group). Additionally, teachers appreciate knowing their partner trusts them to plan lessons in a manner that meets the learning standards and student needs. Thelma shared how she trusted Louise in planning an upcoming unit:

I completely trust her judgment and where she is going to go with it. And

I think that’s nice too cause after a certain amount of time there is that

trust and I trust . . . in her professionalism and in her content knowledge and in her special ed knowledge and everything (Focus Group).

Teachers show trust for one another by also allowing them to share in grading assignments without questioning their decisions. Several teachers mentioned how both of them have online access to the grade book, even though officially it would only be in the general education teacher's account. Sharing the grade book password demonstrated a trust they had in their relationship that their partner would grade an assignment in the same manner they would. Louise stated that they do not question each other's grading, "Thelma graded those two assignments. I grade the last two . . . and we didn't even necessarily confer over it. Because if I take a stack of grading, like Thelma has never question, nor would I question ever what she did" (Focus Group).

A significant component of trust in a co-teaching relationship is being reliable in meeting together or being on time for class. Conflicts occurred when one teacher felt as though the other person was not present when class needed to begin or if they were not prompt for collaborative planning meetings. Teachers appreciated when their co-teaching partner would tell them ahead of time if they were going to be late for class or absent for some reason. This thoughtful communication created a trust in each other through building reliability. Cindy mentioned they know they can always meet together in the morning before school to discuss lesson plans or adjustments to the lessons, because they both are there early (Focus Group). She said "we know what the schedule is and you know it's not like somebody is waiting on somebody to get there . . . He's always there for me" (Focus Group). Knowing the other person will be there to support

one another in the classroom builds trust, as well as a sense that the other person really cares about them as an individual person.

Care beyond the classroom. Another important dimension to an effective co-teaching relationship is feeling as though one's co-teaching partner really cares about him or her as a person rather than just as a teaching colleague. When giving advice for teachers beginning a co-teaching relationship, one teacher said co-teachers should "care about the person beyond the classroom" (Angie, Focus Group). Co-teachers naturally spend a lot of time together during the course of the day or the school year and as they work together, they build a rapport with each other that becomes almost like a marriage relationship where you have to personally care about the other person. Louise stated it this way, "I seriously told my husband this like two weeks ago. I said 'Thelma, and I mean for all intense purposes when you are a co-teacher, we are basically like married at work!'" (Focus Group).

Teachers talked about watching out for the other person during class by taking over when one person was frustrated with a student or being a witness of classroom events. They mentioned either of them would take over if a person was dealing with a challenging student, in order to not only share the burden of managing student behavior, but also for relieving the personal stress of their co-teaching partner. Sometimes this would include telling a student to stop misbehaving for the sake of the other teacher. Bianca shared how Alex would tell a student "to stop pushing her buttons" (Focus Group). I also observed this as Thelma and Louise would step in for each other to support the enforcement of classroom rules (First and Second Observations). Teachers also talked about watching out for one another in a way that would protect them from

false accusations of another student. Like Louise said, having a co-teacher in the room provided a credible witness that nothing inappropriate happened (Focus Group).

Additionally, teachers watched out for each other by taking over leading classroom instruction if they knew their co-teaching partner was not feeling well that day. For example, Vicki said Angie took over for her because she was coughing and could not lead instruction (Focus Group). Similarly, Brent said, “and one person takes over after the other. Last week I felt crummy and my head wasn’t there and you [Cindy] did most of it. So, yeah it balances that way” (Focus Group). When teachers showed this kind of regard for each other, they built a relationship that was not just based on professional collaboration, but also personal ties with each other.

For some teachers this personal regard for each other extended beyond the classroom walls. Teachers talked about how they share things about each other’s families or personal interests. Gordy mentioned it was important for him in building connections with another person to know something more about the person than how they are as a teacher, such as sharing common experiences with Tyler of being a father (Individual Interview). Not only did teachers share with each other about personal stories, but they also enjoyed doing fun things together outside of school together. The time teachers spent together helped them become friends or strengthened a friendship that existed prior to co-teaching together. Thelma described the friendship she had developed with Louise:

And not just because she is my co-teacher, but now she really truly is one of my closest friends at school and outside of school. Just, I mean, it was bound to happen, just because we do spend so much time together, but it

was such a positive experience that that is really important to me as a whole (Focus Group).

Professional development. While the needed dimensions discussed so far included those related to interpersonal factors, there are also external factors that teachers listed as being important for creating effective co-teaching partnerships. One of these external factors is adequate professional development. The general education teachers in this study did not receive any co-teaching training in their college preparation, while some of the special education teachers mentioned co-teaching was integrated into some of their coursework. However, for most teachers it was limited and they did not have a wealth of knowledge about co-teaching before beginning a co-teaching relationship.

Most of the teachers in this study participated in a brief school district training on co-teaching as an introduction to beginning a co-teaching relationship. During the training session, they were shown different co-teaching models and how to use these models in practice. Tyler talked about how they showed a team teaching model where two people presented the lesson “going back and forth and they were talking on the board, oh this person is going to write like this, well you could do it this way as well” (Focus Group). However, some of the teachers acknowledged this was very limited and then after this training they were pretty much on their own for making their co-teaching partnership work well. In particular, the two co-teaching teams that felt they experienced more challenges in their relationship mentioned more training would have been helpful to know if they were being effective. Tyler commented:

The chance of being in classrooms with experienced co-teachers, yeah
more evaluation of us in the room, more groundwork for expectations of

like how do they envision grading going, how do they envision the class work going. To the extent of like so, yeah who grades what, how do those things happen, what are the standards that we expect the kids to work up to, stuff like that. That's been left up to Gordy and I, and so, so if we're making the right choice by the grace of God, then yeah! But if we are not making the right choice, then . . . (Individual Interview).

However, professional development on co-teaching needs to be individualized to meet a variety of needs and levels of learning. Co-teaching teams that had moved to the more effective stage in their relationship did not believe more professional development was needed for their co-teaching relationship, because they were able to support one another and could learn from one another. However, for those still in the Symbiosis Spin professional development was something they desired. The difficulty some teachers expressed with providing co-teaching training at the district level is that building a co-teaching relationship varies across co-teaching teams. Therefore, it "really depends on your relationship with your co-teacher" (Louise, Individual Interview) as to whether more training would have been helpful. Additionally, as Thelma mentioned co-teaching teams might need training on different co-teaching concepts that would make a general training inappropriate, "most of it is just so people specific, that I don't know that they could have done any more for us" (Individual Interview).

Teachers discussed ongoing professional development might be more beneficiary to co-teaching teams. As Gordy stated, the initial training was a nice introduction, but ongoing training in how to differentiate for student needs would have been helpful for him and Tyler (Individual Interview). Louise also mentioned ongoing training, that was

more like counseling, could be beneficial for those teams that are struggling with a co-teaching relationship (Individual Interview). In particular, a consensus across co-teaching teams was specific professional development that was ongoing would be the most helpful for co-teaching teams who were not quickly moving through the Symbiosis Spin process to the Fulfillment Stage of co-teaching relationships. Tyler said that the feeling he got from the initial training was that co-teaching is good and it is not that difficult to do well (Focus Group). However, he mentioned that was not necessarily the case and ongoing training would have been helpful:

On a grander scheme I think co-teaching is good, but it's not intrinsically good . . . and that like we're going to throw this together and now it's going to be perfection and I don't feel like we were given near enough support as far, either from a beginning standpoint or from a continual standpoint. So, I'll be interested to see how much support we'll be given forward and what that helps us do (Tyler, Focus Group).

Co-planning time. Another external factor necessary for creating effective co-teaching partnerships is co-planning time. Teachers acknowledged that the common planning time was particularly important the first year they were co-teaching because they needed to meet almost daily to plan lessons and formally plan out units. Louise shared that the first year that she and Thelma were co-teaching, they needed the co-prep to make day to day decisions and that it would have been nearly impossible for them if they did not have a co-prep time (Focus Group). Overall, co-teachers said the first year they taught together, they met more often in a formal manner. Alex shared:

You almost have to probably talk about it, first year versus, the difference between now we take for granted that most of it is already pretty much planned. The first year that we taught, we spent half of that, we would get a roughly 50 min. prep period, that would be co-prep. And we would spend most of that 50 min. period, or about half of that, half I mean. It would depend, some days we would need more and some days less. Sort of getting stuff together (Focus Group).

Planning time became less formal for teachers as they had co-taught more than one year together. For the most part, they referred to planning as more touching base with one another on the pace of the lessons, with formal planning being for upcoming units. Angie shared how she and Vicki plan upcoming lessons by emailing one another or stopping in to make sure they are on the same page for lesson activities (Focus Group). Thelma and Louise also mentioned that their planning time is less formal, but they do spend time together mapping out how they will do an upcoming unit and look at any lessons they want to change or improve from the previous year (Focus Group). Although they are now in their fourth year of teaching together, she said they still find the co-prep time to be valuable to their co-teaching relationship and effectiveness in the classroom. She said that they “would be willing to fight for it if it went away” (Louise, Focus Group).

Co-teachers also expressed the importance of having both the common planning time with their co-teacher and also the individual planning time for other courses they teach on their own. Some teachers found tensions between each other if they held different desires for co-planning. Gordy shared that he is more detail oriented than Tyler,

which meant he would have liked more planning done together than Tyler felt was necessary (Individual Interview). However, he felt they have worked it out this year by trying to compromise with each other:

I mean Tyler is, it has been a concerted effort I saw in him to be willing to meet every day, even if it is for a short period of time and know where we're going. But you know, I can see that he has certainly made a concerted effort to go that way and I made a concerted effort to try to not be so compulsive about saying we need to have everything planned out (Individual Interview).

Additionally, teachers handled differences in expectations for co-planning time and allowing for both co-prep and individual prep by meeting for only part of their co-prep time or meeting on alternate days. Particularly as teachers got through their first year of co-teaching together and planning was less formal, they found they could have both an individual and co-prep planning time. Angie said that she and Vicki worked it out so that they could do both, because “our content doesn’t change a lot, maybe our delivery might change, but we are still teaching some of the same novels that we taught the first year, so we don’t have to reinvent everything” (Focus Group). Cindy also discussed how the eighth grade team all has the same planning time and they meet as a team first and then they can do their own things afterwards (Focus Group). Their building also has discipline level team meetings on Thursdays, which allows for teachers to meet in content areas to plan as well, thus keeping their co-taught class on the same pace as much as possible with the other science classes.

Administrative support. While co-planning time is essential for teachers, it would not have occurred without administrative support for scheduling that common planning time. Administrative support is also needed in other ways for teachers to feel as though they can provide effective instruction to the students in their co-taught classes. Teachers mentioned administrative support in the areas of valuing co-teaching, providing choice towards co-teaching, pairing people appropriately, mediating conflicts, and setting realistic expectations. Teachers felt that they had administrative support for the idea of co-teaching, but the specifics of how it was worked out was sometimes not actively supported by building administration. Most teachers noted that their building administrators were too passive and would not step in to support teachers through observations or suggestions of improvement. They mentioned overcoming this lack of support by simply uniting together to do the best they could within their classrooms.

For supporting the idea of co-teaching occurring within their building, all of the teachers in this study believed their building administrators valued co-teaching and would arrange the schedule for teachers to make co-teaching happen. Some teachers mentioned that their building administrator was supportive of inclusion as much as possible and encouraged co-teaching as a means to make inclusion work for students and teachers. Cindy described her building principal as “very supportive . . . she’s all for getting kids integrated. And more, especially next year. So, I like that we have that support.” (Focus Group). Louise also felt that she had administrator approval and support when she self-initiated co-teaching in her first building and now in her current building. According to teachers, simply making it occur in the schedule was not sufficient to making co-teaching

effective in practice. As Gordy inferred “from my perspective, their management and leadership approach is we put it here, we support it” (Focus Group).

Teachers believed administrators have to support co-teaching by honoring teachers’ choice towards participating in co-teaching. Louise said although her building has for the most part embraced the concept of co-teaching, the administrators “have not forced it on anyone who has not [been] willing and I think that makes a big difference” (Focus Group). Angie also mentioned they had a choice to participate in co-teaching in her building, “I think . . . honor your choice is good and I feel that we have that here” (Focus Group). They felt as though the situations in which teachers did not have a choice and did not want to co-teach, both teachers were put in awkward positions that did not set them up well for establishing effective co-teaching relationships.

Teachers also felt that administrators can be supportive of co-teaching by pairing people strategically. While some people look at co-teaching as a way to provide peer mentorship, one point emphasized by co-teachers was not putting inexperienced teachers in a co-teaching situation. They believed that the stress of being a first year teacher in combination with also co-teaching could be really difficult. For example, Alex said:

I think it would be really hard to be planning three new classes and trying to figure out how to co-teach and developing a relationship . . . I just think it would add additional stress to that very difficult first couple of years (Focus Group).

Teachers thought teams in which people were paired thoughtfully ended up being more successful for both teachers and students. Tyler mentioned this when he said administrators should think about personality styles and if two people were truly

compatible, rather than just randomly putting people together (Focus Group). Several teams in this study believed their administrators knew they would work well together. Thelma shared how her first co-teaching experience did not go well, but that she thought their building administrators knew “Louise and I would be better suited together” (Focus Group). Vicki also expressed how administrators can thoughtfully pair people together:

I think our administrator probably chose us for the other, or I don’t know or if they, you know asked for input from special ed and they placed me with Angie. They somehow seemed to know that we would be compatible. I think we agree with each other about expectations, discipline even (Focus Group).

When co-teaching teams do not collaborate smoothly, teachers felt that it is important for administrators to help mediate conflicts. Teachers thought administrators could help step in and facilitate meetings for the co-teachers or have them observe other co-teaching teams. Both Cindy and Thelma had previous negative experiences with a co-teacher and said it was important to them to have their administrator be supportive of how co-teaching should function (Focus Groups; Individual Interviews). However, if the co-teaching partnership was proving to be impossible to resolve differences of philosophy or expectations, teachers felt administrators should not continue to force an unworkable situation. Thelma shared in detail how she used administrative support to help her with a difficult situation:

When my first partnership was unsuccessful, they were very open to discontinuing it and coming up with another solution. So . . . it just happened to be a coincidence that the gentleman that I co-taught with

before got a different job outside of the district, but had he remained at [High School A], he wouldn't have been co-teaching with anybody, period. But they were very supportive of not only discontinuing that, but before we got to that point, facilitating meetings and setting us up for observations with other successful co-teachers and just really trying to do everything to make that partnership work (Focus Group).

An area in which teachers experienced challenges with co-teaching was unrealistic expectations from administrators in terms of the composition of their co-taught classes. Teachers felt their administrators were supportive in word for co-teaching, but would not always support it by creating the right environment for inclusion to effectively occur within the general education setting. Teachers shared that the percentages in their classes of students who had IEPs was increasing, thus making it above what they thought was the recommended amount of less than 50% students with IEPs. Teachers said that having so many students in their classes who struggle with learning or with behavior made it very difficult to bring students up to a higher level of conversation and learning. Alex said, "I am confident that the kids are learning in this situation, but I am not confident that it is the equal education to a regular ed classroom. And when I can't say that, then it's not working" (Focus Group). They felt administrators would look at students' needs on an individual basis and make the case for why a student would benefit from a class with two teachers. However, they failed to look at the class roster as a whole. Teachers said they addressed this challenge by having open conversations at the special education department level of how to address the issue, but, since students are placed in classes by building counselors, they also had discussions with

counselors about reversing this trend in their building. Teachers also worked to overcome this external challenge by doing the best they could with a very challenging situation, “it is very challenging and you just do the absolute best that you can” (Thelma, Individual Interview).

Summary of needed dimensions. The dimensions that are necessary within a co-teaching relationship affect the cycle teachers experience between testing the waters, building an effective relationship, and reflecting for improvement. Interpersonal dimensions necessary for collaborative relationships include parity, respect, trust, and care beyond the classroom. Additionally, external dimensions that teachers felt were necessary for building effective co-teaching relationships include professional development, co-planning time, and administrative support. The degree to which teachers achieve these dimensions or experience conflicts within these dimensions is a force that causes the Symbiosis Spin to cycle. Furthermore, these dimensions work interactively with the concept of compatibility in causing the spin to occur.

Compatibility

An important force that affects how teachers move through the Symbiosis Spin and progressed to an effective co-teaching relationship is how compatible they are with each other. Teachers talked about needing to be suited for one another, whether the administrators helped choose them for each other or because they sought out someone they thought they could work well with in the classroom. Previous partnerships teachers described as being negative were incompatible in philosophies of inclusion, classroom management approaches, or personalities. Teachers felt that they needed to be

compatible with their co-teaching partner in order for it to work successfully both for them and for students.

Teachers described being compatible because they were similar to each other or because they balanced each other out. Of the co-teaching teams in this study, two felt they were mostly similar to each other while the other three teams believed they complemented each other. Vicki and Angie said they were similar with each other, because they agree with most things (Focus Group). Thelma and Louise also said they were mostly similar, because they saw things the same way (Focus Group). For those teams that said they were complementary, they did not see themselves as particularly similar, but thought their differences could be beneficial in a co-teaching relationship. Brent said he and Cindy were on different spectrums, but that they could balance each other out (Individual Interview). Cindy echoed this by saying that it was important to make sure “we complement each other and not . . . butt heads” (Individual Interview). Tyler and Gordy both shared in their individual interviews that they could use their differences to complement one another in the classroom. Alex and Bianca also felt that they were different from each other and could “balance each other out” (Bianca, Individual Interview).

These two dimensions of compatibility do not necessarily oppose each other, as Thelma said, “I don’t think they necessarily have to be different though, either, like I think though we are similar, we are not the same person” (Individual Interview). Teachers discussed how they could both be similar to one another and at the same time complement one another in other areas. In talking with teachers, certain areas were frequently described as necessary to have similar views, while other areas could be

complementary. This section of the paper looks at views of inclusion, philosophical perspectives, use of expertise, and interpersonal factors in light of compatibility between co-teachers.

Views of inclusion. One of the foundations in which a co-teaching relationship is built is the purpose or view of why co-teaching should occur. Teachers described the reasons they sought co-teaching was to integrate students with special needs as well as provide support for all students in the classroom. In discussing views of inclusion with teachers, they felt it was important for both teachers to have the same view of inclusion, both in why it should be done and in how it should work in the classroom. Cindy said in the area of “inclusion you have to be on the same page” (Individual Interview). Indeed, all of the co-teaching teams in this study felt they were similar in views of inclusion with their co-teaching partner, which they thought prevented areas of conflict over how to meet student needs or parity of teacher roles in the classroom.

In integrating students with special needs into general education classes, teachers felt it was important for both members of a co-teaching team to believe in a fully inclusive class where the students are the responsibility of both teachers. Teachers talked about not dividing the students into general education and special education students with teachers assigned to help them respectively, but rather the teachers helped all students, no matter who they were. Brent mentioned that teachers who experienced conflicts with co-teaching sometimes looked at it as “you know these are my kids and these are your kids, but we are both in the same class. And that didn’t work out too well either” (Individual Interview). I noted frequently in my classroom observations that there was no division between general education and special education students within a class, they were well

integrated into the lesson and individual students were not singled out by specific teachers (First and Second Observations). Cindy summarized the view of inclusion across all co-teaching teams in this study when she said, “they are all our kids and we both feel that way” (Individual Interview).

The views of inclusion teachers shared included providing special education students access to the regular education curriculum, differentiating the curriculum, and creating a learning community. Teachers wanted students with special needs to be able to participate in regular education classrooms in order to both earn credit for the classes, but also make a transition from special education to general education. Bianca stated, “I think there are a lot of kids who . . . really were never in a gen ed class before who are successful in here and I think it does help some kids” (Focus Group). Gordy described this transition as “my primary objective was to ensure that those students meet that transition and ideally get them into a class to where there is no co-teacher” (Focus Group). The way teachers felt this transition could occur was to ensure that the co-taught classes provided the same curriculum and materials as non co-taught sections of the same course, as well as not lessen the expectations or standards of learning. Thelma described this well when she said:

My thought was always not to dumb it down or water it down, or not to take content out, but just present it in a different way where the kids can access it and that might be differently than how it’s done in other classrooms, but that doesn’t mean it’s less. Or you know, it may take an extra 10 minutes, but that doesn’t mean you spend two days (Focus Group).

Similar to providing students with special needs access to the general education classroom, teachers also felt they could provide students who were not identified as special needs additional support that would help them be more successful in general education. Angie said, “it also allows me to help kids who are not designated special ed to be successful” (Focus Group). They believed that they could create a classroom environment that would be supportive to all students blossoming in their educational experience, just as Alex shared:

That the 52 minutes in the class can be enjoyable, that’s what I like about teaching general . . . but in the co-taught class I feel like there’s more kids in there that haven’t experienced that, that that is a fresh educational experience for them. Even some of the better kids who . . . in there because [they have an IEP], you know like they are the better students, but they still, there is a rote mechanic, mechanicalism I guess to the way that they approach school just because they know that it is something that they have to do. You know, I think of the girl last year, who was at the beginning of the year, she was needy and afraid to do anything on her own. She wanted credit for it, but she was afraid to do it on her own because she might do it wrong and not get the grade she wanted and by the end of the year she was one of the best voices, and she liked the class . . . and those are, just it’s worthwhile and fulfilling as anything I get out of teaching AP [Advanced Placement], having those kinds of conversations with students (Focus Group).

In meeting all the levels within a co-taught classroom, teachers also shared their views of inclusion as providing differentiation for student learning. Teachers talked about presenting material in a different way, teaching to different learning styles, grouping students for alternate assignments, providing different assessments, using flexible pacing, and providing enrichment for some students. Teachers spoke about differentiating the presentation of material by creating more engaging activities than would typically be in a non co-taught class, as well as breaking up the lesson into more defined components that helped students achieve the learning standards. Changing the presentation of the material meant teachers were cognizant of teaching to different learning style as mentioned by Thelma, “differentiating the instruction so that as many intelligences . . . so that as many students as possible are reached. Which hopefully is everybody” (Focus Group).

Teachers also differentiated the lessons by grouping students in ways that they could provide different activities or accommodations for different groups. In some of the groups, teachers provided choice in how students grouped themselves or teachers would group the students to match up their strengths and weaknesses so they could learn from one another (i.e., heterogeneous groupings). Additionally, teachers used these groups to provide a way to meet student interest by allowing them choices of materials in how they would present material to their class. I also observed teachers using groups to provide different accommodations, such as when Thelma and Louise divided the class into two sections and Thelma gave her group more support by orally reading the text so students could better complete the activity (Third Observation).

Teachers differentiated classroom assessments by allowing students to demonstrate that they learned the standard in a different manner, if necessary. Vicki stated that part of the reason she wanted to co-teach, initially, was to learn how to be more flexible, not lenient, in differentiating instruction and assessment (Focus Group). Examples of how teachers differentiated assessments was to change a test format from short answer to multiple choice, or use more project assessments versus paper and pencil tests. Angie said, “our goal is that kids, read, write, speak, research, you know, listen and use the conventions of language . . . we follow the standards, but how we get there doesn’t have to be the same for each kid” (Focus Group).

Teachers also differentiated within their co-taught classes by being flexible with their pacing during lessons. As Angie stated, “it doesn’t necessarily have to be in the same way or in the same time frame” (Focus Group). Differentiating pacing included breaking something up into smaller parts rather than presenting the whole concept at one time. This allowed teachers to cover the same material as other non co-taught classes, but in a manner that met student needs in their classroom. Alex and Bianca discussed how this aspect of differentiation evolved for them over the course of their co-teaching experience and they believed it benefited not just those with special needs, but all students (Focus Group). Finding a pace that made sense for all students was challenging at times for teachers because they also needed to provide enrichment for some students. Teachers provided enrichment by allowing students choices in more intellectually challenging activities.

Within the inclusive classroom, teachers felt they could create a learning community that supported both the students with special needs and those who were at a

higher level of learning. A learning community provided students with peer support, an opportunity for leadership development, and an improved social identity. It was not only a benefit for students with special needs, but teachers felt that those students without special needs benefited as well. Being in a co-taught class allowed students without special needs to also learn from their peers in both skills and content. Some of the teachers mentioned that the general education students could help those with special needs in a way that the teachers themselves were not able to do. On the other hand, teachers stated special education students also helped their peers because they sometimes had a deeper background about a topic than their peers. Vicki explained the reciprocal teaching that can occur in a co-taught class:

In terms of like a peer or mentor relationship, they kind of switch, sometimes the people with IEPs are better at something and I think the kids can benefit from each other and I think diversity in any way in a classroom is only beneficial (Individual Interview).

Creating a learning community within the co-taught classroom also was an opportunity for students to develop their leadership skills. Students have the opportunity to take leadership roles in group projects that they might not have been able to in other general education classes. In one classroom, I observed a student leading opening discussion in a classroom by asking students to do a quick write of the question on the board and then having students share their responses (Thelma & Louise, Third Observation). This student may not have had a similar opportunity to do this leadership role in another general education classroom. Thelma explained the concept of leadership development in their co-taught classes:

It allows them . . . to be leaders in the classroom where they might not be in a regular gen ed class. So, I think for a lot of kids that's good. I mean not all of them take advantage of that, but we encourage that (Focus Group).

The third component teachers shared of a learning community in a co-taught class was the concept of an improved social identity. Teachers commented on how special education students began to see themselves in a more positive, competent light. While students were taking on harder material or doing things that were initially uncomfortable for them, they started to feel better about themselves because they saw they could participate on a more even level with their peers. Tyler shared how he and Gordy work to create a cohesive class where their students feel they are being appropriately challenged in a manner that does not question their social identity (Focus Group). Teachers discussed wanting their students to see beyond the label of themselves as special education students in order to be able to perform at a higher level. Alex explained:

I've seen a lot of kids who I think are used to SCI classes come into this class and over the course of the year turn into regular ed students, not level 1 kids, but they just blossom. They blossom in a room that doesn't come with their own preconceived notions and stereotypes. And I think that's really good for them . . . cause a couple of kids are just horribly embarrassed by the idea that they are special, that they receive special services, that they have that label. And they think that people judge them, but they don't . . . but you can't tell a 16 year old kid that, they don't. But

when they are in a class and they see that there really is no distinction, that the kids don't judge them, I think that helps them as well. So, I think it helps them academically and I see the benefits of that. I think usually greatly. But I see, I think there is a psychological and emotional sense of coming to grips with who they are (Individual Interview).

All teachers valued inclusion for its academic and social benefits for students, and believed they were similar to their co-teaching partner in this regard. However, teachers experienced challenges when they felt their co-taught classes had too many students who had special needs. Louise said that this created a special education class with two teachers, rather than a general education class with inclusion of some special education students (Individual Interview). Teachers said this challenge was difficult for them to address, not because it affected their co-teaching relationship, but because it was outside of their control in most respects. Teachers shared how they have talked with building counselors, department heads, and building administration about their frustrations of unrealistic expectations for co-taught classes and how they want to see this resolved in the future. However, while they deal with "inclusion overload" as some teachers called it, they were doing the best they could with the situation by ensuring their students were learning as much as possible.

Another challenge teachers experienced in the area of inclusion were differences between co-teachers in the nuances of making inclusion work. Both teachers felt that including students with special needs in the classroom required adjustments in presentation and assessments. Teachers stated many accommodations they make for their students, including reading texts out loud, providing shortened assignments, creating

alternative assessments, and using flexible groupings. However, for some co-teaching teams, there was some disagreement as to how far accommodations should go to make inclusion work within the classroom. The concept of changing expectations versus making accommodations was a point of contention for some teachers. Tyler described this well:

The question for both of us is, I think, there still is a little bit of a how do you define LRE and how does that make sense inside of a classroom. And there's still that question for me . . . if you're going to be in a regular, if this is thought of as a regular level classroom, then you're going to, we are going to ask you to perform at that regular level and if you can't then maybe you shouldn't be in here. And I think he would agree with that, but the level of support then that he thinks we should go to is probably just a little different than the level of support that I think we should go to. Because it is one thing to make an accommodation, it's another thing to kind of change altogether what the assignment is or the expectations are or where that meets in the middle is kind of where we're still figuring the kinks out (Individual Interview).

These differences were areas in which teachers sometimes had to work through to create a more effective partnership. As Tyler mentioned in his individual interview, teachers have to openly share with each other the concepts of accommodations or changing standards so they can come to an agreement about what they will both find acceptable in their co-taught classroom. Once teachers take the time to have those difficult conversations and find common ground, they are better able to approach

inclusion and accommodations in a manner that respects both teachers' philosophies about teaching and learning.

Philosophical perspectives. Another aspect that teachers felt is very important for co-teachers to have unity is the philosophical perspectives they bring with them to the classroom. In order for teachers to be compatible, a similar general philosophy for learning and teaching is important. Vicki stated, "I think we should have the same philosophy in terms of differentiation, inclusion, and even grading, curriculum, definitely, we should be [similar]" (Individual Interview). As mentioned previously, the views of inclusion and differentiation are philosophies that are helpful if teachers are similar in order to avoid challenges. However, where teachers did differ, they could work through finding common ground that validated both teachers' views and philosophies. This also was the case for teachers in their philosophical perspectives towards teaching and learning. This section explains how teachers not only use their similar philosophies to develop effective co-teaching relationships, but how they also use differences to complement one another in productive ways.

While teachers differed in some philosophical perspectives, they felt as though it was important they had the same overall goals for students. Several teachers mentioned that they had the same goals as their co-teaching partner in outcomes for student learning, as well as developing an effective co-teaching relationship. Gordy said, "I think you have to [have same goals]. Because if you are not, you can say all you want, but if you are headed to different ends then . . . it is almost impossible" (Individual Interview). Gordy believed that having a similar motivation for co-teaching and working with students helps them to overcome personal differences manifested in philosophical

differences (Questionnaire Results Discussion). When teachers want the same things for their students, they are able to use that as a leverage point to work through discussions on differences in philosophies of developing critical thinking skills, grading, and classroom management practices.

A key area in which teachers have to work through finding common ground is how to teach critical thinking skills to students. General education teachers expressed that they wanted students to learn how to think and even to sometimes struggle through the learning process in order to encourage independent learning. While special education teachers also wanted students to develop critical thinking skills, they believed it was important to provide the steps along the learning process. This difference in philosophical perspectives was not only tied to their differing teaching positions of general education and special education, but also the college backgrounds they had in content area versus special education. Gordy described how he and Tyler differ in teaching seniors:

The way that we would approach especially with it being seniors [differs]. Tyler's would be, as it should be, prep for college or you know probably more . . . look it is going to be completely independent right now. You should be able to take concepts and run with them, you should be able to go and do all the stuff outside of here and I would probably define it as mine as a far more micro approach. We need to build in steps . . . We just had the conversation today about the memoir research paper and I was reminding him saying, we need to spot check. We need to have stages

along the way that and then we need to tie a value to that (Individual Interview).

This difference in independent learning versus providing support along the learning process was also evident in how teachers approached discussion in the classroom. For some co-teaching teams, they felt as though they had the same goal in wanting their students to become independent thinkers, but how they accomplished this differed in the classroom. Alex shared that he wants students to go through the process of having them get the right answer themselves, versus Bianca giving them prompts along the way to get the right answer (Individual Interview). They have addressed this difference by sometimes interjecting during classroom discussions to balance each other's perspective. For example, Alex that felt sometimes he interjects when she is leading to make comments that help students think on their own, while at other times Bianca interjects when he is leading to help students see what concept he is trying to get them to understand. I also observed this occurring in other classrooms, such as Cindy and Brent's where Cindy would interject with examples or simpler terms to help students understand a complex concept being taught by Brent (First and Second Observations).

Philosophy of grading practices is also an area that teachers need to be similar in or find common ground. This includes what level of quality is expected, how late work is accepted, and what types of accommodations should be made. Tyler explained how he and Gordy had worked through an incident in which they had graded some assignments differently based on the quality of work they expected (Individual Interview). This caused some tensions not only for them as teachers, but also with the students. They worked through this situation by talking about what a paper should be like for all

students, as well as for special education students. In subsequent assignments, they used detailed rubrics to help them both be on the same page for grading student work. Additionally, teachers shared how they had come to an agreement on what was acceptable for late work and whether they allowed students to turn in assignments for full credit after it was due. Louise stated that she appreciated the fact that she and Thelma were similar in encouraging students to turn in late work, because it was easier to work together that way (Focus Group). In the area of accommodations for assessments, teachers noted requiring the same thing of all students is not always the best practice. However, this was a conversation teachers had to openly share in order to come to a common understanding and practice as Angie articulated:

I think the one thing that maybe as a special educator that you come with naturally is the idea that fair is not always equal and that's just always something that you're working on and seeing that if the students are meeting their IEP goal, maybe that's the level of success that we can take. So, just kind of always discussing through that, well you know, they came in extra, they asked questions, they were willing to at least give us a shot at the work, you know that might be more likely to pass than someone who just said 'nope, don't care, not doing anything'. So, just working through that discussion (Individual Interview).

Another critical component of similar philosophies is classroom management. Teachers discussed both past negative experiences with co-teachers and current frustrations in which classroom management practices differed. For these situations, they discussed how one teacher could come across as a "bad cop," while the other teacher,

who was more lenient in classroom management, could be perceived by students as being the “good cop.” Teachers said this was not intentional on anyone’s part, but it made the co-teaching relationship uncomfortable for both people. Louise explained:

I worked with a person who really didn’t have any classroom management and it made me feel uncomfortable. Just being the in the room was difficult, because I was always the one cracking down on kids, “stop doing that, put that away, we need to get on task.” I felt like I was just there nagging the kids and he got to come off as the cool, fun teacher. It was hard for me to do that, it was hard for me to go into that room (Individual Interview).

Teachers who had come to the Fulfillment Stage in their co-teaching relationship viewed their expectations of classroom management as being similar and presenting a unified message to students. Teachers who felt they were still working through the process of the Symbiosis Spin with their co-teaching partners saw their philosophies towards classroom management as being more divergent, thus creating situations where they have had to openly discuss how they would handle situations in the classroom. Gordy and Tyler both shared how they have worked towards having a similar procedure for handling cell phone usage by students in their classroom (Individual Interviews).

Gordy commented:

A good example is with cell phones. They just drove me absolutely crazy. I hated it and Tyler was way more loose with that completely. And we came back and I said “Tyler, you know what I, it’s distracting and it’s hurting because some of the kids can get away with it and still be able to

pay attention.” But, then if we, if you allow one than you have to allow all and if we allow all, that means the students and I kind of put it back to the special ed kids but there were other kids who weren’t special ed. They are not getting what they need and you can’t say “oh, you can do it, and you can’t.” So, we’ve got to be across the board and we . . . have up in the rooms they are supposed to be off and again stylistically we are very different that way. So, he did a good job, I didn’t have to say anything, he walked in and said “okay this is what is going to happen” and he probably took on a more of an approach than I would, you know, here it is and much more direct . . . But I think that was a big change for him from last year, last year I am not sure that would have been as easy a conversation.

(Individual Interview).

Being compatible in classroom management involves having similar expectations for students, while at the same time complementing each other by taking turns being the hard one in disciplining students. Teachers said that while they needed to have the same expectations for students so they knew they would support each other in enforcing classroom expectations, they could also share the responsibility of being the “bad cop” or the “good cop.” Alex described how he and Bianca complemented each other in classroom management through their voice levels, “you sort of jump in and if I raise my voice, she’s a little bit softer, or she’s softer, so I raise mine” (Individual Interview).

Teachers also shared how they supported each other when they noticed one of them was getting particularly frustrated with a student, by stepping in and taking over handling the

incident. This works for teachers when they have developed the trust to know that they will handle a situation in the same way and can flexibly switch between those roles.

Teachers also shared about how they can complement each other in classroom management by using their natural inclinations or personality styles effectively. While differences in classroom management styles can cause conflicts, as mentioned previously, teachers who reached the Fulfillment Stage in a co-teaching relationship shared how they used their differences in a way that balanced each other in the classroom. This is the goal all teachers in the Symbiosis Spin as they work on developing their co-teaching relationship. Vicki articulated this well:

Well, I am probably the more stern one, so it's just, it's not teaching style or you know content in anyway. Well, maybe it is teaching style also, it's more discipline, okay, so I'm, I have observed that I often start a class in a more seriousness and matter of fact, let's just get this done way. You know, I do smile! But she is more inviting, you know she's very [kind] and then if something happens she [assists], but I think that we both sort of [have] gone the other way too, so we have affected each other that way and so more (Individual Interview).

Looking across philosophical perspectives, teachers believed that they had to create a "united front" in terms of their goals, grading practices, and classroom management. They wanted students to know that no matter which teacher they would talk to they would get the same message. They felt it was important to take the time to work through openly discussing differences in expectations for students both academically and behaviorally, so that there was not conflicting messages being given to

students or parents. Vicki stated this well when she said, “I think they [students] consider us as one entity and one voice” (Focus Group). Presenting a united message in terms of philosophical perspectives was important in creating a compatible co-teaching relationship. However, teachers also discussed using their differences in a way that complemented each other in the classroom and building their professional knowledge.

Use of expertise. Teachers participating in co-teaching relationships can use their differences to an advantage by complementing one another in their areas of expertise. While teachers have to find commonality on views of inclusion and philosophical perspectives, they can be compatible in a complementary way by using their different professional backgrounds or experience for the betterment of their students. Co-teaching teams mentioned that they could learn from each other’s teaching styles, content knowledge, or special education knowledge to further their own professional development.

Teachers in this study believed the ways teachers present content in a classroom relates to their teaching style, which can vary between co-teachers. They thought that presenting material in different ways to students can be helpful not only to meet a variety of students’ levels of ability or learning needs, but also students’ learning styles as well. Teachers talked about using different modalities to teach the content, such as presenting material visually as well as orally. Cindy said that she and Brent work together to ensure that they provide material in a variety of ways that provides learning in multiple modalities, which is helpful for science since it lends itself well to hands-on activities (Individual Interview). While it is important to know what types of modalities are

helpful to one's content area, the teachers thought students can benefit from seeing different methods for teaching and learning. Vicki explained:

To balance each other out . . . if co-teachers do have varied teaching styles, you know I think as long as they are flexible and they take that into account and they have an equal relationship in the classroom I think that could work out. I think that would be beneficial for kids to see different teaching styles and then they can learn with different types of teaching and I think different teaching styles can also address different learning styles (Individual Interview).

In terms of teachers' educational backgrounds and previous teaching experiences, they can use their expertise in content knowledge or special education knowledge to benefit the co-teaching partnership. As discussed in the section on parity of roles, it is important that both teachers have at least some knowledge of the content to be able to hold equal roles in planning, instructing, and grading student work. Nevertheless, teachers shared how the general education teacher could use their expertise in the content to provide thoroughness in covering the material and learning standards. Angie said that they both know the content in different ways that they can support one another, but Vicki has "the depth of content" for their co-teaching team (Individual Interview). Teachers talked about knowing the curriculum to a greater depth, as well as the techniques of their particular discipline. In some observations, I noticed the special education teacher deferring to the general education teacher when the material was technical or they did not seem as familiar with it. For example, Gordy deferred to Tyler when he was not sure about the themes that were important for the text (First Observation). Also, when Brent

was presenting about DNA in the classroom, Cindy let him present the material while she built off of his comments to help students connect the material to previous lessons (Second Observation).

General education teachers also provide expertise in what the learning standards are for their content area to help students meet grade level expectations. For the most part, this is because these teachers' sole responsibility is the content area in which they are co-teaching, so they feel accountable for knowing the learning standards. As Brent said, "when it comes to details that we need for science that I know they are going to be tested over, then I usually am a little bit better at that, because I know what is expected and everything" (Individual Interview). The special education teachers also commented on how their co-teaching partner was the content specialist and knew the standards, "[Tyler] is still the expert as far as what the district standards are from curriculum standpoint, so and I trust him on that" (Gordy, Individual Interview).

Conversely, the general education teachers commented on how they relied on their special education colleague to provide the theoretical knowledge in student learning. They knew the special education teachers brought with them a wealth of knowledge about how students learn and how to make the content accessible for different levels of learning. The general education teachers would ask their special education colleague to provide insights in modifying assignments. Tyler shared how Gordy suggests changing an assignment if students are not learning a concept, "saying we need to tweak this, we need to think about it from this angle, these kids might struggle with this concept . . . he's very good at that" (Individual Interview). Thelma said she also has relied on Louise for knowing what challenges might occur in a lesson and how to overcome those challenges

to learning (Individual Interview). Similarly, Vicki stated that Angie provides a perspective on learning styles and accommodations that helps students in their co-taught classroom (Focus Group; Individual Interview).

As teachers use their strengths in teaching styles, content knowledge, or special education knowledge, they are able to learn from each other as well. Special education teachers talked about learning from their general education colleagues the techniques and skills to better teach the content area. They also learned how to approach higher levels of learners through faster pacing or higher levels of thinking. Angie said that she has grown in a better understanding of expectations for general education students, where previously she only saw the special education perspective (Focus Group). Conversely, the general education teachers stated that they improved in their teaching methods not only for the benefit of students in their co-taught classes, but the students in their other sections benefited as well when they used some of the same teaching methods in their non co-taught classes. Teachers improved in their knowledge of differentiation and flexible pacing to meet a variety of student learning needs. They believed their repertoire of approaches to teaching different student learning styles and abilities grew from working with their co-teaching partner.

However, the key to learning from one another is the willingness to change and grow. Teachers frequently mentioned that they learned from each other because they were not beholden to their own methods and approaches. Thelma stated, “I kind of looked at it as, okay I am not set in my ways . . . so if someone else has suggestions or you know if there are ways to be better and learn something then I am all for that” (Focus

Group). Additionally, Gordy portrayed this concept of being flexible enough to learn from one another:

It's like any other relationship, you're going to have to be willing to change . . . you cannot be so hard knocked and locked that your style is right and you might want to say that again idealistically, but I have adapted a lot and it's made me a better teacher. It's made me a better teacher from what I've witnessed and watched, even at first going, "gosh, you know what, maybe you shouldn't be this way, maybe you should be you know hard and fast, straight up." But you know what, no, not always, because the more we go along, the more we know that we can continue to learn (Focus Group).

Interpersonal factors. While teachers need to be compatible in what they do for and with students in the classroom, how teachers relate to one another is also a major factor in establishing a compatible relationship. How well teachers work together is directly influenced by interpersonal factors such as one's background, life stage, gender, personality, communication style, and conflict style. If teachers are similar in these aspects they seem to be able to work well together, while at the same time teachers also talked about complementing each other in these different aspects. Therefore, being similar does not automatically ensure success in a co-teaching relationship, while being different does not automatically ensure conflict either. Rather, all of these aspects are pieces that can influence a relationship either beneficially or negatively.

In the area of one's background, teachers discussed how it was helpful to be similar in this respect, because it provides a starting place for forming a friendship as well

as influences the outlook one has on life. Angie shared how the commonality between her husband being Filipino and Vicki being Filipino gave them something similar to build their friendship (Individual Interview). Thelma also thought it was helpful that she and Louise had both grown up in the same community, were the same kinds of students, and had similar friends (Individual Interview). Brent said both he and Cindy had a family, which even though they are different in many ways helps them have some commonalities (Individual Interview). Brent discussed the similarities between him and Cindy in terms of their background being helpful because one's background provides "the lens you are viewing everything through" (Individual Interview). However, differences in one's background did not always have to be similar, as Bianca said that she thought it was helpful that her background was different than Alex; "I think that it is actually helpful for Alex and I that our backgrounds are so different, like I grew up very poor and he grew up [with more money], so it like helps us see different sides" (Individual Interview).

Another interpersonal dimension that affects co-teachers' compatibility is one's life stage, including point in career or one's age. Tyler and Gordy are different in terms of their life stage, because Tyler has a young child while Gordy has a child in college (Tyler, Individual Interview). In Gordy's words, this difference is about "big brother, little brother" (Focus Group). I observed a difference in how Tyler and Gordy interacted with students in the classroom that could have been related to their age (First Observation). Tyler talked more at the students' level, while Gordy talked with more of a parental tone. This variance might be partly related to how they differ in planning or classroom management; however, they have worked through this difference by openly communicating and joking with each other. Angie and Vicki are not at the same point in

their career because Vicki is in her second profession (Individual Interview). However, Vicki stated that they are at the same life stage, which gives them similar life experiences to relate to one another. Being at different life stages does not have to be a barrier to creating an effective co-teaching relationship, because Cindy mentioned how she had worked with a variety of co-teachers in different stages of life or points in careers (Individual Interview). She felt that this aspect did not directly correlate to how effective a co-teaching relationship became, but, as other co-teachers stated, it could be a piece in one's perspective on life or their career. Thelma and Louise each stated that they felt one's age or number of years teaching was not the sole reason for teachers being compatible with one another, but that it was one piece in a relationship (Individual Interviews).

Another interpersonal piece in a relationship can be the gender composition of a co-teaching team. In this study, I had two teams that were both female, one team that was both male, and two teams that were mixed gender. Interestingly, the two teams that were both female described themselves as being mostly similar in terms of compatibility, while the other teams saw themselves as more complementary. Even though Tyler and Gordy were both male, they saw themselves as being more complementary to each other, perhaps because they were at different life stages or had different personalities (Individual Interviews). Both Vicki and Angie explained that being the same gender could decrease some of the natural differences between men and women's conversation or interactional styles (Individual Interviews). However, other teachers believed gender was not a determining factor in the success of a co-teaching relationship. Rather, they thought teachers of different gender could use it beneficially by modeling how different

genders can work well together. Additionally, Cindy and Brent thought it was helpful for students to see that both a man and a woman can be science teachers or knowledgeable about science (Focus Group). Therefore, while gender can influence a relationship, teachers in this study did not believe it was an interpersonal factor that needed to be a hindrance to creating effective co-teaching partnerships.

One of the most important interpersonal factors discussed by teachers in co-teaching relationships was personality. Teachers stated the personalities of co-teachers needed to be compatible, whether they were similar to each other or they could complement each other. Angie said she knew before starting her co-teaching partnership with Vicki that their personalities would click and this was helpful to her looking forward to the relationship (Focus Group). Additionally, Brent stated that while co-teachers did not have to have the same personality, they needed to blend well together to prevent issues later (Focus Group). Some teachers discussed how they were similar in personality by being flexible in the classroom and enjoying humor. These two areas seemed to be helpful, regardless of other differences in personalities. Other aspects of personality, such as how organized one was or how they approached making decisions seemed to be acceptable if they were different for co-teachers. Tyler said that he and Gordy do a personality activity early in the school year with students and they learned that they have different personalities, but their personalities can intersect in a way that is helpful for a co-teaching team (Focus Group). Tyler emphasized the idea that personalities can complement one another:

So, like the personality thing, you know what I mean, I think you need the cross in whatever way that's going to be [held hands perpendicular to each

other] and because I think you need that person that can really relate to the kids, that can really like be there for them and understand, because you know I think lot of the times kids, and especially once if they are still in co-taught as a senior, probably a lot of their educational history/background has been negative, or at least probably troublesome to some extent. Maybe they haven't had the best experience and so that person to kind of be there and say, hey we are going to get stuff done and we are going to learn, but I can be the emotional rock for you as well . . . But then also the person to say like get it done, we are going to finish these things out, I'm going to, we are going to check up on you and do those things (Individual Interview).

The questionnaire on interpersonal behavior theory (Schutz, 1992) brought to light some of the specifics in personality that co-teachers were similar in or complemented each other. The different co-teaching teams varied in the three interpersonal aspects of inclusion, control, and openness as far as what was similar or different (see Tables 4 and 5 for specific information regarding the results of the questionnaire for co-teaching teams). The scale ranged from 0-9, with 9 indicating the statement more true for an individual. For example, if one scored a 1 in "I want to include people," they would not see including others as describing their interpersonal behaviors. While, if someone scored a 9 in "I want to include people," they thought including others was an important part of their interpersonal behavior.

Table 4

Interpersonal Behavior Questionnaire Results: Part A

	Vicki	Angie	Brent	Cindy	Tyler	Gordy
Inclusion						
I include people.	5	7	1	9	4	8
I want to include people.	5	5	1	9	1	7
I include people more than I want to.		2			3	1
I want to include people more than I do.						
People include me.	8	6	4	9	7	8
I want people to include me.	8	1	0	9	3	8
People include me more than I want them to.		5	4		4	
I want people to include me more than they do.						
Control						
I control people.	4	6	3	6	6	4
I want to control people.	2	1	3	5	3	4
I control people more than I want to.	2	5		1	3	
I want to control people more than I do.						

People control me.	8	8	5	4	5	4
I want people to control me.	5	6	3	4	6	4
People control me more than I want them to.	3	2	2			
I want people to control me more than they do.					1	
Openness						
I am open with people.	2	2	3	5	3	4
I want to be open with people.	2	4	2	5	2	4
I am open with people more than I want to be.			1		1	
I want to be open with people more than I am.		2				
People are open with me.	3	5	7	9	7	7
I want people to be open with me.	4	4	7	9	3	9
People are open with me more than I want them to be.		1			4	
I want people to me open with me more than they are.	1					2

Note. This table provides the results of the Element B (Schutz, 1966) interpersonal behavior questionnaire that was used with participants during the focus group interviews. The three interpersonal behavior dimensions organize the information: inclusion, control, and openness.

Table 5

Interpersonal Behavior Questionnaire Results: Part B

	Thelma	Louise	Alex	Bianca
Inclusion				
I include people.	8	8	1	6
I want to include people.	9	8	1	8
I include people more than I want to.				
I want to include people more than I do.	1			2
People include me.	8	8	1	8
I want people to include me.	8	9	7	8
People include me more than I want them to.				
I want people to include me more than they do.		1	6	
Control				
I control people.	9	4	5	5
I want to control people.	2	8	5	7
I control people more than I want to.	7			
I want to control people more than I do.		4		2
People control me.	7	5	6	5
I want people to control me.	4	6	4	3
People control me more than I want them to.	3		2	2
I want people to control me more than they do.		1		
Openness				
I am open with people.	9	6	2	5

I want to be open with people.	8	6	3	6
I am open with people more than I want to be.	1			
I want to be open with people more than I am.			1	1
People are open with me.	8	9	5	8
I want people to be open with me.	9	8	7	8
People are open with me more than I want them to be.		1		
I want people to me open with me more than they are.	1		2	

Note. This table provides the results of the Element B (Schutz, 1966) interpersonal behavior questionnaire that was used with participants during the focus group interviews. The three interpersonal behavior dimensions organize the information: inclusion, control, and openness.

In terms of inclusion, some teams said that they were similar, while other teams described how they were different in this aspect. Thelma and Louise had both 8's and 9's in all of the inclusion areas, indicating the fact that they were similar in inclusion. Additionally, Angie and Vicki had similar scores in including others (Angie was 7 and Vicki was 5) and wanting to include others (both 5). However, they were different in other people including them and wanting people to include them (Angie had a 6 and 1 respectively, while Vicki had an 8 for both of these scores). The other three co-teaching teams had distinct differences in inclusion, showing that this was an area that they could complement one another. Cindy had much higher scores in inclusion (all 9's), while Brent had scores that ranged from 0 to 4 in inclusion. Brent explained that this was

because he did not mind being by himself, while Cindy was more social. Similar trends were seen for Tyler and Gordy, as well as Alex and Bianca. Gordy had higher scores for inclusion than Tyler (Tyler had mostly 1 to 4 scores and Gordy had mostly 7's and 8's) and Bianca had higher scores than Alex in inclusion (Alex had mostly 1's and Bianca had mostly 8's).

In the area of control, co-teaching teams discussed how their scores were similar or if it reflected a discrepancy in control in their relationship. Some teams showed that one person felt they controlled others more than they wanted to (Vicki had a 5 in this area, as well as Thelma scored a 7 in this area). However, both of these teams adamantly felt that they were co-equals in their relationship in regards to decision making and this was not reflective of their co-teaching relationship as much as the fact that teachers have to control people in the classroom. While this might not be comfortable for their personalities, they said that teachers had to have control in a classroom or it would be detrimental to good order and student learning. Other teams felt that they were more similar in control, including Alex and Bianca who had very similar scores with their higher and lower numbers correlating. They had mostly 5's for controlling others and people controlling them, with 2 to 4 scores for wanting to control others or wanting people to control them.

In the aspect of openness, co-teaching teams showed both similarity and complementary across the openness scores. Thelma and Louise, as well as Angie and Vicki, were similar in aspects of being open with others and wanting people to be open with them. Thelma and Louise had mostly 6 to 8 scores in openness, while Angie and Vicki had mostly 2 to 4 scores. Cindy and Brent were similar in that they had higher

scores for wanting people to be open with them (7 to 9's), versus lower scores for wanting to be open with others (1 to 5's). This was also true for Tyler and Gordy (7 to 9's for wanting people to be open with them and 1 to 4's for wanting to be open with others), although Tyler felt people were more open with him than he wanted. Additionally, Alex and Bianca had some differences in openness, with Bianca scoring higher than Alex (mostly 5 to 8's versus 1 to 5's, respectively).

Although there were differences in how teachers compared in the three areas of inclusion, openness, and control in their interpersonal behaviors, a common theme among co-teaching teams as they looked over the results of their questionnaires together was how they were compatible and could work well together. Some teachers felt that although they had differences in personalities, they both came from the same perspective of wanting to work well with one another and please others. Teachers also addressed differences in personalities by being open with one another about their personality and what they needed to feel fulfilled in the classroom. They thought they could complement one another by using their strengths to balance out the other person's weaknesses. For example, Cindy said she helps Brent keep the room organized, while he can move forward with presenting the lessons (Focus Group). Similarly, Bianca talked about how Alex is the organized person in their team, but she might be able to relate more with student's personal feelings (Individual Interview). Difference in personality styles also relates to the communication styles teachers held with each other and with students.

Communication style is another interpersonal factor that affects how co-teachers worked together in a collaborative relationship. Teachers said that they complemented each other because they were similar in their tone of conversation with students. For

example, Angie said that she and Vicki were both warm and accepting with students (Individual Interview). Tyler and Gordy both felt that they had a conversational tone with students in that they bring in their personal background to class discussions or they try to make personal connections with students (Individual Interviews). Louise and Thelma each shared that they were similar in how they communicate with students in the classroom through a direct, non-confrontational manner (Individual Interviews). However, teachers also talked about how they complement each other when they interact with students, by one teacher relating more on a personal level with students while the other teacher answered more academic type questions. For example, Brent was more concise in his manner with students, while Cindy tended to be more expressive (Individual Interview). Bianca echoed the same difference for her co-teaching partner, as she is more talkative than Alex (Questionnaire Results Discussion). Tyler also shared that he and Gordy tend to be different in their presentation styles in the classroom, which helps them to balance each other out: “[Gordy] brings in a very different mindset from my own. Not that we don’t understand the same concepts but from a like I can be big and boisterous and hit these things and talk about this stuff and then he’ll be like and don’t forget about this” (Focus Group). Alex said, in description of his communication style as compared to Bianca, “how we talk to kids and interact with kids is I think variation on that would be good. I think that would be helpful . . . the more voices that they hear” (Individual Interview).

As teachers work with each other, they can be compatible in their communication styles, because they are similar to each other or because they complement each other. Vicki described how she tends to be more concise and reflective in her communication

style, while Angie tends to be more expressive (Individual Interview). However, she did not feel that it had caused a conflict for them, only that they have learned from each other how to communicate better, “it has taught me to make sure I am not too concise, but that you know I convey exactly what it is I want to convey but also give. . . an adequate explanation” (Individual Interview).

Situations in which differences in communication styles can cause tensions for co-teachers, is if one person does not feel as free to share their opinion or feelings with the other person. This relates back to the interpersonal behavior questionnaire (Schutz, 1992) and how open people tend to be with each other. If it is not a person’s natural inclination to openly share with another person what they are thinking or what they desire in a relationship, it can make it more difficult to become effective co-teaching partners. Gordy explained how he and Tyler were still working through creating an open relationship in which one person did not have to second-guess the other person’s thoughts (Individual Interview). He said that he is more open than Tyler and feels he needs Tyler to openly share his opinions so that he does not have to wonder what Tyler is thinking; “I wish between us there were and it’s getting much better of what do you really think, what do you really believe?” (Individual Interview). He said that they have worked on this by openly sharing their comfort level with each other and trying to establish the understanding that they will not hurt each other’s feelings if they share honestly with each other.

Although teachers expressed some similarity in their communication styles, they did not state this was an area that co-teachers had to be similar in to create effective co-teaching partnerships. Rather, teachers expressed ways in which they complemented

their co-teaching partner in communication styles with each other and with students.

Additionally, they believed communicating with each other took an understanding of the other person's preferences and styles in order to work through any differences that might occur.

Related to communication styles are the conflict styles that teachers hold. The teachers in this study shared how conflict has not been a significant portion of their co-teaching relationships. However, they thought that this was due to how compatible they were as co-teaching partners. In part, this correlates to how teachers naturally approach conflict with students and with each other. In this study, most of the teachers felt that they approached conflict with students in similar ways by being open and direct with students. Some teams expressed minor differences in being more lenient or avoiding conflict with students when they felt that it was not as important to address in the moment. However, they felt that they could complement each other by taking turns being the harder one for handling discipline, rather than one person always taking that role. I observed some differences in handling conflict with a co-teaching team, as Alex was getting frustrated with students not understanding poetic language and Bianca helped calm the tension in the room by clarifying the concepts for students and guiding them with prompts (First Observation).

In conflicts with adults or each other, teachers expressed differences in how they handle or try to resolve conflicts. Some of the teams discussed how one person is more open and direct, while the other person can tend to compromise or avoid the conflict. Brent shared how he tends to be more compromising than Cindy, but it does not bother him that much (Individual Interview). He said that he can relate to a more dominating

conflict style because Cindy's style is similar to his wife's. Where it can be a problem for teachers is when they are not comfortable with each other enough to address a conflict between them. Some teachers expressed ignoring a difference they have between each other because they did not want to ruin the friendship that exists between them (Individual Interviews). However, not addressing the conflict has caused it to continue to fester in their relationship and hinder their effectiveness as co-teaching partners. Not taking criticism personally and communicating this with one's co-teaching partner was mentioned by several teachers as a productive way to overcome conflicts or differences in opinions. Gordy said that he has learned that Tyler is more non-confrontational and that has created some conflicts because he does not always know what Tyler thinks about a situation (Individual Interview). He has learned to handle this situation by trying to clarify what Tyler means when he gives more ambiguous responses to questions that could be controversial. While he has told Tyler his feelings will not be hurt if he openly shares his thoughts, it is taking time to work through this conflict style difference.

Aside from differences in conflict styles creating tensions between teachers, some teachers talked about appreciating that their co-teaching partner has a more open and direct conflict style, because then they can resolve conflicts that are external to the two of them in a more satisfactory approach. Louise illustrated how differences in conflict styles can work to a team's advantage:

I think she is fantastic about being open and direct and she really is.

There's never a question and Thelma and I do not have conflict. We just don't, but when we have issues she's always the one who looks at me and says "alright, we're going down to the office. We are going to tell them

that this is going on, we don't like this, this needs to change.” Okay, and so I go with her. But that's really good, it's really good for me to see when that happens she gets the result she wants, no one's left out, everyone is aware of what is going on and why she's upset and if, like I said it is very good for me to see that, because I am more the type who's like oh, I will just pretend everything is fine and it will be (Individual Interview).

As teachers work together in the classroom using open communication and handling differences respectfully, they model for students appropriate interactions with peers. As mentioned previously in this chapter, students see how adults interact and they learn how disagreement can be handled by observing teachers model how to handle differing opinions. Gordy said that it was important for students to “see interaction and dialogue in a positive way” (Individual Interview). Teachers did this by purposefully modeling different points of view in a conversation or by naturally interjecting to add something that the other person neglected to mention. For example, Angie said that the students observe the two of them working together in the classroom and can see differing opinions as more of a supportive type of relationship, rather than adversarial (Focus Group). As students see how two people can be compatible, regardless of if they are exactly alike, they can learn skills for working with peers.

Summary of compatibility. In looking across the teams in this study, less challenges seemed to occur when teachers felt they were compatible with one another. In order to move from the Symbiosis Spin to the effective stage of a co-teaching relationship, it helps to be similar, or, if teams are complementary, they need to work

through being open with each other about these differences and using them for the betterment of their relationship. As Thelma said, “I think we, Louise and I, didn’t encounter some of those issues just because we were on the same page with everything” (Focus Group). Louise explained:

I think the more similar two people are, the better it works out as a whole.

I think it’s nice when two people can complement one another, but I think those are the partnerships that are more likely to have problems, because one person is going to feel like they are doing more of the work or like they are doing more of the discipline, or just, there will be at some point a burden felt by more, or more by one person than the other. And I think that is going to cause problems. There is no way that won’t cause a problem (Individual Interview).

While similarities are helpful in certain components of a co-teaching relationship, teachers did not believe it was impossible to overcome differences in interpersonal dimensions. Across all the aspects of compatibility, teachers felt they could work well together if they established unity in areas such as classroom management and philosophical perspectives. In areas such as personalities or communication styles, teachers felt they could balance each other out if they were open with each other and respected those differences. To become more compatible with one another, teachers shared strategies they used to build their co-teaching partnerships.

Strategies

Although I briefly described strategies teachers use to address the different components of building an effective co-teaching partnership where it was applicable, it is

helpful to address these strategies separately to better understand the methods co-teachers can use to improve their co-teaching relationship. The strategies that co-teachers shared in this study centered around six different themes, including being open minded, using open communication, finding common ground, using humor, being selfless, and asking to help. I describe each of these strategies and give examples teachers shared about how they used these strategies with each other.

Open-minded. Participating in a symbiotic relationship requires teachers to work together in order to accomplish what they would not be able to do on their own. Co-teachers share physical space, as well as professional space, in a classroom. Thus, they have to listen to one another, be willing to change, and have some “give and take” in their relationship. Teachers said that they need to be able to listen to their co-teaching partner in a manner that is actually hearing what they have to say without discrediting the idea or suggestion. I observed the concept of being willing to listen as I watched teachers in their classrooms interject during class discussions (First and Second Observations). Teachers showed that they were open-minded and willing to listen to other ideas by acknowledging and thanking their partner for the comments they added to the discussion. They also expressed how it was helpful if their co-teaching partner was willing to listen to their suggestions for changing a lesson or modifying an assignment. Angie explained how teachers can listen to each other:

And we’re open-minded, I mean we’re never closed to a suggestion. And you know, maybe if something seems on a whim, we’ll stop and think it through a little more, but it’s never a, you know, no way we’re not going to do that. It’s always, oh, okay (Focus Group).

As teachers listen to each other, they also have to be willing to change in order to truly benefit from having two people in the classroom. If each teacher only did what they knew was best, they would miss the benefits of peer development and would not be able to mesh their styles in the classroom to improve student learning. Teachers used the word “flexible” to describe their relationship with one another in a co-taught classroom. In some respects they talked about flexibly changing the roles during instruction, as well as being flexible in the pacing of the lesson to match student’s needs. However, they believed that one can become a better teacher by not being stuck in one’s own style or ideas. If teachers believed that there was no reason to change, they had a much harder time working with someone who was different than them. Thelma shared how her first co-teacher had taught for many years and thought his ways were sufficient (Individual Interview). She felt that they could not openly discuss the lessons or activities if she wanted to do something different because he did not want “to reinvent the wheel” (Individual Interview). Another quote by Angie illustrates the point of being willing to change, no matter what point a person is in their career, “so, being willing to change. And that goes back to that flexibility, I think. Being willing to recognize that you might not have all the answers” (Focus Group).

When one is flexible and willing to change, they also have some “give and take” in a relationship. Teachers saw this as a component of being open-minded because it involved the cooperation teachers need to work together. Some teachers described the give and take as compromising about one’s preference towards teaching certain parts of a lesson or how they plan for instruction. Gordy shared how he and Tyler have learned to have some give and take in their planning, because Gordy is detail oriented where Tyler

tends to look more at the big picture (Individual Interview). They have worked this out by both of them compromising for the other person. Tyler has made an effort to meet more frequently to plan lessons, while Gordy has released some of the pressure on needing to plan every detail. This reflected the willingness to give up some personal preferences in order to make a co-teaching relationship work well. Brent also described give and take as allowing the other person to take over a part of the lesson, even if one thought that was their part for the day (Individual Interview). He mentioned, if you have the same goals, it does not really matter if “you give up in one area and go in another area as long as it’s for the general . . . betterment of it” (Individual Interview). As teachers worked together in a co-taught classroom, they believed it was important to be open minded through listening to what the other person had to say, being willing to change, and exercising give and take when it would help out their co-teaching relationship. Part of being open-minded was also using open communication with one another to really understand what the other person was thinking or needing in a relationship.

Open communication. In order to move forward in a relationship, co-teachers stated that many times they needed to have open communication with one another. This involved having difficult conversations with each other, being honest, and using reflection. Sometimes teachers felt that they had to discuss issues that could be controversial or create hurt feelings. However, in instances where teachers acknowledged they had avoided an issue, the problem festered and was harder to address later. Teachers mentioned that it was important to address difficult topics as early as possible in a relationship so that the topics would not keep appearing later in a relationship. In these conversations, Gordy admitted that it might not always be

comfortable, because you might not be sure if you will offend the other person (Focus Group). However, once open communication was established between two people, it made it easier to have those difficult conversations without it hindering their relationship. Some teachers said it was also important to go through the difficult conversation until an agreement or resolution was reached, “just not shutting down, not giving up on it if it seems like there is a difficulty” (Angie, Individual Interview).

Part of being open with one another is honestly sharing one’s thoughts and feelings. Teachers noted they needed to really know what the other person was thinking or believed should be done in a situation. When teachers sensed their partner was trying to please them instead of honestly sharing their opinions, it created a barrier to an effective relationship that was difficult to overcome. Although some teachers said it could hurt one’s feelings to be honest with each other, they believed teachers had to accept it as a natural part of a collaborative relationship. Additionally, teachers talked about needing to be honest with one another as they talked about philosophies of learning, including differentiation and how they could practically achieve it in the classroom. Teachers said openly discussing these ideals for co-taught classrooms helped them to not only improve their relationship, but to also improve their instruction.

The third component teachers shared about open communication related to improving instruction through using reflection with one another. Teachers discussed how it was important to want feedback from their co-teaching partner, in order to be able to improve instructional methods or the units for the following year. Vicki explained that while one person might take the lead on planning a unit, they are comfortable with their partner sharing ideas for revisions, “on a weekly or even a daily basis when we have an

idea for addition or revision, we feel very comfortable in saying ‘let’s do this’” (Focus Group). As teachers worked together, they felt that if they found something that needed improvement, they had to be open with one another in order to move forward both in their relationship and in their instruction in the classroom. Gordy explained how he and Tyler have learned to use open reflection with each other, even though it was not natural for both of them:

And with me, I want feedback. And I think he is getting that now too. I want his feedback and not necessarily in a critical way, because he wouldn’t do it, but I want that, because I think it is necessary. And I think he is becoming more comfortable with saying “well, you know, this was good” or “you know this was something that maybe we could look at.” And I am not sure maybe in the beginning with me being open about it because I look at myself and look at him. I never knew exactly how he was taking it of whether I was being critical or not. And I think that maybe he, just because again getting used to styles and relationship, and just like anybody didn’t know how to read that either. So, there was, and I think he finally got with me, what you see is what you get and I think it is easier to deal with things that way (Individual Interview).

As teachers work together, an important strategy they use is open communication through having those difficult conversations in which they are honest with one another and are willing to reflect on their practices. Once co-teaching teams established open communication in their relationship, they were better positioned to move through the Symbiosis Spin to an effective co-teaching partnership. Part of this open communication

with each other is the ability to talk through differences and find commonalities that help them approach situations or issues.

Common ground. During open conversations with one another, teachers shared how important it was to find common ground on issues where they had differences in opinion. If teachers do not address differences, they become walls that are impossible to climb over in working together. Thelma used the analogy of a bridge to describe how they have come to common ground on situations:

It might be time consuming and difficult, but you just have to work through it, because if you can get over that bridge or find that common ground, it'll just open so much up for the kids and for the teacher (Individual Interview).

The co-teaching partners might be on different sides of an issue, but they need to be able to talk openly in order to come to an agreement. Bridging from one side to the other does not always have to be a compromise, as it is possible for teachers to make a decision that validates both of their philosophies or preferences in the classroom. Angie said that she and Vicki always find common ground on an issue, rather than give and take (Individual Interview). They talk about what they both feel would be the best way to handle a situation. Examples of how teachers worked through differences of opinions include grading assignments or tests. Several teachers talked about having conversations of what acceptable or quality work should look like for their class, as well as creating rubrics that specify how to grade student work. Teachers also shared how they have come to an agreement on how to handle classroom management procedures so both

teachers' preferences were addressed and respected. Tyler affirmed how co-teachers can find common ground on classroom management:

And so we had to sit down and be like, okay Gordy, whatever we're doing, and Tyler, what we're doing is not working with that, they don't quite understand how troublesome it is for our classroom environment to have them constantly on that [cell phones]. Let's have this and then we kind of have an organized front . . . this is what Gordy and Tyler are saying to you right now class. Make sure that you are aware of that kind of thing (Individual Interview).

As Thelma mentioned, finding common ground can be time consuming or difficult (Individual Interview), however, in order to move forward in a symbiotic relationship, teachers felt that they needed to build a unity that defined them as a partnership for their students and for each other. One way that teachers work through finding common ground or building compatibility with each other is being light-hearted.

Humor. Knowing teachers will encounter differences and handling them in a way that lightens the tension was a theme mentioned frequently by co-teachers in this study. Teachers used humor to laugh about their personality differences or teaching preferences with each other and with students. Teachers acknowledged that they teased one another about who was more organized or who needed help being organized. Cindy said she cleans up after Brent in his classroom and while they joke about it, it is just part of their relationship that makes it easier to work together (Individual Interview). Tyler and Gordy also talked about how they joke with each other about their personality

differences in the classroom in a way that makes these differences seem easier to address between the two of them (Focus Group). He said:

But by the same token and we even laughed about it, I think last year Tyler, and we are open about joking and we can be self-deprecating and laugh at ourselves, which is why I love working with Tyler that way. Because we are both able to laugh at ourselves and Tyler I think at one time said to the effect of “you know at one point we’re going to get Mr. Gordy to loosen up a little bit.” And I said “at one point we’re going to get Mr. Tyler to follow two rules” [laughter] (Gordy, Focus Group).

Humor in the classroom helps to build cooperative relationships, even if it just includes joking or having fun with students. Several teachers mentioned how they enjoy working together in their classroom, because they have “so much fun with [their] students” (Louise, Focus Group). I observed Angie and Vicki engaging with students with humor in a friendly manner (First Observation). Cindy shared how she naturally uses humor with students and Brent has started to use it more as well, which shows how co-teachers can influence one another. Another example of how teachers joked with each other in front of students occurred when Alex and Bianca were sharing graded homework with their students (Second Observation). Bianca jokingly said the “pretty handwriting” was hers and Alex quipped that the blue ink was his while the pink ink was hers. This joking with students not only made it enjoyable for teachers to work together in the classroom, but also modeled how peers can collaborate.

Teachers felt that it was important to model for students how peers can collaborate and use humor in a way that is not demeaning to either person. Teachers

commented humor should never be used in a way that puts someone down, especially in front of students. They wanted students to see how teachers could have fun working together, even if they sometimes disagree about things. In an observation of Cindy and Brent (Second Observation), I observed how Cindy joked with Brent about his directions to remind him that some of the students' ideas would not work for an activity. This use of humor showed how they enjoyed working together and could handle disagreement or criticism appropriately in front of students. As Gordy said "you know . . . I think it's good for the kids, because it allows them [to] see both and we make it work" (Focus Group).

Selflessness. Another strategy for building an effective co-teaching partnership is being selfless. This includes not taking things personally when difficult conversations needed to be addressed, so that pride does not get in the way of moving forward in the relationship or improving instruction in the classroom. Teachers do this by being willing to change or listen to the other person's ideas. Several teachers mentioned that it was important to not take criticism or differing ideas personally, because it is not about one's individual person as much as about the students. Thelma shared:

I would say, and I'm not good at this, so I'm very lucky to have Louise, but I would say try not to be easily offended, not that I'm easily offended. But try not to let your feelings get hurt in the whole process, because it's not a personal process, it's not about you, it's about the kids, and so like at no point if Louise was like "I didn't like that lesson," I would never, ever internalize that or be like well Louise doesn't like me or she is saying that

I wasn't smart enough to do this or that. But I would just take it as okay that's not what the kids need (Individual Interview).

Being selfless not only includes not taking things personally, but also being considerate of one's co-teaching partner. Teachers said it was important to consider the other person when making decisions to determine how it will affect the other person. Thelma described how when she makes decisions at work, she thinks not only how this will affect her family, but also how it could affect Louise (Focus Group). In showing consideration for the other person, teachers felt it was important to treat one another in a respectful manner that validated them as a professional, not as an aide or secretary. Angie described ways that she and Vicki have shown consideration for the other, such as offering to bring them coffee or covering instruction if one person is not feeling well (Focus Group). Part of showing consideration for one another was offering to help the other person.

Offer to help. In establishing a symbiotic relationship where two people can work effectively together, it is important that teachers notice when they can offer to help the other person or share the workload. Teachers can offer to help each other by preparing materials for lessons the other teacher plans, grading student work, organizing the classroom, or incidental moments in the classroom. Teachers talked about how they divide up grading assignments or how one person will take a stack of grading to help out their co-teaching partner. Conversely, if one person grades most of the assignment, the other person will take it to put into the online grade book. Some teachers also helped the other person by organizing the room or offering to put materials away after the lesson is complete. Also during lessons, I observed teachers offering to help one another by

passing out papers or reading something aloud for the students (First and Second Observations). This showed a consideration that demonstrated a partnership of two teachers. Teachers appreciated when their co-teaching partner would ask to help, even in times where they might not be aware that assistance might be helpful. It might not naturally be one person's personality to ask for help, because they do not want to burden the other person. However, in order to establish parity and build a caring relationship, teachers felt it was important to offer to help each other. Tyler articulated this point well:

I think what works well for us here is that, and why I really value working with Gordy is because he is so good at simply stepping in, you know to be like, like that's just a weakness for me. I don't always know when to say "Gordy, I need your help" or "Gordy I need you to." I can tell that the students need this, I'm just not as cognizant of that and Gordy is very cognizant of that and he understands like here is what it is going to be (Questionnaire Results Discussion).

Summary of strategies. As teachers work together to create an effective partnership, they use several strategies to improve not only their relationship with each other, but their instruction in the classroom. These strategies include being open minded, using open communication, finding common ground, using humor, being selfless, and offering to help. In order to work symbiotically, teachers have to not be afraid of creating misunderstandings, but to work through resolving them. These strategies help teachers to prevent or overcome misunderstandings in order to work more effectively together.

Summary of Symbiosis Spin

Once teachers start a co-teaching relationship, they are immediately thrown into a cycle of learning about each other in testing the waters, building a seamless partnership, and reflecting for improvement. The position in which they are in the cycle is influenced by dimensions needed in a relationship, including interpersonal dimensions such as parity, respect, trust, and care beyond the classroom, as well as external factors such as professional development, co-planning time, and administrative support. Another force on the Symbiosis Spin is how compatible teachers are in terms of views of inclusion, philosophical perspectives, use of their expertise, and interpersonal dimensions that causes teachers to be similar or balance each other out. A third force on the Symbiosis Spin is the strategies that teachers use to improve their relationship and help all the pieces come together in way that is a perfect fit. The next section describes the outcome of all the pieces coming together so both teachers are fulfilled professionally and personally.

Step Three: Fulfillment

When co-teachers get to the point where all the pieces come together in an effective manner, they reach the Fulfillment Stage of the co-teaching relationship (see Figure 6). Teachers discussed finding the right fit in a co-teaching relationship for the roles that they play and how they interact with one another. Each teacher brings with him or her individual preferences for interpersonal behavior, as well as his or her professional knowledge and expertise. It takes teams different lengths of time as they go through the Symbiosis Spin to fit these pieces together in a manner that provides the right fit for each team. Teachers affirmed the purpose of achieving the right fit was for the ultimate benefit of students and their learning. Tyler explained this when he said “If you’re going

to spend as much time together as it's going to be . . . if you're going to be doing something where you care desperately about the kids and you want it to be right for them, then it's got to fit" (Focus Group). Once all the pieces came together, teachers felt that their relationship became more rewarding for each person and teachers could accomplish more together in the classroom. Louise shared this point of view when she said, "like just find the right person, and the right fit, and then you're good to go. Because when it's right, it works really well for you and the students" (Focus Group).

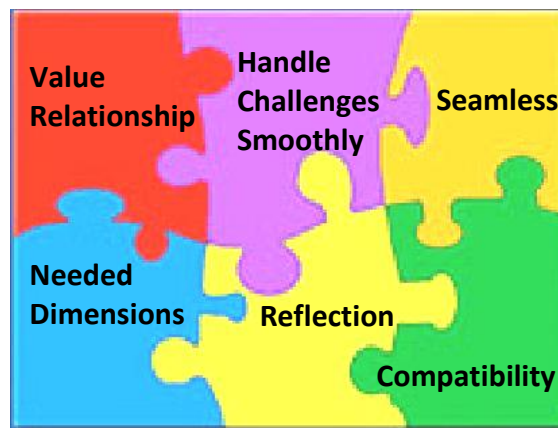


Figure 6. Visual model for Fulfillment Stage. This figure visually represents the pieces that must fit together in an effective co-teaching partnership.

According to the teachers in this study, once they moved into the Fulfillment Stage, they were beyond the Symbiosis Spin and did not return to the cycle of becoming effective. Rather, teachers commented that any challenges they now encountered were not a part of their relationship, but were related to students or administrative pressures. As these challenges arose, teachers were able to handle them smoothly in a manner that validated each person as a contributing member of the partnership. Teachers believed that they were comfortable enough with each other that they were able to continue to be effective co-teaching partners, regardless of external challenges that they met.

The pieces that teachers felt were present in an effective co-teaching relationship have some overlap with those in the Symbiosis Spin, including needed dimensions, compatibility, and reflection. However, in the Fulfillment Stage, these pieces are not spinning, but fit together in a way that supports the relationship. Teachers have achieved these pieces to a degree that they now are seamless in their roles in the classroom, can handle challenges smoothly, and value their relationship with each other. In this section, I describe each piece of a fulfilled relationship in regards to how it looks once teachers fit all the pieces together.

Needed Dimensions

The dimensions teachers need for a co-teaching relationship are now all present and working in a manner that validates each teacher as a professional and as a person. For parity of roles within their relationship and the classroom, teachers mentioned that they felt like they were equals in every aspect. In my observations of co-teaching teams that felt as though they were in the Fulfillment Stage, I observed that they shared instructional roles equally in the class and both teachers would make interjections within a lesson to keep it flowing smoothly (First and Second Observations). Additionally, I observed that students perceived that their teachers were equals by how they would ask either teacher for help and would not ask the other teacher for a different answer (Thelma & Louise, First Observation; Angie & Vicki, Second Observation). As teachers shared about control and the concept of being equals in the individual interviews, several of them said that their co-teaching partner made them feel like an equal in the classroom. They accomplished this by treating each other with respect and trust.

Teachers exercise respect with each other as they continue to treat each other as professionals, as well as respect their individual opinions and feelings. However, teachers mentioned that at this point in their relationship, they did not question whether their partner respected them because they knew, without a doubt, that respect was present between both of them. Additionally, teachers in the Fulfillment Stage now believed that they had trust in all aspects of their relationship with one another. They knew that their co-teaching partner was reliable both in completing tasks and in being prompt for class or co-planning meetings. This respect and trust in a relationship also was evident in how teachers cared about each person beyond the classroom since they had established rapport with one another. Teachers talked about being better friends now than when they started their co-teaching relationship, as well as doing things together outside of their job responsibilities.

External dimensions that continue to be necessary for effective co-teaching relationships include co-planning time and administrative support. Although it did not take as long to plan units or lessons as it did in the first year of their co-teaching relationship, teachers talked about still benefiting from a co-planning time to plan lessons together. They also shared how it was important that administrators supported their co-teaching relationship by continuing to provide time in their schedules for co-planning. One area in which teachers believed administrative support was crucial for student learning in co-taught classes was having realistic expectations about the number of students with learning needs in their classrooms. As discussed previously in this chapter, some teachers felt that their administrators were increasing the number of students with IEPs or significant learning needs in their co-taught classes, thus making it more of a

special education class versus a regular education class with inclusion of special education students. While teachers were strong enough in their co-teaching relationship that they did not feel it was detrimental to their partnership, they still believed it was an issue that needed to be resolved for student learning to occur at high levels.

Compatibility

The piece of compatibility has to come together with the whole relationship in a way that teachers can work well together, whether they are similar or they balance one another. Teachers who reached this point found common ground on critical aspects such as views of inclusion, how to differentiate the classroom, and classroom management procedures. They felt they could balance each other out in how they used their expertise or interpersonal dimensions such as communication styles or conflict styles.

Additionally, teachers felt that they were compatible enough that they now were comfortable with each other. They mentioned knowing how the other person would address a situation and agreeing with most things in the classroom. Vicki said that she and Angie “sort of know how each other feels about different issues or different kids or somebody, you know, bumping somebody up or keeping them as is based on effort and all that stuff” (Individual Interview). In my observations of co-teaching teams, how they interacted with one another showed that they were compatible to the degree that they were comfortable with one another in the classroom (First and Second Observations). This comfort with each another allowed them to be reflective both in the moment in the classroom and in meetings outside of class time.

Reflection

Reflection is a piece that teachers mentioned they did not leave behind when they entered the Fulfillment Stage in their relationship. Rather, their descriptions of how they used reflection showed a deeper level of thinking about student learning as well as their roles in the classroom. Teachers said they reflect to improve their roles in the classroom by deciding which units they might teach based on their current expertise or what activities fit their teaching styles. In the Symbiosis Spin, teachers shared instructional roles and activities based on interests and content knowledge. However, as both teachers grew in content knowledge, they believed they both knew the content but in different ways that they could support each other and students as well.

Teachers said reflection was a large part of how they plan lessons since they have previous years' lessons to use and improve. If students had not typically done well with an assignment, teachers talked about changing the format or content so that students would be more successful. Alex shared how they have updated most of their assignments so that they are more accessible for students, but yet still retain high standards of learning (Focus Group). Teachers also talked about improving components of their content they felt were weak in their curriculum, such as when Angie said she and Vicki are still working on including more writing in their classroom (Individual Interview). Teachers noted that they revised lessons to be more engaging for students, versus when they did not have as much time in the first few years to consider student engagement. Louise affirmed the level of reflection effective co-teaching teams can achieve:

We try very hard to be reflective after anything new that we do as a lesson, we'll go back, did this work, what didn't work and we write directly in our

plan books for the next year. I mean I carry two plan books, one from last year and one from this year. And we always go back and forth and we look and then we compare last year, oh we said that we should probably change this. And if we don't get a chance to change it immediately after the lesson, then we make sure we do it at some point before the next time we do it, so reflection is a huge part of it (Individual Interview).

Seamless

As teachers worked on building a seamless relationship in the Symbiosis Spin stage, once they get to the Fulfillment Stage the seamless piece fits perfectly in their co-teaching relationship. Teachers talked about achieving seamlessness in the classroom that was fluid in how they exchanged roles or built off of one another's comments. I observed this fluidity in many of my observations of co-teaching teams in the classroom. They would flexibly change between roles of leading the classroom or monitoring student learning, such as when Thelma and Louise switched roles during instruction and took turns reading aloud (First Observation). Additionally, teachers would interject in ways that did not disturb the flow of the lesson, but rather built on each other's comments. Cindy and Brent did this frequently when they were showing a video on genetics to their students; they would pause the video and elaborate, both interjecting to extend learning (First Observation). In some ways the talking between teachers would flow as if they were having a conversation with the class and everyone was an equal participant, even when they would take turns leading the instruction (Angie and Vicki, First Observation).

Teachers in the Fulfillment Stage discussed seamlessness being efficient in the classroom, because they could keep a lesson flowing smoothly if one teacher minimized

disruptions while the other person lead instruction. Cindy shared how if one person took care of the attendance and any late students, the other person could begin with instruction as soon as the class period began (Individual Interview). Another example teachers gave of seamless being more efficient in the classroom was when one person led class discussion while the other person took notes on the board. I observed this in Angie and Vicki's classroom, while Angie was leading a vocabulary discussion, Vicki was taking notes on the Smartboard in the front of the room (First Observation). Cindy said this keeps the discussion flowing better and prevents classroom management issues (Focus Group; Individual Interview). Angie explained the concept of seamless well:

I really like the word seamless for us though, because I just don't feel like there's any delay or ripple effect. It's just like, you know, I'll do this. Oh, you know, you forgot this and we just say it, we don't make a big deal of it and just kind of fill each other in on or the kids (Focus Group).

Handle Challenges Smoothly

In my conversations with teachers, I found that once they moved into the Fulfillment Stage they were able to handle challenges smoothly. They did not avoid addressing difficulties in open conversations, but rather they knew they needed to handle them as quickly as possible to continue to work effectively together. Angie gave as an example when Vicki contacted a parent in a manner that could have caused a problem; she stepped in to tell Vicki how this parent was someone that they needed to talk to in a manner that was cautious (Individual Interview). However, she said this difference was not disruptive to their relationship and they were able to handle it smoothly.

Teachers also shared how they address challenges that come from outside of them by going together to speak with building administration. Louise mentioned how she and Thelma go to address a concern with the appropriate people and felt it was important they handled the conflict openly and tactfully (Individual Interview). Teachers said while not all external challenges have been resolved, such as having too many students with IEPs in their co-taught classes, they were able to work together to handle the issues as best as they could. This unified approach in handling conflict reflected a symbiotic relationship.

Value Their Relationship

Once teachers feel fulfilled in their co-teaching relationship, they value the relationship they have with each other. Some teachers even compared it to a marriage relationship, because they spent so much time with each other. They knew that, as in a marriage relationship, one learns to have some give and take (Brent, Questionnaire Results Discussion; Individual Interview). They also felt that they watched out for their co-teaching partner, just as a spouse would do in a marriage relationship. This care for the other person grew to the point where they valued their relationship as co-teachers, and as friends.

The words teachers used to describe their co-teaching relationship included feeling honored to work with their co-teaching partner and being fortunate to co-teach together. Teachers also talked about looking forward to their co-taught class periods because they enjoy working together. Brent said, “where I see myself now, I anticipate it, I look forward to it. It was not always that way, you know, it was more something you know this is what we’ve got to do” (Individual Interview). Teachers said they valued their relationship to the point where they almost feared changing co-teachers. For some

co-teachers, they felt their co-teaching partner had become one of the most important people to them at their work. This passionate quote by Thelma portrays this well:

But, it's just so nice to have somebody else in the room and somebody else's perspective. So, and another set of eyes to see things and another set of hands to help. And just, I mean, it's just, I can't imagine how my teaching career would be different if I hadn't gotten Louise! [laughter].

And I couldn't imagine, like when I think about my future career and how I see things going on. The first thing I think about after my family is Louise, like what would this mean for Louise and our kids (Focus Group).

Summary of Fulfillment

Once teachers put all the pieces together from both of their professional knowledge, experience, and interpersonal dimensions, they reach the point of an effective co-teaching relationship. In an effective co-teaching relationship, teachers still use some of the components that are present during the building process, including needed dimensions such as parity, respect, trust, co-planning time, and administrative support. Compatibility and reflection also continue, but at a deeper level that allows teachers to handle challenges smoothly. Managing challenges in a way that prevents disruptions to their relationship and instruction in the classroom is a sign of the seamlessness teachers have developed in their co-teaching partnership. Eventually, teachers get to the point where they value their relationship with each other not just as colleagues, but also as friends. Achieving fulfillment in a co-teaching relationship takes teams different lengths of time, but once they reach this stage they are unlikely to return to the Symbiosis Spin.

They are now able to handle any challenges that arise without disruptions to their relationship and ability to work together.

Summary

In this chapter, I described the process by which secondary school co-teachers from an urban Eastern Iowa school district addressed natural challenges of collaboration to create an effective co-teaching partnership. I addressed the central research question as well as the research sub-questions that supported the central research question.

Central Research Question

To answer the central research question of how secondary school co-teachers from an urban Eastern Iowa school district resolved challenges inherent in collaboration, I created a theory grounded in data collected from natural settings. The theory that emerged from the data, Achieving Symbiosis, reflects three main stages of the process secondary co-teachers go through to overcome challenges inherent in collaboration (see Figure 7). These three stages include (a) Initiation of a co-teaching relationship, (b) Symbiosis Spin where teachers work at becoming effective, and (c) Fulfillment when all the pieces fit together to create an effecting co-teaching partnership. Data supporting the research sub-questions provided further detail for the central question and the theory that was grounded in the data.

Research Sub-Question 1

The first research sub-question asked how co-teachers address differences in attitudes towards inclusion. In this study, I found that teachers who had established effective co-teaching relationships did not believe their views towards inclusion differed. Rather, if differences existed, they were in the nuances of how to make inclusion

successful. Teachers talked about having open discussions and finding common ground to handle these differences.

Research Sub-Question 2

Similar results were also found for the second research sub-question about how co-teachers address differences in philosophical perspectives of general education and special education. Teachers in this study believed that they were more similar than different to their co-teacher in philosophical perspectives. However, if they differed in classroom management, grading practices, or instruction of critical thinking skills, they worked through these differences by being open minded enough to have some give and take in their relationship and in classroom practices. Finding common ground was also frequently mentioned by teachers as being helpful in addressing their differences in philosophical perspectives.

Research Sub-Question 3

In answering the third research sub-question, the idea of compatibility being complementary was discussed in the area of how teachers resolve interpersonal conflicts. Teachers commented on how they might differ from their co-teaching partner in their personalities, communication styles, or conflict styles. However, these differences made them a stronger, more balanced team that could address different student personalities or learning needs.

Research Sub-Question 4

The fourth research sub-question, addressing how co-teachers address external factors that impede successful collaboration, was answered by teachers sharing how they talk to their administrative staff about components that are necessary for a co-teaching

relationship. For professional development, some teachers felt there was not enough training provided in their district, but they worked through this by learning from one another. Teachers also advocated for making co-planning time an expected part of their schedule. For administrative support, teachers discussed how they deal with unrealistic expectations, including too many students with IEPs in their co-taught classes, by having open conversations with their building administrative staff in an effort to resolve these concerns.

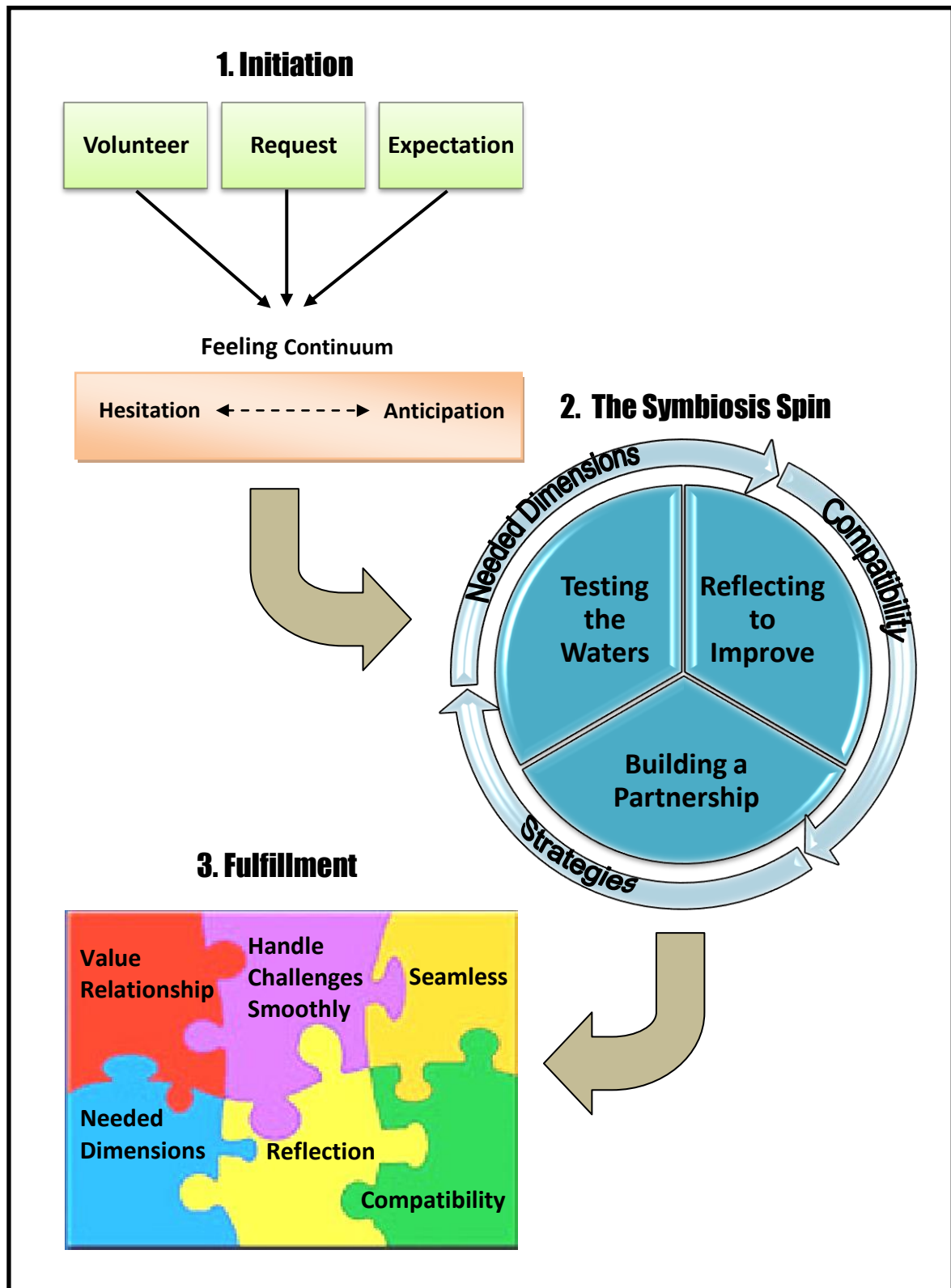


Figure 7. Visual model for Achieving Symbiosis theory. This figure represents the visual depiction of the process co-teachers experience to create effective partnerships.

The data collected for both the central question and the sub-questions fit together to explain the process secondary co-teachers in an Eastern Iowa urban school district go through to resolve naturally occurring challenges in a collaborative relationship. These three stages of Achieving Symbiosis include (a) Initiation, (b) Symbiosis Spin, and (c) Fulfillment. In the Initiation Stage, teachers start co-teaching because they volunteer to co-teach, assent to a request, or are expected to do so. Before co-teaching, they have feelings along a continuum that range from hesitation to anticipation of the upcoming partnership. There does not appear to be a direct tie between how a co-teaching relationship is initiated to how teachers feel along the continuum of anticipation to hesitation. Teachers anticipate a co-teaching relationship because they want to improve their professional knowledge or instructional practice. Conversely, teachers express hesitation with not knowing how compatible they will be with their co-teaching partner or how roles will work out in the classroom.

Once a co-teaching relationship begins, teachers move into the Symbiosis Spin. During the Symbiosis Spin, teachers cycle between testing the waters to learn about one another, building a seamless partnership, and reflecting for improvement. This cycle is influenced by three forces, including needed dimensions for a symbiotic relationship, compatibility, and strategies that teachers use to build their partnership. The dimensions needed for the relationship include parity, respect, trust, care beyond the classroom, professional development, co-planning time, and administrative support. Compatibility refers to how teachers are similar to one another or how they complement one another with their differences. Strategies teachers use to build a partnership include being open-

minded, having open communication, finding common ground, using humor, being selfless, and offering to help.

Once teachers fit all the pieces together for an effective partnership, they reach the Fulfillment Stage. In this stage, the pieces that fit together include the needed dimensions, compatibility, reflection, seamlessness, handling challenges smoothly, and valuing the relationship. Teachers continue to rely on most of the needed dimensions from the Symbiosis Spin including parity, respect, trust, care beyond the classroom, co-planning time, and administrative support. Teachers now feel they are truly compatible with each other, either because they are similar or because they use their differences to complement one another well. Reflection is now an integral part of their relationship, in that teachers can think more deeply about improving their practice and using their individual expertise successfully. Once teachers reach the Fulfillment Stage, they have built a seamless partnership in which they flexibly change roles during instruction or build off of one another's comments in a manner that is fluid and efficient. Having all the pieces fit together enables teachers to handle challenges smoothly, whether they are within their classroom or from more external forces such as administrative expectations. Ultimately, co-teachers now value their co-teaching relationship and see their co-teaching partner as more than a colleague, but also as a friend.

CHAPTER FIVE: DISCUSSION

In this final chapter, I first present a summary of the findings of this study in relation to the research questions, as well as the theoretical model that I created to explain the central research question. I also relate the findings to the history of special education, the theoretical frameworks used for this study, and the literature on co-teaching. In the rest of the chapter, I present implications, limitations, and recommendations for future research.

Summary of the Findings

The purpose of this systematic grounded theory study was to explain how secondary school co-teachers from an Eastern Iowa urban school district overcome problems inherent in collaborative relationships. To answer the central research question about this process, I developed a theory, Achieving Symbiosis, grounded in the data collected from participants in focus groups, questionnaires, classroom observations, and individual interviews. I addressed the sub-questions, as appropriate, in discussion of the theory. The first sub-question of how co-teachers address differences in attitudes towards inclusion was addressed in the compatibility section with how teachers become compatible in their views of inclusion. The second sub-question of how co-teachers address differences in philosophical perspectives of general education and special education was covered in the philosophical perspectives part of the compatibility section. I also covered the third sub-question of how co-teachers resolve interpersonal conflicts in the compatibility section underneath interpersonal dimensions. The fourth research sub-question of how co-teachers address external factors that impede successful collaboration

was explained in the needed dimensions section under professional development, co-planning time, and administrative support.

Placing Findings in Historical Context of Special Education

Collaboration and co-teaching have evolved over the course of special education's journey of meeting the learning needs of students with disabilities (Friend & Cook, 2010; Winzer, 1998). This study's findings highlight how special education has evolved into more collaboration between general education and special education teachers, as well as integration of students with disabilities into the general education setting. Ideas from early educators and advocates for people with disabilities can be seen in the philosophical perspectives and instructional practices of the teachers who participated in this study. John Locke was instrumental in changing society's perceptions that knowledge can be attained in a nurturing environment, disputing the theory of the time that knowledge was innate. This ushered in the view that people with disabilities could be educated in a stimulating and caring environment. The teachers in this study shared their views of inclusion, which emphasized the point that, as much as possible, all children should be given access to the general education curriculum in a supportive setting. Teachers worked together to provide equitable education for students with disabilities and reduce barriers to their learning.

The very fact that special education and general education teachers were collaborating together for the benefit of children's learning in co-taught classrooms in this study points to the progress special education has made in integrating students with disabilities into the general education setting (Winzer, 1998; 2009). While *Brown v. Board of Education of Topeka* (1954) set a legal precedent that separate is not equal,

ultimately, it was the work of the parents' groups in getting critical legislation passed for their children with special needs (Gartner & Lipsky, 1987; Stainback, 2000; Yell et al., 1998). Landmark cases, *PARC* (1972) and *Mills* (1972), both mandated that the states should provide a public education to children with disabilities. These cases were followed by federal law ECHA, PL 94-142, which required a free, appropriate education for all students, based on a LRE. More recently, inclusion has been supported for the LRE in federal laws, such as the reauthorization of ECHA with IDEA (2004). Teachers in this study believed in the LRE and were working to make it happen in their classes.

Another connection to the historical context of special education is found in the collaboration of general education and special education teachers. Historically, teachers in the fields of general education and special education worked separately from each other (Englert & Tarrant, 1995; Van Garderen et al., 2009; Wasburn-Moses & Frager, 2009). This limited not only the potential for inclusion of students with special needs, but also the benefits of collaborating with one's peers. Over time, this separation has diminished, as more inclusive practices are being encouraged for students with disabilities. Additionally, accountability pressures by federal law made it necessary for teachers to work together to improve student performance (Bowen & Rude, 2006; Cooper-Duffy et al., 2010; Van Garderen et al., 2009). Teachers in this study worked together, not only because philosophically they believed students with special needs should be integrated within the classroom, but also because they knew they could learn from their peers in improving instructional methods for students. This points to how

special education and general education teachers in the field are working more collaboratively together than they did historically.

Relating Findings to the Theoretical Foundations

A systematic grounded theory approach is used when the purpose is to refine or generate a new theory (Strauss & Corbin, 1990, 1998). This study accomplishes both adding to existing theory and generating a new theoretical model to explain the process by which secondary school co-teachers overcome problems inherent in collaboration. The findings of this study elaborates on the theoretical foundations that were used as a framework for this study, including Tuckman's (1965; Tuckman & Jensen, 1977) model of group development and Schutz's (1958, 1966, 1984) interpersonal behavior theory.

Stages of Group Development

Tuckman (1965) presented four stages for group development, including (a) forming, (b) storming, (c) norming, and (d) performing. Tuckman and Jensen (1977) later revised this theory to add the fifth stage of adjourning. In this study, I discovered that teachers went through stages as well in their co-teaching relationship including an Initiation Stage, a stage where they build symbiosis, and a Fulfillment Stage. Like Tuckman's (1965) model, the Initiation Stage involves forming a partnership and orienting to beginning the co-teaching relationship. Additionally, there is a period where teachers are learning about each other and establish agreements for their relationship as reflected in the Symbiosis Spin. However, as I will discuss later, this process is not necessarily linear from storming to norming. Instead, teachers talked about a more recursive process in which they had to work through learning about one's differences and building their relationship using reflection. This finding supported Bonebright's (2010)

criticism of the linear structure of Tuckman's (1965; Tuckman & Jensen, 1977) model, since not all groups go through linear stages in their development process. In my study, I did not observe what Tuckman and Jensen (1977) described as the adjourning stage, because all the participants were in an active relationship that they did not believe would end after this school year. However, some teachers shared fears of ending their co-teaching partnership as they had become comfortable with one another.

Interpersonal Behavior Theory

Schutz (1958, 1966, 1992) proposed a theory to describe how people interact and work together. He explained that there are three dimensions to an interactive relationship, including inclusion, control, and openness. Inclusion refers to how people establish their identity in a group or associate with other people. Control involves how people balance power in a relationship and how they make decisions together. The third dimension, openness, considers how close people want to be in interpersonal relationships. In this study, I used Schutz's Element B self-report questionnaire (1992) to explore the preferences people have for interpersonal relationships to see how this related to their co-teaching partnerships. The findings from this questionnaire support Schutz's (1958, 1966, 1992) theory of the dimensions that can describe an interpersonal relationship. Teachers discussed how they are compatible because they either were similar in these aspects or they complemented one another. Additionally, in discussions with teachers about their communication styles and conflict styles, I found that teachers want to feel like their contribution to a relationship is significant, which supports the interpersonal dimensions of inclusion. The dimension of control was also supported by this study because teachers want to have joint decision-making where they feel they are

equals. The aspect of openness varied some across partnerships, but most of the co-teachers mentioned they wanted to know their co-teaching partner in a manner that went beyond the classroom. For those teachers who were in the Fulfillment Stage of co-teaching relationships, they had established an openness with one another that represented a companionable friendship.

Relating Findings to the Literature

While this study elaborated on existing theory, it also confirmed previous research findings on co-teaching, including (a) teachers' roles, (b) challenges found in co-teaching, (c) necessary components for effective co-teaching, and (d) stages of collaboration. This section describes the research findings as they relate to each of these aspects from the literature.

Teachers' Roles

The theoretical and research literature on roles in a co-teaching relationship points to how teachers need to share planning and instruction to create a partnership that exhibits parity (Iowa Department of Education, 2009; Kritikos & Birnbaum, 2003; Murray, 2004; Narian, 2010; Tannock, 2009; Vannest & Hagan-Burke, 2010). The literature posits teachers should use their individual expertise to benefit a co-teaching partnership, including general education teachers' content knowledge and special education teachers' experience on meeting student needs in an inclusive setting (Iowa Department of Education, 2009; Murray, 2004). This position was confirmed by participants in this study, as they discussed using their individual expertise to contribute to the partnership. One of the overarching themes in teachers' roles was how teachers established parity, which ultimately affected their co-teaching relationship.

The use of their expertise provided both teachers a professionalism that helped establish equality. However, in order to share in planning and instruction in the classroom, teachers believed over the course of the first year, the special education teacher also needs to grow in the content knowledge. This addressed a frequently cited concern in co-teaching roles of the special education teacher being primarily in an assistant role (Austin, 2001; Bessette, 2008; Bouck, 2007; Harbourt et al., 2007; Narian, 2010; Scruggs et al., 2007; Vannest & Hagan-Burke, 2010; Weiss & Lloyd, 2002). Once teachers were on a more even level of content knowledge, they believed that they were able to use effective roles in the classroom and in their partnership.

Challenges Found in Co-Teaching

Besides the challenge of establishing parity in co-teachers' roles within the classroom, the literature on challenges found in co-teaching centers around five themes, including (a) lack of common planning time, (b) lack of administrative support, (c) different teaching styles, (d) interpersonal differences, and (e) teacher attitudes. Most of these challenges were confirmed in this study's findings, except for insufficient co-planning time.

Teachers in this study shared how common planning time has become an accepted part of co-teaching responsibilities in their schools. They commented that they did not need to request a common planning time, as administrators and department heads acknowledge it is necessary for creating effective co-teaching partnerships. Teachers said common planning time was just part of the package when they agreed to co-teach. The literature on common planning times reports that teachers lack sufficient planning time, under normal conditions, to make co-taught classrooms high-performing settings

for students with disabilities (Austin, 2001; Bouck, 2007; Carter et al., 2009; Kritikos & Birnbaum, 2003; Magiera & Zigmond, 2005; Murray, 2004; Paulsen, 2008; Van Garderen & Whittaker, 2007). While teachers had common planning times in this study, some teachers mentioned how they differed from each other in the amount of the planning time that they desire to spend together versus doing individual classroom preparation. Teachers saw this difference as a challenge they had to overcome to attain an effective partnership.

Another challenge cited in the literature is lack of administrative support (Carter et al., 2009; Jang, 2006; Kritikos & Birnbaum, 2003). Jang (2006) reported that teachers need administrators to demonstrate their value of co-teaching by arranging schedules to provide common planning time. This aspect of administrator support was confirmed as present in participants' school buildings and was helpful to the development of their co-teaching partnerships. Paulsen (2008) commented on administrators being an important piece of successful collaboration by sharing the pressure of meeting student needs in a co-taught classroom. Teachers in this study reported feeling challenged by unrealistic expectations administrative staff in their buildings placed on co-teaching classes. Teachers stated that they had more than the ideal number of students with IEPs in their co-taught sections, thus making it difficult to create inclusive classroom environments.

A third challenge mentioned in the literature for creating effective co-teaching partnerships is different teaching styles between the co-teaching partners (Bouck, 2007; Brownell et al., 2006; Carter et al., 2009; Kritikos & Birnbaum, 2003; Paulsen, 2008; Rugotska, 2005; Timmons, 2006; Van Garderen & Whittaker, 2007). Different teaching styles originated from the historical separation of training of special education and

general education teachers (Van Garderen et al., 2009; Wasburn-Moses & Frager, 2009; Winzer, 1993). Teaching styles often come from one's philosophical perspective towards teaching and learning, which tends to be more behaviorist focused in special education and constructivist focused in general education (Wasburn-Moses & Frager, 2009). This philosophical difference that also played out into teaching styles was found in observations and interviews with co-teachers in this study. General education teachers talked more about promoting students to independently develop critical thinking skills, while they felt their special education teachers viewed critical thinking skills as best taught sequentially. Special education teachers also reported helping their co-teaching partners break assignments into smaller steps, which reflects a behaviorist approach. While some teachers reported philosophical differences or teaching style differences being a tension in their co-teaching partnership, other teachers thought that they could learn from each other and blend the two approaches as needed for student learning in the classroom.

Interpersonal differences can also be challenges in co-teaching relationships, if teachers are not compatible in their personality styles, communication styles, and conflict styles (Cramer & Stivers, 2007; Friend, 2000; Friend & Cook, 2010; Glazier, 2004; Stevenson et al., 2005). Gender can also be one characteristic that influences how teachers work together as well, although most teachers in this study felt gender was not a critical component in determining compatibility between co-teachers. Teachers stated interpersonal differences in personalities, communication styles, or conflict styles can create hindrances to a co-teaching relationship if teachers do not use the differences to complement one another. The literature on personality styles states that personality

differences can interfere with effective collaboration, if people do not trust someone who is different from them (Clinebell & Stecher, 2003; Cramer & Stivers, 2007; Gilley et al., 2010; McDuffie et al., 2009; Mooradian et al., 2006; Stevenson et al., 2005). Some researchers advocate for taking the time to understand each other's personalities in order to improve relationships and work performance (Duhe, 2009; Varvel et al., 2004). The teachers in this study mentioned being reflective about each other's personality in the classroom in order to use differences beneficially, rather than in an oppositional manner.

In the individual interviews, teachers also shared how interpersonal differences in communication styles can be used positively to benefit different student learning styles. This supports the research finding of considering the other person's communication style in a relationship and working to accommodate these styles (Conderman et al., 2009; Jourdain, 2004). Additionally, conflict styles can cause challenges in an interpersonal relationship if teachers do not approach conflicts contextually by using appropriate styles for the situation (Conderman, 2011; Gross & Guerrero, 2000; Rahim, 1986; Rahim & Bonoma, 1979; Rahim et al., 1992). Conflict styles are generally categorized as dominating, integrating, compromising, avoiding, or obliging. Teachers in this study shared how they use a mix of these styles with students or adults, but within their own collegial relationship they tend to be direct or compromising with one another.

A fifth challenge to co-teaching present in the literature includes teacher attitudes towards students with disabilities (Damore & Murray, 2009; Idol, 2006; Leatherman, 2009; Santoli et al., 2008). If teachers are discrepant in their views of inclusion and how it is implemented within co-taught classrooms, collaboration is often hindered. Current research showed that teachers were becoming more positive in their views towards

inclusion of students with disabilities in the general education setting (Damore & Murray, 2009; Idol, 2006; Santoli et al., 2008). Teachers in this study portrayed a positive attitude towards inclusion, but some challenges arose when teachers had opposing views of how far standards and assessments should be accommodated. They worked through these challenges by having open communication and finding common ground.

Necessary Components for Effective Co-Teaching

The challenges to co-teaching lead directly into the components teachers need in a co-teaching relationship to make it effective including (a) teacher training, (b) administrative support, (c) common planning time, (d) common philosophies, and (e) reflection (Carter et al., 2009; Damore & Murray, 2009; Jang, 2006; Magiera & Zigmond, 2005; Paulsen, 2008; Roth et al., 1999). All of these components were mentioned by teachers in this study as being necessary for either the beginning of a co-teaching partnership or continuance of an established co-teaching relationship. Several teachers expressed the need for improved training for co-teaching in their district. They commented on how the training was a brief introduction to co-teaching and not on-going. The literature on teacher training demonstrates the benefits of ongoing professional development for co-teachers on establishing parity in their relationship or improving student learning in the classroom (Austin, 2001; Friend et al., 2010; Idol, 2006; Vaughn et al., 1998).

Administrative support is also a necessary component of creating effective co-teaching partnerships (Damore & Murray, 2009; Jang, 2006; Kritikos & Birnbaum, 2003; Leatherman, 2009; Paulsen, 2008; Phillips & Sapona, 1995; Santoli et al., 2008; Scruggs et al., 2007). Administrators can make collaborative partnerships more successful in their

school buildings by providing appropriate professional development that includes both initial training and ongoing coaching. Additionally, administrators are influential in building a school wide climate that fosters and promotes collaborative practices (Conderman & Johnston-Rodriguez, 2009; Friend & Cook, 2010; Hawkins, 2007). Although teachers in this study shared that their administrators arranged initial professional development on co-teaching, they did not provide ongoing coaching to ensure co-teaching partnerships were successful. However, most teachers believed that their administrators had created an environment that promoted collaboration, or, if this collaborative environment was not already established, their administrators were working to build support for more co-teaching partnerships.

A third component of successful co-teaching partnerships includes common planning time (Gately, S.E. & Gately, 2001; Ploessl et al., 2010; Tannock, 2009). Planning together enables teachers to better articulate their roles and responsibilities in their co-taught classes, as well as establish parity in decision making (Bouck, 2007; Carter et al., 2009; Damore & Murray, 2009; Hang & Rabren, 2009; Leatherman, 2009; Phillips & Sapona, 1995). All of the teachers in this study stated that they had a scheduled common planning time with each other. Teachers who believed that they had reached the Fulfillment Stage in their relationship reported planning units together or dividing up units for more formal planning. Those teaching teams who had more difficulty with parity in their relationship were still working on using their scheduled co-planning time effectively.

An important component of effective co-teaching teams, supported by this study's findings, are common philosophies. When teachers possess common philosophies

towards teaching and learning, they are able to more easily set goals, share responsibilities, and establish parity in their relationship (Capizzi & Barton-Arwood, 2009; Englert & Tarrant, 1995; Friend & Cook, 2010; Kritikos & Birnbaum, 2003). If there are differences in philosophies, teachers should openly discuss these differences with each other and achieve a common understanding (Carter et al., 2009; McDuffie et al., 2009; Van Garderen et al., 2009; Wasburn-Moses & Frager, 2009). Teachers in this study believed that common philosophies were imperative to being compatible and supportive of one another in the classroom. If there were differences in philosophies, teachers approached these challenges by resolving them openly and professionally.

A fifth component needed for effective co-teaching teams is teacher reflection. The literature on teacher reflection demonstrates the benefits for teachers' professional development as well as student learning (Brownell et al., 2006; Camburn, 2010; Jang, 2006; Pugach & Johnson, 1995; Roth et al., 1999). This study supported the importance of teacher reflection for moving through the process of building effective co-teaching relationships that overcome naturally occurring challenges. Reflection was described by teachers as necessary in the middle stage of learning about each other and improving. However, teachers affirmed that reflection was not discarded when they moved to the Fulfillment Stage of their co-teaching relationship. Rather, reflection became an integral part of how they worked together in planning and implementing instruction.

Stages of Collaboration

The pre-existing literature on stages of collaboration for co-teachers is limited in scope. This literature provides stages of collaboration that are generally dated (Phillips & Sapona, 1995) or theoretical in nature (Gately, S.E. & Gately, 2001). Phillips and Sapona

(1995) identified several stages in the process that teachers work through to achieve more effective collaboration including anxiety, managing logistics, identifying teachers' roles in the classroom, co-planning, seeing the benefits, using a continuum of options for students, and evaluating the process. Gately and Gately (2001) discussed three developmental stages for collaborating teachers, including (a) beginning, (b) compromising, and (c) collaborating. The theory developed in this study supported the idea of three stages, as Gately and Gately (2001) described with Initiation, Symbiosis Spin, and Fulfillment. The Initiation Stage tends to be before a partnership actually begins, thus preceding the beginning stage in Gately and Gately's (2001) theory. The Symbiosis Spin stage encompasses both the beginning stage and compromising stage, while the collaborating and Fulfillment Stage are more closely aligned. Additionally, Roth et al.'s (2005) findings related to the collaborative stage of co-teaching relationships in regards to coordinated or seamless interactions of teachers were supported by this study. Teachers believed that once they worked through the process of becoming effective, they were seamless in switching roles in the classroom, as well as interjecting comments in a conversational tone. While these sequences of collaboration correlate, the previous theories did not explain how teachers actually overcame problems inherent in collaboration, which the theory proposed in this model describes more thoroughly.

Contributing a New Model for Development of Effective Co-Teaching Partnerships

The purpose of a systematic grounded theory study is to fill in gaps in existing theories or the literature on explaining a process of a phenomenon (Strauss & Corbin, 1990, 1998). In this study, I generated a model that explained the process whereby secondary school co-teachers in an Eastern Iowa urban school district resolve challenges

inherent in collaboration. This theory fills gaps in both Tuckman's (1965; Tuckman & Jensen, 1977) model of group development and Schutz's (1958, 1966, 1992) interpersonal behavior theory. Additionally, it adds to the literature base on co-teaching relationships by contributing new information to an area previously unexplored in educational research, resolving challenges in co-teaching.

Tuckman's (1965; Tuckman & Jensen, 1977) model on group development explains the process groups go through, including forming, storming, norming, performing, and adjourning. However, this presentation of the process of group development depicts a linear journey, which does not fit the data I collected from co-teachers through observations and conversations. Teachers discussed their co-teaching process as a cycle of learning about one another, building their partnership, and reflecting for improvement. The theory I generated from this study reflects this recursive process within the middle stage of the Symbiosis Spin.

Additionally, Tuckman (1965; Tuckman & Jensen, 1977) did not clearly define the storming stage for educational contexts (Cassidy, 2007) and this lack of definition hinders the understanding of how co-teachers move from the storming stage to the norming or performing stages. Moreover, in the data I collected from effective co-teaching partners, the stages of storming and norming emerged as more inclusive than separate, which is reflected in the Symbiosis Spin of this study's theory. Co-teachers become effective by simultaneously addressing challenges with reflection and strategies that build compatibility.

Schutz's (1958, 1966, 1992) interpersonal behavior theory describes interpersonal relationships as needing three aspects: inclusion, control, and openness.

These factors reflect parts of a co-teaching relationship, as teachers described in this study, with parity in a relationship and a care for a co-teaching partner beyond the classroom. However, teachers believed that needed dimensions for a successful co-teaching relationship also included respect and trust, which are not well described by any of these dimensions. Interpersonal relationships are more complex than Schutz's (1958, 1955, 1992) model portrays. Furthermore, Schutz's (1958, 1966, 1992) theory does not address how teachers consider interpersonal wants in overcoming problems in a co-teaching relationship. The Symbiosis Spin and Fulfillment Stages reflect dimensions that teachers wanted and worked to achieve in their interpersonal relationship, including parity, respect, trust, and care beyond the classroom.

The research on co-teaching presents the challenges that co-teachers experience and components that are necessary for an effective co-teaching relationship (Austin, 2001; Bouck, 2007; Carter et al., 2009; Idol, 2006; Kritikos & Birnbaum, 2003; McDuffie et al., 2009; Magiera & Zigmond, 2005; Murray 2004; Paulsen, 2008; Santoli et al., 2008; Van Garderen & Whittaker, 2007; Wasburn-Moses & Frager, 2009). However, in presentation of the challenges and necessary components, the process teachers go through to overcome these challenges and acquire the necessary components is lacking in the literature. Additionally, the literature on stages of collaboration in general exhibits limited research (Gately, S.E. & Gately, 2001) and theoretical writings (Phillips & Sapona, 1995). These two writings present the stages that teachers experience in a co-teaching relationship, but not in a manner that describes how teachers actually overcome challenges inherent in collaboration.

The theory that I present to fill these gaps in both existing theories and the literature on co-teaching is entitled Achieving Symbiosis. This theory has three main stages, including (a) Initiation, (b) Symbiosis Spin, and (c) Fulfillment. In the Initiation Stage, teachers begin a co-teaching partnership in one of three following ways: (a) volunteering to co-teach, (b) assenting to a request, or (c) fulfilling an expectation. As teachers look towards starting their co-teaching relationship, they have feelings that fall along a continuum of anticipation to hesitation. Teachers feel anticipation if they are looking forward to the relationship or hesitation if they are unsure how the partnership will work.

Once co-teachers begin working together, they start into the Symbiosis Spin, which involves three actions, including testing the waters where teachers learn about each other, building a partnership, and reflecting to improve. Where teachers are in this cycle is influenced by three forces, including needed dimensions for a co-teaching relationship, compatibility, and strategies teachers use to build their effective relationship. The dimensions that are necessary for a co-teaching relationship involve parity, respect, trust, care beyond the classroom, professional development, co-planning time, and administrative support. Compatibility refers to how teachers are similar to one another or how they complement one another to use their differences effectively in views of inclusion, philosophical perspectives, use of their expertise, and interpersonal dimensions. The strategies teachers use to build a co-teaching partnership include being open-minded, having open communication, finding common ground, using humor, being selfless, and offering to help.

Once teachers fit all pieces together in a way that builds a seamless, equal relationship they reach the Fulfillment Stage. The pieces that are a part of a fulfilled co-teaching relationship contain parts of the Symbiosis Spin, including needed dimensions, compatibility, and reflection. The other pieces include seamlessness, handling challenges smoothly, and valuing their relationship. Teachers now perceive their co-teaching relationship as important to them not only professionally, but also personally.

This theory is not present in the literature on co-teaching because other studies did not actually address the process for overcoming challenges inherent in collaboration. Rather, research looked at describing the challenges and made suggestions for improvement (Austin, 2001; Bouck, 2007; Brownell et al., 2006; Carter et al., 2009; Damore & Murray, 2009; Jang, 2006; Kritikos & Birnbaum, 2003; Leatherman, 2009; Magiera & Zigmond, 2005; Murray, 2004; Paulsen, 2008; Santoli et al., 2008; Timmons, 2006; Van Garderen & Whittaker, 2007). The studies on co-teaching have relied mainly on case study research (Bouck, 2007; Harbort et al., 2007; Leatherman, 2009; Murray, 2004; Phillips & Sapona, 1995; Rugotska, 2005) or quantitative methods (Boudah et al., 1997; Damore & Murray, 2009; Hawkins, 2007; Jang, 2006; Santoli et al., 2008; Vannest & Hagan-Burke, 2010). However, these designs do not explain the complex processes that occur in phenomenon, such as how teachers resolve challenges to effective co-teaching relationships.

The study presented here employed a systematic grounded theory method to explain a process with a theory that emerged from data collected in natural settings (Corbin & Strauss, 2008; Glaser & Strauss, 1967; Strauss, 1987; Strauss & Corbin, 1990, 1998). Using a quantitative design would not have uncovered thick, contextual

information from teachers about how they overcome challenges with co-teaching, as numbers cannot portray the complex interpersonal relationships involved in collaborative partnerships. Utilizing a systematic grounded theory research design allowed me to have rich conversations with teachers in both the focus groups and individual interviews. Additionally, a systematic grounded theory design provides an emerging research design in which phases of data collection inform a developing theory (Corbin & Strauss, 2008; Lincoln & Guba, 1985). Using this methodology, I was able to explain the process secondary school co-teachers in an Eastern Iowa urban school district go through to resolve problems inherent in collaboration.

Implications

This study provides several implications for practice as co-teachers work together to build effective co-teaching partnerships and, in so doing, also overcome challenges inherent in collaboration. These implications refer not only to co-teachers, but also administrators as they support co-teaching partnerships in their school districts or buildings. Additionally, teachers can support students in their peer interactions by modeling respectful collegial interactions in the classroom.

Teachers

As teachers look to begin a co-teaching partnership, it is helpful if they have some choice in whether to participate, what content area they would like to co-teach, and who their co-teaching partner will be. Teachers will be more willing to participate in co-teaching if it is a choice and administrators honor their choice. For special education teachers, in particular, they should be given the option of what content area they would like to co-teach. This provides them with the opportunity to choose a content area with

which they have more knowledge or experience. Additionally, teachers should have input in whom they would like to co-teach with in the classroom. Choosing a co-teaching partner allows teachers to consider who would be compatible interpersonally and if they believe they have similar philosophical perspectives.

Another implication for teachers includes how they use their individual expertise in the classroom to build an effective co-teaching partnership. Teachers should consider their strengths in the areas of content knowledge or learning knowledge to see how they can use these strengths in planning or instructing. While these areas of expertise should not limit one person to a certain role in the classroom, they are helpful to determine how to best learn from one another. Teachers can grow in their personal professional knowledge or understanding of instructional methods by being willing to learn from their partner's strengths.

The findings from this study also provide practical implications for teachers in regards to the development and maintenance of a co-teaching relationship. These implications center under six general themes including (a) co-planning, (b) instruction, (c) classroom management, (d) assessment and grading, (e) communication, and (d) conflict. I present specific implications for each of these themes in a bulleted list format.

Co-planning.

- Schedule regular (i.e., weekly) meeting times during co-planning blocks.
- Map out units together for intended learning outcomes.
- Use expertise of content or theoretical knowledge on student learning to help plan units and activities.
- Divide lessons into parts and note who will teach each section.

- Share responsibilities for preparing lesson materials.
- Frequently check in with each other for confirming the next day's plans.
- Reflect on previous lessons to determine effective instructional practices.
- Take time to learn the content in order to equally share responsibilities.

Instruction.

- Share parts of lessons so each teacher is an active instructional leader.
- Share instruction of general and special education students to prevent artificial divisions in the classroom.
- Use expertise during a lesson to decide when to be the instructional leader.
- Create flexible groupings to meet different student needs while also sharing instructional roles of various groups.
- Be flexible and consult with co-teaching partner to make adjustments during instruction.
- Ask co-teaching partner for input, either for content or procedural questions.
- Interject comments in a conversational tone to help extend or clarify presentation of material for students.
- Use humor with each other and with students.
- Reflect in the moment by observing co-teaching partner and learning from his/her instructional practices.

Classroom management.

- Discuss expectations and tolerance levels to reach common ground before beginning instruction with students.
- Present expectations from both teachers for a consistent message.

- Enforce expectations in consistent manner.
- Share responsibilities of enforcement to avoid a “good cop, bad cop” situation.
- Rotate around the room while the other person leads instruction to track student learning.
- Take over for co-teaching partner to give them a break if they are handling a challenging situation with a student.

Assessing and grading.

- Develop common expectations for proficiency levels.
- Establish common ground on accommodations for assessments.
- Use co-created detailed rubrics for more complex assignments.
- Grade together initially to ensure similar grading practices.
- Share grading responsibilities.
- Share online gradebook access.

Communication.

- Respect and accommodate different communication preferences.
- Be honest and open with each other.
- Be willing to have difficult conversations to learn from each other and grow.
- Take time to learn about each other beyond the classroom.

Conflict.

- Respect and accommodate different conflict styles.
- Be open and address issues that arise to move forward.
- Learn from each other in how to handle conflicts.
- Do not take criticism personally but grow from it.

- Be willing to change.
- Have some give and take.
- Use humor to lighten the situation.

Administrators

Implications for administrators include providing professional development that is not only initial, but also ongoing. Teachers need support in moving through the process of the co-teaching progression to achieve the Fulfillment Stage where all the pieces fit together in a seamless partnership. The content of professional development should not only be in effective models of co-teaching to consider best instructional practices and teachers' roles, but interpersonal dimensions should also be considered. Co-teachers need to be able to work well together and this may involve learning how to work professionally in a collaborative relationship. Teachers could benefit from training on communication styles or conflict styles. Additionally, when co-teaching partners are having conflicts, professional development could be provided that is tailored to the issues they are working through as a team.

Another implication for administrators is how they can provide support for co-teaching teams through setting realistic expectations for the composition of co-taught classes. Students need to be able to learn from one another in an environment that supports high expectations and high goals. This is no different for students with special needs who are being included within the co-taught classes. Thus, administrators should consider the number of students with special needs that are placed within co-taught classes to ensure there is still a mix of student ability where high expectations and goals will naturally occur.

Students

An implication for students includes the modeling teachers can demonstrate through day-to-day interactions with their colleague in the co-taught classroom. Students will observe how teachers work together and could begin to assimilate these models into their own interpersonal behaviors. Teachers can either purposefully model peer interaction or this modeling will naturally occur as teachers work together in front of students. Specific interpersonal behaviors teachers should model for students could include how to disagree politely, how to hold a group discussion, how to work together on a project, or verbally showing appreciation of the other person.

Trustworthiness

An important part of qualitative research is establishing trustworthiness to ensure the study's conclusions accurately reflected the data collected from participants in the field (Lincoln & Guba, 1985). While I used the four principles previously mentioned in Chapter Three, including (a) credibility, (b) dependability, (c) transferability, and (d) confirmability, in this section I specifically describe how I used peer review and member checks. These two methods were important to confirm the findings of this study were based on reality of participants' experiences, rather than any researcher bias.

Member Checks

The findings of this study were confirmed with the teachers through using member checks. At the end of each focus group and individual interview, I verbally confirmed a summary of the interview with teachers. I also sent the transcript of their focus group and individual interviews to the teachers for them to verify the information

was correct. I conducted a formal member check of the theory with teachers at the end of each individual interview by verbally sharing with them the theory at its current state.

Teachers confirmed the overall process and gave suggestions about details that would better fit their experience. I used their input to revise the theory so that it reflected all of the teachers' experiences. Teachers clarified the relationship between how a co-teaching partnership was started and the feelings they had towards starting that relationship were more on a continuum than two opposite feelings of hesitation or anticipation. Thus, I changed the model to include a feeling continuum rather than two separate boxes for anticipation and hesitation. Some teachers also suggested that the reflection was still an integral part of an effective co-teaching relationship and that it is not discarded after leaving the Symbiosis Spin. Therefore, I included reflection as one of the components of an effective co-teaching relationship. Additionally, teachers said the middle stage was a cycle rather than a linear process, which I emphasized by creating the Symbiosis Spin in a circle with forces that caused it to spin. Another point teachers shared that I included in the theory was how teachers believed once they reached the Fulfillment Stage they were able to overcome challenges more smoothly, without going through the turbulent process of the Symbiosis Spin. This is depicted by the Fulfillment Stage component of handling challenges smoothly and the fact that the arrow only goes from the Symbiosis Spin to the Fulfillment Stage, rather than recursively. Teachers believed that any challenges they encountered were not a reflection of their co-teaching relationship and their strong relationship allowed them to continue to teach students effectively in the classroom, regardless of extraneous circumstances that could be viewed as hindrances to learning.

Peer Review

I also established trustworthiness by sharing the visual model developed to explain the phenomenon in this study with my peer reviewers, including two dissertation committee members. Peer review was important for objectively checking the theory that I was developing to explain how co-teachers resolve challenges inherent in collaboration. The peer reviewers asked questions about the process reflected in the model to assist me in making the stages flow from one to the other. Also, the peer reviewers provided suggestions that improved the design of the model so it would better reflect the theory.

Limitations

This study was conducted with co-teaching teams who had the choice of whether or not to participate in this study. While I started with a list of eight co-teaching teams that met the criteria of the study, ultimately five teams consented to participate. This created a limitation for this study because it provided a small sample size of five co-teaching teams, or ten participants in total. It would have been helpful to generalize the findings if the study had included a larger sample size. Moreover, the teachers all came from one urban school district in Eastern Iowa, making it difficult to generalize to other school districts or co-teachers from different geographical settings. Thus, the findings of this study are limited to similar settings.

Another limitation seen in this study is the type of participants who were recruited to participate. Because the study examined how effective co-teaching teams overcame problems inherent in collaboration, it was necessary to delimit the participants to ones who met the criteria established for being effective co-teaching teams. Therefore, the

findings and generated theory can only be generalized to effective co-teaching teams, not those teams who are still having difficulty working through conflicts.

A third limitation relates to the length of the study. Although teachers were asked to share their experiences from the beginning of their co-teaching relationship, the data collection period of this study was over a three-month period, rather than an entire school year. Co-teaching partnerships can change over the course of a school year, due to students moving in or out of a school. This study did not address these types of changes.

Recommendations for Future Research

This study points to new directions for future research on co-teaching teams. Researchers should replicate this study with a larger sample size to determine if these findings can be generalized to other effective co-teaching teams. It would be helpful to analyze how cultural or ethnic differences between co-teaching teams play a part in their relationship. Additionally, using a larger sample size would provide researchers the opportunity to include a broader sample with other school districts or geographical areas, particularly rural or suburban districts. Including more participants would be helpful in determining if the hypothesized theory on Achieving Symbiosis fits a wider variety of participants.

Another aspect that research studies could address is a comparison of effective co-teaching teams with those that are not as effective. Researchers could use the theory developed in this study to see if non-effective teams experience a breach somewhere in the theory that explains why they are not moving through the process to achieve a fulfilled stage of their co-teaching relationship. The theory could also be tested to

determine if providing professional development in an area where teachers are struggling helps them move beyond the Symbiosis Spin to the Fulfillment Stage.

Compatibility is another area that future research could explore in more depth to better determine how gender, point in career, or one's family background influences how two people work together. Interpersonal dimensions could also be further studied by using instruments that have been created to explain one's communication style or conflict styles to determine how compatible co-teachers are in these areas. Additionally, once compatibility is achieved, a comparison could be done to determine how it affects co-teachers' progress to effective partnerships.

Because school districts are increasingly using co-teaching as an inclusion model, it is also important to consider the correlation between effective co-teaching practices and student achievement. Future research should look at co-teaching practices that meet the Fulfillment Stage of this model to determine if effective co-teaching relationships impact student achievement. Researchers could also consider effective co-teaching instructional models (i.e., station teaching versus one teach, one assist) to determine the effect they have on student achievement.

Conclusion

This study investigated how secondary school co-teachers in an Eastern Iowa urban school district overcome problems inherent in collaboration. Findings of this study reinforce previous research on co-teaching, including necessary components for effective co-teaching relationships such as professional development, common planning time, administrative support, and similar philosophies. The study contributed to the literature by generating a theory, grounded in data collected naturally in the field, to explain how

co-teachers achieve symbiosis through fitting all the pieces of their backgrounds, expertise, and interpersonal dimensions together to achieve a fulfilled relationship.

The theory generated from this study, Achieving Symbiosis, is significant to the fields of both general education and special education as teachers collaborate together. With inclusion of students with disabilities in general education classrooms being both a federal and a public expectation, teachers and administrators need to develop effective practices that meet the needs of students. This theory provides a needed model for how teachers can work through the process of achieving effective co-teaching relationships. Teachers and administrators can use this model to build new or improve existing co-teaching relationships through consideration of the components and strategies presented in this theory.

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APPENDICES

Appendix A: Institutional Review Board Approval

Approval 1217.122811

IRB, IRB

To: [Gerst, Sharon](#); [Spaulding, Lucinda S](#)

Cc: [IRB, IRB](#)

Wednesday, December 28, 2011 7:55 AM

Dear Sharon,

We are pleased to inform you that your above study has been approved by the Liberty IRB. This approval is extended to you for one year. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases are attached to your approval email.

Thank you for your cooperation with the IRB and we wish you well with your research project.

Sincerely,

Fernando Garzon, Psy.D.
IRB Chair
Liberty University

Appendix B: District Approval Form

The Co-Teaching Journey: A Systematic Grounded Theory Study Investigating How Secondary-School Teachers Resolve Challenges to Co-Teaching

Sharon Gerst
Liberty University
Department of Education

As part of my doctoral dissertation research, I am requesting permission to conduct a systematic grounded theory study of collaboration between general education and special education teachers. This letter explains the purpose of the research, the procedures I will follow, possible benefits or risks for participants, and confidentiality measures I will use to protect participants.

Background Information:

The purpose of this study is to determine teachers' perspectives and experiences in overcoming problems inherent in co-teaching relationships. The study seeks to understand the process general education and special education teachers go through to create and maintain an effective co-teaching partnership.

Procedures:

After Institutional Review Board approval, participants will be selected based on the district's secondary curriculum coach for special services recommendation for co-teaching partnerships that meet the following criteria:

1. Composed of a general education teacher and a special education teacher
2. Have been co-teaching for at least one year
3. Utilize effective co-teaching methods (not predominantly one teach, while one assists unless they exchange these roles during instruction)

Using the suggestions of effective co-teaching partnerships given by the district's secondary curriculum coach for special services, I will seek approval from the appropriate secondary school principals before seeking approval from the co-teachers. I will ask the district secondary curriculum coach for special services for assistance in emailing principals of the appropriate schools (see attached letter). Once I receive principal approval, I will email the participants to ask for their permission in participating in this study (see attached letter).

The data collection methods will include:

1. Focus group interviews with each co-teaching partnership: This focus group interview will involve questions about the co-teaching partnership from its initiation to the present. I will ask participants for permission to tape record the focus group in order to capture their words and ideas accurately. The interview

will take approximately one hour. A possible follow-up interview will be scheduled if I need further questions answered.

2. Questionnaires of interpersonal behavior theory: As part of the focus group interviews, I will ask participants to complete the Element B Interpersonal Behavior Theory. This questionnaire asks participants to rate their tendencies towards different interpersonal behaviors. After participants complete the questionnaire, I will help them score the answers and discuss the findings with them. I will ask their permission to tape record this section of the focus group as well.
3. Observations of two co-teaching periods per partnership: I will schedule the first observation with participants. I will conduct the second observation unannounced during a two-week window of time provided by the participants that is conducive to observation.
4. Individual interviews with each participant: The purpose of these interviews will be to clarify any questions that arose during the focus group or observations specific to each teacher's role and responsibilities in the co-teaching partnership. I will ask participants for permission to tape record the interview in order to capture their words and ideas accurately. The interview will take approximately one hour. A possible follow-up interview will be scheduled if I need more questions answered.

Risks and Benefits of being in the Study:

The study has minimal risks. However, there could be the possibility of minimal invasion to participants' privacy during the interviews and observations. Second, they may encounter information that could hinder their co-teaching partnership. No other types of risks or emotional side effects are anticipated.

The benefits to participation include learning about other co-teaching partnerships. Reports of the findings will be shared with participants and could be used to strengthen their professional knowledge on collaboration between general education and special education teachers.

Compensation:

As a small token of appreciation for the time participants grant me outside of their contract hours required by the school district, I will give the participants a gift card to a local teacher store. They will receive the gift card after they have completed all parts of the study: focus group interview, questionnaire, observations, and individual interview.

Confidentiality:

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a participant. First,

participants' confidentiality, rights, and welfare will be protected by the use of codes or pseudonyms chosen by participants to substitute for their actual names. The codes or pseudonyms will be used on all data records as well as written reports. Only the primary investigator will have access to the informed consent forms that include pseudonyms on the forms. Informed consent forms will be stored in a separate locked file drawer from other pieces of data to prevent linkage of participant names to pseudonyms.

Second, research reports will be stored securely. Only my dissertation committee members and I will have access to the records. I will protect the data in a locked storage cabinet with access restricted to the researcher and any digital media will be protected with password access. When data is shared with a peer for review of reliability of the study and with the dissertation committee, only codes and pseudonyms will be used. After the sound recordings are transcribed and the transcriptions are checked for accuracy, the sound recordings will be permanently deleted. All paper and digital data records (transcriptions, fieldnotes, memos) will be stored securely for three years from the completion of the study and then subsequently destroyed. Digital files will be permanently deleted and paper records will be shredded.

Voluntary Nature of the Study:

Participation in this study is voluntary. Participants' decision whether or not to participate will not affect their current or future relations with Liberty University. Participants will be free to decline answering any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is: Sharon Gerst. If you have questions, **you are encouraged** to contact me at (319)558-1042 or sgerst@cr.k12.ia.us. You may also contact the project investigator's faculty advisor, Dr. Lucinda Spaulding, at (434) 592-4307 or lsspaulding@liberty.edu

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact the Institutional Review Board, Dr. Fernando Garzon, Chair, 1971 University Blvd, Suite 2400, Lynchburg, VA 24502 or email at fgarzon@liberty.edu.

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read the above information. I have asked questions and have received answers. I grant permission for the investigator to conduct this research in our school district, once the Institutional Review Board approves this study.

Signature:_____ Date: _____

Signature of Investigator:_____ Date: _____

Appendix C: Principal Consent Email

Dear --,

I am contacting you in regards to a research study being conducted in our district by Sharon Gerst, a Title 1 teacher at Van Buren Elementary, as a part of her doctoral work at Liberty University. The school district and special services have approved this study being conducted in our district. She is exploring the process by which secondary school co-teachers overcome problems inherent in co-teaching relationships and is recruiting participants who are involved in effective co-teaching partnerships. I am requesting your permission for her to conduct this study in your school with the consent of the following co-teachers whom I have suggested as effective co-teaching partners:

The study will involve the following data collection procedures: (a) focus group interview with each co-teaching partnership, (b) an interpersonal behavior questionnaire for each participant, (c) two observations of the co-teachers instructing in their classroom with one announced and one unannounced during a two-week window of time provided by the participants, and (d) individual interviews with each participant.

She will ensure confidentiality of your school and teachers by using pseudonyms on all interview transcripts and written reports. The researcher will take care to nurture, rather than hinder, the co-teachers' relationships.

If you have any questions about the study, please feel free to contact Sharon Gerst at sgerst@cr.k12.ia.us or 319-558-1042.

Please let me know if you will permit this study being conducted in your school. After we receive your consent, Sharon Gerst will email the co-teachers for their consent to participate in this study.

Thanks for your timely consideration of this matter.

Sincerely,

Appendix D: Participant Recruitment Email

Dear --,

You are invited to participate in a research study of collaboration between general education and special education teachers. I am conducting this study as part of my doctoral work at Liberty University. The study will be investigating the process by which co-teachers overcome problems inherent in co-teaching relationships. You were selected as a possible participant because you have been suggested by our school district's secondary curriculum coach for special services, Rose Hays, as being involved in an effective co-teaching partnership. She believes you have experienced challenges in your co-teaching relationship with -- and have successfully overcome them. Your experience will provide valuable information to this study.

As part of this study you will be asked to participate in the following activities:

1. Focus-group interview with your co-teaching partner (approximately 1 hour)
2. Questionnaire about interpersonal behaviors as part of the focus-group interview (15 min.)
3. Observations of you and your co-teaching partner instructing in the classroom during a class period (1 scheduled and 1 unannounced during a 2-week window of your choosing)
4. Individual interview (approximately 1 hour)
5. Checking study conclusions for accuracy by email (approximately 20 min.)

For participating in this study and granting me time outside of your contract hours, I will give you a gift card to a local teacher store as a small token of appreciation. Additionally, I will share the findings of this study with you, as you might find it helpful for your co-teaching relationship.

If you have any questions about this study, please feel free to contact me. Please let me know if you would be willing to participate in this study.

Sincerely,
Sharon Gerst
Doctoral Student at Liberty University
Title 1 Teacher at Van Buren Elementary

Appendix E: Informed Consent Form

The Co-Teaching Journey: A Systematic Grounded Theory Study Investigating How Secondary-School Teachers Resolve Challenges to Co-Teaching

Sharon Gerst
Liberty University
Department of Education

You are invited to participate in a research study of collaboration between general education and special education teachers. You were selected as a possible participant because you have been suggested by your school district's secondary curriculum coach for special services as being involved in an effective co-teaching partnership. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Sharon Gerst, doctoral student in the Department of Education at Liberty University.

Background Information:

The purpose of this study is to determine teachers' perspectives and experiences in overcoming problems inherent in co-teaching relationships. The study seeks to understand the process general education and special education teachers go through to create and maintain an effective co-teaching partnership.

Procedures:

If you agree to be in this study, I would ask you to do the following things:

1. You will be asked to participate in a focus group interview that will include both you and your co-teaching colleague. This focus group interview will involve questions about your co-teaching partnership from its initiation to the present. I will ask your permission to tape record the focus group in order to capture your words and ideas accurately. The interview will take approximately one hour. A possible follow-up interview will be scheduled if the researcher needs further questions answered.
2. As part of the focus group interview, you will be asked to complete the Element B Interpersonal Behavior questionnaire. This questionnaire will ask you to rate your tendency towards different interpersonal behaviors. After you complete the questionnaire, your responses will be scored and you will be asked to discuss the findings with the researcher. I will ask your permission to tape record this part of the focus group interview as well. This part of the focus group interview will take approximately 15 minutes.

3. You will be observed for two class periods during which you are co-teaching. I will schedule the first observation during a time of your choosing. The second observation, I will conduct unannounced during a two-week window of time you provide that is conducive to an observation.
4. You will be asked to participate in an individual interview that will be conducted after the observations. The purpose of this interview will be to clarify any questions that arose during the focus group or observations that are specific to your role and responsibilities in the co-teaching partnership. I will ask your permission to tape record the interview in order to capture your words and ideas accurately. The interview will take approximately one hour. A possible follow-up interview will be scheduled if I need more questions answered.
5. You will be asked to check the conclusions of this study to determine if it accurately portrays your experiences. I will send a summary of the research results to you over email and will ask you to provide me feedback or corrections as needed.

Risks and Benefits of being in the Study:

The study has minimal risks. However, there could be the possibility of minimal invasion of your privacy during the interviews and observations. Second, you may encounter information that could hinder your co-teaching partnership. No other types of risks or emotional side effects are anticipated.

The benefits to participation include learning about other co-teaching partnerships. Reports of the findings will be shared with participants and could be used to strengthen your professional knowledge on collaboration between general education and special education teachers.

Compensation:

As a small token of appreciation for the time you grant me outside of your contract hours required by the school district, I will give you a gift card to a local teacher store. You will receive the gift card after you have completed all parts of the study: focus group interview, questionnaire, observations, and individual interview.

Confidentiality:

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a participant. First, your confidentiality, rights, and welfare will be protected by the use of codes or pseudonyms chosen by you to substitute for your actual name. The codes or pseudonyms will be used on all data records as well as written reports. Only I will have access to the informed consent forms that include pseudonyms on the forms. I will store informed consent forms in a separate locked file drawer from other pieces of data to prevent linkage of your name to your pseudonym.

Second, research reports will be stored securely. Only my dissertation committee members and I will have access to the records. I will protect the data in a locked storage cabinet with access restricted to the researcher and any digital media will be protected with password access. When data is shared with a peer for review of reliability of the study and with the dissertation committee, only codes and pseudonyms will be used. After the sound recordings are transcribed and the transcriptions are checked for accuracy, the sound recordings will be permanently deleted. All paper and digital data records (transcriptions, fieldnotes, memos) will be stored securely for three years from the completion of the study and then subsequently destroyed. Digital files will be permanently deleted and paper records will be shredded.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is: Sharon Gerst. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact me at (319)400-9193 or sgerst@liberty.edu. You may also contact the project investigator's faculty advisor, Dr. Lucinda Spaulding, at (434) 592-4307 or lsspaulding@liberty.edu

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact the Institutional Review Board, Dr. Fernando Garzon, Chair, 1971 University Blvd, Suite 2400, Lynchburg, VA 24502 or email at fgarzon@liberty.edu.

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Signature: _____ Date: _____

Signature of Investigator: _____ Date: _____

Appendix F: Semi-Structured Interview Guide for Focus Groups

The Co-Teaching Journey: How Secondary-School Teachers Resolve Challenges to Co-Teaching

INTERVIEW QUESTIONS

A. Participants' Initial Experiences and Views of Co-Teaching

A1. To begin our focus group, I would like you to tell me how you started co-teaching together.

A2. What were your initial thoughts about co-teaching and how might have these affected your view of beginning a co-teaching partnership?

A3. What were the initial goals or ideal you held for co-teaching?

A4. What do you believe the purpose of co-teaching should be?

B. Co-teaching Experiences

B1. What does a typical co-teaching lesson look like in your class?

B2. What does planning look like for your co-taught classes?

B3. Tell me about how you address different student needs in your co-taught classroom?

B4. Tell me about administrative support in your building for co-teaching.

C. Effects of Collaboration

C1. Tell me about any challenges you have experienced as you have co-taught.

C2. How have these challenges affected your co-teaching relationship?

C3. How have these challenges affected your instruction in the classroom?

C4. How have you addressed these challenges?

C5. Tell me about any positive aspects you have observed or experienced from co-teaching.

D. Closing Questions

D1. What advice would you give others who would be starting to co-teach?

D2. Is there anything else you would like to share about your co-teaching experiences and relationship that we have not talked about so far?

Appendix G: Observation Protocol

Observer: Sharon Gerst

Participants Observed:

Setting of Observation:

Date of Observation:

Start Time:

End Time:

Length of Observation:

Describe the physical setting of the classroom being observed (draw picture as appropriate):

Describe the role of the general education teacher in the observed lesson:

Describe the role of the special education teacher in the observed lesson:

Describe the interactions of the teachers:

Describe the interactions of the general education teacher with students:

Describe the interactions of the special education teacher with students:

Appendix H: Semi-Structured Interview Guide for Individual Interviews

The Co-Teaching Journey: How Secondary-School Teachers Resolve Challenges to Co-Teaching

INTERVIEW QUESTIONS

E. Specific individual data

A1. How many years have you been teaching overall? How many years have you been co-teaching?

A2. What are your teaching certifications, including those you earned in undergraduate and graduate levels?

A3. What have been your professional development experiences for co-teaching? How adequate do you feel these experiences have been?

A4. What is the composition of the classes you co-teach this year? Number of students, number of students with IEPs, gender, etc.

F. Compatibility

B1. How are you similar to your co-teaching partner?

B2. How do you complement, or balance out, your co-teaching partner?

B3. Some teams said they are compatible because they are similar, while other teams said they are compatible because they balance each other out. Describe if your co-teaching relationship is mostly similar or mostly complementary.

B4. What aspects do you think co-teaching partners should be similar in? What aspects do you think are helpful if they balance each other out?

G. Philosophical Differences

C1. Describe your view of inclusion and how this is similar or different from your co-teaching partner's view. If there is a difference, how have you addressed the differences you both hold for inclusion?

C2. Special education and general education teachers are often prepared for their careers differently. Do you feel you bring a different perspective towards teaching and learning to the classroom than your co-teaching partner? If there is a difference, how have you addressed these different perspectives?

H. Interpersonal Differences

D1. Describe your communication style preference with students or other adults and if this differs from your co-teaching partner (expressive, emotional, concise, reflective). If there is a difference, how have you handled these differences?

D2. Describe how you handle conflict either with students or with other adults in relation to these styles:

1. Integration: open and direct
2. Dominating: forceful
3. Obliging: please others or make peace
4. Avoiding: withdraw or deny
5. Compromising: concession

If your conflict style differs from your co-teaching partner, how have you handled these differences?

D3. How would you describe control in regards to your co-teaching relationship? Is there one person who is more dominant in decisions and if so, how does this affect your relationship?

I. Closing Questions

E1. Is there anything else you would like to share about your co-teaching experiences and relationship that we have not talked about so far?

Appendix I: Sample Transcript

Individual Interview

Vicki

3-5-12

2:15-2:45 pm

PI: So the first part is just the information I need when I describe participants in my study. So, how many years have you been teaching overall?

Vicki: This is my second profession, so I've been teaching for six years and three of those have been co-teaching.

PI: And then what are your teaching certifications?

Vicki: I have an MAT in English and then I have a reading endorsement.

PI: Okay. So, you wouldn't have like any special ed endorsements or anything like that?

Vicki: Nope.

PI: And when you say MAT is that a Masters?

Vicki: Masters of Art in Teaching.

PI: And then what has been your professional development experience for co-teaching and this could include anything you had in college classes or at the district level.

Vicki: Yeah, mostly district level, PLCs and department level type of meetings and you know in-service type things.

PI: And Angie had mentioned something about you had some initial professional development class for the district?

Vicki: Oh, right.

PI: But that was all really.

Vicki: Yes, that was all.

PI: So do you feel like those experiences have been adequate for your co-teaching relationship?

Vicki: I think for us, I think so because we are willing to learn from each other and Angie has quite bit of experience, so you know I can learn from that.

PI: And so then the next question Angie answered for me, so you don't have to.

Vicki: We checked that with each other anyway.

PI: Yeah. I figured you would. The only question I do have is when I have been talking to a few teams since I talked to Angie on Thursday, some of them have expressed that they've difficulty with their classes staying with a recommended amount of number of IEP students. And yours didn't seem particularly, I don't, they thought the recommended amount was around 30%, which is about what yours look like it is. Have you had difficulty with them trying to put more kids in there that have IEPS or has that not been a problem?

Vicki: No, they hasn't been a problem.

PI: Okay, alright. Then the next section goes into compatibility. So, how are you similar to your co-teaching partner?

Vicki: We are very similar. Pretty similar in teaching styles and just general you know outlook on our philosophy of collaboration as well as inclusion. So, we're a little frighteningly similar.

PI: So, how do you complement or balance out your co-teaching partner?

Vicki: Well, I am probably the more stern one, so it's just, it's not teaching style or you know content in anyway. Well, maybe it is teaching style also, it's more discipline, okay, so I'm, I have observed that I often start a class in a more seriousness and matter of fact, let's just get this done way. You know, I do smile. But she is more inviting, you know she's very and then if something happens she, but I think that we both sort of gone the other way too, so we have affected each other that way and so more. . .

PI: And then the next question is that some teams said they are compatible because they are very similar and other teams said they balance each other out, so do you think you are mostly similar or complementary?

Vicki: I think we are mostly similar.

PI: Yeah. Okay.

Vicki: We agree with most things and you know we check with each other. We sort of know how each other feels about different issues or different kids or somebody, you know, bumping somebody up or keeping them as is based on effort and all that stuff, yeah.

PI: And one thing I did talk to Angie about that is not on here was as far as some teams thought they were mostly similar because they were at the same point in their career or even gender affected that. So, I don't know how you think those two aspects affect your relationship, but.

Vicki: Well, maybe gender, yeah. I haven't thought about that, but probably, right. But our point in our professional career, no because I am very much of a newcomer and but I think it is the place where we are in our lives, so I am older than Angie, but we both raised teenage children and so we've both been there and we've been out in the world and we've gone to college and I am Philippino and she is married to a Philippino, or half Philippino. I don't know, I don't think that's it, but it's where we are in our lives, our life experiences.

PI: So, you don't think that's necessarily the reason why you are similar, but it could help probably.

Vicki: No, I think our personalities are very similar, I think that's what it is.

PI: That's the main reason, okay. And then just looking overall at co-teaching partners, what aspects do you think they should be similar in?

Vicki: Oh, I think we should have the same philosophy in terms of differentiation, inclusion, and even grading, curriculum definitely, we should be. You know, we should know the curriculum or know our goals and student expectations and I think we're pretty good at that.

PI: And then what aspects do you think are helpful to balance each other out?

Vicki: To balance each other out, I think maybe you know if people, if co-teachers do have varied teaching styles, you know I think as long as they are flexible and they take that into account and they have an equal relationship in the classroom I think that could work out, I think that would be beneficial for kids to see different teaching styles and then they can learn with different types of teaching and I think different teaching styles also can address different learning styles, right, so I think you, so the philosophy on

inclusion and differentiation, I think it's best, you know kids are best served if when they are similar and they agree, yeah.

PI: And what do you think about classroom management, that's something, I mean I know you said you are a little different, but do you think you need to have the same expectations or you think?

Vicki: I think so. I think you have to lay that out and the first year it's probably going to be the rocky year where okay I'm going to let that go or I told him yes and then he talked to you and you told him no. They still do that, so we have learned to say, did you talk to Mrs. Angie, you know whatever she says, but yeah, I think you have to support each other, but you also have to be prepared for the challenges, right in the classroom, but I think in philosophy, in terms of philosophy and just dealing with management issues, I think it's more beneficial if you have a similar philosophy.

PI: Alright, the next one you have answered some of it, so if you want to add to it that's fine, but your view of inclusion, think about that and then if it is similar or different from your co-teaching partner's view.

Vicki: I think we have the same, we have a similar philosophy of that, we take all comers really, as long as they're willing to try and you know definitely their classmates who do not have IEPs also benefit from having those others with them. And in terms of like a peer or mentor relationship, they kind of switch, sometimes the people with IEPs are better at something and I think the kids can benefit from each other and I think diversity in any way in a classroom is only beneficial.

PI: Okay, so you haven't experienced a difference that's created a challenge?

Vicki: No.

PI: Okay, alright. And then the next one is that philosophy. So, oftentimes special education and general education teachers are prepared for their careers differently, do you feel you have a different perspective towards teaching and learning?

Vicki: Well, so mine is probably more text based, more literature based, while hers is more special ed and kind of support based, right. Though she is, she is an expert in language arts herself and she was our language arts facilitator in the district for a long time, but I think I've probably taught more books, you know so she's, Angie, is not just great with the content that she has taught, but she also has the benefit of you know really taking into account learning styles and accommodations and all those factors, so I think perspective wise, I think.

PI: And then have you addressed those different perspectives?

Vicki: We address them all the time, you know we always look to each other for our different expertise, so.

PI: Now we will go into the interpersonal differences, so the first one is talking about communication style preference and this could be with how you communicate with students or with other adults and if that differs from Angie. So, some examples I had there were if you are expressive, emotional, more concise or reflective.

Vicki: I would go for myself, I am more concise and reflective. I feel that she is more expressive and I think she has become more concise working with me, yeah. So, I don't know if that is a good thing, you know because she is so expressive, she wants to make sure everybody understands things and when she communicates with the students and parents, you know. She, I am more concise I feel.

PI: So, has that ever caused anything where you have had to work through something together because you are different, or not?

Vicki: I don't think it has caused a problem, but it has taught me to make sure I am not too concise. But that you know I convey exactly what it is I want to convey but also give an explanation or you know give an adequate explanation or satisfactory one.

PI: And then the next part is conflict styles. So, how you would handle it with students and then also with other adults. And I'll just describe those five to you. So, the first one, these are from the literature is where I got them from, the research literature, but it's again more of that concise thing where you are just open about it and very direct to address it.

Vicki: So, it's our own conflict style.

PI: Yes, how you would think about it, and then forceful or manipulative kind of or obliging, more of a peacemaker, or you just avoid it, or you try to compromise.

Vicki: I think I am number one [integrative], open and direct. And then I feel that Angie is either obliging or compromising, probably because of her special ed again experience, right, but we haven't really, that hasn't been a problem that has caused any issues. I think when we handle students, we handle them you know whoever gets there first or whoever is helping another student, sort of get to know how we're going to react to certain things and sometimes certain students go to her, you know and others go to me, depending on how they think we are going to react, yeah. If they are in trouble, they go to her.

PI: And then the next one is control and that just came mostly from when we did that questionnaire and control came up. So, how would you describe control in regards to your co-teaching relationship?

Vicki: We are so equal. We just, and I think you observed that in our classroom.

PI: Yes, I did.

Vicki: Because even when we say okay I've got this, you take this part of the, or I'll do the opening and you give them the lesson and then I'll give them this. We are always in there, so interactive in there, so I think we're very equal. Did she say the same thing?

PI: Yes, she did.

Vicki: Okay.

PI: The only thing that I did have to just clarify for you was when I was looking back at our transcript on the questionnaire discussion, you had made some comment about how you felt like you control her more. I don't know if you feel like that really was reflective or if it was just kind of the end of our discussion and...

Vicki: Sometimes I do, because I just have always, especially with new texts or new material, I've done more of them, so I have, but she has also. I have also noticed that increasingly, especially when we do texts that only she has done, so we have no problem taking the control when we're the expert and then supporting each other and then you know in subsequent years when we both know the material we are pretty co-equal.

PI: So, it is more of a joint decision, you feel like, rather than someone dominating.

Vicki: And it's a manner of efficiency really, right. Okay, I know this and we are going to do this. Let's start with this and if you want to jump in with a different activity or like change this, it's more like that. It's not a control thing, more a matter of time, I think, efficiency.

PI: That makes sense. And then the one thing I have to go over before we do the closing, is the theory that I am developing for my study. And that's my research model is that I

will come up with a theory that explains the process co-teachers go through to become effective in their relationship. So, I am just going to go through and briefly summarize it and what I want from you is to tell me if something doesn't fit with your experience, okay. So, when co-teachers start it's more the initiation stage where either some teachers requested to co-teach or you were asked to co-teach. And you might have some feelings of hesitancy if you're not sure how it is going to work out or for some teachers it was more an anticipation they were looking forward to it. Then, once you get started, you kind of move into this, I'm calling it like a spin or a cycle, where you go between testing the waters, seamless, and reflection. And testing the waters talks about just learning about each other's styles, preferences, expectations, philosophies, all those pieces. And then seamless you become more flexible in your roles in the classroom, you build off of each other's comments, that kind of thing. And then reflection is where you look at how can we improve our relationship, how can we improve our instruction, and how do we benefit students. And some of the things that kind of create that spin, it looked like to me were how compatible teachers were as far as how similar they are or if they used their expertise to balance each other out, also there were several dimensions that really had to be in place for that relationship such as respect, trust, a care for that person as a person not just as my teaching partner. And then there were strategies teams used such as like open communication, being willing to have some give and take, being willing to change. So, that's kind of that whole middle process and then once you have gone through that several times, or several months or a year, or however long it takes, you move into more of what I am calling a fulfillment stage, where you are really comfortable with each other, you feel like almost you can read their mind, you know what they are thinking, and if challenges do come up, because they will with students or whatever, you can really handle them smoothly and not feel as if someone's above the other, you are more co-equals. So, is there anything that doesn't go?

Vicki: That is very accurate. You really described us. And you know and not, you don't really leave all the stages. So, we're past the initial stage, but you know we are in the fulfillment part because we sometimes we're like and sort of finish each other's sentences almost. It's almost a little scary, but yeah and you know actually the other day I did something and it was hilarious but the kids didn't and we were sitting in front laughing at each other, while they were doing something on their own. And I thought this is probably not good, so I told them sorry, something happened and it is really funny, but you don't need to know about it. And they were like okay, that's alright, but so you know I feel like, we are really lucky, you know. I am really blessed that they put us together, they must have known that we would click. So, but I think we are in the fulfillment stage where you know we know what to expect and we know how to handle things and it doesn't matter even if the kids choose the wrong person to deal with something, we are going to be fine, they are going to be fine because we sort of, you know, are very flexible and we know the kids, but also pretty reflective still, too. Because we are always tweaking our material and you know tweaking the choices we give them, so I think we are still.

PI: So, you don't leave that behind, that is still part of that fulfillment stage?

Vicki: Yeah, we never will leave that.

PI: Okay.

Vicki: That is pretty accurate.

PI: Okay, good.

Vicki: Well done. [laughter]

PI: Is there anything else you want to share that you think we haven't talked about that you think would be important to know?

Vicki: No, but this was good because you know it really kind of reinforced the fact that I like to co-teach, I mean I told, they are trying to see who wants to teach what next year and get a list of teachers and who would like to co-teach with next year. And I said if someone wants to try it, they are welcome to, but I am happen to co-teach with Angie for whatever you know for however long they need us, so. I am lucky.

PI: That's what she said too, she said they were thinking about changing and it makes her feel a little nervous.

Vicki: Yeah, and how would that be, so?

Appendix J: Open Coding Example

Coding from Focus Group Interview with Thelma and Louise Codes are marked in bold within the transcript.

Thelma: And I think the discipline is a big one. (**Compatibility: Similar – Classroom Management**) Not that I say that I'm a micro-manager. But, it's really upsetting to me when kids are off task, or not paying attention, or you know, doodling or on their phone or, whatever. And the same, you know my first co-teacher just really was so much more lax than I was. And so he would never jump in and do any of the management sort of stuff, (**Parity of Roles: Share Classroom Management**) because it wasn't bothering him. And I don't know if he just didn't understand that it was bothering me or what the situation with that was. But, I never, I mean there was times that first year that I co-taught where I would go home and I would cry. And I would cry a lot and I didn't know what to do and I didn't know how to approach it, and the gentleman was significantly older than I was (**Compatibility: Life Stage/Point in Career**), and so every time I tried to talk to him about stuff it was like oh, you're only in your first year of teaching, or second year. You're only in your second year of teaching, like I've been doing this for like twenty whatever years, like just, you just got to relax and calm down (**Respect: Opinions or Feelings**). Like, at no point has Louise ever told me to relax, at no point has she ever told me to calm down, or questioned my experience in any sort of way (**Respect: Professionalism**).

Louise: Yeah, we were at the same point in our careers when we started co-teaching together, so I'm sure that had an impact as well (**Compatible: Point in Career**). But it does really make a difference how you both see things and we're always on the same page (**Compatible: "On the Same Page"**). So, I don't and I think too both of us having bad experiences before, you know we were a little more, I wouldn't say hesitant about it, but we were a little more willing to kind of like well is that okay with you? Yeah, that's fine with me. (**Respect: Opinions or Feelings; Testing the Waters**) Whereas, I mean I think we would have gotten along fine had we been each other's first co-teaching partners, but umm, I don't think it hurt to have a bad experience behind both of us either. (**Hesitation**) And just be like, oh thank goodness someone sees things the way I do. (**Compatible: "On the Same Page"**) We can do this, this is not going to be a problem. So, I think that matters too.

Appendix K: Axial Coding List

Category	Subcategories	Dimensions
Compatibility	Similarity	Background
		"Right Fit"
		Personalities
		Classroom management
		Point in Career/Age
		Gender
		"On the Same Page"
		Philosophy
		Teaching Style
	"Balance each other out"	Personalities
		Gender
		Point in Career/Age
		Teaching Style
		Philosophy
		Classroom management
Parity of Roles	Carrying Equal Weight	Content Knowledge
		Share Classroom Management
		Planning/Grading
	Flexibility of Roles	Switch Roles
		Share Roles
	Students' Perceptions	Avoid Separation of Gen Ed and Spec Ed
		Mentorship
		United Front
	Equals	
	Control	
Respect	Professional	
	Opinions or Feelings	
	Model Peer Collaboration	

	Teaching Style	
Trust	Professionalism	
	Competence	
	Grading	
	Content Knowledge	
	Reliable	
Care Beyond Classroom	"Married at Work"	
	Outside of Work	
	Care about partner as a person	
	Watch out for each other	
	Value relationship	
Strategies	Open-Minded	Listen
		Willing to Change
		Share Space
		"Give and Take"
	Open Communication	Have difficult conversations
		Find Common Ground
		Not personal
		Reflection
		Honesty
	Humor	Joke with Students
		Not Demeaning
		Personality Differences
		Model Peer Collaboration
	Selfless	Not personal
		Considerate
	Ask to Help	Carry equal weight
		Grading
		Organization
		Incidental Decisions
Initiation	Self-initiated	
	Request	
	Expectation	
	Not forced	
	Choose partner wisely	
Hesitancy	Carrying Equal Weight	

	Sharing Space	
	Meshing Styles	
	Not Experienced	
Anticipation		
Testing Waters	Learn Content	
	Formal Planning	
	Styles	
	Temporary	
	Uncomfortable	
	Recursive	
Seamless	Switch Roles	
	Build off of each other	
	Informal planning	
	Efficient	
	Takes time to achieve	
Reflection	"Continuous Improvement"	
	Relationship	
Fulfillment	Value Relationship	
	Handle Challenges Smoothly	
	Comfortable with each other	
	Married at Work	
	Feel Like an Equal	
	Reflection	
Views of Inclusion	Integration	Spec Ed Teachers
		Spec Ed Students
		Support
		"Our Kids"
		Similarities
	Access	"Not Watered Down"
		Curriculum and Materials
		Earn Credit
		Student Needs
		Transition
	Differentiation	Meet all levels
		Presentation
		Groupings

		Learning Styles
		Assessment
		Pacing
		Enrichment
	"Learning Community"	Peer support
		Leadership development
		Social aspects
Philosophical Perspectives	Differences	
	Goals	
	Accommodations	All students
		Types
	United Front	Same message
		Classroom management
		Common Ground
		Mentorship
	Instructional Styles	Format
		Engagement
	Use of Expertise	Content Knowledge
		Special Ed Knowledge
		Peer development
Interpersonal	Point in Career/Age	
	Gender	
	Communication Style	
	Conflict Style	
	Personality	
	Model Peer Interactions	
External Forces	Professional Development	
	Planning Time	Necessary
		Formal and Informal
		Co and Individual
	Administrative Support	Value It
		Passive
		Pair Appropriately
		Mediator
		Provide Choice

		Unrealistic Expectations
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Appendix L: Sample Theoretical Memo

2/2/12

Theoretical Memo from 1st three focus group interviews

Code: Parity of roles

Parity of roles is discussed in the literature as necessary for effective co-teaching relationships. This is reflected in all three of the first interviews as teachers discuss their roles in the classroom, how they plan for instruction, and how they develop relationships with students. Parity of roles includes both people being active and their knowledge being respected.

In the classroom, it was mentioned by Cindy and Louise in their co-teaching relationships, they wanted to have an active instructional role in the classroom. Louise mentioned strongly that she was not there for just classroom management while Cindy stated no teacher should be “a glorified babysitter.” This definitely correlates with the literature that states both teachers feel fulfilled and respected when they are involved in the instruction in the classroom. This was also mentioned by Thelma and Brent on the general education teacher perspective that they did not want special education co-teachers who would just sit in their classroom and be passive observers. Rather, they wanted the person to be actively involved in instruction and assisting students with their learning.

Parity of roles was also discussed in the planning aspect of the relationship. Thelma and Louise share planning duties as well as Angie and Vicki. They accomplish this by dividing up responsibilities for lessons, units, or different grading assignments. They discussed how it was important to trust the other person in the planning of these units or lessons, although they will discuss them together for actual instruction of the lessons occurs. They believe both people in a relationship have good ideas that can be utilized for making the content accessible to students and improve student performance in meeting expectations. Cindy and Brent also talked about both people sharing ideas for instruction and benefiting from this peer development.

Parity of roles was also discussed in the relationship building the teachers do with students. Thelma and Louise discussed having students more than one year in a row in their classes and becoming mentors for their students. They mentioned that both teachers were involved in conferencing with students about assignments, grades, and graduation requirements. They also both talk with parents in order to present more than one person’s view as well as present a united perspective for parents’ concerns about student behavior or performance. Angie and Vicki also mentioned sharing the workload of conferencing with students and parents about assignment completion and grades. Angie mentioned they take turns and that it is not always one person’s job because of a student being general ed or special ed, “we take turns with that too. It’s not just Vicki’s responsibility or mine, we just take turns. It’s just whoever is available at the moment to do that

administrative task. I think it's nice, because I don't think other teachers would see it as, you know, that's just your class..."

Appendix M: Audit Trail Summary

Date & Time	Event	Participants
1/18/12 3:30-4:00 pm	Pilot Focus Group	Pilot Group
1/24/12 3:30-5:00 pm	Focus Group and Questionnaire	Thelma and Louise
1/26/12 3:40-5:00 pm	Focus Group and Questionnaire	Vicki and Angie
1/30/12 3:30-4:30 pm	Focus Group and Questionnaire	Cindy and Brent
2/3/12 3:30-4:30 pm	Focus Group and Questionnaire	Tyler and Gordy
2/9/12 8:00-8:50 am	Observation	Cindy and Brent
2/9/12 9:44-10:41 am	Observation	Tyler and Gordy
2/9/12 10:46-11:38 am	Observation	Thelma and Louise
2/9/12 12:50-1:45 pm	Observation	Angie and Vicki
2/14/12 12:50-1:45 pm	Observation	Angie and Vicki
2/20/12 8:00-8:50 am	Observation	Cindy and Brent
2/20/12 9:44-10:41 am	Observation	Tyler and Gordy
2/20/12 10:46-11:38 am	Observation	Thelma and Louise
2/27/12 3:30-4:15 pm	Pilot Individual Interview	Pilot Special Ed. Teacher
2/28/12 3:30-4:00 pm	Pilot Individual Interview	Pilot General Ed. Teacher
3/1/12 7:00-7:20 am	Individual Interview	Angie
3/1/12 3:30-4:15 pm	Individual Interview	Tyler
3/2/12 1:30-2:10 pm	Focus Group and Questionnaire	Alex and Bianca
3/6/12 7:00-7:30 am	Individual Interview	Thelma
3/6/12 3:30-4:15 pm	Individual Interview	Gordy
3/7/12 7:00-7:30 am	Individual Interview	Cindy
3/8/12 7:00-7:40 am	Individual Interview	Louise
3/8/12 2:07-3:00 pm	Observation	Alex and Bianca
3/8/12 3:00-3:35 pm	Individual Interview	Bianca
3/12/12 3:30-3:55 pm	Individual Interview	Brent
3/15/12 10:46-11:40 am	Observation	Thelma and Louise
3/15/12 2:07-3:00 pm	Observation	Alex and Bianca
3/15/12 3:00-3:30 pm	Individual Interview	Alex

Appendix N: Example of Completed Questionnaire Protocol

Observer: Sharon Gerst

Participants Observed: Cindy and Brent

Setting of Observation: Brent's classroom

Date of Observation: 2/20/12

Start Time: 7:50

End Time: 8:50

Length of Observation: 1 hour

Describe the physical setting of the classroom being observed (draw picture as appropriate):

Same arrangement as first observation: in rows facing the front of the classroom

Describe the role of the general education teacher in the observed lesson:

Getting materials prepared for the day

Greeting students in the hall

Opening question with class – introduces it, writes notes on the smartboard as students share

Leads transition to next activity (stopping to think), discusses stopping to think activity with students as Cindy reads it

Leads analysis activity

Leads discussion of reflection writing for analysis work

Leads critter breed activity

Describe the role of the special education teacher in the observed lesson:

Greeting students in the hall

Doing attendance as students finish coming in

Clarifies the vocabulary of the opening question as students begin writing (fraternal and identical twins)

Walks around the room and monitors students' work, also calls on students to continue to answer question as Brent writes notes on the board

Switches smartboard display and reads stopping to think activity for students

Introduces and reads stopping to think activities, discusses stopping to think activity with students

Writes analysis activity notes on smartboard, builds off of Brent's comments

Leads reflection writing activity for analysis work

Builds off of Brent's directions and assists students during Critters Breed activity

While Brent discusses it, she comes up and draws picture cues for students.

When bell rings, she closes class by reminding students not to lose them.

Describe the interactions of the teachers:

Cindy apologizes to Brent that she might have given away the answer with her clarification of the vocabulary. Brent said it is okay, because they will go more deeply into the concept.

During opening question and stopping to think question – build off of each other's comments

When Brent wants to interject into Cindy reading the stopping to think question, she tells him to go ahead.

Cindy interjects during Brent's directions of Analysis activity

When Cindy encourages students that they would be able to answer quiz about sexual vs. asexual reproduction, Brent asks her how she knew he had decided to give a formative assessment on it the next day.

When Brent uses a different term during Analysis activity (regeneration), she asks if he wants her to write that word on the board.

Cindy jokes with Brent when he told some students how cloning would not work in some instances – she called him “a party pooper” and said he spoiled what all they wanted to do with cloning.

Brent acknowledges Cindy's picture cues

Briefly discuss what they will do the next day to continue work on reproduction.

Describe the interactions of the general education teacher with students:

Monitors students' work during opening question write time

Walks around and helps students during stopping to think time

Describe the interactions of the special education teacher with students:

Monitors students' work during opening question write time

Collects paper with questions for a student and assists her in getting started

Assists various students as they work on their stopping to think activity

Notifies a student has lost her paper and collects one for her

When a student finishes the reflection work early, she tells him it would be a 1, not a 2 or 3 and to add more detail

Assists students as they are working on Critters Breed activity

Sequence of the lesson:

Opening question – Brent opens, Cindy clarifies, both walk around to check student work

Sharing of opening question – Brent starts and writes notes on smartboard, Cindy calls on students to share as Brent writes on the board, both build off of student comments

Stopping to think activity on genetics and reproduction of traits: Brent introduces, Cindy reads it aloud, both discuss and ask students questions as they are reading it, then students write their answers to the question while both teachers walk around to assist as needed

Analysis activity – Brent introduces and Cindy builds off of it, Brent leads discussion while Cindy writes notes on the smartboard, Cindy leads reflection writing while Brent helps lead discussion of reflection writing

Critters Breed activity – Brent introduces, both pass out papers to the class, Brent gives directions and Cindy builds off of directions

Other observations:

Paraprofessionals help some students in the room. They also contribute to opening question discussion.

Researcher comments:

Seamless: The concept of building off of each other's comments during the course of the lesson was very seamless. This team teaching was a natural flow of conversation between the teachers and the students. The students were engaged in the conversation, partly because the concept being discussed of types of twins was interesting but also it appeared the natural flow of conversation was engaging for students as well.

Parity of Roles: Both are leading parts of the lesson today. They are clearly both responsible for instruction and monitoring student work. They take turns leading discussion as well as walking around monitoring student work. They both make decisions as far as pacing of the class and when to move on to the next question or the next part of the lesson.

Respect: During different points of the lesson today, both interjected or interrupted the other to clarify directions or content for students. It appeared that they respected each other's contributions and clarification, rather than being annoyed by the interruption. Cindy also points out something Brent is doing to work on reproduction in his classroom that is not part of the science labs, but a personal project. As she points this out, she is validating his interest and expertise in science for students – respecting his content knowledge and professionalism.

Humor: Cindy joked with Brent today when he clarified cloning for some students and told them how it would not work for some ideas they thought of. This use of humor showed how they enjoyed working together and to handle disagreement or criticism appropriately for students.

Use of Expertise: As I observed their interjections to each other's directions and comments this morning, I noticed that Brent's interjections were more content based while Cindy's interjections were more directions based or scaffolding off of previous lessons. The interjections were seamless and flowed naturally into the rest of the directions/discussion. Their use of expertise was obvious – Brent had more content knowledge and Cindy had more of the student learning in her background. While both teachers could contribute to both aspects, they used their individual expertise to make the lesson more effective for students.