Finding Their Voice: Co-Teaching, Communication, and Collaboration

by

Jennifer L. Hiller

A dissertation submitted in partial fulfillment
of the requirement for the degree of
Doctor of Education
(Educational Leadership)
at the University of Michigan-Dearborn
2019

Doctoral Committee:

       Professor Bonnie M. Beyer, Chair
       Associate Professor Emerita Martha A. Adler
       Professor Kim Killu

Dedication

To my husband, Michael. We have grown together through this process. What started as a challenge turned into an ever-changing career path that you have supported me through. Thank you for your editing, reading, supporting, and pulling me out of the doldrums when I felt that I should give up. The time that you have provided me is irreplaceable and I will always appreciate your belief in me when I could not believe in myself.

To my children, Levi and Everly. I started this program before you. Your life has been filled with watching me read, write, and type. While I have felt the pain of having to leave you to write, I have watched you both transform into children that speak about reading and writing and believe in its importance. I hope that watching me navigate the doctoral program will inspire you to question and explore this world in which we live.

To Tera, thank you for your feedback and for always motivating me. Your willingness to read my writing, and brutal honesty, helped transform this manuscript. To Norma, thank you for your motivating words. I never would have finished this without you and I am eternally grateful.

To the teachers at the high school studied in this dissertation, thank you for your time and willingness to meet with me. When I started this research, we did not know one another, and when we ended, we were partners in this educational experience. I have learned so much about co-teaching and how we are all trying to meet the needs of every student that encounters us.

To Cohort 2, thank you for your continued support. I appreciate the kind words and motivation. I wish you all the best in your future endeavors, and I am sure our paths will cross again.

Acknowledgements

To Dr. Bonnie Beyer, my committee chair and motivational support. You never gave up on me and you inspired me to keep writing. Your high expectations, academic knowledge, and belief in me was essential to the completion of this dissertation. Thank you for taking the time to meet with me and for supporting me when I wanted to give up. I could not have completed this without you.

To Dr. Martha Adler, the reason for this study. Your doctoral class is where I found the inspiration for this study. Your questions, feedback, and guidance through this study was essential in its completion. I have learned so much from you and I wish you the best in your retirement.

To Dr. Kim Killu, thank you for expanding my understanding of special education. You were available and supportive throughout this process. I am most appreciative of your feedback and special education expertise. I can never thank you enough for stepping in without hesitation to support me.

Table of Contents

List of Tables

Table	Title	Page

List of Figures

List of Appendices

Abstract

How we educate students with disabilities has transformed since the passage of PL 94-142, also known as the Education of All Handicapped Children Act, in 1975. The merging of special education and general education teachers has supported the need for their collaboration and communication to meet the needs of a diverse group of learners. The increased inclusion of students with disabilities in general education classrooms has resulted in the implementation of a service delivery model known as co-teaching. Co-teaching has focused on bringing a general education and special education together in a classroom. Communication and collaboration between educators have been deemed important factors in the success of a co-teaching pair and this research examined how teachers communicate, collaborate, and interact with one another in the classroom and in planning time.

The success of co-teaching is contingent on both pairs believing in the importance of co-teaching to support students with and without disabilities as well as a desire to work with one another. The findings of this study indicated that general education teacher continues to lead the curriculum planning and timeline for lessons. Special education teachers support students within the classroom and provide differentiated and accommodated instruction. A key factor in the relationship between a special education and general education teacher's partnership is the background knowledge that the special education has about students. This background knowledge supports teachers in planning and in the classroom.

Chapter 1: Introduction

Co-teaching, a service-delivery model, supports special education students in the general education setting. In theory, this model provides two teachers who can increase the amount of instruction and attention that each student receives within the classroom (Scruggs & Mastropieri, 2017). Co-teaching pairs a general education and a special education teacher together in the classroom. The general education teacher is commonly seen as the content expert, while the special education teacher can support and differentiate instruction of the content to ensure that students with disabilities have access to the general education curriculum (Kurth & Gross, 2014).

Co-teachers have shared a space, but they have not always shared equal status within the classroom; the general education teacher typically takes the lead and the special education teacher supports instruction (Conderman, 2011). In a review of more than 400 qualitative co-teaching studies, Scruggs Mastropieri, and McDuffie (2007) found that the general education teacher continues to remain the lead teacher in the front of the classroom, providing instruction to students, whereas the special education teacher continues to be a support within the classroom. The present study looked at both classroom instruction and planning times to understand the interactions between teachers and how they communicate and collaborate with one another.

I have served in a variety of roles: as a general education teacher for middle school students, a special education teacher for elementary and high school students, a teacher consultant, an assistant principal, and a principal. Reaching struggling learners and closing

the achievement gap has been my focus and I have witnessed shutting down and lack of

confidence among children who believed they were not successful in school. Co-teaching is a

familiar role, as I have been a co-teacher and worked on a team where each member had the

same philosophy and goal for our students. I have also been a member of a team where we

had to find common ground, as our philosophies and goals were different. The relationships I

built with my co-teachers were different inside and outside of each classroom. The

development of our relationship influenced how we co-taught within the classroom and

determined whether or not I was a partner or a guest within each classroom. Throughout, I

realized that my priority was to help students to not only find success in school but also to

achieve a sense of belonging. I believe that co-teaching is a model that can support students'

feelings of inclusion in schools. However, in order for co-teaching to be successful, co-

teachers need collaboration and open communication during planning time and classroom

instruction. The co-teaching models that teachers use also have an effect on the success of

co-teaching. Models that use more collaboration and communication such as team teaching

and parallel teaching are found to be more beneficial than co-teaching models that find the

special education teacher in a support role. The research discussed in Chapter 2 will provide

more detail regarding the models of co-teaching.

Educating students with disabilities has been influenced by the passage of laws

throughout the last 40 years that have reflected an increased focus on accessibility and

accountability for special education students in the general education classroom. From

2003–2013, the percentage of students exiting special education with a high school diploma

increased from 54.5 % to 65.1 %, whereas the percentage of special education students who

dropped out of high school decreased from 31.1 % to 18.1 % (National Center for

Educational Studies, 2016). Further, the National Center for Educational Studies reported

that about 95 % of students with disabilities were enrolled in regular public schools, and

approximately 62 % of those students were reported to spend 80% or more of their time in

general education classes. Increased prevalence of special education students in the general

education classroom has required support in these classrooms for special education students.

Many schools have adopted co-teaching as a model that supports integrated educational

experiences for special education students within the general education setting.

Background of the Problem

The progressive movement during the 1960s focused on reforming educational

opportunities for all students and led to the team-teaching movement (Joyce, 2004).

Proponents of the team-teaching movement held that teachers should share their expertise in

teaching the same group of students. Team teaching involved two general education teachers,

both having knowledge of the general education curriculum, sharing students. Co-teaching

was derived from team teaching during the progressive movement.

Co-teaching research has shown the need for a collaborative relationship between the

general education teacher and the special education teacher (Friend, Cook, Hurley-

Chamberlain, & Shamberger, 2010). According to Murwaski, and Lochner (2011), educators

must co-plan, co-instruct, and co-assess the students in the shared classroom together. For the

special education and general education teacher to co-plan, co-instruct, and co-assess

effectively, there must be communication and collaboration between the educators.

Collaboration is defined as an interpersonal relationship that exists when two or more people

have equal value and share in the decision-making process towards a common goal (Friend et

al., 2010). In the collaboration time between educators, they should be communicating their

shared beliefs and roles with co-planning, co-instructing, and co-assessing all students within the classroom. Co-teaching has become one of the fastest-growing inclusive models in schools, yet research is limited regarding the communication between co-teaching pairs and how their communication and relationship transcends the school environment. Scruggs, Mastropieri, and McDuffie (2007) conducted a meta-analysis of 32 qualitative studies of co-teaching and found that compatibility between teachers in a co-taught classroom benefits the co-teaching partnership.

Communication consists of both verbal and nonverbal interactions, such as listening skills, eye contact, responding to questions, and providing feedback to instruction, has been shown to be a factor in successful co-teaching partnerships (Shamberger, Williamson-Henriques, Moffett, & Brownlee-Williams, 2014). Austin (2001) found that although there is collaboration when the teachers are together, the general education teacher still does a majority of the work in the inclusive classroom. The work of the general education teacher includes lesson planning, grading, and organization of instruction. In addition, many co-teaching partners report insufficient planning time available for successful collaboration (Austin, 2001, Friend, 2014; Scruggs et al., 2007).

Villa, Thousand, and Nevin (2008) identified general education teachers as masters of content and special education teachers as masters of access to the content. Scruggs et al. (2007) found that general education teachers have ownership of the classroom, curriculum, content, and a majority of the students within the classroom, this inevitably leads to the general education teacher having a more dominant role with the special education teacher providing assistance and access to content within the structure of the co-taught classroom. Additionally, special education teachers in elementary settings are found in subordinate roles

as well (Scruggs et al., 2007). It is important for teachers to communicate and share their

philosophies and beliefs in their roles to develop a relationship that will work to support all

learners in the classroom (Sileo, 2011). General education teachers are often seen as the

content experts, whereas the special education teachers are the accommodation and

modification experts (Beninghof, 2016; Koehler-Evans, 2006; Kurth & Gross, 2014).

Research is limited regarding the ways that co-teachers interact with one another inside and

outside of the classroom and how this communication between the teachers affects their

relationship with one another.

Statement of the Problem

Co-teaching is often viewed as inequitable within the classroom (Kusuma-Powell &

Powell, 2016; Murwaski, & Lochner, 2011) and the differing roles of the general and special

education teacher may have an academic, social, and emotional effect on students within the

classroom setting. According to Kusuma-Powell and Powell (2016), "Status, the perception

of where one stands in relation to others in a social group, has long been shown to influence

learning" (p. 62). To better understand the co-teacher relationship and the status that may

accompany different roles, it is important to understand how teachers collaborate, define their

roles outside and inside the classroom, and communicate with one another.

Curriculum planning and instruction are areas where co-teachers need to develop

common understandings and roles. Decisions determine which teacher plans and teaches the

lessons, prepares and organizes instructional materials, identifies the co-teaching model to

use, determines appropriate assessments, and grades material (Sileo, 2011). These decisions

form the foundation of the co-teaching partnership and provide signals to students, parents,

and others outside of the classroom that the co-teachers are in partnership. In the classroom,

the parity of grading, amount of time each teacher presents lessons, and which teachers are

answering questions demonstrate to students whether the co-teachers' relationship is a

partnership (Sacks, 2014; Stivers, 2008). Additional signals of partnership include having

two teacher's desks, sharing communication to parents, and listing both teachers' names on

the class roster and report card (Kluth & Causton, 2016).

Communication and collaboration within and outside of the classroom may play a

role in the development of the co-teaching relationship. Of interest is learning how co-

teachers view their relationships with one another and if the way they communicate and

collaborate with one another changes during classroom instruction and planning time. Co-

teachers who have not developed a collaborative relationship may send conflicting messages

to students regarding which teacher may be approached with questions, or students may

manipulate situations to their advantage by creating situations of pitting one teacher against

the other (Sileo, 2011). Disagreements between teachers can further deteriorate their

working relationship. Administrators can support co-teachers and their relationships to help

them develop their co-teaching relationship prior to the start of the school year by providing

planning time (Austin, 2001; Sailor, 2014; Scruggs et al., 2007).

According to Murawski and Bernhardt (2015), co-teaching should be a best practice

in education rather than a special education initiative. Co-teaching is a model to support

special and general education students in the classroom. Rather than viewing co-teaching as a

model to support special education students in the general education classroom, co-teaching

should be a way to support all students who may struggle to grasp and understand curriculum

within the classroom. I believe that by having a content expert and a special education expert

in the room, the teaching team should be able to adapt, differentiate, and accommodate curriculum to meet the diverse needs of students.

With 62% of special education students receiving services in the general education classroom for 80% or more of the day (National Center for Educational Statistics, 2016), it is essential that teachers understand students' disabilities, as well as academic and emotional needs. Co-teachers will need to work together to support the diverse needs of students within the classroom. I believe that effective communication and collaboration can translate into a co-teaching environment that supports all students academically, behaviorally, socially, and emotionally.

Purpose of the Study

The purpose of this investigation is to develop a better understanding of co-teaching interactions and communication within the classroom and planning time. A case study design is appropriate to understand the phenomenon of co-teaching within the context of the co-teaching environment (Creswell, 2009). Communication with one another plays a role in the teachers' collaboration, co-teaching model used, and interactions with one another. It can be expected that effective communication and collaboration would lead to higher academic outcomes for students and a more equitable teaching partnership within the classroom. More specifically, communication, collaboration, and the interactions between two general education teachers and one special education teacher were investigated in this study. Understanding the teachers' roles and level of parity through their communication and collaboration with one another was investigated. Communication between teachers was analyzed to better understand how they related to one another and how they collaborated.

The research literature documented a need for more time to collaborate and communicate (Austin, 2001; Conderman, Johnston-Rodriguez, & Hartman, 2009; Jang, 2006; Weiss, 2004), yet the literature did not describe the type of communication that should be used in the classroom and during planning time. The present case study provides findings on whether the communication between educators in a shared classroom is similar to or different from communication during planning time and if teachers' interactions within the classroom are equitable. This researcher believes that a deeper understanding of communication and the transferability of roles within the classroom will help to guide teacher preparation programs, professional development, and evaluation of both general and special education teachers.

Co-teaching is a widely accepted model for providing inclusive education, research showing the success of co-teaching has been limited and has largely focused on the models and need for collaboration (Solis, Vaughn, Swanson, & McCulley, 2012). Co-teaching research has shown that communication, collaboration, and the relationship of the co-teachers is essential for a successful co-teaching partnership (Conderman et al., 2009; Keefe, Moore, & Duff, 2004); however, the communication described through research literature provided generalizations or general characteristics of communication and collaboration rather than explicit methods to improve and adapt communication and collaboration between co-teachers.

Research Questions

Qualitative inquiry used phenomenological case study methods in this study to further understand the interactions between co-teachers and how they communicate and collaborate with one another during planning time and within the classroom. Qualitative inquiry was

selected to understand the phenomenon of co-teaching in the teachers' natural environment. Recordings of one set of co-teachers' classroom instruction, recordings of both sets of co-teaching partners planning times, interviews, and a questionnaire enabled understanding of how teachers collaborated and how they interacted within the classroom and planning setting. The relationships between teachers who co-teach were investigated to answer the central question: How do teachers communicate with one another while teaching and while planning? Sub-questions addressed by the study included the following:

1. How do co-teachers communicate verbally and nonverbally with one another during classroom instruction?

2. How do co-teachers communicate verbally and nonverbally with one another during planning time?

3. How does the special education teacher perceive her role and relationship with her teaching partners?

4. How do co-teachers collaborate with one another?

Limitations

This study is limited in that the researcher was not an observer in the classroom. The research involved nonparticipant observations of the classroom and only one co-teaching pair participated in the classroom video recordings. Both co-teaching pairs participated in audio recorded planning time. Only one high school within the district was selected for this study even though there were three high schools at the time of this study. The investigation is a narrow study and further research must be conducted to determine if the results found here are reflective of the broader experience of co-teaching within other districts or between high schools of this district.

The researcher did not know each participant on a personal level but was a teacher consultant within the district. The participants and researcher had mutual co-workers. Although care was taken to ensure accurate and honest responses were given, these issues can be a factor in answers given to the researcher.

Delimitations

The size and sample of the research was limited to one district with teachers who chose to participate, limiting the available sample size and amount of data for review. The co-teaching team was not being observed to determine whether their co-teaching was having a positive result for achievement in students.

Conclusion

Co-teaching is one model that school leaders can choose to meet the diverse student needs in classrooms today. Research by Murawski and Lochner (2010) indicated that the success of co-teaching teams requires time to co-plan, co-instruct, and co-assess. Limited research was focused on how co-teachers' communication appears during teaching and planning times. This study followed two co-teaching teams and illustrated their interactions both inside and outside of the classroom.

A historical perspective of special education is presented in Chapter 2 to help the reader understand the challenges to create a more inclusive environment for special education students. Research regarding communication and collaboration in the development of co-teaching is also included. The research design and methods, including observations, interviews, and the questionnaire, are discussed in Chapter 3, followed in Chapter 4 with the findings and analysis of the data collected. The dissertation concludes in Chapter 5 with a

discussion of the implication of the findings and how the findings connect to current literature and directions for future research.

This study adds to research that focuses on the benefits of communication and collaboration to support the co-teaching relationship. Significance of this study is the focus on how the co-teachers communicated within planning times and if their interactions showed parity within the classroom. Although co-teachers may collaborate and communicate with one another, this study examined how they communicate and collaborate in planning times and the shared classroom setting.

Chapter 2: Literature Review

Beginning with a brief introduction on the nature of special education, the literature review continues with background on the history of special education legislation and the effects that special education instructional methodologies have had on shaping classrooms today. This discussion will help to explain the division between general and special education. Inclusion, a philosophy basic to the integration of special education students within the general education classroom, is described along with the models of co-teaching for teachers to practice and use in their co-taught classrooms. Multiple models of co-teaching have been set forth with varying degrees of recommendation about which model is the best for educators to use (Friend, 2007; Friend & Cook 2016; Murawski & Dieker, 2004; Villa & Thousand, 2005). Communication and collaboration are discussed in more detail in the literature, as studies have found that open communication and common planning time for collaboration are necessary for successful co-teaching (Ashton, 2016; Austin, 2001; Scruggs et al., 2007).

Special Education

Special education is instruction and accommodations designed specifically for students who have been certified as having a disability. A wide range of disabilities are recognized within the public education system, but no universal classification system is extant between the states (Reschly, 1996). Students may have more than one disability, however, each student is typically identified by a primary disability. Thirteen identified disabilities are defined in the federal *Individuals with Disabilities Education Improvement*

Act (IDEIA, 2004) regulations: autism, deaf-blindness, deafness, emotional disturbance, hearing impairment, intellectual disability (previously mental retardation), speech or language impairment, multiple disabilities, other health impairment, orthopedic impairment, specific learning disability, traumatic brain injury, and visual impairment. Although all of the disabilities are categories of certification, the disability does not determine the program placement. Program placement is based on a team decision and includes the academic and support needs of the student in the education setting. Program placement can have many different variations.

Prior to the 1975 passage of the *Education of All Handicapped Children Act, P.L. 94-142* (later renamed the *Individuals with Disabilities Education Improvement Act* (IDEIA) special education programs were initially developed within the public education system as separate classes, commonly known as self-contained classrooms. (Kavale & Forness, 2000). Students with disabilities were either denied access to public schools or were separated from their mainstreamed peers, general education students, for many reasons, including beliefs that they were unable to profit from instruction and that they would benefit from smaller groups and one-on-one teacher support. Typically, self-contained classrooms had fewer students than general education classrooms. A special education teacher with fewer students was determined to be better-equipped to provide individualized instruction. Further, the content area with which the student struggles can be the focus of instruction in a smaller setting with specially trained teachers and greater individualization of content (Kavale & Forness, 2000).

Support continues for students who require self-contained special education classrooms while ensuring that placement in these classrooms are focused on the least restrictive environment for students. Federal mandate for students with disabilities requires

students with disabilities to be educated with non-disabled peers to the maximum extent appropriate. Efforts to comply with the federal legislation have changed how we support the majority of our special education students.

Historical Overview

Public education in the United States has been influenced by the 10th Amendment of the Constitution: "The powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively or to the people" (National Archives, 2018, n. p.). Public schooling is not delegated as an area for federal oversight, because there is no constitutional right to an education; therefore, education is seen as a state matter. Public education has been deemed a state area of control and the federal government has intervened in public education to support equity within the educational system when the constitutional rights of students have been violated.

Racial segregation. A critical issue of equity, racial segregation led to federal government policy to prohibit the practice of racial segregation in schools. In May 1954, the U. S. Supreme Court announced its decision on the case of *Brown v. Board of Education of Topeka*. Prior to the Supreme Court decision, it was determined that African-American students were not offered or receiving equal education opportunities. The court ruled that racial segregation of school children in public schools was unconstitutional according to the 14th amendment of the United States Constitution (*Brown v. Board of Education of Topeka*, 1954). Part of developing the case included the psychological research finding that "children who were part of such an officially sanctioned system, they said, were made to feel inferior. And children who felt inferior would necessarily lose motivation to learn" (Patterson, 2002, p. 34).

Title I. The *Elementary and Secondary Education Act* (ESEA) (Elementary and Secondary Education Act of 1965) was originally signed into law in 1965 and provided federal funding, commonly known as Title I, for educating economically disadvantaged students in public schools. The goal of the legislation was to make educational opportunity equitable for students. It was not until the amendments made to the act in 1966 that the first federal grant program was created for educating students with disabilities (Yell, Rogers, & Rogers, 1998).

The *Elementary and Secondary Education Act* (ESEA) has been reauthorized multiple times since its original inception in 1965. The most notable reauthorizations include the *No Child Left Behind Act* (NCLB) in 2001 (No Child Left Behind Act of 2001) and *Every Student Succeeds Act* (Every Student Succeeds Act of 2015). In 2001, NCLB focused on accountability and quality education within districts (Beyer & Johnson, 2014). The achievement gap between high performing and underperforming students was identified. NCLB did define scientifically based research, and legislators believed that this requirement would "result in stronger and more effective programs for students with disabilities in special education" (Yell et al., 2007, p. 9). As a result, standards and assessments were made mandatory, and all schools were required to show improvement and success in education for all students. Once again, achievement for all was a critical issue that resulted in policy that created regulations for school performance and mandated state testing. The reauthorization of ESSA still requires academic achievement testing; however, the accountability of these assessments are the responsibility of the state.

Self-contained vs. mainstreaming special education students. An article by Lloyd Dunn (1968), questioned whether separate classes were appropriate for special education

students. Dunn emphasized that parents were dissatisfied with having their children labeled

as mentally retarded and segregated into special classes. Federal court decisions of the early

1970s ruled in favor of placing students in a more inclusive environment. Prior to federal

and state policies, students who required special services because of physical, emotional,

mental, or learning difficulties could be denied an education in public schools. These denial

strategies included postponement, exclusion, and suspension (Weintraub & Abeson, 1974).

Court decisions. Two prominent court cases in the early 1970s helped spur the

movement towards federal involvement in education and support for a more inclusive

education for students with disabilities. *Brown v. Board of Education of Topeka* (1954) served

as the basis for the *Pennsylvania Association for Retarded Children (PARC) v.*

Commonwealth of Pennsylvania (1971); the PARC case relied on the *Brown* case's

arguments and ruling to argue the case. In the *PARC* case, the exclusion of children from

enrollment in public schools due to their mental age was a violation of the Equal Protection

Clause as well as the Due Process Clause of the Fourteenth Amendment of the Constitution,

just as excluding children of color from public schools was in violation of the Fourteenth

Amendment of the Constitution. PARC sued the Commonwealth of Pennsylvania for

allowing public schools to deny education to students who had not reached the mental age of

five years. The district courts decided that students who were classified as mentally retarded

at the time had the right to a free, appropriate, public education under the equal protection

and due process clause of the Fourteenth Amendment.

In *Mills v. Board of Education* (1972), seven children with disabilities who resided in

the District of Columbia sued the Board of Education for being excluded or denied services

in the public education setting. The federal district court ruled that no child shall be excluded

from a public education and that the school has the responsibility to provide equitable

funding to ensure that all children have adequate resources for a public education. Once

again, the equal protection and due process clauses of the Fourteenth Amendment were

upheld in this decision.

The outcomes of the *Pennsylvania Association for Retarded Children (PARC) v.

Commonwealth of Pennsylvania* (1971), and the *Mills v. Board of Education* (1972) cases, as

well as pressures nationwide for support of students with disabilities, resulted in the federal

passages of legislation. *Section 504* of the *Rehabilitation Act* was enacted in 1973 to ensure

that no person, based solely on the reason of a disability, be denied benefits of or

discriminated against in any program that receives federal funding (Section 504 Act of 1973).

The *Education Amendments of 1974* (P.L. 93-380) (Education Amendments Act of 1974)

signed into law by President Gerald Ford included amendments with language to extend

rights to those with disabilities in order for programs to continue to receive Title I funding

(Yell et al., 1998).

The Federal passage of the *Education for All Handicapped Children Act*, P.L. 94-142

of 1975 (EAHCA) mandated that students with disabilities should be educated with students

without disabilities to the maximum extent appropriate in the regular education classroom,

and that the least restrictive environment must be an environment that most closely resembles

a general education classroom (Education for All Handicapped Children Act of 1975). The

law became effective for public schools two years after its passage and provided federal

funding for public schools to help support special education students.

The EAHCA mandated that students with disabilities had the right to

nondiscriminatory testing and evaluations, be educated in the least restrictive environment,

be allowed due process, have a free education, and receive an education appropriate to their

needs (Education for all Handicapped Children Act of 1975). EAHCA was later amended in

1990 and renamed the *Individuals with Disabilities Education Act* (IDEA). The amendment

changed terminology from *handicapped* to *disability* and provided a plan for transition from

school to post-school environments within the IEP at the age of 16. (Yell, et al., 1998). Over

time, these changes to federal law have resulted in more students needing special education

services and placement in general education classrooms.

   Education for All Handicapped Children Act, P.L. 94-142 of 1975, has been amended

and reauthorized multiple times. The 1997 reauthorization as the *Individuals with Disabilities*

Education Act stated, "Disability is a natural part of the human experience and in no way

diminishes the right of individuals to participate in or contribute to society" (IDEA, 1997). It

was later revised and renamed the *Individuals with Disabilities Education Improvement Act*

(IDEIA, 2004). Expansions included involvement of special education students in the general

education curriculum, participation in statewide assessments, reporting progress on goals and

objectives to parents, and supplementary aids and services based on peer-reviewed research

(Yell, Katsiyannis, & Hazelkorn, 2007).

   Some of the amendments to P.L. 94-142 added requirements on school districts, such

as inclusion in state and district-wide assessments for students with disabilities, measurable

goals and objectives for students, positive behavior interventions and supports for students

with behavioral concerns, and suspensions not to exceed ten days without a manifestation

determination review (IDEIA, 2004). The legislation requires educators to look at each

student's unique learning needs to determine the least restrictive environment and amount of

inclusion of special education students with general education students in the general

education classroom. According to IDEA (2004):

To the maximum extent appropriate, children with disabilities, including children in

public or private institutions or other care facilities, are educated with children who are not

disabled, and special classes, separate schooling, or other removal of children with

disabilities from the regular educational environment occurs only when the nature or severity

of the disability of a child is such that education in regular classes with the use of

supplementary aids and services cannot be achieved satisfactorily. (IDEA, Sec. 300.114,

2004)

Least restrictive environment. In 1990, Title II of the *Americans with Disabilities*

Act was passed. This act, along with Section 504, prohibits discrimination of students and

places an emphasis on determining the least restrictive environment for them. Although

students may be placed in separate facilities or take separate courses, placements must occur

when it is necessary to provide them with the equal educational opportunity to learn and the

facilities must be comparable to other facilities and services provided to their nondisabled

peers (Office of Civil Rights, 2006).

When determining the educational needs of students, the expectation is that public

school districts start with the least restrictive environment (LRE). Varying levels of support

may be provided to special education students. When reviewing a student's level of

academic needs, school leaders may determine that the student's disability may require more

academic supports than their nondisabled peers (Logan & Malone, 1998). The amount of

support needed for a student to be successful in the general education curriculum will drive

decisions about the least restrictive environment for the student. The LRE may determine

that students need accommodations within the classroom, specialized instruction with a

special education teacher inside or outside of the general education classroom, or a separate,

specialized program with other special education students.

The lowest level of support would involve having special education students in the

general education classroom for the entirety of the school day. In order to support the student,

accommodations within the general education classroom taught by a general education

teacher would be made. The general education teacher may receive support from a special

education teacher or special education teacher consultant. Additionally, the general education

classes may include co-taught classes where a special education teacher works with the

general education teacher and students to accommodate the curriculum. The levels of support

would continue to increase based on the individual needs of the student. The student may

benefit from self-contained math or English classes, support classes for organizational skills,

or full-time special education support in a specialized program. Additionally, ancillary

support services such as speech and language and social work supports may be determined as

a need for the individual student.

The legislative decisions mandated that an Individualized Education Program (IEP)

be developed by a team for each student who qualifies for special education services to

determine a student's accommodations, program placement, and the need for additional

support services. IEPs were mandated to include information regarding the extent to which

special education students were able to participate in general education environments and the

percentage of time that they were in the general education classroom. General education

teachers are expected to provide input on the IEP team, whose makeup must include the

parent; one general education teacher of the child, if the child receives any general education

services; one special education teacher of the child; a translator, if needed; school

psychologist; any related services support personnel (such as social work or speech and

language therapy); and, a district representative. Providing input within the IEP for both

general and special education teachers requires some form of communication and

collaboration between both educators. Children are not required to attend their IEP meetings

until they reach the age of 16.

The historical basis for the least restrictive environment for students and the laws

requiring that students with disabilities can no longer be restricted from an education is

important to understanding the relationship of teachers in general and special education

programs and in the preparation offered to teachers who need to work in concert. Although

students with disabilities receive education in the least restrictive environment, general

education teachers do not receive thorough or even sufficient training in providing special

education and general education services, and special education teachers are not fully

prepared to provide and understand general education instruction (Blanton, Pugach, and

Florian, 2011). According to Blanton et al. (2011), 17 states required special education

teachers to receive a general education license first. A majority of states do not require

special education teachers to have specialized content knowledge in the classrooms where

they are co-teaching. Further, general education teachers feel unprepared to meet the

academic needs of the diverse group of learners within their classrooms.

Inclusion

It is important to note that although schools are required to provide a free and

appropriate public education within the least restrictive environment (LRE) for each student,

the law does not mean that LRE and inclusion are synonymous. Inclusion is a philosophy

that many school districts use to have students with disabilities in classrooms with students

without disabilities. When the special education team determines the LRE for a student, they

are identifying the most appropriate environment for the student. Placement may mean that

less time in a general education setting may be the most appropriate environment if the

student has significant needs that would not be met in the general education setting. Just

because a student is included in a classroom does not mean that his or her needs are being

met. Inclusion can also be a violation of the law's mandate for placement in the least

restrictive environment, just as isolating a student with a disability from their non-disabled

peers can violate their right to placement in the least restrictive environment.

Educating special education students in public schools has had a short history when

compared to the education of general education students without disabilities, but the

philosophy of inclusion or integrating students is not new. For the last 40 years the U. S.

government has been working on creating more inclusive settings for special education

students based on the same reasoning for discontinuance of racial segregation in our schools.

Parents expect their children to be educated with all students, not segregated. Ikeda (2012)

explained the need for inclusion best: "When parents of students with disabilities drop their

child off at school, they are expecting their child to be part of the school's general culture and

educational program" (p. 277). Removal can also signal to children that they are not good

enough, and if they acquire more skills, then perhaps they may be good enough one day

(Villa & Thousand, 2005).

The least restrictive environment for a particular student may be provided by schools

within inclusive classrooms with special education support. Time and classes can differ from

student to student. For example, a student with an intellectual disability may be in a general

education classroom for one hour per day and the remaining class time may be in a self-contained classroom with a certified special education teacher who has a background in intellectual disabilities. Currently, 95% of students with disabilities are enrolled in regular public schools and approximately 61% of the students were reported to spend most of their time in general education classes 80% or more of the time (National Center for Educational Statistics, 2016). General education teachers are supporting students with disabilities within the classroom and providing specialized instruction (Kavale & Forness, 2000; McIntosh, Vaughn, Schumm, Hager, & Lee, 1993).

With the passage of academic mandates requiring access to general education curriculum and state assessments for all students, schools have seen added pressure on general and special education teachers (Damore & Murray, 2009). Collaborative teaching models such as co-teaching have been adopted in many districts to support special education students in the general education environment. Co-teaching helps to promote the integration of special education students within the general education environment, provides them with extra adult support to help with accommodations and modifications, and ensures that students are receiving specialized instruction to meet their diverse needs.

Partners in Education

General and special education teachers have not always had to work with one another in the public-school setting. Although general education teacher programs emerged from the schoolhouse, special education teacher programs emerged in residential facilities due to segregation of students with disabilities (Brownell, Sindelar, Kiely, & Danielson, 2010). By the 1960s and 1970s, cases requiring integration of disabled students perpetuated an increase in special education teacher programs in colleges, though the teacher education programs

were mainly focused on categorical disability knowledge until the 1980s when cross-

categorical programs emerged in response to the belief that special education teachers should

be able to meet a variety of behavioral and academic needs (Brownell et al., 2010). By the

1990s through the present day, the movement for special education students to be integrated

into classrooms with their general education peers has influenced special education teacher

programs. Research has shown that students with disabilities in inclusive settings performed

higher than their peers with disabilities in segregated classrooms (Jordan, Schwartz, &

McGhie-Richmond, 2009).

According to Brownell et al. (2010), "Because collaboration figured more

prominently in inclusive service delivery than it did when students with disabilities were

educated in resource rooms or self-contained classrooms, it became an essential feature of

special education teacher preparation" (p. 358). Cases, laws, and policies have created a

need in recent years for both general and special education teachers to begin working

together rather than separately. Preparation is needed for teachers to ensure that effective

teaching is meeting the needs of diverse groups of learners. A special education and general

education teacher working together can mutually address accommodations and curriculum

needs of students; thereby, making both teachers more prepared to meet the needs of all

learners in the inclusive classroom.

Service Delivery Models

The diversity of students with disabilities and the need for school districts to meet the

requirements of the range of services in IDEIA has led district leaders to create a continuum

of services within their schools. The continuum was first introduced as the cascade model

and described by Deno (1970). The term *cascade* is used because the services for students

with disabilities move from least restrictive to most restrictive (Deno, 1970). The continuum

of services ranges from services for special education students who require limited special

education support to special education students who require maximum special education

support. Support may be as minimal as having a co-teacher or a resource teacher who only

checks in on special education students to ensure that they are supported, to special education

students being placed in a fully segregated special education public school or hospital setting

away from their non-disabled peers.

Deno (1970) identified seven levels within the continuum. Levels One through Three

are the least restrictive. Level One is the general education classroom with few or no

additional educational supports. In Level Two, the student is in the general education

classroom full-time but receives special education support within this classroom

environment. Special education students in Level Three are in the general education

classroom part of the day and attend a special education classroom for the remainder of the

day. Co-teaching may occur within Levels One through Three.

Levels Four through Seven are the most restrictive environments for special

education students. Level Four students are in a special education classroom full-time and

have a special education teacher providing curriculum and accommodations. Within this

level, special education students may attend elective classes such as gym or art with their

general education peers but are not in the general education students' homeroom. Special

education students in Level Five attend a day school specifically prepared to offer special

education services. A day school allows for specialized instruction for disabilities such as

cognitive impairments and behavioral disorders. Level Six services and/or instruction are

provided for special education students who are homebound or in a residential or hospital

environment. Level six is provided for students who are unable to attend a public school due

to suspensions, extreme medical conditions, and emotional or behavioral needs. In-patient

educational services, which are overseen by a health or welfare agency, are provided in Level

Seven.

Figure 1, the researcher's rendering based on Deno's (1970) continuum, shows the

levels of services. IDEIA (2004) mandated that schools determine programs as a team and

determine placement based on the least restrictive environment possible. Referring to the

continuum of services, special education providers, and IEP teams can determine the

placement option that offers the best fit for special education students based on their

individualized needs. Placement can range from full-time general education classroom to

full-time special education services.

In-patient services

Residential, homebound, hospital instruction

Special education day school

Special education classroom - full time

General education - part time
Special education - part time

General education classroom full time - with inclusive special education support

General education classroom - full time
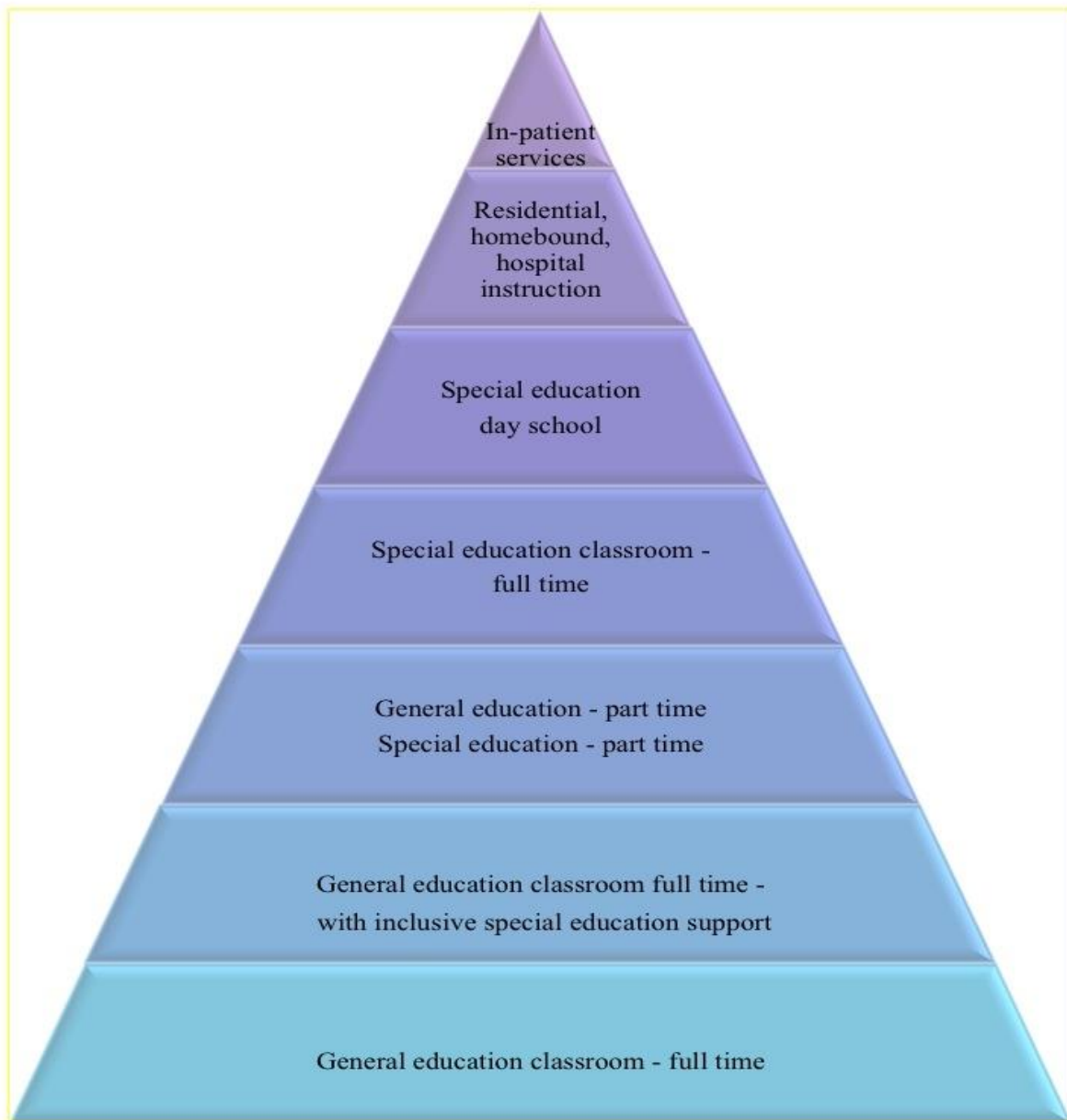
Figure 1. Deno's Continuum of Special Education Services

National Center for Education Statistics (2016) reported that 61.8 % of special

education students are in the general education setting 80 % or more of the time; 19.4 % of

special education students are in general education settings 40 to 79 % of the time; 13.8 % of

special education students are in general education settings less than 40 % of the time; and

3% of students are in separate schools for special education students. Less than 1% of

students are in hospitalized, homebound, or in-patient settings.

Collaborative Teaching

Numerous models of collaborative teaching are found within special education.

According to Damore and Murray (2009), these models include the following:

- Consultation only: Special education teacher provides teacher with ideas and
  strategies but no direct classroom support.

- Collaborative teaching in a general education class: Special education teacher
  attends general education class for part of the day (less than 50%) and
  provides direct service to students with disabilities in general/regular
  education classrooms.

- Team teaching: Special education teacher spends majority of the school day
  (more than 50%) in one general/regular education classroom.

- None: There is no consultation, no collaborative teaching, and no team
  teaching. (p. 235)

The empirical study by Damore and Murray (2009) focused on identifying and

understanding co-teachers' perceptions of collaborative teaching practices. Co-teachers in the

study were aware that there were numerous models for co-teaching; however, they reported

limited experience with using the models. Co-teaching can look and feel different in various

classrooms and requires collaboration of both the general and special education teacher in

order to be prepared for meeting the individual needs of the students and the curriculum

requirements. Damore and Murray (2009) found that teachers also need time to learn about the models and practice using the models available in their classrooms.

Co-teaching has been an active topic in research for more than 15 years. Existing research often focuses on the models of co-teaching and the three factors needed for successful co-teaching, co-planning, co-assessing, and co-instructing (Conderman & Hedin, 2017; Murawski & Lochner, 2011; Oh, Murawski, & Nussili, 2017). The following section will provide a review of co-teaching, what is needed for successful co-teaching, and the varying models of co-teaching within the classroom.

Co-teaching

The co-teaching model has been used in regular education classrooms with general education teachers prior to being adopted by school districts to support inclusion of special education students in the regular education classroom setting. Co-teaching is seen in the first three levels of Deno's continuum. Co-teaching is a partnership between a general education teacher who is qualified in content with subject area expertise and a special education teacher who is qualified in learning strategies and in disabilities (Little & Dieker, 2009). "Simply putting two educators in the same room is neither sufficient nor necessarily collaborative" (Murawski & Hughes, 2009, p. 3). Ideally, two or more educators collaborate and work together to deliver the core curriculum teach and the required content (Ferguson & Wilson, 2011).

A positive relationship between co-teachers, or the lack thereof, often designates the success or failure of co-teaching in a classroom (Mastropieri, Scruggs, Graetz, Norland, Gardizi, & McDuffie, 2005). For co-teaching to be successful, teachers need to be willing to work together, to choose to create a co-teaching team (Scruggs et al., 2007). Often, teachers

are selected to work together, and this may influence the relationship from the start (Kohler-Evans, 2006). The collaboration between teachers will have a more positive effect on the classroom when both teachers make a voluntary commitment to the partnership (Scruggs, et al., 2007).

The opportunity to share planning time also helps both teachers to grow as professionals (Scruggs, et al., 2007), as special education teachers learn more about the content they are responsible for delivering and the general education teachers learn new ways for the curriculum to meet the needs of the variety of students in their classrooms (Weiss, 2004). Planning together ensures that both teachers are actively involved in creating lesson plans and determining the best methods to support the delivery of curriculum. Further, training for both teachers is also beneficial to the creation of a bond and trust between each teacher (Scruggs, et al., 2007). Co-teaching is often compared to a marriage and, like any good marriage, takes continuous work and collaboration between both individuals (Dieker, n.d.).

The student and his or her perspective on the usefulness of co-teaching is an important component to its success. Hang and Raben (2009) collected data through questionnaires and observations of 45 co-teachers and 58 students with disabilities who were in co-taught classes during the 2004-2005 school year to determine whether those students and their teachers had favorable perceptions of co-teaching. The students with disabilities were found to have increased confidence, gained knowledge on content, and improvements in their behavior. Overall, the students were able to receive more one-on-one attention, which resulted in increased self-confidence.

Previous research on student perceptions of co-teaching by Dugan and Letterman (2008) found that students preferred a team-taught approach when compared to an alternating two-person course and a panel of three or more faculty. Overall, findings showed that student perceptions were positive and tended to be more positive with the team teaching model. Although students' perceptions are one indicator, teachers' perceptions of the success of co-teaching are also important. Hang and Raben (2009) found that co-teaching provided sufficient support for students in the classroom and that all students improved academically.

Within the context of the co-teaching relationship, the general education teacher is commonly seen as the content expert (Mastropieri, et al., 2005). It may be assumed that the role of the special education teacher will be to accommodate and modify subject matter, rather than having a depth of knowledge about the content. For parity to exist, both teachers need to discuss instructional planning, instructional delivery, grading, discipline, and collaboration with parents. Co-teachers who are unable to discuss or have not discussed their roles may have unresolved issues that will affect their relationships with students (Sileo, 2011).

A study conducted by Jang (2006) showed the benefits of co-teaching. Jang (2006) used the term *team teaching* in this study. Two certified teachers in four secondary math classes participated in the study. Two control group classes received traditional instruction and two classes received instruction in the team teaching approach. The study used non-random sampling because the school had previously placed students in the classes. The findings showed the final exam scores of students who received team teaching instruction were significantly higher than exam scores of students who received traditional instruction. In addition, more than half of the students in the experimental group preferred

team teaching compared to the traditional teaching approach. Jang (2006) indicated not only

a positive impact on student achievement in co-taught classrooms but also positive

perceptions regarding this type of teaching style.

King-Sears, Brawand, Jenkins, and Preston-Smith (2014) completed a case study with

a high school science co-teaching team in order to understand the perception of co-teaching

from the lens of the teachers and students. Observations of the teachers indicated that the

general education teacher interacted with the entire classroom twice as often as the special

education teacher and the general education teacher presented new content three times as

often as the special education teacher. Students reported that their learning needs were being

met and that both teachers had the same job; however, students did identify the general

education teacher as the one who planned most of the instruction and graded most of the

work. King-Sears, et al. (2014), sought to understand the roles of the co-teachers and

confirmed that the general education teacher still completed most of the teaching and

academic grading, whereas the special education teacher supported students.

Co-teaching is one method to support inclusion of students with disabilities in the

general education classroom. Although having both a special education and general

education teacher in a classroom benefit students with and without disabilities, it may

continue to support the use of language such as *typical* and *special* when describing students

within the classroom (Naraian, 2010). Naraian (2010) identified research published in the

Disability Studies in Education (DSE) as an area that supports inclusive education of students

and gives a voice to teachers, parents, and students to understand the experience in current

general and special education systems. Categorizing students into general and special

education students continues to separate students within an inclusive classroom (Naraian, 2010).

Models of co-teaching. Co-teaching can look and feel different in classrooms and schools depending on which model of co-teaching is being used. Six common models of co-teaching include the following: one–teach, one–observe; one–teach, one–assist; team-teaching; alternative-teaching; parallel-teaching; and station-teaching (Friend & Cook, 2016). These models may be used in varying degrees depending on the styles of the lesson.

Friend, et al., (2010) defined each of the six models. In the one–teach, one–observe model, one teacher takes the lead role, whereas the other observes the class and ensures that students are on track. One teacher is identified as the lead teacher of instruction, whereas the second teacher gathers data on specific students or the class to support academic, social, or behavioral needs of students.

In the one–teach, one–assist model, one teacher presents the lesson and the other teacher circulates throughout the classroom to assist individual students. Friend (2007) advised that this model is often over-used, and each teacher should take turns being the lead in this model. One–teach, one–assist is possible with a low amount of planning and requires limited change of roles by each teacher in the classroom.

Both teachers share the teaching of the instructional content equally in the model of team teaching, which is widely recognized as the best choice for co-teaching (Jang, 2006). Both teachers lead instruction in the classroom and are responsible for the delivery of curriculum to all students. According to Pugach and Wesson (1995), team teaching "places classroom and special education teachers together in a teaching team" (p. 280). Both

teachers are actively involved in the organization of the curriculum and the classroom management of the students.

Two groups are identified in alternative teaching. One group, however, is small and more readily available for extension assignments or review, and the other group is larger. The small group may have students with disabilities or students who need extra support on a topic.

Parallel teaching is similar to alternative teaching and entails teachers planning collaboratively and dividing the class into two groups. The teachers then each take responsibility for one group. The teachers may present the same information, but the content or delivery may be different based on the needs of the students. Teachers may choose to teach both groups in the same classroom or in separate locations.

In station teaching, the content and classroom are divided into stations, and the students rotate between each station. The stations may consist of a teacher in two stations, partner work at a station, and independent work at a station. This model allows for a low student to teacher ratio.

While co-teachers may change their approaches and models depending on the lesson, it is noted that team teaching, where both teachers take an active role in delivering classroom instruction, is a more highly regarded approach to co-teaching (Jang, 2006). Team teaching allows for each teacher to take on an active role in the classroom (Pugach & Wesson, 1995) creating a classroom environment where the students see both teachers as equals. Both teachers are actively involved in the organization of the curriculum and the management of the students.

Although this model is seen as highly effective, it has its challenges. Special

education teachers who are placed in a general education classroom are often lacking the

knowledge of the content area being delivered. Therefore, they often take on a role of an aide

or an assistant in the classroom (Mastropieri et al., 2005). With this in mind, it has been

found that collaboration is needed between the special education and general education

teachers and collaboration is an important aspect in the team teaching approach (Weiss,

2004).

Scheeler, Congdon, and Stansbery (2010) found that using the one–teach, one–assist

method of instruction was not shown to be a successful and valuable teaching style. Their

study explored changing the role of the special education teacher from subordinate or

instructional assistant to an additional teacher. The teachers involved in the study were

provided a peer coach who watched their instruction and used bug-in-ear technology to

correct and re-direct the teachers' actions immediately in the classroom setting. Additionally,

co-teachers then provided feedback to one another while teaching lessons. Examples of these

actions and feedback included the peer coach asking teachers to stay with a student,

providing positive reinforcement, and ensuring they were on the correct track with the lesson

(Scheeler, et al., 2010). This additional support helped the teachers gain confidence in the

classroom and take a more active role in the instruction that the team-teaching style requires.

The study emphasized the importance of the co-teacher in the general education setting and

that both teachers need supportive and leadership roles in the classroom. All teachers

reported that the feedback supported their teaching partnership.

Communication and Collaboration

Co-teaching is built on communication and collaboration between two individuals. Kohler-Evans (2006) and Dieker (2007) recommended that communication be clear and open. When there is friction between co-teachers, students may receive conflicting messages (Sileo, 2011). It is essential for teachers to communicate and work through any conflicts that may arise between them. Recommended communication skills for co-teachers include the following: asking open-ended questions, paraphrasing, summarizing, listening carefully, and stating concerns between neutral statements (Conderman, 2011). Successful communication is needed for co-teachers to collaborate effectively (Sileo, 2011). Co-teachers who communicate effectively can agree upon each of their roles in the classroom and communicate openly about issues as they arise rather than letting unresolved issues interfere with their ability to collaborate.

Three main components. Successful co-teaching considers the three main components of co-teaching: co-planning, co-instructing, and co-assessing (Murawski & Dieker, 2004). Co-planning involves both the general education and special education teacher. The general education teacher discusses what will be taught (content and curriculum) and the special education teacher discusses how it will be taught (accommodations, differentiation, and co-teaching models) (Murawski & Dieker, 2004). By integrating each teacher's area of expertise both teachers are contributing to lesson planning while meeting the needs of all students in the classroom (Conderman, 2011).

Co-instructing is the process of teaching within the classroom. Co-teachers may choose one of the co-teaching models that benefits the instruction being given. These include: one–teach, one–observe, one–teach, one–assist, team-teaching, alternative- teaching,

parallel-teaching, and station-teaching (Friend et al., 2010). Co-teachers can determine nonverbal signs to communicate when they are ready to move on, if they need extra time, or they need to converse (Conderman, 2011, Murwaski & Dieker, 2004).

Co-assessing occurs when both teachers come together to determine if their instruction is resulting in student progress and understanding of the curriculum. During this time, both teachers can determine what went well, different assessments needed for different student needs, how they will grade assessments, and if they need to accommodate further or re-teach students using a different method or approach (Conderman, 2011, Murwaski & Dieker, 2004). Co-teachers should share the load and each grade assessments by first grading a few separately to ensure validity and reliability between the teachers (Murawski & Dieker, 2004). When co-teachers work cooperatively to co-plan, co-instruct, and co-assess they will be communicating frequently with one another and in front of students.

Research about discourse. Fairclough (2001) noted that listening to how we communicate with one another exposes our ideologies, which can come from our experiences, beliefs, interests, and positions. Pennebaker (2002) added that language is important and can help us learn more about ourselves and others. The power of language is explained by Pennebaker in the following statement:

> Words such as we, us, and our can be powerful markers of identity. When people tell complete strangers about "our marriage," "our business," or "our community," they are making a public statement about who they are and with whom they identify. (p. 229)

Examining language between co-teachers' can determine whether they are identifying with one another and whether their collaboration is impacting them in the classroom.

In their research on classroom teachers, Murawski and Lochner (2011) offered a checklist for principals about what to ask for, look for, and listen for when observing co-teachers for evaluations. The checklist includes the pronoun usage of the words *we* and *our* to demonstrate true collaboration and shared responsibility. Although listening for these factors may be important, limited research was found on whether observing this characteristic demonstrates effective communication and collaboration between educators. Much of the extant research has been on the teachers' discourse with students and its impact within the classroom.

Hanrahan (2005) used critical discourse analysis to compare the communication between two science teachers who were co-teaching in their classroom. Analysis of the data was used to determine how teachers could enhance or even limit students' interest in and access to the science curriculum. Findings showed teachers discouraged by students' work ethics and background knowledge may be limited in teaching styles if they are limited to traditional science communication. Teachers who used hybrid courses, allowing arguments, and open discussions with students were more apt to feel energized and, therefore, more students were granted access to the science curriculum.

Berry (2006) conducted a study to investigate the social context of an inclusive classroom to better understand how discourse shapes the interactional processes. Berry used discourse analysis to examine the purpose of the classroom setting and participants within. The classroom observed was in an urban setting with both a general and special education teacher, and the students were a split of second and third graders. Although the findings showed that the teachers set up and attempted to maintain a community-based classroom, when teachers were not present, general education students marginalized special

education students. For example, a student made comments about the special education

student's difficulty with spelling and writing. By speaking to the special education student

with a negative tone and disparaging comments, the speaker lowered the special education

student's status within the classroom. Although this study gave recommendations regarding

communication to ensure that students are not marginalized in the co-taught classroom, the

Berry (2006) study is once again still focused on the teacher and student relationship.

Ashton (2010) studied a general education teacher and a special education teacher in

an eighth-grade classroom. They were observed teaching and communicating, and their

discourse was evaluated using critical discourse analysis. Although both teachers met many

of the requirements for successful co-teaching, such as collaboration and co-planning time, it

became apparent to Ashton that the success of their relationship was not based upon factors

such as parity, conflict, or sufficient co-planning time. The teachers' success was found to be

dependent upon their ability to make a non-traditional arrangement, like co-teaching, work

for the students and teachers in an educational system that preferred traditional values and

practices. Ashton (2010) looked at the teachers' discourse within the classroom but did not

identify how the discourse between the teachers influenced their relationship or whether their

discourse changed based on different situations within the school day. The research did not

observe planning times to gain a deeper understanding of how the teachers collaborated and

communicated with one another and how this communication affected student academic

outcomes.

Local, institutional, and social relationships of co-teachers. Ashton (2016)

explored a co-teaching relationship and how the roles of the teachers in this relationship were

related to the local, institutional, and societal level. The teachers' pedagogic beliefs, district

and state mandates, and teaching practice all played a part in their relationship with one another. An important piece of the study was the notion that inclusive education must move beyond the individual classroom to the district and state level. Further, although the classroom in Ashton's study was considered an inclusive, co-taught classroom, language was still used to tell a story of separation between general education and special education.

Naraian (2010) conducted ethnographic research in a first-grade classroom co-taught by a general and special education teacher. The teachers worked together but continued discourse focused on deficits between general and special education students. Although the classroom was inclusive, categorizing students as *special* and *general* perpetuated the deficit and separatist dialogue within the inclusive setting. Communication that focuses on a deficit model may affect the co-teaching team and continue to delineate their role in the classroom setting.

Successful co-teaching requires professionalism, collaboration, common goals of student success, and time for shared communication between a general and special education teacher (Murawski & Bernhardt, 2015). Co-teaching is a service delivery model for students with special needs, where a general and special education teacher work together in a general education classroom, sharing the instruction and classroom with both general and special education students.

Although co-teaching supports inclusive teaching, it is important to understand the history of segregation of students. Students with special needs have been separated and segregated from students who do not receive special education services and have been seen as students who are "abnormal," or who require different, specialized treatment (Ashton, 2016). The inclusive practice of co-teaching may have changed the placement of students

with special needs, but the communication between teachers in these co-taught settings may continue the dialogue of exclusivity. By understanding the ways teachers communicate and collaborate, we are better able to understand how inclusive the educational setting is in a co-taught classroom.

Planning time communication. Co-planning is a time when both the special education and general education teacher come together to plan for lessons within the classroom. While planning time has been identified as an important component to successful co-teaching, there is limited research on planning time between teachers (Friend, 2014; Sailor, 2014; Swanson & Bianchini, 2015).

In a study conducted by Swanson and Bianchini (2015), co-planning was examined from observational data collected through video and the use of field notes. Two teams of high school science and special education teachers were brought together to co-plan. Findings showed that the teachers found collaboration time beneficial; science topics were discussed more than special education topics; general education teachers took the role of task master more often than special education teachers; and turn-taking was comparable between all teachers.

Swanson and Bianchini (2015) found that more research was needed to determine reasons for unequal sharing of instructional responsibilities. Additionally, time should be spent researching how teachers adapt their curricular lessons to meet the needs of students with disabilities within the classroom. Swanson and Bianchini (2005) found that while teachers identify co-planning as beneficial, it identified the need for professional developers to support teachers and help guide them to develop shared common goals for their co-planning sessions. These could include time to discuss the needs of students within the

classroom rather than focusing so heavily on content.

Howard and Potts (2009) discussed the prevalent theme of planning time being deemed essential in research literature; however, the lack of research on how to use this planning time was identified as an area of need for further clarification and research. Howard and Potts recommended focusing on the standards, assessment, accommodations /modifications, instructional strategies, and logistics (p. 3). Although they provided a checklist that may be beneficial for teachers while planning, there is still a lack of clarification on how teachers communicate with one another while planning. Rather, the checklist provided topics to discuss.

Cockpit communication. Although there is research on communication and its benefits in co-teaching, it is useful to look at other fields where the team and co-teaching approach is important for the team to be successful. Some of the most in-depth research available on communication and its impact at work is cockpit communication in the airline industry. Schultz (2002) noted that communication in cockpits may be impacted by diversity among airlines and different cultural approaches to communication and may contribute to accidents. Schultz explained:

> Regions with high accident rates also share similar cultural values, such as power distance—the inability of subordinates to question the actions of superiors and recommend alternative courses of action—and uncertainty avoidance, which emphasizes rigid adherence to rules and procedures that reduces the directness and bluntness of communication. (p. 21)

Effective communication and the ability to speak openly and be heard between the captain and his crew are important to successful flights. Sexton and Helmreich (2000)

analyzed cockpit communications to determine whether language use was related to flight outcomes and whether language varies across position or workload. Results showed that captains used the first person plural (we) more often than first officers and flight engineers and, over time the use of "we" increased, which may be an indicator of becoming more familiar with one another. Sexton and Helmreich (2000) also found that the more *we* words the crew used, the fewer errors the crew made. Results from this study have facilitated the discussion that language use can have a de facto result on performance and that perhaps we could train others in language styles and effective communication.

Cocklin (2004) examined the use of checklists in emergency situations as well as captain and first officer communication during the flight of Swissair 111. Swissair 111 had conflicts between the checklists. Checklists are used to ensure that the crew looks at each area of concern to ensure all steps are taken prior to deciding on an emergency descent. Findings showed the need for standardizing checklists and noted the communication between the captain and first officer. Comments of the first officer fell into the negative politeness/mitigated/indirect category; "he used hints, permission requests, and confirmation seeking questions, which research has shown is common for first officers when addressing captains" (Cocklin, 2004, p. 38). By examining co-teacher communication, the types of dialogue between teachers can be different depending on which teacher is seen as the lead or the head of the classroom.

Each of these studies provided insight into how communication can impact the relationships around us. If students can marginalize other students, and cockpit pilots can marginalize their co-pilots, then there can be a case where co-teachers may also be marginalizing one another.

      Doctors, nurses, and patient communication. Research in the medical field addresses how doctors, nurses, and patients communicate with one another. In the medical field there is also an imbalance of power between doctors and nurses. This imbalance of power can influence how doctors and nurses communicate with one another. Medical research can support how we observe co-teachers and enhance the communication shared between each teacher.

      In the medical field, Video-Reflexive Ethnography (VRE) involves filming what is happening in patient care and discussions that occur between doctors, nurses, and patients (Hung, Phinney, Chaudhury, & Rodney, 2018). The video recordings are conducted and then then shared with the doctors and nurses to stimulate discussions and reflection about the events that occurred and how the communication transpired. By seeing their verbal and non-verbal communication, the medical staff can reflect on their actions with one another and discuss ways that they can communicate with one another to support their relationships and the needs of their patients.

      Manojlovich et al. (2018) completed VRE research with physicians and nurses. The researchers recorded interactions between the physicians and nurses by following them and then later had the physicians and nurses review the videos. The data indicated that the video observations helps the doctors and nurses become aware of their habits and how to improve their communication with another when they watch the videos together. The research found that the doctor-nurse hierarchy affects the way that nurses communicate with doctors. Nurses were prone to providing indirect requests rather than making their requests direct and explicit to the doctors. The ramifications of unclear communication between doctors and nurses could

have an effect on the quality of care that they provide their patients (Manojlovich et al., 2018).

Research conducted by Gordon, Rees, and Ker (2016) used video reflexive ethnography to understand leadership in the healthcare workplace. Of interest, was focusing on the micro-level, or the "interactions between people and what leadership means to those involved" (p. 1103). Video was gathered using a 'handi-cam' during meetings between general practitioners, nurses, medical consultants, and secretaries. Recordings identified the use of directives, questioning, and singular pronoun usage all contributed to identifying which person was identified as the lead or the person with more power in the conversation. After recordings were complete, select videos were collected into short clips and shared with the participants within the reflexivity sessions. Participants were able to provide their viewpoints on leadership practices and relationships. The study revealed the importance in providing leadership education at all levels of the workplace in order to support the dismantling of traditional interprofessional hierarchies (Gordon, Rees, & Ker, 2017).

Benefits of video data include the ability to review repeatedly and capture non-verbal and verbal interactions that can be observed and analyzed (Caldwell, 2005). Non-participant video recordings occur when the observer is not present during the recordings. In the medical field, video recording is beneficial in allowing professionals to observe the recordings to support understanding of behavior and interactions that occur between medical staff (Caldwell, 2005).

Co-Teaching Preparation

Teacher education programs have been criticized for failure to prepare teachers for the diverse classrooms and teaching arrangements they will encounter (Oh et al., 2017).

Administrators, in turn, are aware of research about how they can promote co-teaching within their schools and how to support and develop co-teaching teams. According to Murawski and Bernhardt (2015), administrators must provide professional development on inclusion, collaboration, and co-teaching; establish scheduling strategies; partner the right teachers; supervise and evaluate strategically; and improve, increase, and institutionalize co-teaching practices.

Research continues to find that special education teachers tend to hold a subordinate role in the classroom due to lack of sufficient content knowledge in the classroom (Pugach & Winn, 2011). School leaders are encouraged to allow special education teachers to select content with which they are comfortable teaching. If this is not possible, special education teachers should have common planning time with the general education teacher to allow shared time to understand and learn curriculum being taught. Pugach and Winn (2011) suggested that when creating co-teaching teams, the task for administrators is to select compatible personalities, content expertise, and instructional philosophies.

Shamberger et al. (2014) found that teachers named the following as top factors for successful co-teaching: co-planning time, communication skills, student learning needs, shared instruction, and elements of collaboration and content knowledge. By providing teachers planning time to collaborate and create shared instructional goals for students, teachers in the co-taught environment are better prepared for meeting the diverse needs of students. Communication mentioned in the studies, however, was limited to discussion about *how* to support communication between teachers.

Significance of the Study

The literature related to co-teaching education is lacking regarding how teachers are to effectively communicate with one another. The research is focused on teachers needing to communicate and collaborate, but how they are to do this is not clear. Ideas about common planning time and the ability to select their own teaching teams are options but lead to another question: How does the discourse that teachers use with one another in the classroom show that they are a unified front and equally responsible for the classroom? There is a need for more research on how teachers are communicating with each other and how this communication can be adapted or changed if needed. This study examined two co-teaching teams to better understand their communication and collaboration with one another during classroom instruction and planning times. This research should be a supportive tool for co-teachers who may use it to analyze how they currently communicate with one another and how this communication can support collaboration to meet the needs of all students in the classroom.

Conclusion

The review of the literature presented the history of educating students with and without disabilities. Historical events have been a factor in the development of present-day education programs and the certification of general and special education teachers. The last 15 years have shown movement to increase inclusivity, and co-teaching has been a model that schools have utilized as a best practice for supporting students (Murawski & Bernhardt, 2015).

Three main factors of successful co-teaching frequently found in research are co-planning, co-assessing, and co-instructing (Conderman & Hedin, 2017; Murawski &

Lochner, 2011; Oh et al., 2017). Co-teachers are required to work together to plan, instruct in the classroom, and assess all student needs. Although the literature determined these as three important components of co-teaching, research has shown that they are challenging to achieve.

Communication is frequently discussed as an important factor in successful co-teaching (Conderman, 2011; Dieker, 2007; Kohler-Evans, 2006; Murawski & Lochner, 2011; Shamberger et al., 2014 Sileo, 2011). Communication is key to developing and maintaining a healthy relationship between co-teachers and students. Communication will help support each teacher in the class and define his/her role. By looking outside of educational research to that of cock-pit communication and nursing communication, research demonstrated how language can affect the success of the crew or create marginalization of roles. Current research regarding communication within co-teaching provided examples of how teachers should communicate with one another but is limited in providing research on how communication can be marginalizing and how we can adapt and change the way that teachers communicate with one another in the classroom.

Methods used to compile data from both sets of teaching teams in this study are discussed in the following chapter. Included are data from observations, interviews, and a questionnaire. Themes from codes were identified to seek further information related to teachers' communication in order to understand each teacher's role in the co-teaching environment and communication with one another inside and outside of the classroom.

The present case study examined the experience of one special education teacher with two different co-teaching partners. Each experience, while with the same special education teacher, is unique in that the relationship that each teacher has is a blend of their

personalities, educational ideologies, and preferences of roles. The research delved deeper

into each co-teachers' perspectives to understand their co-teaching partnership with one

another.

Chapter 3: Research Design and Methods

Introduction

Co-teaching is a practice that necessitates collaboration and relationships between general and special education teachers (Friend et al., 2010). This case study examined the interactions between teachers during instruction time and planning time of one special education teacher and two general education teachers who co-taught in two separate high school classrooms. The special education teacher co-taught with one of the general education teachers in a geometry classroom and co-taught with the second general education teacher in an English classroom.

The following research questions guided the study:

1. How do co-teachers communicate verbally and nonverbally with one another during classroom instruction?

2. How do co-teachers communicate both verbally and nonverbally with one another during planning times?

3. How does the special education teacher perceive her role and relationship with her teaching partners?

4. How do co-teachers collaborate with one another?

Research Design and Methods

A qualitative research design was chosen based on the exploratory nature of this study. Rather than using a causality and prediction format, this research examined the teachers' experiences within the phenomenon of co-teaching (Creswell, 2009). A

phenomenological case study was chosen to understand the educators' relationships within

the classroom. The goal of this study was to understand the lived experiences (Johnson &

Christensen, 2008) through the perspectives of the three co-teachers. Husserl (2012) referred

to this commonality as an essence. We use our background knowledge to identify images and

events that we encounter. For example, the way an apple tree is an apple tree and not a plum

tree is the essence of the apple tree. Husserl (2012) stated, "We adhere to our general

principle that each individual event has its essence that can be grasped in its eidetic purity,

and in this purity must belong to a field available to eidetic inquiry" (p. 64). Husserl

identifies that the essence we all observe is based on our own knowledge and lived

experiences. Therefore, in order to understand the co-teaching relationship, we must observe

the co-teachers in their environment and then ask questions to understand the essence of their

lived experience.

Data were collected to interpret and describe the co-teachers' interactions as well as

how teachers communicated and collaborated with one another in the classroom and during

planning times. Of interest was how the co-teachers viewed their interactions and how the

day-to-day tasks were divided. There were two co-teaching pairs in this case study. Non-

participant observations (Caldwell, 2005) were used for one co-teaching pair as they video-

recorded themselves once a week, during one semester, from January 2015 to May 2015. The

video-recordings were submitted to the researcher who viewed and transcribed them each

week. The second co-teaching pair did not provide or conduct any video-recorded classroom

sessions. In addition, both co-teaching pairs provided audio-recordings of their planning

times. During planning times, both co-teaching pairs used an audio-recorder for a total of one

to two hours each week. Additionally, each participant completed an interview and questionnaire.

The researcher relied on the self-recordings of the co-teachers. The researcher was in another building at the time of the study and unable to be present during any teacher planning times. Prior to the investigation, the researcher met with the special education teacher to provide the video-camera, audio-recorder, and storage cards to describe how the equipment worked and to discuss how the recordings would be given back to the researcher. Each week, the researcher collected the storage cards and downloaded the audio- and video-recordings to a password protected laptop. The files were then saved to a password-protected drive.

Using non-participant, video-based observations can be beneficial when observations occur in one room and the camera is set in a fixed position. These video recordings may also limit the Hawthorne effect, which is the possibility that behavior can change when an observer is present (Asan & Montague, 2014). To understand the co-teaching environment, the researcher not being present in the classroom supported limiting interactions between the co-teachers and the researcher. Limiting interactions between the researcher and co-teachers provided the opportunity for the researcher to truly be *wallpaper* and discrete so that the co-teachers were not able to communicate with the researcher during classroom time as could occur in participant observation (Cooper, Lewis, & Urquhart, 2004).

The substantive framework of the study was to investigate how co-teachers communicate and collaborate and how the special education teacher perceives her role and interactions within the co-teaching partnership. The transcripts were coded verbatim; intonations and pauses were indicated within transcripts during the interactions between teachers. When co-teachers were working individually with students and not working with

one another, it was determined that intonations and pauses would not be identified as the

researcher was examining the relationship between teachers, and not between teachers and

students. Discourse patterns and grammatical aspects of the dialogue between teachers were

examined while coding. The analysis of discourse included how the teachers used language

when interacting with one another in the classroom and during planning times, how the

teachers talked about co-teaching, described their roles, and identified with one another.

Role of the Researcher

The role of the researcher was a non-participant observer. At the time of this study I

was a teacher-consultant in the selected school district at a school for fifth and sixth grade

students. Teacher consultants in this district are viewed in a *pseudo-administration* role,

responsible for ensuring that teachers are compliant with following special education laws

and regulations and validating all paperwork for Individualized Education Programs. As a

previous co-teacher, I supervised the co-taught classrooms within the building to which I was

assigned and played a role in developing special education students' Individualized

Education Programs (IEP). For these reasons, my school was excluded from this study to

avoid any conflict of interest. Additionally, the researcher was unable to be present during

planning times due to work commitments in the district. Therefore, non-participant

observation was identified as a method to record teachers in their natural setting.

Non-participant observation allowed the researcher to limit interactions with teachers

within the classroom as well as limit the possibility for the Hawthorne effect (Asan &

Montague, 2014). The Hawthorne effect earned its name from a study at the Hawthorne Plant

of the Western Electric Company in Chicago, Illinois, during the 1920s (Roethlisberger &

Dickson, 2003). The study found that the workers' productivity increased while being

observed and when the study was finished, their productivity decreased. The findings of the

Hawthorne study identified that research participants may change their behavior while being

observed (Sedgewick & Greenwood, 2015). By observing the videos outside of the

classroom, the researcher was able to observe one co-teaching pair's environment with some

detachment from the teachers. Additionally, after reviewing videos of the one co-teaching

pair, the researcher was able to meet with the teachers for the interviews and ask questions

that would help the researcher better understand what was observed through the videos.

Participants and Setting

A high school with 1,200 students, in a suburban school district in the Midwest

serving approximately 10,000 students, was chosen as the setting for this study.

Approximately 12% of the students in the high school received special education services,

which included numerous programs with different levels of restrictiveness. Classes without

co-teachers were offered in all subject areas; however, English and geometry classes were the

only courses co-taught. Programs included self-contained English and math classes available

for special education students, and two self-contained classrooms for all core subjects were

provided for students with intellectual disabilities in the building. Each class or program that

special education students were scheduled to attend depended on the level of need in a

student's IEP. The other high schools in this district offered additional programs, such as a

self-contained Autism program and a self-contained Emotional/Behavioral Disordered

program.

The two classrooms in this study included a co-taught English class with 28 students

and a geometry class with 26 students. Ten students received special education services in

the English classroom, and six students received special education services in the geometry classroom.

Participant Selection

Participation in the study was voluntary. There were five special education teachers at the high school at the time of the study. Angela was the only special education teacher who volunteered to participate. During the year of the study, she co-taught with three general education teachers, two of whom volunteered to participate in this study. Each of these general education teachers co-taught with Angela for one of their class periods each day. They did not co-teach with any other special education teacher. Pseudonyms were assigned to each of the three co-teachers who chose to participate.

The special education teacher met with the researcher during lunch and received the consent form to participate in the study. The two general education teachers who agreed to participate in the study with the special education teacher were emailed the consent form, met with the researcher, and were given opportunity to ask any further questions. The two general education teachers only co-taught with Angela and they did not have other co-teaching partners. The consent form notified the participants that they would be completing the study with their co-teacher during one semester and would audio- and video-record one class period per day using a video camera in addition to audio-recording their planning times with an audio-recorder. One co-teaching pair agreed to audio- and video-recordings of their classroom instruction and audio-recording of their planning times. The other co-teaching pair agreed to audio-recording of the planning times only. All the participants were given the option to leave the study at any time without penalty.

The Teachers

The participating teachers, Angela, Brenda, and Carol had a range of co-teaching experience levels, from two to six years. Demographic data were obtained from the district's seniority list that is available to all staff in the district and from a questionnaire, in which each teacher offered information about their background and social experience with other teachers. Demographic information included gender, years of experience as a general or special education teacher, years of experience co-teaching, and highest degree obtained (See Table 1).

Angela. A female special education teacher with 16 years of teaching experience; Angela had co-taught with a variety of teachers in the building for the past nine years. During the time of this study, she co-taught English with Brenda and geometry with Carol. Angela and Brenda had been co-teaching English together for six years. Angela and Carol were co-teaching geometry together for their second year. Angela continued to co-teach with Brenda and Carol for two more years after this study.

Brenda. A female general education teacher, with 11 years of teaching experience at the time of this study, Brenda was assigned to one co-taught English class with Angela and individually taught four other English classes each school day. In addition to teaching collaboratively with Angela for six years, Brenda had also co-taught with other special education teachers in the building.

Carol. A female general education teacher with 13 years of teaching experience at the time of this study, Carol was assigned to one co-taught geometry class with Angela and individually taught four other math classes each school day. Carol and Angela were co-teaching geometry for the second year and shared a common prep time.

Table 1

Participants: Background Data

Name	Gender	Years Teaching	Highest Degree	Certification	Years of Co-Teaching Experience	Years Co-teaching with current partner
Angela	Female	16	Masters	K-5 General Education; K-12 Special Education Emotional Impairment and Specific Learning Disability	9	2 years with the Carol, 6 years with Brenda
Brenda	Female	11	Masters	6-12 General Education; English and Speech	6	6 years
Carol	Female	13	Masters	6-12 General Education; Math and Biology	On and off for 9 years	2 years

Data Collection

The data collected for this study included: a) one set of non-participant audio/video-recorded classroom sessions, b) two sets of audio-recorded planning sessions, c) interviews, d) analytic memos, and e) questionnaire responses. Data were collected in the second semester of the school year, from January 2015 to May 2015. An additional interview with Angela, where she watched the video recordings of her lessons, was conducted in January 2016. The timeline for the data collection is shown in Table 2.

The English class sessions were 55 minutes in length and provided video- and audio-recordings ranging from 30 to 55 minutes in length. Angela stated that, "I tried to turn on the

camera as close to the beginning of instruction as possible and I turned it off at the end of

instruction when the kids were working independently." Both the English and geometry

classroom were tenth grade-level classes. The co-taught geometry classes were not audio- or

video-recorded; however, the planning sessions were audio-recorded. Students were different

in each classroom and their data were not tracked for this study, as the focus of the study was

on communication and collaboration between the co-teaching teams.

Table 2

Timeline for Research

Method	Beginning Date	Ending Date
Classroom and Planning Recordings	January 5, 2015	May 1, 2015
Interviews	May 18, 2015	May 19, 2015
Analytic Memos	January 3, 2015	June 1, 2015
Questionnaires	June 1, 2015	August 1, 2015
Post Study Interview	January 2, 2019	January 2, 2019

Classroom Session Data with Angela and Brenda. Angela and Brenda were the

only pair audio- and video-recorded within the classroom. They were non-participant-

observed by video camera that Angela placed in the classroom. Angela was responsible for

setting up the video recorder and turning it on and off. Angela stated, "They [indicating

Brenda] felt that it would be easier if one person was assigned to taking care of everything."

Angela placed the camera in the front of room so that Angela and Brenda's interactions with

one another could be seen. The angle of the camera allowed for the front, center, and right

side of the room to be observed. The videos that were less than 55 minutes were due to either

students working independently or because Angela or Brenda turned off the video camera

and turned on the audio recorder to record their planning sessions. Analytic memos were taken while observing the video-recordings.

The video-recordings included the beginning of the class sessions. Students' communication and interactions with teachers in the classroom were recorded, but student recordings were not the focus of the study. The video-recordings were viewed and transcribed each week when the camera SD card was collected. The observation protocol was used by the researcher to identify which teachers were doing the lead teaching, frequency, and types of interaction, and roles within the classroom (See Appendix A). The general education teacher in the geometry co-taught classroom declined to participate in the classroom video-recording during classroom instructional periods. As shown in Table 3, the length of each of the multiple video-recording sessions for the team that did participate was between 30 minutes to 55 minutes. A planning session that occurred in the classroom on the day of the video-recorded lesson was the cause of the variance in length.

Table 3

English Classroom Recording Sessions

Date	Classroom Duration / Method	Planning Duration / Method
January 12, 2015	35 minutes / audio, video	13 minutes / audio
January 26, 2015	46 minutes / audio, video	6 minutes / audio
February 2, 2015	55 minutes / audio, video	None Recorded
February 9, 2015	31 minutes / audio, video	15 minutes / audio
February 17, 2015	None Recorded	20 minutes / audio
March 16, 2015	48 minutes / audio, video	6 minutes / audio
March 23, 2015	42 minutes / audio, video	10 minutes /audio
April 20, 2015	35 minutes / audio, video	15 minutes / audio
April 27, 2015	30 minutes / audio, video	20 minutes / audio

Planning Session Data

A digital audio-recorder was used during planning settings once each week for 30 to 55 minutes for the geometry co-teachers and six to 20 minutes for the English co-teachers over a ten-week period in both the English and geometry classroom. A total of 13 planning sessions were recorded. Eight of the planning sessions were with the English co-teachers and five of the planning sessions were with the geometry co-teachers. Planning sessions were only audio-recorded and did not include video. In the English classroom, the teachers planned after their classroom lesson was complete while the students were working cooperatively or individually. An audio recorder was able to hear the conversation between each teacher as they spoke quietly while the students were working. Planning sessions occurred in the geometry classroom during their common planning time for the co-teachers. Table 4 identifies the planning session dates, times, and method of recording for Angela and Carol in their co-taught geometry classroom.

Table 4

Geometry Planning Recording Sessions

Date	Planning Duration	Method
February 5, 2015	55 minutes	Audio Recording
February 12, 2015	35 minutes	Audio Recording
February 26, 2015	31 minutes	Audio Recording
March 19, 2015	43 minutes	Audio Recording
March 26, 2015	48 minutes	Audio Recording

The special education teacher was given the digital audio-recorder and SD cards to save all recordings. The special education teacher managed all digital audio-recordings and

these were shared with the researcher each week. Teachers were asked not to edit or change

the recordings and the researcher retrieved the cameras and audio-recorder each week to

collect the SD cards and download the recordings.

Gaining Access and Entry

One of the four high schools in the school district was selected for this study. This

high school was selected based on the researcher's close working relationship with the

teacher consultant assigned at this school during the study. The teacher consultant was able

to organize a meeting to introduce me to the special education teachers and discuss the study.

The proposal for this study was submitted to and approved by the university's

Institutional Review Board (IRB). Permission was subsequently requested from the school

district and approved by the superintendent (See Appendix B), which permitted contact with

the teacher consultant who supervises special education programs in the high school selected

for this study. A lunch meeting was held with all available special education teachers at this

high school and a consent form that described the purpose of the study and data collection

necessary was given to each special education teacher (Appendix C). Each special education

teacher was asked to discuss the research opportunity with her general education counterpart.

One special education teacher identified interest in the study and contacted the

researcher via email. The researcher went to the high school, met with the teachers, and each

general education teacher, and the special education teacher signed and submitted the consent

forms to the researcher. Based on the availability of the special education teacher, the

researcher met with the special education teacher to review the equipment and discussed how

data would be collected over the ten-week period. An email was sent to all participants

welcoming them to the study (See Appendix D).

Interviews

All three teachers were interviewed in the location of their choice where they felt most comfortable. The teachers' consent to participate in the study also included consent to the interview. Teachers were informed that they could refuse to answer any question or stop the interview at any time without consequences. Each of the co-teachers was interviewed once after all the classroom video- and planning-recordings were complete. Semi-structured, face-to-face, interviews with individual study participants were conducted in a convenient space for the teachers at the school in May 2015 (See Appendix E). Seventeen open-ended questions were pre-determined to guide the interview but follow up questions emerged in the process of the interview. Clarifying questions were asked to provide further detail. The teachers described which classes they were co-teaching, the grade levels, and the demographics of the classroom. Participants were asked to discuss the methods they valued for co-teaching, their perceived roles within the classroom, how the team communicated and collaborated, how they viewed their co-teaching relationship, and whether they had found co-teaching beneficial for themselves and their students. The purpose of the interview was to understand the teachers' experiences with co-teaching and the roles they play within the classroom and planning settings.

Interviews were audio-recorded and transcribed in their entirety for a detailed analysis that explored the views and roles between special and general education teachers and were used to triangulate analysis with other data sources. The general education teachers were interviewed once. The special education teacher had a second, post-study interview.

The post-study interview with Angela followed the semi-structured interview asked clarifying questions to provide further detail following data analysis (See Appendix F). The

purpose of the interview was to understand Angela's role in the recording process,

understand information that I would have missed from not being physically present, as well

as member checking video recorded lessons with Brenda. Additionally, Angela was also

asked questions about her perception of co-teaching with Brenda. Angela's interview was 52

minutes long.

Questionnaire

All teachers who participated in this study completed the questionnaire that was

designed by merging an online questionnaire and a survey created by Austin (Co-Teaching

Questionnaire, n. d.; Smith, 2012; Austin, 2001) (See Appendix G). Permission was

requested and granted to modify the questionnaire by Austin as deemed necessary for this

study (See Appendix H). The adapted questionnaire included an additional section about

delineation of current tasks and three added statements to determine any personal relationship

between the co-teachers: 1) My co-teacher and I are friends; 2) I communicate with the same

groups of teachers; and 3) We sit together during professional development sessions. The

questionnaire corresponded with the interview questions in order to fully understand the

teachers' perceived relationships with one another and to help understand whether the role of

the teacher had an influence on their perception of co-teaching.

The questionnaire's first section included the teachers' background and demographic

data that were correlated with district demographic data on the teachers. Open-ended

questions regarding their opinions of co-teaching were also asked. Teachers then completed

five-point Likert-scale questions with responses ranging from, strongly agree, agree, neutral,

disagree, and strongly disagree. The questions asked about their responsibilities in the

classroom, if they had learned from one another, and how well they worked with one another.

The final section asked the teachers to describe who was responsible—general or special

education— for or if they shared duties such as planning, grading, attendance,

accommodations, and lesson planning. These data were compared and triangulated with

other data to identify themes and to deeper understand the co-teaching relationship.

The questionnaire was emailed via Google Docs to participants in this study in June

2015, at the completion of the video-recordings, audio-recordings, and interviews. Teachers

submitted the questionnaire through their Google Account. Two of the teachers completed the

questionnaire in June; Carol was reminded about the questionnaire and completed it in

August.

Data Analysis and Interpretation

Data collected from audio- and video-recordings, the questionnaire, and interviews

were all transcribed in the participants' exact words and phrases in Microsoft Word

documents. All transcribed data were kept on a password-protected laptop and password-

protected Drop Box, to which only the researcher had access.

All transcribed data were coded three separate times. The special education teacher

was assigned the acronym SEE for special education teacher English and SEG for special

education teacher geometry in order to distinguish between each class. Brenda was assigned

the acronym GEE for general education teacher English, and Carol was assigned the acronym

GEG for general education teacher geometry. An example of the coding sheet is shown in

Table5. The initial process used in vivo coding where the researcher uses the participants'

own words to understand how participants use specific words or phrases within their

environment (Saldaña, 2009). Codes placed in an Excel spreadsheet were labeled under the

heading category of in vivo codes. The initial coding process allowed the researcher to

review the teachers' own words and determine the roles that teachers had in the classroom.

All interviews, audio- and video-recordings, and the questionnaire were identified for

commonalities.

Table 5

Coding Sample

In Vivo Coding	Descriptive Coding	Axial Coding
GEE "Here's what the *expectations* are"	Describes lesson	Content Expert
GEE "*It is* a newspaper article so it is not first person *it is* written in third"	Interrupted by SE Describes Lesson	Content Expert
SEE "But *they're not writing* it like a Journal" Table 5	Interrupted GE Clarifying Lesson	Accommodation Expert
GEE "*Correct* you don't even say I interviewed because when you read-"	Agreeing with SE Interrupted by SE	Shared Agreement
SEE "*So not I, We*"	Interrupted GE Clarifying Lesson	Accommodation Expert
GEE "*Correct*, third person, you don't need to say "*I interviewed*"	Agreeing with SE Describing Expectation	Shared Agreement Content Expert
SEE "*In interviewing*…[looks to student to give example]"	Giving an Example Verifying Understanding	Content Expert
GEE "*Right*, third person [nodding to student]"	Agreeing with SE Verifying Understanding	Shared Agreement
SEE "*Right* [nodding]"	Agreeing with GE	Shared Agreement
GEE "It is like *this is what happens*, not I was told"	Describes Lesson	Content Expert
GEE "*I'm going to show you in an example*"	Singular Pronoun Leading Lesson, Describes Lesson	Exclusive Content Ex. Lesson Lead
GEE "The *first thing you* do	Describes Lesson	Lesson Lead

[describes expectations]"

Table 5 *(continued)*

Coding Sample

In Vivo Coding	Descriptive Coding	Axial Coding
SEE [Reading along directions with students in student desk]	Student Seat, Following Along	Lack of Space Student Role
SEE [Taking notes of expectations]	Accommodating	Accommodation Expert
SEE [Shhing student with finger]	Behavior Management Subtle Management	Behavior Support Subtle Method
SEE [Points to student, mouths "pay attention]"	Behavior Management Subtle Management	Behavior Support Subtle Method

In the descriptive coding, key phrases were identified that corresponded with the teacher's own words. The semantic and grammatical aspects of the transcribed discourse was analyzed. Of interest were events where teachers discussed their roles in the classroom and planning times, how the school organization influenced their roles, and how state requirements influence student learning. Additionally, codes determined turn-taking between teachers, the co-teaching model that was used, and the role that the teachers had within the classroom. The co-teaching model selected was based on the definitions provided by Friend et al. (2010) the six models identified were: one–teach, one–observe, one– teach, one–assist, team-teaching, alternative-teaching, parallel-teaching, and station-teaching.

To identify the which model was used, key factors in each model were identified. The time that the model occurred was noted, and what each teacher was doing at the time of the lesson was identified. If the key factors of each model were identified during the video observed then the researcher noted this as one of the models used while co-teaching. Key

factors of the one–teach, one–observe model was as one teacher in the lead role and the other

teacher observing the class to make sure students were attending to the task identified by the

lead teacher. A key factor of the one–teach, one–assist model was that one teacher presented

the lesson and the other teacher circulated throughout the classroom to assist individual

students. Key factors of team teaching showed both teachers leading instruction in the

classroom and both teachers responsible for the delivery of curriculum to all students. A key

factor of alternative teaching was indicated when the class was split into a large and small

group with one group receiving support on an assignment or an extension activity and the

other group receiving extra support on a topic each teacher was supporting a group. Key

factors of parallel teaching showed both teachers presenting the same information to two

separate groups, but the content or delivery may be different based on the needs of the

students. Finally, a key factor of station teaching showed each teacher at a station and

students rotated between the stations.

> While watching the video-recorded lessons, each was tagged using the above-
mentioned criteria to determine which model was used during that lesson. The researcher

developed codes and determined patterns through an inductive process rather than pre-

determining codes. For example, the descriptive code *classroom routines* emerged as the data

were reviewed and related to teachers' use of the room. Examples of additional descriptive

codes included the following: *look to one another for support*, *ease of relationship*, and

classroom management. The descriptive phase of critical discourse analysis was included in

these codes as well. For example, *inclusive pronoun usage*, *exclusive pronoun usage,*

interrupted, and finishes sentence were obtained from classroom and planning sessions.

Through this second level of coding the researcher was able to generate categories and trends across the data sets.

After the initial coding with in vivo and descriptive coding, a final coding was conducted. Axial coding is used to reassemble data that were split during the initial coding process (Saldaña, 2009). Similarly coded data were grouped to help reduce the number of initial codes that were developed. All codes from the English classroom video recordings, all audio-planning-recordings, and interviews were triangulated, and patterns were identified. Triangulated data from multiple methods that included video-recordings, audio-recordings, lesson plans, and interviews of numerous co-teaching subjects ensured trustworthiness of the study (Marshall & Rossman, 2011). This level of coding allowed for themes and the identification of key findings from the study.

Discourse is part of a social process and is determined by our social structures. Fairclough (2001) encouraged analysis that explores local, institutional, and societal contexts of interaction. Local contexts were considered throughout the analysis of the discourse. Local contexts are the immediate classroom or planning environment. Events that were coded and identified as having local relevance were identified and analyzed further with discourse analysis. The discourse between teachers was analyzed through this lens to determine the language they used depending on their setting. Several factors from classroom supports, district mandates, and state mandates played a part in how teachers worked with one another and students.

Maintaining Integrity in This Study

I worked with general and special education teachers with whom I had no previous working relationship to prevent potential bias. Further, I did not engage in any personal

conversations with administrators or directors who oversaw the co-teaching programs in the

participant building so that their perceptions of the working relationship of the teachers did

not influence the interpretation of the findings of the study.

Summary

The purpose of the research was to gain an understanding of the co-teachers'

interactions both the classroom and during planning sessions. By understanding the roles and

responsibilities of each teacher in the different settings, the research analyzed how co-

teaching teams worked with and communicated with one another. The findings from these

data are reported in Chapter 4.

Chapter 4: Research Findings

An Overview

The purpose of this study was to understand how teachers communicate and collaborate with one another while teaching in the classroom and during planning time. The research is a case study of one secondary special education teacher paired with two different general education teachers. Of interest is how the teachers communicated and collaborated with one another. Findings from the teaching teams in this study are presented in this chapter.

The data presented in this chapter address the four research questions in this study.

1. How do co-teachers communicate verbally and nonverbally with one another during classroom instruction?

2. How do co-teachers communicate verbally and nonverbally with one another during planning time?

3. How does the special education teacher perceive her role and relationship with her teaching partners?

4. How do co-teachers collaborate with one another?

The main findings within this study are as follows: (a) the general education teacher is the lead teacher in the classroom; (b) the general education teacher is responsible for organizing and delivering instruction; (c) the special education teacher supports students in the classroom; (d) the special education teacher is responsible for providing accommodations and the background knowledge of students; (e) co-teaching is beneficial for supporting

teachers to address the students' needs; and (f) barriers exist for successful co-teaching partnerships.

This chapter is divided into two parts. Part one includes descriptions of teaching teams, physical descriptions of the classroom settings, responsibilities identified by each teacher, and the structure of special education support at this school and the school district level. Part two describes the key findings of the study.

Part I–The Teaching Teams

To fully understand the relationship between the teaching teams, it is important to know the teachers' backgrounds, how long they have been working with one another, and the structure of their work days. Angela, Brenda, and Carol were the participating teachers in this study. The daily schedule at the selected high school comprised six-periods, with one period of each day designated as prep time for teachers, when they can participate in shared planning or work on other tasks such as differentiating assignments, grading, or IEP paperwork. When both teachers have the same prep time, it is called common planning time.

Angela. At the time of this study, Angela had been a special education teacher at the high school for 16 years. The highest degree she obtained was a master's degree, and her special education certification was in emotional impairments and learning disabilities, although Angela has worked with a wide-range of students with various disabilities. Throughout the school day, Angela co-taught with three different teachers in each of their assigned classrooms. Of the three, two of her co-teachers, Brenda, an English teacher, and Carol, a geometry teacher, agreed to participate in this study; however, only the geometry teacher had a common planning period with Angela. In addition to co-teaching assignments, Angela's schedule included two other class periods specific for special education students.

One of the classes was an academic skills class that included students on her caseload and the other was a resource room designed as a drop-in time for special education students if they needed support.

Brenda. Brenda, a certified general education teacher for 11 years, earned a bachelor's degree in secondary education, with a major in English and speech as well as a master's degree in English. In Brenda's tenth grade English co-taught classroom, 10 of the 28 students in the room were certified as special education students. The teachers did not identify the special education students to the researcher, and there was no way to distinguish the special education students within the classroom. A paraprofessional was also scheduled in this classroom with one student who needed motor support. Because of the nature of this student's disability and the presence of the paraprofessional, the identification of this student as receiving special education services is apparent through the video recordings. Brenda had co-taught with Angela for six years at the time of this study; they did not have a common planning period. Brenda did not have a co-teacher in any of her other five remaining class periods of English and speech.

Carol. Carol co-taught at various times in the previous nine years; the year of this study was just the second-year of co-teaching with Angela. Carol, a certified general education teacher for 13 years, had earned a master's degree in educational leadership and a bachelor's degree in secondary education with certification in math and biology. Six special education students were among the 26 students in the geometry classroom, where she and Angela co-taught geometry one hour each school day. As the researcher, no students were identified as special education students by the teachers. Carol and Angela had a common planning period, and Carol did not co-teach during any other class periods.

The daily schedule for each teacher is shown in Table 6. Note the co-taught class

periods of Angela with Brenda and with Carol and the common prep time during 2nd period

for Angela and Carol.

Table 6

Teacher Schedules

Teachers	1st Period	2nd Period	3rd Period	4th Period	5th Period	6th Period
Angela	Co-Taught Geometry	Prep	Co-Taught English	Co-Taught English	Academic Skills	Resource Room
Brenda	English	English	Co-Taught English	English	English	Prep
Carol	Co-Taught Geometry	Prep	Geometry	Geometry	Algebra	Algebra

The Planning Time

The co-teaching teams involved in this study were Angela and Brenda in an English

class and Angela and Carol in a geometry class, both were tenth grade classrooms. Angela

reported that she spent two to three hours planning for her co-taught classes each week.

Angela reported that her planning time was allocated within the classroom with Brenda and

during the common planning period with Carol. She planned more with Carol, as they had a

common planning time and were only in their second year working with one another. Angela

spent time outside of the planning sessions to prepare accommodated materials. Brenda

reported 15 minutes planning for her co-taught class each week, which was spent planning

with Angela after Brenda finished teaching the lesson for the day. Because Brenda and

Angela had been working together for six years, they did not plan together often, and their

planning times were short.

Angela and Carol taught one section of geometry together. They had a common

planning time and met one to two times per week to plan. The pair met during their planning

time for 15 to 20 minutes. Carol stated:

> "We both have the same conference hour. We teach first hour together and then meet
>
> second hour for 15-20 minutes and that happens at least twice a week. Things do pop
>
> up and pull us apart. That is hard. Typically, it is always at least twice a week."

The English classroom. The English classroom had one teacher's desk and chair at

the front of the room designated for Brenda, and student desks were arranged on each side of

the classroom facing the center of the room. Brenda was seen sitting at her desk after the

introduction of the lesson was complete and students were working individually. There was

no desk or teacher's chair for Angela in the classroom. Angela sat in a student desk and, in

her interview, she identified that she preferred to be close to some of her special education

students. During the interview, Angela identified that only the students who needed more

support and redirection were seated near Angela during the lessons. Angela stated that she

sits in the student desks, "Just because of the classroom make-up. There was not enough

room for a second teacher desk, number one, and second, I did not want to be in another

person's space, and there was always an extra student desk, so I just sat there." When Angela

was asked if she ever felt that she need a space, she stated,

> No, everything I needed was in my bag that I brought. I never felt that a designated
>
> area was needed. They were both willing to share their space I just never sat in a

teacher desk. I was more comfortable sitting in a student desk with the kids and I felt

that made them (the students) more comfortable coming to me.

Figure 2 is a diagram of the English classroom.

Ten special education students were assigned to the English class co-taught by Brenda

and Angela, with a paraprofessional assigned to one of the special education students in the

classroom. Brenda organized student desk assignments, but Angela made sure that students

with special education services had designated seating appropriate to their supplementary

aids and services. Angela stated, "Brenda assigns student seats but I make sure that special

education students have seats that match their accommodations. I know what the kids need

and where they need to go." The English classroom was referred to as Brenda's class. For

example, if a student or Angela answered the phone they would answer with the greeting,
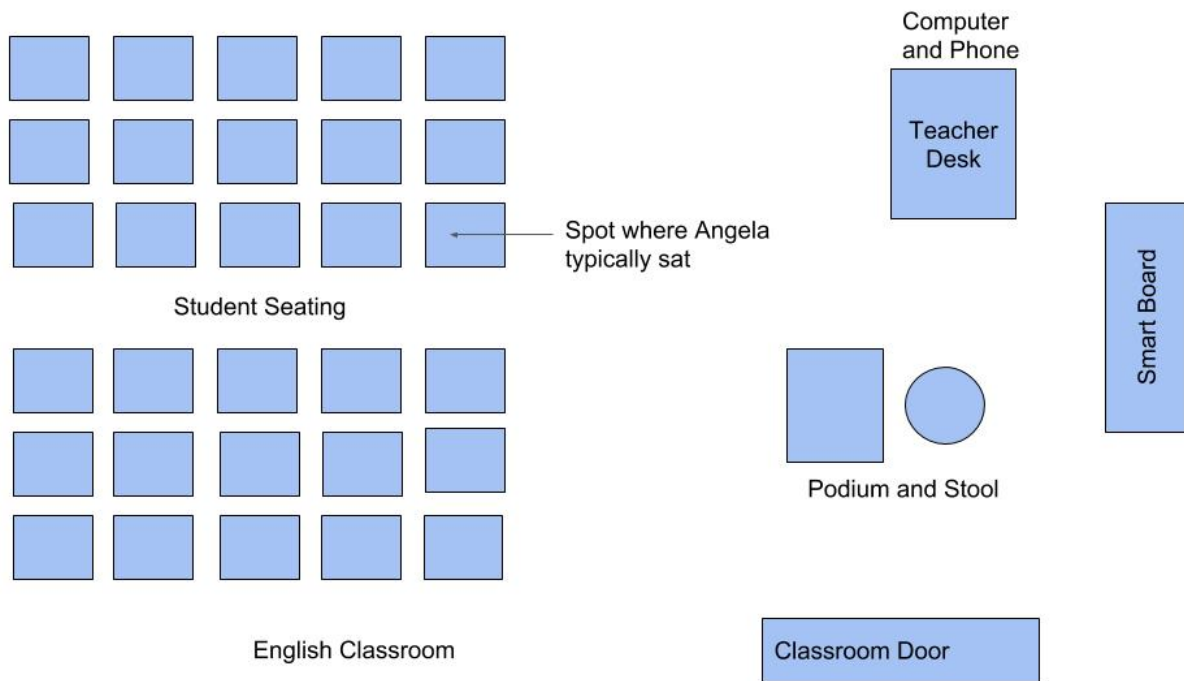
"Mrs. Brenda's class."

Figure 2. The English Classroom.

Angela was assigned a separate office space with her own computer and desk at the opposite end of the hallway from the Carol's English classroom. Angela brought students to her office for accommodated assessments or additional support, if needed, during classroom instructional time. When students needed further support they were told that they could go to Angela's office. Angela taught an academic skills classroom for one period of the day. This classroom was shared with four other special education teachers as they all taught an academic skills class for one period per day. The academic skills classes were exclusively for special education students.

Non-participant video-recorded classroom sessions showed Angela and Brenda using the one–teach–one–assist model of co-teaching. Angela was either sitting and observing the lesson, taking notes, maintaining student focus, or circulating around the room to support students individually. Angela stated that, as the co-teacher, she would present lessons to students in the English classroom; however, this was not observed in the eight video-recordings of the study

The classroom routine in the English classroom was for all students to come in and have a seat, then complete a bell-work assignment in their writing notebooks. This assignment was posted on the white board in front of the classroom. After this assignment was complete and assignments were reviewed by Brenda, the main instruction of the day began. For the recorded lessons, Brenda always led the lesson and discussion. Six of the eight lessons video-observed involved more independent work time for students rather than teacher-directed time. Brenda started the work time session for students and ended the time on each of these occurrences. Angela interjected with comments, accommodated students, and provided supportive verbal cues. Examples of these within the class included Angela

moving a desk to a location for a student in the class, using her cell phone to take pictures of class notes, scribing class notes and giving copies of the notes to students, asking students what they are supposed to be doing, pointing at students when they are off task, and placing her fingers to her lips when asking students to be quiet. While Brenda addressed the entire class, Angela typically circulated around the room monitoring student progress and providing feedback for students. During whole-class discussions, Angela participated but was seated in a student desk with the class. Angela's participation consisted of adding to the group discussion. Angela was never the lead or in control of the discussion during the video recorded sessions.

The geometry classroom. During the interview with Carol the researcher was able to see the classroom arrangement. A teacher's desk and chair were set at the front of Carol's geometry classroom. This desk and chair were for Carol's use. Students' desks all faced the white board. Figure 3 shows a diagram of the classroom arrangement. The only interactions recorded for these teachers were during their planning time, as Carol did not record any class lessons for this study. Carol did not feel comfortable with video-recording the classroom during class sessions.

In her classroom, Carol described how Angela moved about the classroom to support students or sat with students in the student desks. Angela did not have a designated seat. Angela and Carol had a common planning period immediately after their class session together. Carol stated that they planned for "15-20 minutes and that happens at least twice a week." and provided five audio-recorded planning sessions of between 30 and 55 minutes.
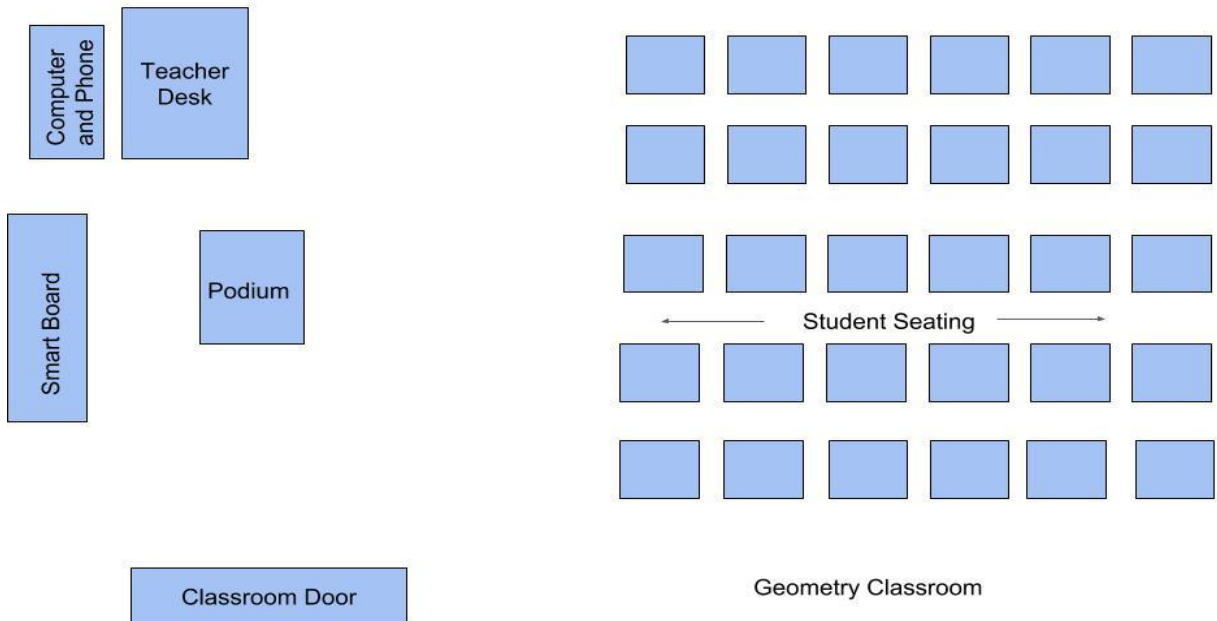
Figure 3. The Geometry Classroom

Carol discussed the planning time as beneficial, but she believed that Angela was pulled away too often for "special education issues" (Interview, 2015). Carol defined those issues as: IEP meetings, student discipline, and personal curriculum meetings. Angela confirmed that she was torn during these times and knew Carol needed her and she could not be there as often as required. Angela had stated in her interview, "I feel bad, I can't always be there [for planning times] because I have meetings, or an urgent matter comes up. I can't be in two places at once."

District Level

To understand the multiple factors that affected special education teachers at the high school, it was essential to understand the configuration of special education support at the district level. Although general education teachers report to their assistant principals and principals, the special education teachers also report to district and school-level special education supervisors. Approximately 1,200 special education students with a wide range of

disabilities are enrolled in the school district and are served by the following special

education staff:

- A director of special education responsible for all special education programming;

- Two special education supervisors, each responsible for half of the district buildings;

- Special education teacher consultants at each high school, middle school, and upper

  elementary school, responsible for compliance and organization of programming

  within the school building;

- Four district special education teacher consultants: 1) a consultant responsible for

  compliance of Individualized Education Programs (IEPs); 2) a consultant responsible

  for autism programs and support; 3) a consultant responsible for cognitive or

  intellectual disability programs and support; and 4) a consultant for support of

  students with emotional disturbance;

- Special Education teachers placed in all buildings for programming. The

  programming placement was chosen by the director of special education. Placements

  were based on certification of the teacher and student needs based on IEPs.

     In this study, the high school teacher consultant was responsible for IEP compliance

in the building and supported scheduling co-teaching teams and classrooms with the

counseling department and assistant principal (Angela's Interview, 2015). Although special

education teachers provided the teacher consultant with input regarding their schedules and

co-teaching partners, they were not guaranteed placements. Likewise, general education

teachers provided feedback regarding their placements to the assistant principal, but their

placements were also not guaranteed. Angela had requested to co-teach with Brenda. Last

school year, Angela had asked to not co-teach with Carol, as she was not comfortable in a

geometry classroom. However, her administrators determined the need for Angela and Carol to co-teach together. After the year with Carol, Angela decided that continuing to co-teach with Carol this school year would be beneficial.

In addition to Angela's co-teaching, academic skills class, and resource classroom, she was also responsible for IEP compliance and annual IEP meetings. Each meeting was scheduled and organized by Angela and the teacher consultant at the high school. Angela was also responsible for transitioning students from the high school to post-secondary programming. Angela was in frequent communication with special education teacher consultants and the special education supervisor. These additional assignments all added to Angela's responsibilities.

Part II–Findings

The study found that the general education and special education teachers were following a traditional approach to teaching, the one–-each, one–assist model of co-teaching. The general education teacher continued to be a lead teacher within the classroom and was responsible for organizing and delivering instruction. The special education teacher supported students within the classroom so that they could meet the identified academic goals by providing accommodations and supports her general education teacher with background knowledge of each special education student. Additionally, the teachers identified numerous benefits for co-teaching as well as barriers that continue to make co-teaching difficult within and outside of the classroom.

The findings are organized by the classroom sessions with Angela and Brenda and then by planning sessions. The planning sessions will begin with Angela and Brenda,

followed by planning sessions with Angela and Carol. The remainder of the findings will

focus on benefits and challenges identified by both co-teaching pairs within the study.

General Education Teacher as Lead Teacher

Brenda was the general education English teacher in this study, and she identified

herself as the lead teacher. Each lesson observed showed Brenda starting the lesson for the

day, providing a review of the day's activities, and directing the whole group lessons.

Classroom instruction was teacher-centered, and Brenda was recorded providing the large

group instruction from the front of the room, whereas Angela joined the discussions. The

students faced the general education teacher who was standing in front of the classroom

directing the lesson. During whole group lessons, when Angela interjected to add to the

discussion, it was not uncommon for her to be interrupted by Brenda for further clarification.

The special education teacher was seated in the classroom or stood to the back or side of the

classroom as the lesson progressed.

Classroom routine with Angela and Brenda. Angela described the typical day in

the classroom with Brenda as the following:

> She [Brenda] would deliver the lesson, whether it would be a grammar lesson, the
>
> novel, or an essay we were working on and then from that point we would split off
>
> into groups where I would work with general and special education students working
>
> on whatever assignment or enrichment they needed more help on.

When describing how they worked with students within the classroom, Angela stated:

> Sometimes I was in the classroom as a whole group, and it was Brenda and I tag-
>
> teaming, sometimes I would take kids to a different room because we wanted smaller

groups. We never really worked with a set group of students we were both willing to

work with general education and special education students.

Each lesson observed had a similar pattern. Students began the day with an

assignment from the whiteboard. Brenda then greeted the class and began by reviewing

goals for the class to complete that day. During two of the recorded class sessions, Angela set

up the equipment and then left class. Angela arrived to these two classes after Brenda had

already started the class lesson. Angela also left one class early to support another teacher

during one of the recorded sessions. While Brenda addressed the class, Angela distributed

papers that students would need, sat in a student desk as a participant of the class, or checked

progress on work with students.

When the whole group lessons were complete, Brenda would have students work

independently or within groups. During this time, Brenda would come to her desk and work

while Angela rotated around the classroom or sat with students to support them. At these

times, Brenda interrupted Angela on multiple occasions to add to the instruction and support

what Angela was giving the group. At times, Angela and Brenda repeated one another, as if

to signal that they agreed on the comment, and they made small talk and joked during

lessons. When Angela observed these moments she stated, "Brenda and I were so in sync. I

say stop and she does the same thing. You know that you are in sync but looking back on the

video I think we really were."

Utterances between Angela and Brenda. Utterances between Angela and Brenda

also were identified as important for determining which was the lead instructor. Brenda made

more utterances in the classroom than Angela; all utterances were approximately the same

length. The amount of speaking time concurs with video-recordings that show Brenda as the

lead teacher, and Angela is observed in six of the eight video-recordings using the one–teach, one–assist model of co-teaching. On the third video-recording, Angela took a small group of students to another room to provide academic support; this was identified as parallel teaching. During another video-recording, Angela took students to an alternative location for an assessment.

Every utterance that teachers made in the classroom was counted and examined. Table 7 shows a summary of each video-recording, which teacher was uttering, to whom the conversation was directed, and the total times the teacher uttered in the classroom during the recorded period. Table 8 follows with an overall summary of the entirety of utterances in the classroom setting. The captured utterances provide a general overview of the amount of times that each teacher was speaking.

Table 7

Utterances in the Classroom

Video Recordings	Teacher Uttering	To Student	To Class	To Co-Teacher	Total
Obs. 1	Angela	13	0	2	15
Obs. 1	Brenda	20	2	5	27
Obs. 2	Angela	6	0	3	9
Obs. 2	Brenda	9	2	3	14
Obs. 3	Angela	4	0	17	21
Obs. 3	Brenda	1	1	18	20
Obs. 4	Angela	5	1	2	8
Obs. 4	Brenda	2	6	1	9
Obs. 5	Angela	13	7	8	28
Obs. 5	Brenda	17	34	5	56
Obs. 6	Angela	9	0	19	28
Obs. 6	Brenda	7	3	26	36
Obs. 7	Angela	11	0	15	26
Obs. 7	Brenda	40	2	14	56
Obs. 8	Angela	6	1	6	13
Obs. 8	Brenda	11	3	4	18

Table 8

Entirety of Utterances in the Classroom

Teacher	To Student	To Class	To Co-Teacher	Total
Angela	67	16	72	155
Brenda	107	53	50	210

Categories emerged within the utterances and are defined in Table 9. The data showed that Brenda spent more time directing lessons, explaining lessons, providing classroom management, and establishing timelines when compared to Angela. Angela spent more time providing accommodations to students when compared to Brenda. The category "other" represents categories such as: clarifying with student, side bar conversation, and joking. Brenda overwhelmingly directed the class lessons, showing that she is the lead teacher of instruction within the classroom.

Table 9

Categories of Utterances in the Classroom

Category	Angela	Brenda	Examples
Directing Lesson	8%	92%	"Here's what the expectations are for today" (Brenda). "That's the first quiz and we are doing the second on the back" (Angela).
Explaining Lesson	44%	56%	"It is a newspaper article so it is not first person it is written in third" (Brenda) "Your group is supposed to do this part" (Angela)
Classroom Management	35%	65%	"Sit down in your seat" (Brenda). "Look at her" (Angela)
Directing Partner	0%	100%	"They can use the quote, I just don't want this copied" (Brenda) "Can you make 2 copies of this?" (Brenda)
Providing Timeline	10%	90%	"You will have two days to work with your group" (Brenda) "Your last fifteen minutes will be partner work" (Angela)
Providing Accommodation	83%	17%	"Just read this part first and highlight the key details" (Angela) "You may work with a partner" (Brenda)
Other	53%	47%	"Oh my gosh, you guys kill me" (Brenda) "You know that they would send you and I there" (Angela)

Although Brenda continually was the lead instructor, the effect of the six years that

Angela and Brenda had worked together was palpable in the classroom. A side glance or a

gesture was all that was needed from one to the other to know what they would do next or

what the other was thinking. They work around one another seamlessly and completed tasks

such as passing out papers without conversation. Angela and Brenda were equally attentive

to students and there was no noticeable discrepancy in which teacher worked with special education and general education students. In the classroom, Brenda was strict and expected appropriate behavior from students. Examination of Brenda's utterance showed that Brenda provided classroom management to the class 65% of total classroom management utterances compared to Angela's 35%. Brenda's corrections were heard throughout the classroom 39 times and are an example of being seen in a lead role.

Additionally, Brenda directed Angela 10 different times, whereas Angela never directed Brenda. Directing Angela was identified as another indicator of Brenda as the lead teacher. Brenda would ask Angela to "hold on" or "wait to copy this" when Angela was going to take a picture or write down notes from the board. Brenda also asked Angela to get the phone when it rang. Overall, Brenda took the lead in the classroom. Brenda was also seen taking the lead of direction when discussing due dates and time frames for work completion. Brenda discussed these dates and time frames with the class 18 times, whereas Angela mentioned due dates only two times.

During the interview, Brenda identified her role as an English teacher in charge of planning lessons, grading, and developing tests and quizzes. Brenda did identify that Angela shared in teaching lessons, but Angela is not responsible for whole group instruction. During Angela's interview, she stated, "I feel that we share whole group instruction because I am comfortable adding to the lessons." Although Brenda respects Angela and appreciates her support for students and herself, she identified herself as the lead teacher in the classroom. When answering the question, "I feel that our responsibilities within the class are equitable," Brenda selected agree. Although Brenda and Angela had worked together for many years, Brenda still saw herself as the lead teacher in the classroom.

Examples of leading the direction of the lesson. Patterns emerged with how the teachers communicated with one another in the classroom. Interruptions are one example of how Brenda led and managed the pacing of the lessons. Analysis of the interruptions determined that Brenda interrupted Angela a total of 19 times. Five of the interruptions were to add to a whole class comment that Angela had made during whole class discussions. During these times, Brenda had taken over the classroom lead and cut off Angela's statements to the classroom. The following examples provide more detail regarding interruptions that occurred in the classroom.

Lead Teacher Example 1 is an interaction that occurred while students were watching a video about a family that did not believe the Holocaust occurred. The sensitive lesson covered topics that students could find offensive and racist. The purpose of the video was to help students explore how their environment and family life may influence their beliefs. Both teachers had presented this lesson in the past. Planning sessions indicated that Brenda wanted students to be able to question how their environment and upbringing may play a role in who they are today. Brenda relied on Angela for background knowledge about the people in the video and both frequently asked one another questions or made comments about previous lessons. This video was setting the stage for a formal writing assignment.

In one part of the discussion, a student became upset with someone in the video who used offensive language to talk about African Americans. There was a three second pause after the student asked the question and Angela began to answer the question, describing why the people were using that word. Brenda interrupted Angela to bring the class back together. Angela seemed comfortable discussing the topic; however, Brenda, seeing that the lesson was moving to a discussion about the word usage rather than the discussion about beliefs and

how this influences our daily lives, interrupted the discussion to resume the lesson in the

direction that she chose. The lesson was planned to stir a reaction from students about how

beliefs can influence people. However, the discussion about word usage was not within the

plan and seemed to veer the conversation in another direction. This example showed Brenda

as the leader in facilitating the instruction and content of the lesson.

Lead Teacher Example 1.

Student A: Why would they use that word? [3 second pause]

Angela: [Angela breaks the silence] I know that is a sensitive word when *we* hear it,

but they are trying to justify their use of the word by comparing it to rap music. They are

trying to say it is not any worse . . .

Brenda: [Interrupts] Hold on, *I* want to get back to the connection of how you are

raised and what you believe. They talk like it is normal. *I* will tell you a follow up. If you

read up on these girls now, they are saying that they do not believe this anymore. They have

detached themselves from what their parents taught them.

In the post study interview, when Angela watched the video of this lesson she

explained the background of the lesson:

> We were having a discussion about the "n" word and how students are influenced by
>
> their environment and there still is racism and a lack of understanding of different
>
> ethnic backgrounds. We were trying to get them to see that their environment
>
> influences them. Prior to this, Brenda presented a lesson about Hitler's childhood and
>
> early life and how this possibly influenced the way he was thinking. This was a more
>
> modern day piece where kids can see how they can be influenced by their parents.

When asked about the interruption by Brenda, Angela did not feel interrupted at that time and felt that they were both comfortable interrupting one another during lessons. This lesson was taught each year; Angela felt that they just differentiated it throughout the years together. Angela was able to identify that Brenda wanted the classroom discussion to focus on how beliefs can lead people to say and do things that we deem inappropriate. Brenda's interruption showed that Brenda oversaw the instruction and led the lesson. Lead Teacher Example 1 provided more insight into a difference in the discourse between Angela and Brenda. When Brenda interrupted Angela, Brenda used *I* to take control of the situation and to bring the class back to attention.

Additional interruptions by Brenda were to add to an answer that Angela was giving to a student. Lead Teacher Example 2 occurred when a student came to Angela to ask a question about a group project on which the students were working. Angela was sitting near Brenda's desk with another student at the time but began to answer the student when Brenda interjected. Brenda was working at her desk on the computer.

Lead Teacher Example 2.

Student B: How do I know what quote matches this theme?

Angela: Well, your group is supposed to do that. You can stay . . .

Brenda: [Interrupts] Stay with your group. The point is to say, "Here's my quote, here's what I thought about." How do you guys think this quote helps to demonstrate that this theme exists in the novel?

Brenda understood the content and what progress she wanted students to make in each lesson. Each interruption provided Brenda with the ability to ensure that students knew what they were to focus on, and this supported Brenda as the lead in the classroom.

General Education Teacher Content Expert

Classroom video-recordings indicated that, as the general education teacher, Brenda was the content expert. Planning time audio-recordings also supported that both Brenda and Carol were focused on content-planning for the co-taught classrooms. Angela provided more content support in planning sessions with Brenda, as she was more comfortable with the English curriculum. Angela identified that she was comfortable with the English curriculum and would lead the *Mice and Men* unit.

Brenda as content expert within the classroom. Video-recordings of lessons identified that Brenda spent more time directing lessons, explaining lessons, providing classroom management, and establishing timelines for the lessons. An examination of the utterances within the classroom found that Brenda was leading the lesson 92% of utterances categorized as directing lesson. The positioning of the lectures and discussions documented the roles of Brenda as the lead teacher and content expert. Additionally, discussions between Angela and Brenda in planning times also provided data corresponding to the general education teacher being the content expert.

In Brenda's interview, she defined her role in the classroom as "instruction and curriculum for the day." Brenda felt that having both teachers in the room allowed them to offer more accommodations to other students who were struggling but did not receive special education services. Brenda described what she had learned from Angela was to be more patient with accommodating students and to be willing to adjust assignments based on individual student needs, yet she still identified Angela as being responsible for accommodating students rather than that being a shared task. Brenda defined Angela's role

as instructional support and Angela "specifically focuses on "her" kids [special education students] and works with general education students too."

Brenda felt pressure to maintain a strong pace to complete the grade-level curriculum. Brenda stated, "God, this class is hard, even our gen ed [general education] kids aren't getting it." Brenda delineated between general education and special education students in this comment. In a later planning session, she expressed, "I think we are keeping a pretty good pace" for completing the curriculum requirements. Her desire to follow the content and meet curriculum requirements may have led to her feeling the need to lead the content within the classroom.

During classroom lessons Brenda interrupted Angela at times to add to the content that was being discussed with students. Fourteen of the times that Brenda interrupted Angela were to add to Angela's answer to a student's question. An example of this occurred when Angela was beginning to describe to a student how to write a quote from the text. Angela said to the student, "You don't have to write the . . ." Brenda interrupted Angela and interjected with, "just do the beginning of it, and the end. Or just do that much, and then just paraphrase." Angela seemed comfortable herself with describing how to paraphrase the quote before Brenda interjected. Typically, Brenda's interruptions were to give more detail or reiterate what Angela was stating. All the interruptions within the classroom involved Brenda adding more to the instruction of the lesson. However, Angela seemed comfortable answering the questions herself before Brenda interrupted. At no point did Angela gesture or look to Brenda for support. When asked about her comfort levels with the lessons, Angela stated, "I feel like either of us could have been the lead teacher for this lesson." Brenda's interruptions supported the content of the lesson.

Angela watched videos of the lessons where she was interrupted, and she stated, "I

never felt interrupted and I do not think that she did either." She felt that the interruptions

were adding to the lesson and that,

Brenda and I had a good working relationship she never was like be quiet don't say

anything and when I did *Mice and Men* she would sit in the back of the room and she

would interject. We just had a very natural ebb and flow to our delivery.

Angela also described past co-teaching experiences and stated:

In the past there were certain co-teaching situations where I did not say a whole lot

because I knew that teacher did not like it. You have to feel a certain rapport to

interrupt and I did not want to lessen that rapport by interjecting with them.

Brenda as content expert while planning. Audio-recordings of planning sessions

identified that the number of questions asked by Angela and Brenda in planning sessions

were equal; each asked 12 questions while lesson planning. Angela's questions were about

the lesson-planning, such as, "Tomorrow is the vocabulary assignment?", and "I think that

should be okay." Questions from Brenda looked for confirmation, such as, "You know what

I mean?" and "Sound good?" Angela was looking for confirmation more than Brenda overall

with statements such as, "So, then maybe we don't do that" and "Maybe we could start this

project early." Brenda was looking for confirmation of the content and pace of the lessons.

Brenda's responses during the interview showed that Brenda perceived her role as the

lead on planning due to her responsibility to provide the content, even though they planned

together. Brenda stated:

Since she knows the stuff [curriculum] and we have been doing this so long, I will

just say, what do you think about adjusting this based on what happened last year, and

we talk about what went well and didn't go well.

On the questionnaire, Brenda identified planning lessons as her responsibility even

though she stated that Angela "knows and understands the curriculum." Additionally,

planning recordings indicated that Angela was taking an active role in planning lessons. In

Content Expert Example 1 Brenda is describing the content that students will be working on

during their book summaries. Angela supports Brenda's pacing of the lesson and agrees that

the selected books should benefit all students and should not be too difficult.

Content Expert Example 1.

Brenda: So then tomorrow, we will go over the outline for the summary and the

details that they need. I have that sheet where they complete the summary of each book.

Angela: Okay.

Brenda: So we'll give them that. We'll go over each one. But I don't think any of

them are a concern. I think they can all find one at their level.

Angela: No, I don't think any of them are either and I know which kids to suggest

books to.

Brenda: And the problem with that last time, it was more of a logistical problem and

not having it all organized.

Brenda continued to support content of the lessons while planning and described the

lessons that she would be presenting. Angela agreed with the pace and would provide

feedback for accommodations that she thought would benefit students. In Content Expert

Example 2, Brenda describes a writing assignment where the students needed details from a

story that they were reading. Angela suggested that they spend time in groups with other

students reading the same book so that they could discuss some of the details together first

before having to write them on their own. Although Brenda agreed to the accommodation,

she continued to provide details in how the content would then be delivered within the class

session.

Content Expert Example 2.

Angela: Let's give them time to work with their book groups first.

Brenda: And then, that way if it's wrong, or if they need to add on the details more,

then they have the group to make sure that they have a meaningful discussion, and that they

flush out all the analysis and that.

Angela: Right.

Brenda: So, and then we'll just tell them too, you need to get your individual stuff

like, you better do it well, because if you keep coming to your group on whatever days, you

are losing time.

Angela: Right

Brenda: With like, a sentence written, they just have more work to do. So it's really

on you to bring something good to your group.

While Brenda was comfortable providing direction for the content, she continued to

support recommended accommodations from Angela. Additionally, their time working

together over the years helped them identify ways to accommodate and support this year's

group of students.

Carol as content expert while planning. Carol identified herself as a math teacher

and the deliverer of content. Planning sessions revealed that Carol was providing input for

the delivery of the content, while Angela was supporting accommodations and timelines.

Although Carol was not video-recorded teaching in the classroom, she was able to define her

role and the classroom setting during our interview. Carol described her classroom with about

10 special education students and students with 504 plans (further clarification found that

there are 6 IEP students and the other four students have 504s). She stated "we let them

remove themselves from the class when they need more help." Carol identified her role:

> I am in charge of planning the lessons and developing the tests and quizzes. Angela
>
> is responsible for accommodating the tests and quizzes. I do the lectures, but she has
>
> a good handle on the material and will interject with suggestions or clarify the lesson
>
> as I go. I basically do the instruction. We don't have discipline issues. We both take
>
> care of it as it comes up.

During the planning-time sessions, the teachers were amicable and laughed and joked

with one another. Both teachers were actively involved in the sessions; however, Carol still

took the lead on directing curriculum and planning where they were heading with each unit

as expressed in their interviews. In Content Expert Example 1, Angela and Carol were

planning for the next unit of study and finalizing a date for their unit exam. Carol was

focused on describing the content of the lesson, whereas Angela was focused on when the

content was going to occur.

Content Expert Example 1.

Carol: So *we* just- it's all right triangles. *We've* done Pythagorean Theorem. *We've*

done special rate. *We* now do trig.

Angela: Okay. And that's the formula stuff? [asking questions about content]

Carol: Yes.

Angela: Okay.

Carol: Yes. So then, *we* took the quiz today. *I'm* gonna say- Wednesday I'll have those back.

Angela: Okay.

Carol: And then *I* figure it'll take . . . , tomorrow's notes will be long, light on homework tomorrow. Then it'll be homework on Wednesday, homework on Thursday, then *we've* just got to figure out when they have a test next week. *We'll* do that packet of story problems. *I'll* break it down in small chunks.

Angela: Okay, so, you're thinking this week? [asking questions about pacing]

Carol: Yep, and obviously not the late start day.

Angela: *I* don't think it's good to have it on Monday, so, Wednesday? What is that, the 29th?

Carol: Okay. Better tell them now so we don't hear it in three weeks. [laughter]

Angela: So Wednesday the 29th we will have the chapter eight test, which will be Pythagorean Theorem, special right triangles, and the trig stuff.

Carol: Yeah, I think we're keeping a pretty good pace.

Angela: Yeah, I don't feel like we're behind like last year. I felt like last year, it was a little bit slower pace.

There are many facets to this example. By examining pronoun usage, Angela was comfortable with selecting a date for the exam and used singular pronouns to do this. Carol used plural pronouns to discuss what they had done; however, she reverted to singular pronouns when discussing the tasks to be completed in the future. Singular pronoun usage showed Carol taking responsibility of grading the recent quiz. Carol also spoke of

accommodating the assessment by breaking it down into small chunks. In addition, Angela's questioning about pacing and content showed her still learning and becoming comfortable with the curriculum. During planning sessions, Angela asked Carol 20 lesson-planning and pacing questions. In comparison, Carol asked 10 questions. All of Carol's questions regarded special education services, such as, "What is Student E certified as?" and task completion questions such as, "You have all six completed?" Carol never asked questions about the pace of planning or lesson-planning.

During planning sessions Carol discussed where the class was heading with the content. Angela often listened and confirmed with Carol where they were heading but she did not offer her own suggested timelines for the content. Content Expert Example 2 shows Carol directing the lesson content with Angela agreeing to the pace.

Content Expert Example 2.

Carol: And then after chapter eight we go all the way to chapter ten. We start doing surface area and volume.

Angela: Yeah.

Carol: Or first area, and then the surface area and volume, and if we have time, I'll come back and pick up circles. And I don't think last year we had time, and I'm pretty sure that this year we're not going to have time. But, that's the most important stuff to get to, is that surface area and volume

Angela: Right.

Carol: So to be able to get to say that we hit it for all of that ten- we might get back to circles.

While Carol was focused on the pace she also felt frustration with making sure that all students mastered the content. In one planning session Carol stated, "We spent so much time on Pythagorean theorem; I was not going to spend another day on it." Carol felt the need to move on to the next topic even though the assessments that were completed did not match the performance level that she had envisioned. A difference between Angela and Carol's planning conversations when compared to Angela and Brenda's was the amount of times that Angela confirmed or agreed with a statement that Carol made. Angela frequently stated, "Yes," "I agree," or "Okay" to support Carol's decisions on the lesson planning. Angela had less input on the organization of the lesson within the classroom. Additionally, Carol never looked for confirmation or support from Angela for the lesson planning, whereas Angela asked questions such as "We are moving on to chapter nine then, right?" or "Last year we did that, right?"

Special Education Teacher as Accommodation Expert

Angela felt responsible for all students who were struggling in her co-taught classes. Angela's commitment to supporting those students was a focus in her classroom and planning times. She was focused on finding explanations for students as well as different methods for students to show their understanding of the curriculum. When asked if she felt that she and her co-teachers treated students fairly, Angela stated, "Yes, I think some of my colleagues would have a fit about what I do." Angela described how she takes any student who needs extra support for small group testing, and she sees her role in the classroom as one who is there to help support and accommodate the struggling learner.

Angela as accommodation expert in the classroom. In the classroom with Brenda, Angela was identified providing accommodation support in 83% of categorized utterances

compared to Brenda who accommodated 17% of utterances. Angela provided suggestions for students such as highlighting key words and text, partnering with a peer, and chunking the assignment. Angela was approving these suggestions after the lesson was directed and led by Brenda. Angela then rotated around the room and provided students with support.

Angela explained lessons within the classroom 46% of utterances categorized as explaining the lesson after Brenda described the task to the entire class. Angela then described the lesson to students again or in a different way if they were not understanding the direction that Brenda had given. Angela used her time rotating around the room to gauge student understanding and to identify if students needed additional explanations or accommodations to complete the task.

Angela as accommodation expert in the planning sessions. Angela was identified as the accommodation expert in planning sessions with Brenda and Carol. Additionally, Angela provided more student knowledge that general education teachers did not have in planning sessions. Angela's ability to connect student knowledge to the accommodations that would benefit students supported the ability for both teams to plan.

Angela and Brenda. During planning sessions Angela was comfortable with providing suggestions for accommodating and supporting the curriculum. Angela provided more accommodation suggestions and supports than Brenda and took the lead in this area. During a planning session Angela recommended, "So, I think we need to do preselected groups." Angela also discussed these grouping further by providing student knowledge, "They'll be the weakest link, I feel we need someone else there." These examples show Angela's confidence in supporting an accommodation recommendation in the content but also showed her support of students in the classroom with Brenda.

Planning sessions were investigated further to understand the areas that each teacher supported. Categories that emerged in the planning sessions are shown in Table 10. Brenda and Angela's years of working together were apparent when listening to their lesson planning. Although Brenda supported the lesson content and organization of the lessons more than Angela, Angela still added significant contributions to what would be taught and how it would be taught. Angela also interjected with multiple accommodations that she could provide students and she seemed to have more student knowledge about the diverse needs and supports that special education students required. Brenda supported the timelines of the lessons, whereas Angela provided opinions for the timelines and structures of the lessons. The *other* category includes comments such as: agreement, last year connection, joking, commiserating, and off topic conversation.

Table 10

Categories of Utterances in Planning

Category	Angela	Brenda	Examples
Lesson Content	40%	60%	"It's still going to be the same essential questions I would think" (Angela) "They will work on the analytical thinking within their paper" (Brenda)
Organization of Lesson	42%	58%	"We could have it be more of a presentation than a museum exhibit" (Angela) "They will work with a partner to review their quotes" (Brenda)
Accommodating	72%	28%	"I will make a word bank for this" (Angela) "We could do that with some examples" (Brenda) "So, then on Friday we will do the IRR" (Angela)
Timelines	27%	73%	"Group meeting four will be on Monday" (Brenda)
Student Knowledge	67%	27%	"He will be okay with that one" (Angela) "I think they tried to write that part down" (Brenda)
Grading	41%	59%	"We'll be grading the individual response on participation" (Angela) "I haven't even looked at those papers yet" (Brenda)
Opinion	79%	21%	"I think we should only have a short answer on this quiz" (Angela) "I don't think any of these papers are a concern" (Brenda)
Looking for Confirmation	67%	33%	"So then, like maybe we don't do that." (Angela) "Does that make sense?" (Brenda)
Other	51%	49%	"Let's digest this craziness now" (Angela) "There are attendance problems" (Brenda)

Angela supported accommodations for students 72% of utterances in the accommodation category while planning with Brenda. Additionally, Angela led more conversations regarding student knowledge. Angela's strength in student knowledge supported her ability to accommodate students within the co-taught classroom.

While planning, Brenda asked questions that were looking for clarity and asking about student supports: "What do you mean when you say questions?" "What supports do we need for Alex?" Angela was never heard asking questions about student supports. Angela instead had strong student knowledge and provided background information of students. This background knowledge was used to support accommodations that students would need. Examples include Angela's statement, "Analysis is hard for them," "Her parents would be supportive," and "He's just going to be a distraction if we pull him for that."

Angela and Carol. Over a ten-week period, five planning sessions that involved Carol and Angela were recorded. The planning sessions occurred within Carol and Angela's co-taught classroom. The teachers had a common planning period after their first hour geometry class. Angela was comfortable providing accommodations and student knowledge during planning sessions with Carol. This was similar to Angela's support with Brenda.

An analysis of the utterances revealed categories between Angela and Carol. Carol directed the lesson content timelines of the lesson, and the organization of the lesson when compared to Angela. When Angela provided comments about lesson content it was in relation to special education and supporting personal curriculums for students with IEPs. As for the organization of the lesson, Angela's suggestions were focused on how she could support students in small groups or in her academic skills class for IEP students later in the

school day. Once again, along with student knowledge, Angela provided more

accommodation support (71%) compared to Carol's 29%. Whereas Carol described grades

and grading assignments, Angela discussed the grades of the quiz but never discussed

grading them herself. The *other* category represents comments such as: joking,

commiserating, and off topic conversations. Table 11 provides the categories and the amount

of times in each.

Table 11

Number of Utterances in Planning by Categories.

Category	Angela	Carol	Examples
Lesson Content	6%	94%	"We have to do the whole isosceles" (Carol) "We will have to do a personal curriculum for him next year" (Angela)
Organization of Lesson	31%	69%	"After chapter eight we jump to chapter ten" (Carol) "I can take one group to review the steps" (Angela)
Accommodating	71%	29%	"I'll break it down into small chunks" (Carol) "I'll give them four choices" (Angela)
			"I am pretty sure we are not going to have enough time for that" (Carol) "A week from tomorrow will be the chapter test on chapter four" (Angela)
Timelines	26%	74%	

Table 11 (*continued*)

Number of Utterances in Planning by Categories. (continued)

Category	Angela	Carol	Examples
Student Knowledge	75%	25%	"In the class with me he will be quiet" (Carol) "I'm going to have to catch her up" (Angela)
Grading	44%	56%	"I'll grade them and see" (Carol) "This last quiz was low overall" (Angela)
Confirming with teacher	74%	26%	"Yes, that would be nice" (Angela) "Yes, I let her know" (Carol)
Looking for Confirmation	100%	0%	"Last year we did that right?" (Angela) "We aren't doing the kites then, right?"
Other	42%	58%	"This is totally off topic" (Carol) "Awe, that was nice of him" (Angela)

Angela defined her role as "more of a support" in geometry than in English due to her lack of knowledge about the geometry curriculum. Angela's discussions in planning times supported her role as a support, as she only provided discussions with content 6% of categorized utterances compared to Carol's 94%. Angela selected agree on her questionnaire for the question, "My co-teacher and I both understand the curriculum." Angela expressed, "Just until this year did I feel comfortable with the curriculum. I mean, I hadn't had geometry since I was in high school. I am more of a support and differentiated instruction person." Although Angela may have been hesitant at first to co-teach geometry, she confirmed that her confidence in the subject had grown and had improved her confidence in teaching and in her

math skills. Although Angela planned lessons with Carol, she did not take the lead on the curriculum or instruction planning.

Planning sessions between Angela and Carol showed that Angela was comfortable suggesting accommodations and support for students. Angela reviewed assessment data for special education students and was comfortable using this data to support accommodation requests with Carol. When quiz grades for the special education students were low, Angela discussed her concerns with Carol. Carol had decided to give a quiz on a Monday. Angela was frustrated with the quiz grades and expressed to Carol, "That's why I don't like giving quizzes on Monday." Angela also supported additional quizzes and tests by stating that, "I already have one accommodated." Angela also checked with students to make sure that they were getting the additional support and accommodations that they needed, "I'll check in with her at the end of the day," and "I'll pull them tomorrow." Angela used her academic skills class hour to fill in the gaps for students that were behind and not understanding the curriculum. Special education students were able to see Angela for an additional hour for support. Often, this was a time to complete assignments and receive additional 1:1 support that students were not able to receive in the co-taught classroom.

Carol stated, "Angela is responsible for accommodating the tests and quizzes." Carol identified that Angela supports students and ways to accommodate. She also identified Angela's role in helping students who do not have IEPs but who are failing. The teachers work together with students who are struggling to support them. Carol selected strongly agree on the questionnaire for "I feel comfortable making accommodations for students" and "My co-teaching partner feels comfortable making accommodations for students." Yet, through the questionnaire, Angela identified accommodations as her responsibility.

Additionally, planning sessions also indicated that Angela provided more accommodation decisions with Carol than with Brenda. Carol continually discussed how she was there to support all students and that sometimes special education students in the class felt more comfortable with her and did not leave the room for small group testing.

Special Education Teacher Supporting

Angela's background knowledge of special education students supported Brenda during instruction time as well as supported Brenda and Carol during planning times. Angela was the gatekeeper of student background knowledge and this sustained the support needed for students and teachers. By providing key background knowledge, Angela was able to help teachers better understand their students' needs. Additionally, her closeness with parents was also a support for general education teachers, as she was another teacher available to communicate with families.

Angela supporting within the classroom. In Angela and Brenda's co-taught English class, Angela was comfortable supporting the delivery of the content. Angela was not seen in the front of the classroom leading instruction but she would direct students through tasks and transitions when the students were beginning group work. Angela directed students to transition to her room for a task. Brenda explained details of the lesson to individual students 39 times and 31 times for the entire class, whereas Angela explained the lesson five times for the entire class and 23 times with individual students. Angela's individual explanations were to support students in completing the tasks identified by Brenda. When Angela explained the lesson, it was to support Brenda, and Angela was seated in a student desk or to the side of the classroom, not in a lead position.

Although Angela was not seen leading the lesson at the time of this study, Angela stated that, "This unit, Brenda led; I would lead the *Mice and Men* unit earlier in the year." Angela was observed taking notes and making copies of these notes for students who had difficulty keeping up with the note-taking or had disabilities that interfered with note-taking. Angela worked with students during independent work-time in class. On two separate occasions, Angela left the classroom with a group of students: once was to support an assessment and the other time to work with a small group of students in her room for additional instruction.

In Angela's interview she stated:

In English, I feel that Brenda delivers the instruction initially, but then there is

collaboration between both of us. The kids would say that she presents the

information, but when it comes to implementing and moving forward, we are equal in

the classroom.

Angela's ability to support the lesson after Brenda's introduction supported the whole group instruction. Additionally, Angela shared that, "I deliver the instruction for the *Mice and Men* unit and Brenda supports with that unit."

Angela supported all students within the classroom. Angela occasionally took students without IEPs out of the classroom for assistance; thus, it was not identified which of the students had IEP services. A benefit to co-teaching was Angela's ability to adjust the groups of students depending on the academic needs of the students. Angela did not always take every identified special education student. In the quote below, Angela took all of the special education students as well as an additional group of general education students who needed more support. Angela stated in her interview:

I think my colleagues would have a fit about what I do. I took like half the class and there are only six special education students in there, but I had like 12 kids, so six or seven were general education students. Some of my colleagues have a fit about that. I should be spending all my time with special ed. I don't see it that way. If there is a student struggling, special ed [special education] or general ed [general education], I see that as my role in the classroom.

Angela knew supports that benefited students. Angela's background knowledge of individual students came from her close relationship with students as well as the additional time she had with students in the academic skills class. In Student Knowledge Example 1, Angela's background knowledge about a student was beneficial in supporting the student in the class room with Brenda. The students were working on quotes. Brenda was seated at her desk while Angela circulated around the room. A student had a pass to see a teacher in another room, but the student was trying to leave at the wrong time. In this context, Brenda used a singular pronoun to ask him to wait. Angela had already asked him to wait earlier. Angela then went to the student and used the plural pronoun to describe the student's need to wait. She then used a plural pronoun to ask him how many quotes were needed.

Student Knowledge Example 1.

Brenda: Is he [a student] leaving?

Angela: No, [To Brenda] You [student] don't see him for an hour.

Brenda: I think you need to wait. Finish your question. You should wait a few more minutes.

Angela: [walks to student] We said wait. Let me see your paper. How many quotes did we say you need?

At this point in the lesson, the student remained in the room for the remaining class period. It seems that the student and Angela had previously spoken about the arrangement that the student had with the other teacher. Angela had more background knowledge on this situation than Brenda.

Interruptions between Angela and Brenda were an area that showed how Angela's background knowledge was used to support students within the classroom. Angela interrupted Brenda a total of eight times. Three of these interruptions were to ask about students, two were to add to a student comment, and three times were to add to a whole class comment that Brenda had made. Brenda asked about students to clarify where they were or if they had received an assignment. Brenda was talking to another student during these interruptions. In Student Knowledge Example 2, Angela interrupted Brenda when a student approached Brenda to ask a question about completing quotes. Angela was seated next to Brenda's desk at this time working with another student. Angela overheard the student asking Brenda a question.

Student Knowledge Example 2.

Student C: How do I cite this quote?

Brenda: That's not about your quote right now. That's about . . .

Angela: [Interrupts] It doesn't matter right now. You'll get to that this weekend.

In this example, Angela knew more details about the student's assignment. She continued to ask the student why he did not work on this assignment in fifth period. This information revealed that the student attended Angela's fifth period academic skills classroom and that he is a special education student. Angela was interrupting to add more detail and background to support Brenda's discussion with the student. Angela knew more about students' individual

needs and backgrounds than her co-teachers. An example of this is when Brenda stated,

"The IEP only tells me about their accommodations. Having someone in here gives me their

background and story."

When Angela participated in whole group instruction, she supported the content and

clarified student questions. Brenda led the discussion and content expectations, but Angela's

additions were supportive in ensuring that Brenda understood student misunderstandings and

that students' questions were clarified. An example of Angela participating in whole group

instruction in the classroom is seen in Supporting Content Example 1. Italics are used in the

example to identify inclusive versus exclusive pronoun usage used between teachers. Angela

was seen seated in a student chair, as if she herself were a part of the lesson. Angela did

interject to support or add to the lesson. Angela added to a question that a student asked and

supported student participation as well as the curriculum.

Supporting Content Example 1.

Student: So, then, like, could I quote Scout to answer that question?

Brenda: That is correct. *I* know you guys are brilliant.

Angela: *We* need questions like that; that's a good question because you need a direct

quote. If you did not have your book in front of you, you cannot do this.

Brenda: That is right, you can describe the situation, but you need a direct quote in

order to back it up. Let *me* explain this first before *I* answer any more questions.

Supporting Content Example 1 showed Angela as supportive of clarifying content

knowledge and supporting students' participation within the classroom discussion. Brenda

was also using more exclusive pronouns such as "I" and "me," whereas Angela used more

inclusive pronouns such as "we."

In Supporting Content Example 2, Angela interrupted Brenda during a whole class discussion. Students asked Brenda questions about an article that they had read. Brenda was answering a question, and Angela interrupted Brenda to clarifying a part of the question.

Supporting Content Example 2.

Brenda: Well, they were cut . . .

Angela: [Interrupts] I think Alex was asking about why they were leaving.

Brenda: Oh, well their lives were probably in danger, and they feared of getting killed.

When Angela interrupted Brenda, it was to support students' understanding or to clarify points within a lesson. Angela identified that Brenda's explanation was not clarifying a misunderstanding with the student. Another example was when Brenda was describing a writing assignment and Brenda interjected to make sure that students knew they were not writing the paper like a journal. All the interruptions were to support student comprehension of material and, in turn, supported their academic performance. Additionally, throughout the video-recorded class sessions, Angela and Brenda would laugh and joke with one another. The students seemed at ease with both teachers. Angela frequently walked throughout the room while students were working and supported all students within the classroom.

Angela was supportive with classroom management in the classroom with Brenda. Angela was less overt than Brenda and her classroom management was subtler. Angela corrected student behavior but did this more subtly with gestures or intense eye contact so that she did not disrupt the lesson. Angela corrected individual student behavior 21 times but only 11 of these times were loud enough for the class to hear. Angela whispered, nodded her head, or wagged her finger to discipline students. The nonverbal classroom management

from Angela occurred 48% of categorized utterances. An example of this is when Brenda

was passing out scantrons for an assessment. Angela wagged her finger at a student to have

the student stop talking and whispered, "Stop it." While reviewing a video where Angela

whispered to a student to be quiet and Brenda loudly asked the student to stop, Angela

identified this moment as being in sync with one another rather than Brenda repeating what

was already asked in a louder more overt way.

During Brenda's interview, Brenda identified that Angela supported students by

accommodating tests and interjects in lessons to clarify or make suggestions. Brenda

identified an area Angela supported such as "emailing the parents of kids that are certified to

let them know when tests and quizzes are coming up." Brenda saw Angela as a support with

parents because Angela had a close relationship with students and parents.

Angela supporting Brenda during planning times. Angela was comfortable with

supporting lesson planning with Brenda. Angela would add to the discussions with lesson

content and identified accommodations that would support students. Angela described her

comfort level with planning with Angela, "We have been co-teaching for so long together;

back in the day, we used to lesson-plan together a lot more but now we just change some

things as we go."

Through interviews, video-recordings, and audio-recordings, it was apparent that

Angela and Brenda were comfortable planning with one another, and both teachers felt

comfortable with the curriculum that was taught. Angela discussed how their units changed

each year they were together:

"We taught the same units every year, but we worked at differentiating it throughout

the years. Brenda started one way, like with the research project, and I was like, ummm, we

need to do this, this, and this. She would then say let's try this and it changed a little bit every year." Angela's comment indicated that she is continually supporting their lessons by providing input and suggestions each year.

In the planning sessions, Angela interrupted Brenda a total of 29 times, whereas Brenda interrupted Angela 14 times. Of interest was that interruptions in planning time were greater by Angela, whereas interruptions were greater by Brenda in classroom video-recordings. The interruptions by Angela were to add information about students that Brenda did not have and to finish Brenda's sentences. Angela and Brenda had a close working relationship, which was revealed in the amount of times that they interrupted to finish one another's statements. Angela completed Brenda's statements on 10 different occasions, whereas Brenda completed Angela's statements on six occasions. Each time, the teacher who was interrupted knew where the comment was heading.

The following are examples of a few of the moments wherein Angela and Brenda completed one another's statements. After each of these statements the teacher who was interrupted stated, "I was going to say that," nods in agreement, or confirms the added information. Shown in Supporting Thought Example 1, Angela and Brenda were discussing their upcoming schedule with a research assignment. They were working on navigating the amount of time the research paper would take with the amount of time left in the school year. Brenda completed Angela's thought as they tried to determine how to shorten an assignment to make sure that students would have time to finish the assignment before the end of the school year.

Supporting Thought Example 1.

Angela: Okay. Well, we'll just . . .

Brenda: We'll have to figure out some of that.

Angela: Yep, I know it.

During lesson planning between Angela and Brenda, they discussed what had occurred last year and what changes they would need to make to support this year's group of students. They discussed the academic abilities of the present group of students compared to last year's, compared this year's lesson to lessons of previous years, and discussed adjustments that they could make to lessons to meet the needs of this year's students. The teachers' strong connection to past experiences helped to shape their planning time discussion.

Supporting Thought Example 2 is an example that shows the benefits of the teachers' multiple years of working together. Angela and Brenda had a museum exhibit that students completed last year for books the students had read. This year, the co-teaching team wanted to try something different. They were focusing on having tenth grade students create a lesson to present to eighth grade students getting ready for high school. Angela was able to know where the conversation was heading and completed Brenda's thought.

Supporting Thought Example 2.

Brenda: Instead of saying we could create a museum exhibit, like, you would have to create a professional type . . .

Angela: [interrupts] . . . a professional lesson to engage eighth graders.

Brenda: Right, like how are you going to make your presentation look interesting and exciting, and how would you get eighth graders interested.

The ease of their relationship with planning, ability to predict the direction of the discussion, and equity in speaking time supported their relationship. Angela was engaged in

lesson-planning, and her foundation of knowledge from past lessons supported her

confidence and ability to be a partner in planning. Angela strongly agreed on the

questionnaire that she and Brenda both understood the curriculum. Whereas Brenda

maintained the role of content expert, Angela was comfortable providing input and adapting

the lessons to meet the needs of the students.

The purpose of the 11 times that Angela interrupted Brenda was to add something to

the lesson plan discussion. Angela volunteered to support or to propose an idea to Brenda.

In Supporting Accommodation Example 1, Angela supported the lesson planning by adding

to Brenda's statement and providing an accommodation to the lesson. Angela felt

comfortable with planning the lessons with Brenda, and her articulation and ideas

demonstrated that she was knowledgeable with the curriculum.

Supporting Accommodation Example 1.

Brenda: I am just trying to think of an idea. Maybe there's a prompt that they each

have to answer as part of their project . . .

Angela: [Interrupts] They're going to go up there and give a summary of the book. If

we come up with questions for each of the four sub-categories; the character, the conflict, the

theme; symbols and themes, then it wouldn't be people getting up and giving a book report.

It'll be giving individual information about their books and how it related to enhancing a

person's perspective.

Brenda: Right; now I'm trying to think of how they would present that.

Brenda was comfortable providing suggestions to accommodate and support student

understanding of the lesson content. Additionally, Angela was able to support Brenda by

recalling lessons that occurred in previous years. By recalling lessons, the teachers were able

to build on this year's lesson and prepare for misunderstandings that students may have. In

Supporting Accommodation Example 2, Angela and Brenda are discussing an assignment

that involves complex sentences. Angela provided accommodation suggestions and both

teachers connected these year's lesson to how the lesson was last school year.

Supporting Accommodation Example 2.

Angela: We'll give a couple of examples.

Brenda: Like, Here's the complex . . .

Angela: Yeah, maybe do a couple of those, just so that they can see if they did it right

or not. Cause that's all we're doing tomorrow, is the vocabulary? Finding the words and then

having them do the definition and the types of sentences.

Brenda: Right. So I'll probably . . . I have to create it, cause I . . . I don't remember

how we did it last year, but I was gonna change it.

Angela: It was too many words. And remember, it was like . . .

Brenda: Yeah, I think that's why I picked five this time.

Additionally, Angela interrupted Brenda in three different occurrences to add to a

statement that Brenda made about the lack of effort that students were making in the class.

One planning session involved Brenda expressing frustration over students who were still not

passing the English class due to their lack of effort. Brenda felt that both teachers had

provided a lot of support for students, but a few students were still not invested or completing

the needed work for the class. Supporting Emotionally Example 1 shows how both teachers

also supported one another emotionally through their planning session, although Angela

clarified that the lack of effort was not due to special education students in the classroom.

Supporting Emotionally Example 1.

Brenda: People are not getting stuff done. I'm just trying to figure out. Like, what is it that they . . . how are you just not doing any work?

Angela: It's because of the lack . . . it's the apathetic attitude that . . . Carol and I were talking about that, too.

Brenda: She does the same things in her . . .

Angela: [Interrupts Brenda] She just gets aggravated because like, with math, we're going over notes. We're reviewing. And the kids just sit there. And she is like, "I don't get that."

Brenda: It's a similar climate there?

Angela: Yes

Brenda: Like, a similar makeup of kids?

Angela: Yeah, I mean, there's a good ten kids that are the same way. But, I mean it's not my resource room kids [special education students].

This example showed Angela and Brenda in agreement with student attitudes. Angela supported Brenda and connected Brenda's experience with Angela's other co-teacher. Angela also supported special education students, saying, "It's not my resource room kids." In this example, Angela identified special education students as hers and that they were not the only kids struggling in these classes. This situation occurred three times during planning sessions. In a different planning session, Angela gave feedback regarding how special education students in the class would be able to complete an assignment that Brenda assigned. Angela stated, "I just don't know . . . I think it'll work with my resource room, 'cause I don't think there's anybody in there that would be like, "I wanna work by myself."

In this situation, Angela still used *my* to indicate possession of special education students within the class rather than stating *our* resource students.

The teachers focused on creating lessons that supported student growth and also supported one another. In a conversation between them, Angela said, "I think this trimester worked better than any that we've ever done." Brenda replied, "I feel like there were a lot of things that were successful. So, that's what I have been trying to pick out, like what we focused on." The teachers' six years of planning time together allowed them to reflect on and adapt their teaching to support students. Throughout planning time, Angela and Brenda were close and supportive to one another. They both had a sense of humor and were often heard joking and laughing throughout their planning sessions.

During planning times, Brenda used more plural pronouns than in the classroom, yet she was still non-participant-observed using more singular pronouns than plural pronouns. In planning times, Angela also used more singular pronouns but her plural pronoun usage was still comparable to the number of plural pronouns that Brenda used. In Table 12 the differences in plural pronouns between planning and classroom time with Brenda is shown.

Table 12

Pronoun Usage–Angela and Brenda

Teacher	Planning Singular # / Plural #	Classroom Singular #/ Plural #	Examples
Angela (communicating with Brenda)	129 / 108	21 / 42	"*I'll* get their words" "Today *we* are doing the group meeting" "*We* gave the first quiz back"
Brenda	120 / 93	336 / 133	"*I* already wrote them the quiz" "*I* have not looked at those papers yet" "*I'll* still give them the quiz sheet tomorrow" "What *we* will do, cause *we* have time" "*We* will have the theme one done."

As previously noted, the number of utterances between the pair was comparable. Although Brenda had more utterances related to lesson content and the organization of the lesson, Angela also made many utterances and contributions to these areas. Angela seemed to understand the content and organization of the lessons. During the interview, Angela described her knowledge with the common core standards for English and how "The common core units give more choice to the students versus what used to be done in the classrooms." In lesson planning Angela described not wanting to change curriculum for some of her students because that would be "modifying the curriculum."

Angela supporting Carol during planning times. During planning sessions, Angela supported Carol with providing student knowledge and accommodations for students. Angela was aware of meeting the pace of the curriculum but was also focused on supporting student understanding. In Supporting Accommodation Example 1, Angela is concerned with a recent assessment on Pythagorean Theorem, whereas Carol was happy that they were

getting through more of the curriculum this year, Angela was suggesting that they slow down and look at the quizzes to identify if students were understanding the material.

Supporting Accommodation Example 1.

Carol: And then, I do think we got to more this year.

Brenda: I feel like we did too. Last year we slowed it way down. It was . . . we slowed it way down. Their . . . I mean, these quizzes will tell. Maybe we should slow down and review some more. How did the quizzes look when they were taking them?

Carol: I . . . like, I felt like they were getting it but I don't know.

Angela would provide suggestions for accommodations on tests, quizzes, and assignments. In Supporting Accommodation Example 2, Angela gave a suggestion of providing choices on the assessment. Although Angela was comfortable making the suggestions, she made the suggestion in a questioning tone and asked Carol to give input on whether this accommodation was appropriate. Carol agreed with the accommodation and then gave an example of what that would look like. Carol then asked Angela if she had an accommodated assessment. This comment showed the growth in their relationship, as this assessment would have been an assessment that Angela had given last year.

Supporting Accommodation Example 2.

Angela: And then, and tell me if I'm wrong when you look at it, but I'm thinking the only accommodations that we need to be providing them is the choices.

Carol: Yep. And on this one . . . yeah, they should have all four choices. Angle, angle side, side angle.

Angela: Yep.

Carol: Do you have the accommodated version?

Angela: I'm pretty sure I do. I'll take one just in case I don't. But I'm pretty sure I do. I haven't looked in my binder.

Additionally, Brenda supported Carol emotionally. They both became frustrated with student progress. They commiserated and discussed what they were doing to try and support students in the classroom. Supporting Emotionally Example 1 describes a planning session where both teachers came back together after a quiz and reviewed scores. Prior to Angela speaking, they were discussing the Pythagorean Theorem and how they thought the quiz scores would have been higher. The teachers had assessed two separate groups. Angela had taken a group to her office to assess and Carol had assessed a group in the classroom.

Supporting Emotionally Example 1.

Angela: I . . . like, I felt like . . .

Carol: (Interrupts Angela's thought) The Pythagorean Theorem, they were rocking it. And then today they asked like . . .

Angela: (Interrupts Carol's thought)

I know. But they . . . but then, like, I even drew on the board for them before we started. I had the formula already written on the, on the accommodated test. But I rewrote it again, and then I also put on there . . . like, I put on the board . . . I drew a bunch of different triangles . . . you know, flipped all around . . . with the right angle in it. And I was like, "Okay, when you get your paper, draw an arrow to the hypotenuse, because you know that's always your 'C'. Like, I went over that.

Carol: They were doing great with this stuff last week.

Angela: I know. And I'm like, "What the heck?" I did an equation for them. And then the other three, they just had to set up the equations. I said, "You can't put it on the other side

of the equal sign, because that is the hypotenuse, and you have to leave it in the 'c' squared

spot." So, I don't know where they were coming from.

Carol: And that should be the easiest way to do it.

Angela: I know.

Carol: Because all you're doing is solving . . . you're doing arithmetic.

Although this example does not show teachers supporting a change in the delivery of

academics, the example shows Angela's growing comfort level in geometry during this

second year of co-teaching. Angela had stated previously that she was nervous about

working with Carol because she was not a math major and was not comfortable with the

curriculum. Although Carol added that the accommodation should have been an appropriate

one that would have made solving the problem easy, the students still struggled with the

concept on that week compared to the previous week. Angela's growing academic

knowledge showed that Carol agreed with her level of content knowledge and they were

discussing this lesson as equals.

In Table 13 the differences in plural pronouns during planning time with Carol is

shown. Carol used more plural pronouns while lesson planning and described lessons that

were completed with pronouns such as "we" and "us." Angela used plural pronouns when

asking timelines for lesson content and for feedback on the lesson planning calendar. The

singular pronouns related to tasks that the teachers identified for themselves. Singular

pronouns were used more frequently by Angela when she described accommodations that she

would do for students or when giving her opinion on how an assessment or lesson went.

Table 13

Pronoun Usage–Angela and Carol

Teacher	Planning Singular # / Plural #	Examples
Angela (communicating with Carol)	96 / 32	"I don't think it's good to have it Monday" "I already have one accommodated" "We could finish it during fifth hour" "Are we doing kites at all?"
Carol	95 / 76	"I'll have those back" "I'll break it down in small chunks" "We completed the last section in this chapter" "We've got to figure out when to have a test"

There were interruptions between Angela and Carol as well. Angela interrupted Carol eight times during planning sessions, whereas Carol interrupted Angela ten times. Further investigation showed that Angela interrupted Carol three times to ask a clarifying question, three times to agree with a statement that Carol had made, and once to add to a conversation regarding a student's disability. Carol interrupted Angela eight times to finish Angela's sentence and two times to add to Angela's statement. The purpose of each of Carol's interruptions was to add information regarding the curriculum and how the curriculum was taught. Of interest, Angela did not finish Carol's sentences and interrupted Carol to ask clarifying questions about the lesson-planning and to support student accommodations and background knowledge.

Co-Teaching is Beneficial

All teachers in this study spoke of their beliefs in benefits that co-teaching provided to meeting the academic needs of students. The teachers acknowledged the benefits of co-teaching and acknowledged the barriers that they believed hampered successful co-teaching

at the high school level. Common themes regarding benefits to co-teaching emerged in

responses to interviews of Angela, Brenda, and Carol. The summary of comments is shown

in Table 14.

Table 14

Teachers' Indicators of Benefits to Co-Teaching

Benefits	Teacher
Supports academics of all students	Angela, Brenda, Carol
Students receive more attention	Angela, Brenda
Another adult in the room for support	Angela, Brenda, Carol
Learning from one another	Angela, Brenda, Carol

Co-teaching benefits students. Angela, Brenda, and Carol all spoke of how students

received academic support from co-teaching. Carol described how Angela "does not work

with just special education kids, she works with all kids. There were kids that barely passed

last semester and we knew they could do better, and so we offered more services." Brenda

voiced similar reflections about the roles that she and Angela played in the classroom, "It

[co-teaching] helps all of them, both general and special education [students]." Angela

believed that although she is supporting all students, her colleagues would not all agree with

this approach. Angela's discourse revealed that she believed she supported co-teaching and

meeting students' needs, "I just truly enjoy co-teaching and find it beneficial." Angela

defined her role as a special education teacher, or in her words, "resource teacher." Angela

identified that,

most secondary students do not want to ask for help or be known as different. They saw that Brenda and Carol and I worked together closely and that everyone was included in the classroom, so no one knew who had an IEP and who didn't because we both worked with both populations. Some of my colleagues only would work with the special education students.

Angela and Brenda found that a benefit to co-teaching was the additional attention that students received. Brenda stated, "It gives them a lot more one-on-one attention. Also, I think when they just know that there is a special education teacher available, it makes them more comfortable seeking help from her." Angela felt that students were "given two teachers for the price of one" and Angela expressed her belief in the additional attention given to students:

 I feel that it benefits students with disabilities because it gives them one more adult in the classroom that they can use as support if they need. I am not a big pull out type of resource teacher. I want them to be integrated with general education kids because I think that they need that exposure. I think it ups the game that much more and I know some people pull out resource room kids once the lesson is done. I feel they benefit having someone in there that they are comfortable with and know their accommodations. I send daily emails home to parents about what is going on in class and what is due and what students need help with. I do that for all my resource students and general education students who are struggling. I let parents know my role.

Angela's quote best summarizes the teams' co-teaching experience:

I just truly enjoy co-teaching and find it beneficial. I know some would argue that it is a glorified para-professional position. I do not feel that way at all. If you ask students, I feel they view me as equally as a general education teacher. We may not perform a co-teaching classroom as ideally as people think it will happen, but I think that with the personalities that I co-teach with I feel successful. Very rarely do we have students fail. I think it is important and I do not want to see it go away. I think kids should be exposed to as much of the general education curriculum as possible.

Co-teaching benefits teachers. All three teachers discussed how having another adult in the room could serve to support each other as well as all students. Carol expressed that a second person allows another "perspective" in the room and that co-teaching "helps me see the kids that need the help and help them." Brenda believed that a second adult supports her and student instruction. Brenda expressed this when she stated:

Just having someone else who is in it with you, to give feedback. Teaching is sometimes a really isolating job, and it is really nice to have someone else with you every day to say, hey, did I screw that up, did we do that well, I think it's great.

Angela, Brenda, and Carol all discussed how they have learned from one another. When asked how co-teaching has benefited her, Carol stated:

Angela has taught me a lot about their disability. She has taught me how to break down math problems. Last year, I was trying something new and trying to be more hands on in math. Last year we were doing something with patty paper, 12 years of teaching geometry, and I had never used patty paper. I thought I was doing well, and then Angela saw something that would make it even better. It was new to me and new

to her, but that perspective of being new to her was different. I think we benefit, and we have always gotten along. There is no worry of projecting on each other.

Brenda learned, "how to slow things down and be more patient with accommodations and willing to adjust things based on individual needs." Angela described how she has, "learned a lot of behavioral strategies, because her [Brenda's] personality is so different than mine. She is calm and patient, and I have learned that from her." Angela felt that "She [Carol] pushes kids, and my expectations have risen." Angela also stated that co-teaching "has improved my confidence in teaching."

Additionally, the time together benefited the units that they delivered to their students. Having time together allowed them to change units over the years and adapt to meet student needs. Angela stated,

> Towards the end, the final research project ended up being split. She felt I was better with helping with the transitions between paragraphs and she felt stronger with the introduction and conclusion and tying it all together. We came up with a really cool template that we used the last two years that students could plug in and help guide them.

Co-planning supports students and teachers. Over a 10-week period, eight planning sessions that involved Brenda and Angela were recorded during class time while the students were working independently. The planning sessions were conducted at Brenda's desk in the classroom, with a chair pulled up for Angela. Seven of the planning sessions took place on days that the teachers also recorded their lessons. Planning time only happened during the class period because Angela and Brenda did not have a common planning time.

Students knew to limit interruptions during the planning time. Angela stated, "Students

would know that they needed to hold their questions when they saw us working together."

    Time with co-teaching partners supports relationship. In the interview, Brenda

explained how she and Angela's relationship and roles have changed in the classroom over

the years that they have worked together. Although Angela continued to support in the

classroom, Brenda previously identified Angela's role as more of an aide. She discussed how

Angela had more of a voice in the curriculum-planning due to their comfort level. Brenda

described this change:

> I guess at this point it has sort of formed after years of working together. So, in the
>
> beginning, since I was the one who had responsibility for coming up with the
>
> curriculum, she was more of, almost like an aide, and was focusing on skills for her
>
> special education kids more, but over time, now that she knows the curriculum more,
>
> she can aid in some of the instruction, so, we sort of tag team things more at this
>
> point, which has come out of us having each other, the curriculum, and us having
>
> been together for years now. It has probably been about six years.

Brenda and Angela had been working together for so long that both felt that short five

to 15-minute planning sessions were manageable. Brenda believed that this arrangement was

beneficial for students to see, as they, too, had to work cooperatively; she stated, "I think this

actually worked really well because students saw us working together as a team, trying to

plan for the next day." Non-participant video-recordings of classroom instruction and audio-

recordings of planning time showed that Angela added to the lessons and felt comfortable

with the English curriculum, in part because of the amount of time that she and Brenda had

worked together. Video-recordings were not taken for planning sessions. In interviews,

Angela noted that Brenda delivered the instruction initially and that there was collaboration between them, yet she still saw their responsibilities within the class as equitable.

During planning sessions, Angela and Brenda discussed what content would be taught, how the lesson would be organized, and who would be responsible for which pieces of the lesson. Brenda was responsible for organizing the time frame of the lessons; she never asked Angela a question regarding the time frame; whereas, Angela asked 18 questions regarding time frames within units of study. Brenda looked for support with developing the lessons 23 times by asking questions that involved Angela's input. The input included looking for support and knowledge about students. Examples included the following: "What else can they do?" "How can we make this work?" "Tell me if I'm wrong when you look at this." In all of these questions, Brenda sought support from Angela for designing a lesson that met all student needs.

When Brenda was asked about who was responsible for planning, Brenda stated, "in the beginning, since I was the one who had responsibility for coming up with the curriculum, she was more of, almost like an aid, and focusing on her special ed [education] students more, but over time, now that she knows the curriculum more, she can aide in some of the instruction." Brenda also expressed that, "We talk about sequencing and talk about what is coming up. In terms of content though, I take care of that."

Carol and Angela were in their second year of co-teaching. Carol laughed about when they first started working together and how Angela was unhappy to be working in a geometry classroom. Carol said that they get along fine now but that is because they have been allowed to develop their relationship and stay together. Carol expressed in her interview that general education teachers feel that they need more time with special education teachers.

Angela described she, and Carol's relationship changed over the years. Angela stated that, Carol was more rigid, and we had a lot of tough conversations, where I would say, "you can't do that, they are not understanding, we have got to find a different way." It helped me being a stronger personality, because she was more rigid. She would just say this is how I teach it." Angela explained how their planning sessions became more productive by Angela being more direct with what was and what was not working. Angela described her first year with Carol as being, a lot of digesting everything.

> I never taught a lesson the first year. When kids were doing work, I would help
>
> students and they would help me. At the same time, I was an asset in there because if
>
> I did not understand the information then I would say, hey, if you do this, this, and
>
> this it would be better.

Angela expressed that she had taught lessons for Carol this year when Carol has been absent. Carol did not report that Angela taught lessons this year. Angela described being able to see things differently, and that over time she would lead a lesson, especially when Carol was on maternity leave. Angela would accommodate the lessons, and Carol would then determine if there was too much accommodating of the lessons.

Angela explained that she was just becoming more comfortable in the geometry classroom, as this is her second-year co-teaching in this classroom. Angela described her comfort level as not at the point where she was delivering lessons herself but rather adding to the lesson to explain and model information to help any misunderstanding among the students.

Angela and Carol both expressed how Angela's comfort level with the curriculum affected their planning times. Regarding Carol, Angela stated, "She does most of the

planning because this content is new for me. Last year, that was new for me, and this year I

am becoming more comfortable." In Carol's interview, she said, "We talk about sequencing

and talk about what is coming up. In terms of content though, I take care of that."

Angela discussed how her relationship with Carol changed Carol's perception of

student abilities and how co-teaching works. Angela stated:

> I saw a change in Carol's attitude towards how students learn differently, and she had
>
> a more open mind on how to deliver instruction. I think she felt kids were being
>
> pushed through and not held accountable for their learning. Having me in there and
>
> giving her other ideas on ways to differentiate and accommodate and work with
>
> students with IEPs and at-risk students it helped her understand a little bit more.

Co-Teaching has Barriers

Common themes regarding barriers to co-teaching also emerged in responses to

interviews of Angela, Brenda, and Carol. The summary of comments is shown in Table 15.

Table 15

Teachers' Indicators of Barriers to Co-Teaching

Barriers	Teachers
Lack of Common Planning Time	Angela, Brenda, Carol
Consistency of Co-Teacher Availability (Being pulled for IEP meetings, separate special education meetings)	Angela, Brenda, Carol
Lack of Consistency and Choice with Partners	Angela, Carol
Scheduling (Not having multiple co-teaching assignments with partner or your partner having too many additional assignments)	Brenda, Carol
Lack of knowledge of curriculum	Angela, Carol
Personality or teaching philosophy clashes	Angela, Brenda, Carol

Inconsistent planning time. Angela and Brenda did not have a common planning time. Angela, Brenda, and Carol identified the lack of planning time as a concern on the questionnaire. During the interview Brenda stated,

> Since she knows the stuff and we have been doing this so long, I will just say what do you think about adjusting this based on what happened last year- and what went well and didn't go well. It usually only happens during class period because we do not have a common planning time.

Although Angela and Brenda did not need as much time to plan together, they still wanted a planning time together. This year, they had to adapt their class time so that they could plan together. Angela also identified planning time as a barrier and discussed how she and Brenda adapted their class time to complete planning while students were working independently. Angela stated in her interview that:

> I wish there would have been more time to plan, collaborate, and dive into how we can differentiate more and reach every single student. Brenda and I reached some low at-risk students as well as some major behavioral students that people would purposefully place in our class. We just needed more time.

Planning time was identified as a barrier by all three teachers in the study. One common complaint among the pair was the difficulty they have planning together due to interruptions from students and scheduled meetings. Carol identified that trying to meet consistently was a concern. "Things do pop up and pull us apart." Angela stated, "Usually, for math it is second hour conference, so we meet the hour after we teach together. I do get pulled out of there for things sometimes. I know this can be frustrating for Carol." Additionally, concerns regarding Angela's additional responsibilities, such as IEP meetings,

parent and student meetings, and special education professional development, all affected the consistency of Angela's availability. During a planning session Angela was heard telling Carol, "I'll probably be out for IEPs."

Inconsistent co-teaching partners. The teachers provided additional data regarding the lack of choice and consistency teachers have in selecting and staying with co-teaching partners. Angela and Carol both saw consistency as a barrier to successful co-teaching. Brenda did not identify this as an area of concern, perhaps because Brenda and Angela have been together for six years. Carol stated, "I do [see co-teaching as beneficial for students] and I am very adamant, and they [administration] know it. I am adamant about consistency. I dislike having someone new in here every year."

Multiple barriers existed outside of the teachers' control. They were related to the way scheduling and placements were made within the building and how special education programming was organized at the district level. Angela reported to the teacher consultant and special education supervisor as well as the principal and assistant principals in the building. Angela's meetings with the special education department preceded meetings with general education teachers. Further, although teachers placed preferences of placements, these placement requests were not a guarantee. Angela expressed this frustration with her geometry placement last year, "I would have never placed myself in that situation." Although this was a frustration for Angela, she found that being placed in this uncomfortable situation, "has made me a better teacher in that I am confident in my math skills. Kids would come to me for help and I would tell them to see someone else."

The separate professional development for special education teachers that Angela attended throughout the school year was a difference in Angela's role; however, Angela

missed general education information to attend special education meetings. She described

how the demands for her caseload of students, IEP paperwork, and meetings could cause her

to arrive late to class or miss a class entirely. She understood that this can be very frustrating

for general education teachers and felt that they did not understand all the other obligations

of special education teachers. In one non-participant-observed video-recording, Angela was

pulled out of class by a colleague. She missed five minutes of the lesson that day; the student

with whom she was working was assisted during that time by the para-professional in the

classroom.

        Lack of content knowledge. Angela and Carol both identified how lack of content

knowledge is a barrier to co-teaching. Carol identified this as "a frustration on the general

education teacher's side." Angela also discussed how this was challenging but her confidence

was starting to grow. All three teachers selected personality clashes or philosophy clashes as

barriers to successful co-teaching. However, each teacher in this study identified their co-

teaching partner as someone with whom they got along and enjoyed working. Only Angela

spoke of "personalities that I teach with." Angela spoke of previous co-teachers that she

taught with and how she was not comfortable interrupting or speaking within the classroom.

        Need to meet state requirements and curriculum. The teachers expressed the need

to meet the curriculum requirements for graduation. A concern expressed by Carol related to

co-teaching and supporting advanced students. She stated, "My one worry is the kid that is

advanced in a co-taught class. I feel, and I put this as a weakness for myself, I have a hard

time differentiating for them." Carol identified that her co-taught classes moved at a slower

pace than her other classes that were not co-taught, "It is the same content, but the other

classes always go a little faster."

With the required graduation requirements, there were options for students to have a personal curriculum if they had an IEP. The personal curriculum would adapt the required math or English content so that students could fulfill the requirements differently than general education students. Carol gave Angela input for personal curriculums for students, "If I could get my two-cents in for the personal curriculum." Personal curriculums are a way to change state requirements for graduation. Through planning conversations, Angela and Carol discussed students who would not be on track for graduation based on their academic performance.

Angela discussed one student with Carol, "He would like to stay here for five years on the extended graduation plan." They discussed how to support that student and what changes they could make on the personal curriculum for him to be successful. Overall, the teachers placed pressure on themselves and navigated ways to support students academically while still meeting the challenging high school graduation requirements and providing the required state curriculum.

Continued delineation between special education and general education. Although all teachers spoke of inclusivity for students within the classroom, further investigation into the discourse of the teachers revealed that there were times that they separated students into special education and general education groups. When Brenda was asked about their daily responsibilities, she stated that Angela worked with students, but that she, "specifically focuses on her kids [special education students] and works with general education students." Additionally, when Angela speaks about students that are not performing as expected she tells Brenda, "But, I mean, it's not my resource kids." Even

though the relationship of the teachers was built on inclusivity, beneath the discourse, there is still a layer of separation between special education and general education students.

The delineation between special and general education students arose during a planning session. Carol was heard stating, "And my, then my kids," when discussing a quiz that the class had taken and the grades that students had scored. In this conversation, "my kids" were the general education students in the classroom. Angela explained that Carol's preference for co-teaching stemmed from being "used to a style where a co-teacher would come in, take the special ed kids, and work with them in the room or leave. Carol would deliver the lesson and that was it. That was not the case when I was in there because I could not just sit there like that."

Of interest were other variations of the teachers separating general education and special education students. Angela identified special education students as hers in a conversation with Brenda. Angela stated, "But, I mean, it's not my resource kids" and she then stated, "And some of it is the general education kids" when describing students having a difficult time with the curriculum. She was explaining to Brenda that other students, or the general education students were having a difficult time. Angela also delineated students when she told Brenda that "I think it will work with my resource kids" when discussing an accommodated lesson. Brenda also asked Angela, "Is it a similar make-up of kids here?" when she was discussing the difficulty that students were having on a project. In this sentence, Brenda was questioning if that teacher's classroom had a mixture of special education and general education students.

Summary

Although all teachers defined their roles in the co-teaching classroom, non-participant video-recordings and audio-recordings did not always match how they perceived their roles in the classroom. Angela defined her role as more shared than both general education teachers defined her. Additionally, each set of teachers found a unique way to navigate the shared space, time, and responsibilities of the classroom that matched individual's preference as a team member. In each classroom, Angela was typically responsible for accommodating material, monitoring student understanding, and providing support to struggling learners; whereas, Brenda and Carol were identified as the deliverers of content for the group, responsible for grading assessments, and responsible for curriculum-planning. Of interest, the change in discourse between planning-time and lesson-planning showed the way teachers continued to navigate their roles, even when students were not present. Although the teachers used more plural pronouns in these settings, they still switched pronoun usage when discussing the different roles that they played in the classroom setting. Further, the perpetuation of continued use of "my students" for distinguishing between special education and general education students showed a continuing separation of responsibilities and stewardship of students with disabilities.

The classroom video-recordings, audio-recordings of planning times, interviews, and questionnaire supported the following findings that the general education teacher is the lead teacher in the classroom and responsible for organizing and delivering instruction. The special education teacher supports students in the classroom and is responsible for accommodating and providing background knowledge of students. All the participating

teachers in the study were able to identify benefits to co-teaching as well as barriers to establishing successful co-teaching relationships.

The co-teachers reported that they found their co-teaching relationship beneficial for themselves and for the students whom they support. Although the co-teachers found benefits to co-teaching, there were barriers that made their relationship and the ways they support students challenging. The ability to have a common planning time, background knowledge in curriculum, and consistency of co-teaching partners were all found to be important factors to successful co-teaching. Additionally, the co-teachers found that they learn from one another. The special education teacher holds key background knowledge from which the general education teachers benefit, whereas the general education teacher knows the curriculum and pacing that is needed to meet state and district requirements.

Chapter 5: Interpretations and Recommendations

This qualitative case study focused on the interactions within the classroom and during planning time of one special education teacher and two general education teachers who co-taught in two separate high school classrooms. The study investigated both classroom instruction and planning times to understand the interactions between teachers and how they communicate and collaborate with one another. Research about co-teaching, a widely accepted model for providing inclusive education, has shown that communication, collaboration, and the relationship of co-teachers are all essential to establishing a successful co-taught classroom (Conderman, Johnston-Rodriguez, & Hartman, 2009; Keefe, Moore, & Duff, 2004).

The following questions guided this study:

1. How do co-teachers communicate verbally and nonverbally with one another during classroom instruction?

2. How do co-teachers communicate verbally and nonverbally with one another during   planning time?

3. How does the special education teacher perceive her role and relationship with her teaching partners?

4. How do co-teachers collaborate with one another?

To understand how the teachers interacted and collaborated with one another, one special education teacher and one general education teacher were non-participant video-recorded in the classroom and audio-recorded during planning time while the same special

education teacher was audio-recorded during planning time with a different general education

teacher. In addition to the video- and audio- recordings, the teachers completed a

questionnaire and were interviewed. Analysis of these data resulted in six findings related to

the interactions, communication, and collaboration of co-teachers:

Finding 1. The general education teacher continues to be the lead teacher in the

classroom.

Finding 2. The general education teacher is responsible for organizing and delivering

instruction.

Finding 3. The special education teacher supports students in the classroom but is not

identified as the lead teacher.

Finding 4. The special education teacher is responsible for accommodating and

providing background knowledge of students that supports differentiation and adapting

instructional material to meet student needs.

Finding 5. Co-teaching is beneficial for supporting teachers to address students' needs.

Finding 6. Barriers exist for successful co-teaching partnerships.

An analysis of each finding was presented in previous chapters. Discussion of the

findings and the relevance for current and future research comprises this chapter.

General Education Teacher Leads Instruction

In this study, analysis of discourse in the classroom co-taught by English teacher

Brenda and special education teacher Angela showed Brenda as the lead teacher, whereas

Angela took a supportive role. This finding concurs with previous research where the general

education teacher is the lead instructor in the classroom (King-Sears et al., 2014). Although

Angela identified one unit where she led instruction in the school year, overall, Brenda was

the lead teacher and in charge of the delivery of instruction. Angela identified that she was

confident and knowledgeable of the content curriculum yet, she was still not identified by the

researcher as sharing the instruction the classroom. Angela continued to assume the role of

support and assisted students within the classroom rather than presenting to the larger group.

This finding concurs with prior research showing that the general education teacher continues

to be the expert in the content area (King-Sears et al., 2014; Mastropieri et al., 2005). A

difference of this study when compared to previous studies is that Angela was confident in

her content knowledge of English, yet, was still not found taking a lead role in the classroom.

In this study, the general education teacher was identified as the teacher qualified in

subject area content, whereas the special education teacher was qualified in learning

strategies and background of the disabilities. This finding concurs with previous research

where the general education teacher continues to focus on the curriculum and content while

the special education teacher supports the content (Little & Dieker, 2009; Scruggs, et al.,

2007). In this study, the pairing of the two teachers in the classroom did not make them more

collaborative or equitable with delivery of content within the classroom. Previous studies

found that bringing two teachers in the room did not make the teachers more collaborative or

share a more equitable space within the classroom (Ferguson & Wilson, 2011; Murawski &

Hughes, 2009).

The use of the one–teach, one–assist model of co-teaching continued to support the

general education teacher as the lead instructor and places the special education teacher in the

supportive role. This study found that Angela and Brenda's lack of the team-teaching model

for delivering instruction will continue to create inequitable roles within the classroom as

supported by previous research (Jang, 2006). The one-teach, one-assist model is seen as the

least collaborative and equitable model to use within the classroom environment (Scruggs, et al., 2007; Jang, 2006). The special education teacher, Angela, identified that she was comfortable with the curriculum after the numerous years that she and English teacher Brenda have been together. It would be expected by this amount of time co-teaching with one another that each teacher would be comfortable delivering instruction within the classroom. Dependency on the one–teach, one–assist model can be taken as an indication the special education teacher continues to take the role of the accommodation expert and the general education teacher is the content expert. Findings of this study indicate that even with multiple years of experience co-teaching together and familiarity with content knowledge do not change two partners co-teaching models. Deliberate planning with discussions of which co-teaching model to use would be necessary in planning times is necessary to change how co-teachers work in the classroom with one another.

Although this research did not identify student perceptions, research has shown that students prefer a team-taught approach compared to other models of co-teaching (Dugan & Letterman, 2008). The continuation of the one–teach, one–assist model may be barrier to the team's growth as a collaborative pair. Angela and Brenda are comfortable with the one–teach, one–assist model and may need more support and professional development to adapt and try different models of co-teaching within the classroom. This research suggested that although the team had numerous years of co-teaching together, that variable alone does not support an equitable co-teaching pair.

General Education Teacher Leads Curriculum Planning

This study found that the general education teachers continued to lead the curriculum-planning, identified content to be taught, and the timeline. The special education teacher

continued to support the general education teacher as the content expert as previous studies have concurred (Mastropieri, et al., 2005). Co-planning between teachers continued to support the general education teacher discussing the content and curriculum, whereas the special education teacher discussed how the curriculum will be taught with accommodations and differentiation (Murawski & Dieker, 2004). Within this study the teachers did not discuss which model of co-teaching would be used and instead delivered instruction in the traditional, one-teach one-assist model. In both co-teaching teams, the teachers integrated their areas of expertise and contributed to lesson planning to meet the needs of all students within the classroom. As presented in research by Conderman (2011) the teachers were able to define each person's area of expertise as well as provide feedback to one another to meet student needs within the classroom. Both co-teaching sets in this study listened to one another, asked open-ended questions, and summarized one another's identified tasks and roles to prepare the lessons ahead.

This study found that the teachers co-planning supported research that their areas of expertise should be used to support curriculum-planning and supporting students (Murawski & Dieker, 2004). Murawski and Dieker (2004) identified that the co-teaching partnership may be "doomed" if one teacher leads in a direction that the other teacher is not expecting. The general education teacher was the lead teacher in this study; however, it was not a doomed partnership since both teachers co-planned and agreed on how the instruction would be implemented within the classroom. However, the focus on their area of expertise may influence how they co-teach within the classroom. This study found that while Angela and Brenda agreed on the instruction yet, Angela continued to support the identified role of being a special education teacher. She identified that she understood and felt comfortable with the

content in the English classroom, but she is not a certified English teacher. This continued

separation of roles may also perpetuate the separation of general education and special

education role identity. While both co-teachers identified themselves a team, their discourse

may continue to delineate their roles. Without purposeful planning about roles and how roles

can change within the classroom based on the co-teaching model used, Angela will continue

to support students with accommodations, and Brenda and Carol will continue to lead content

and instruction.

Special Education Teacher in a Supportive Role

First, Angela continued to support students within the classroom but was not

identified as the lead teacher within the classroom. Her responsibilities were focused on

accommodating student needs rather than pacing and teaching the curriculum. Angela's role

as a support within the classroom continued to place her in an assistive role. This study found

that the special education teacher in a subordinate or assistive role corresponds with research

on co-teaching (Scruggs et al., 2007; Pugach & Wesson, 1995; Pugach & Winn, 2011). A

difference of this finding to current research is that Angela did understand and had sufficient

content knowledge in the English curriculum, yet she continued to hold a supportive and

subordinate role within the classroom.

Second, Angela supported students in alternative locations to the general education

classroom. Special education students who were having difficulty with the content in the

general education classroom received additional instructional support with Angela in her

academic skills class. Additionally, Angela removed students from the general education

classroom to provide small group instruction outside of the classroom. Angela noted that she

took both special education and general education students out of the classroom for

additional support. Although Angela identified this as a method to meet student needs,

removing students from the general education classroom may signal to students that they are

not good enough or need more support than can be provided within the general education

classroom. Villa and Thousand (2005) discussed the need for inclusive education to ensure

that students belong in the classroom so that they do not feel segregated from their general

education peers. This study found that special education and at risk students are still

continuing to be removed from the classroom even with co-teaching in place. Co-teaching is

promoted as model for integration, yet students are still being removed for additional support

outside of the classroom.

     This study did not survey students to understand their preference for co-teachers.

Kusuma-Powell & Powell (2011) noted that students are aware of teacher status, and lower

status is attributed to the teacher who is less involved in instruction than their co-teacher.

Students may seek out the teacher with the higher status in the classroom. Angela believed

that students sought her and Brenda out equally because both teachers worked with both

general and special education students in the classroom. Further research with students is

recommended as a method to determine if Angela's perceptions of her status within the class

are accurate.

Special Education Teacher is the Keeper of Student Knowledge

     This study found that the special education teacher is the keeper of student

knowledge. Angela knew more background knowledge of special education and at-risk

students than her general education co-teachers. Planning sessions indicated that the special

education teacher addressed individual student performance and accommodations needed to

support student success with the curriculum. The special education teacher held key student

knowledge and background of individual students that was needed to accommodate and differentiate lessons. The general education teachers depended on this background knowledge from Angela. Previous research concurs with this finding as the special education teacher is familiar with the disability and accommodations needed for special education students in the co-taught classroom (Howard & Potts, 2009).

Angela's ability to work with students in the general education classroom as well as in the academic skills classroom supported her ability to get to know students and understand their individualized needs. Additionally, her knowledge of disabilities and special education services supported her and her co-teachers during planning times. Both Brenda and Carol described how Angela's special education background and knowledge of students supported them while planning and teaching.

Angela's background knowledge supported her both in the classroom and in planning time. During classroom instruction Angela knew when to interject to support individual students. Within planning times Angela could identify which students would need more support and how to group students for lessons. Although Angela continued to use her background knowledge of students to support her co-teachers, it would be beneficial for the general education teachers to work with and learn more about students with disabilities. Previous research discusses the importance of purposeful planning and teaching to meet the needs of not only the students with disabilities, but the needs of all students within the classroom (Dieker & Murawski, 2003; Kluth, & Causton, 2016).

Co-Teaching is Beneficial

First, co-teaching benefits students within the classroom. This study did not analyze how students perceived their co-taught classroom, and the study did not take a quantitative

approach to analyze their academic performance within the classroom. However, all of the

teachers in the study expressed belief that co-teaching benefits students by providing students

with more adult support within the classroom. Benefiting more students than the solely

special education students has been identified in previous research as a benefit to co-teaching

(Mastropieri & McDuffie, 2007; Scruggs et al., 2007).

Second, a common theme between the co-teaching pairs was that time together is

essential. Findings from this study highlighted that although co-teachers spoke highly of

inclusion and the support that students received, placing special education students and

teachers in an inclusive classroom does not automatically make that classroom feel or

become inclusive for students or teachers. Additionally, while this theme concurs with

research, the time together did not change the model of co-teaching that the teachers used in

the classroom.

Although Angela and Brenda identified time together as beneficial, they continued to

delineate their roles as a general education with content and instruction and a special

education teacher with accommodating and differentiating to meet student needs. Whereas

time together may lead to more equitable roles inside the classroom, change can be difficult.

The roles that special education and general education teachers define for themselves will

need deliberate planning and support from one another if they wish to change roles within the

classroom. Deliberate conversations in which special education teachers define how their role

looks as lead in a classroom will be needed.

Co-Teaching has Barriers

First, inconsistent planning time was identified as a barrier to co-teaching. The

ongoing effects of a lack of common planning time and meetings that interrupt scheduled

planning time all played a role in the ability for co-teachers to plan together. Lack of

planning is identified as research as a barrier to successful co-teaching relationships (Ashton,

2010; Murawski, 2006; Pugach & Winn, 2011). Common planning continued to be identified

as essential for co-teachers yet the work schedule of only one co-teaching team allocated

planning time together. Both teams made time to plan with one another, showing their

commitment to supporting their co-taught classroom. Angela and Brenda improvised and

managed to meet within the classroom while students were completing assignments with

their partners or individually. Although planning time was identified as a barrier, the lack of

planning time itself was not a barrier to their ability to plan for instruction. Mastropieri et al.

(2005), identified teachers that continued to have successful co-teaching relationships with

limited planning time available. It is the responsibility of school administrators to support

common planning time for teachers. With the lack of common planning times, teachers were

left to improvise on their own.

Second, co-teachers in this study continued to support research that they benefit from

a voluntary commitment and partnership. Previous research suggests that co-teachers should

have input in their co-teaching partner (Ashton, 2016; Murawski & Bernhardt, 2015; Scruggs

et al., 2007) Providing co-teachers with a voice regarding choice of their partner and choice

of subjects to teach supports the development of co-teaching relationships. Each teacher in

this study identified that the lack of consistency and time with co-teaching partners affected

their relationships. Although research indicated that voluntary commitment will provide more

collaboration and equitable roles within the classroom, Angela did acknowledge that she has

grown as a teacher by being placed in a curricular area that was outside her comfort level.

Third, the continued pressure to meet the demands of the curriculum and graduation

requirements were evident in comments of all three teachers in this study. The organization

of supports from the district influenced how students are taught throughout the school day.

Special education students are provided more time and support in academic skills to fill in

gaps of learning and to catch up on daily assignments. Although this was a benefit and

additional support for special education students, it was still challenging to meet the

curriculum within the general education classroom. Angela continually discussed how she

will support students in time outside of the general education classroom to ensure student

knowledge of the curriculum. Additionally, Angela and Carol felt responsible for adjusting

the curriculum plan for individual students to meet the mandated state curriculum for

students who were having difficulty meeting the requirements for graduation.

Limitations and Delimitations

Limitations. Constraints beyond the control of the researcher affect all research

studies. The case study design was limited by participation of two co-teaching pairs; only one

co-teaching pair participated in both classroom non-participant observations and recorded

planning time sessions. Without recordings from Angela and Carol's classroom instruction, it

is unknown whether Angela followed a similar pattern of having a subordinate, supportive

role in the classroom. Although a case study was beneficial in gaining a deep understanding

of the co-teaching relationship of the teachers within this study, a case study is not conducive

to supporting a broad overview of all co-teaching relationships. Additionally, while non-

participant research can be beneficial to prevent the Hawthorne effect, the inability of the

researcher to attend all recordings and observe in person was a limitation to this study (Asan

& Montague, 2014). Limiting the interactions between the researcher and co-teachers

allowed the researcher to be discrete; however, the co-teachers were then unable to speak to the researcher during observations to provide further clarity of the interactions between co-teachers.

Although the teachers were given parameters for recording classroom sessions and planning time, the devices were left with the teachers, so the lessons and planning sessions were selected by the teachers. Participant observations may have provided a broader selection of class lessons. Additionally, the interviews did correlate with findings of the non-participant video-recordings and the answers to interview questions provided by the teachers were thought to be true and based on their personal beliefs. The data provided the researcher with the co-teachers experience within a co-teaching classroom. This was a narrow study and may not reflect the broader experience of co-teaching within other classrooms and other school districts.

Delimitations. Boundaries established by the researcher delimit the study, making it manageable. The objectives, research questions and variables, the participants, and site, as well as the theoretical and conceptual framework and choice of data-gathering tools described the scope of the study. The participants were volunteers from one district. The themes identified were determined by the researcher and are believed to reflect the teachers' implicit perceptions of their roles and responsibilities within their co-teaching experiences.

Implications for Practice

The results of this study have several implications for future practice in co-teaching. The implications include providing professional development and support for co-teachers to practice and try different roles within the classroom instruction as well as during planning times. This study recommends that special education and general education teachers have

professional development that explains and exposes teachers to each co-teaching model. Teachers will need to understand each model and learn how to plan with the models identified. Teachers are comfortable in the roles that they have been trained for through their college programs.

Findings from this study suggest that although co-teachers can have continued time with one another, this does not mean that their co-teaching practice is changing their teacher styles or preferences. Whereas a co-teaching pair may collaborate and communicate well with one another, their interactions may remain traditional, in the one–teach, one–assist approach. This study recommends administrative training in what co-teaching is and the different models that co-teachers can be using in the classroom. Administrators will need to show that co-teaching is a priority by providing planning times for co-teachers as well as time in the beginning of the school year for co-teachers to meet with one another to determine their roles and responsibilities within the classroom. Support from administrators with deliberate planning and feedback from observations should assist teachers in stepping out of their comfort zones and trying different co-teaching models. Administrators need to acknowledge that although a co-teaching pair has been together for a period of time, that does not mean that best practices in co-teaching are occurring.

Special education teachers have knowledge of special education students that is highly beneficial for general education teachers. A focus on providing time for special education teachers to attend planning time of general education teachers is deemed beneficial in supporting accommodations and differentiation of lesson planning. Administrators would benefit from having special education teachers meet with general education teachers even if

the two teachers are not co-teaching together. The communication within planning time supports students and the development of lessons.

This study identified that there is a need for increasing the exposure of co-teaching within teacher preparation programs as well as fieldwork prior to graduation. Student teachers in the general education and special education fields would benefit from a co-teaching experience in the classroom. Additionally, general education teacher candidates would benefit from further training in student pedagogy and co-teaching models at the college level. A better understanding of the roles and responsibilities of special education and general education teachers would benefit educators.

Finally, the models of co-teaching and data regarding which model is deemed best practice should be reviewed. Perhaps, team teaching is not the best practice for co-teaching. Each teacher in the co-taught classroom is a specialist. The general education teacher is a specialist in content while the special education teacher is a specialist in accommodating and differentiation to meet student needs. With each teacher bringing a unique perspective into the classroom, students are being supported, and teachers are learning from one another. More important than the model that teachers are using is how they are communicating and collaborating with one another to meet the needs of students.

Recommendations for Future Research

As a researcher, I would like to replicate this study with multiple co-teaching teams in a district at the middle and high school level as this level is where content expertise for general education teachers becomes more defined. I would continue to compare their planning and co-teaching times to see if the communication and collaboration within their planning sessions effect how co-teachers interact with one another and students within the

classroom. I would also like to understand the student's perceptions of the teachers' roles within the classroom and if this is a factor in how the students feel about themselves. Additionally, I would like to focus on pairs who have co-taught with one another for more than one year. Does the amount of years they co-teach -and co-plan together influence the co-teaching models they select? Do the students feel comfortable approaching both the general education and special education teacher? Do the special education students feel included within the classroom and do they feel that they need more support outside of the general education classroom? Is preparing teachers in two different college programs supporting an inclusive model or does it continue to support the separation of roles?

Although co-teaching is a widely accepted model to support inclusive education, the roles of the general and special education teachers in the classroom are defined by the background knowledge and level of comfort with one another. Whereas communication and collaboration have been deemed important for the co-teaching relationship (Solis et al., 2012), limited research is extant about how communication with one another continues to define roles. A unique aspect of this study opened discussions of how preconceived beliefs and identified roles may affect how we communicate and collaborate with one another. The essence of special education and general education is engrained in the foundations of education. University teacher preparation programs continue to delineate the roles of special education and general education based on the requirements that are imposed from the state. Our communication with one another continues to separate the roles as well. For example, the teachers in this study may not realize how their communication with one another and their communication with students within the classroom continues to identify the special education teacher as a supportive role and the general education teacher as the leader of

instruction. A focus on how our discourse has been prescribed to us through our history

would benefit teachers in order to break down barriers and preconceived thoughts on what

each role should entail.

For equitability to transfer into the classroom, deliberate planning is required so that

not only curriculum and accommodations are discussed but also co-teacher's roles in a lesson

to demonstrate shared responsibility and equal leadership in the classroom. Having time to

identify one another's role and then identify roles that each could share would benefit the

teacher's ability to create a shared space within the classroom. Although each teacher is

specialized, they are both leaders who can support one another's learning and understanding

of working with students with diverse needs. Giving teachers time to learn from one another

and space to take risks and perform roles outside of their comfort zones would benefit their

personal and professional growth.

Recommendations for researching the beliefs and value of inclusive education in

districts and schools would be beneficial. This study did not ask school principals or district

special education supervisors how they valued inclusive education; however, planning time

was not allocated as necessary for teachers in general education classes that included special

education students. The special education teacher was not placed on the roster or given

appropriate space that would reflect equal status in the classroom. Additionally, professional

development for special education teachers, although needed, may also foster segregation of

co-teachers, as the special education teachers are pulled away from their general education

colleagues. It would benefit future research if administrators were asked questions about how

they support collaboration and communication between general education and special

education teachers. Are administrators providing the feedback and support needed to allow

their teachers the freedom and space needed to take risks and try models outside of their comfort zones?

Future research using Video-Reflexive Ethnography (VRE) is recommended. Co-teaching is comparable to medical studies as the co-teacher's status within the general education classroom is inequitable. By providing co-teachers with professional development on co-teaching, leadership, and how communication affects role status within the classroom, the co-teachers would be able to view video from their lessons through a different lens.

It would be beneficial for the researcher to be present during video-recordings and then provide time for both the general and special education teacher to review footage together. Continued professional development, along with watching their working relationship together, may help them identify the idiosyncrasies of co-teaching and how their body language and communication with one another perpetuates their unequal status within the classroom. While the co-teaching teams felt comfortable with their current co-teaching relationship, they may not yet realize how their co-teaching relationship could change for themselves and for students.

This study poses recommendations for teacher preparation programs at the university level. For all teachers to be prepared for the content and specialized instruction for all learners, teachers need to believe in the need for inclusive education settings, have content knowledge, and the ability to support the educational needs for a diverse group of learners. Perhaps, our continued division of general and special education programs perpetuates marginalization of our special education teachers and students. Further research is needed to examine programs for general and special education students and to determine whether separate preparatory programs are necessary for teachers.

Future research for co-teaching should focus on creating truly equitable classrooms and schools where students are not identified as special education or general education students within the building. Our language and how we communicate student needs is focused on the deficit approach. We identify students as lacking in academic, social, and emotional knowledge. By focusing on the ways to support all students within the classroom we will raise the status of special education students and teachers. It is necessary to support best practices in the classroom that are good for all students regardless of ability levels.

Final Reflections

Kohler-Evans (2006) and Howard and Potts (2009) characterized co-teaching as a marriage. However, according to Stivers (2008), considering co-teaching as a marriage may create unrealistic expectations; although teachers may not have a personal relationship, they can have an effective professional relationship. Further, their personal relationship may not transfer into the classroom as they have intended, and teachers may not even be aware of this difference. Although the co-teachers in this study reported liking one another, they did not sit with one another in professional development meetings, and often, the special education teacher was pulled into separate special education department meetings.

From an outsider's view, Angela and Brenda's co-teaching experience would appear inequitable. Angela's status in the classroom, where she was not seen as the lead instructor, seemed to be lower than Brenda's. However, their planning sessions were rich, and both teachers focused on curriculum and accommodation conversations. Angela was comfortable with the curriculum and identified that she could teach the curriculum herself, if needed. Giving feedback to teachers regarding how teachers communicate with one another and identify their roles may help support a more equalized role within the classroom. This

research revealed that teachers may present lower in status in a classroom but demonstrate equal status outside of the classroom environment.

The current United States educational system and history of segregating special education students may influence why special education teachers appear to have lower status when they enter the general education classroom. All the teachers in this study respected and valued one another. They also all expressed their frustrations with the current co-teaching system and the lack of support they had to overcome to ensure successful co-teaching in their building.

Although continued professional development, ability to select co-teaching partners, and guaranteed planning time have all been recommended in previous research, they remain recommendations in this study. Additionally, professional development pertaining to communication, how teachers identify roles, and time for the teams to watch themselves co-teaching together would benefit their co-teaching relationship. Teachers should have the ability to explore deeper into their understanding of inclusion and their belief systems of supporting students with disabilities. Perhaps, co-teaching teams have equitable, supportive conversations, but these good intentions may not transfer into classrooms. Providing co-teachers more guidance and direction about how to transfer their equitable relationship into the classroom may be the key to supporting themselves and their students.

Appendices

Appendix A: Observation Protocol

Teachers: _____

Date: _____

Grade:_____

Time Observed: _____

1. Today's topic:

2. Who is doing the main teaching/model using:

3. What are both teachers doing during the lesson:

4. Materials used, who passes them out, who obtains them:

5. Utterances of general education teacher:

6. Utterances of special education teacher:

7. Times general educator was asked a question by a student:

8. Times special educator was asked a question by a student:

Appendix B: Request for Consent by School District for Research Study

The University of Michigan-Dearborn

[Finding Their Voice: Co-teaching, Communication, and Collaboration]

Purpose of the study: I am a doctoral student in the Educational Leadership department at the University of Michigan Dearborn. I am currently completing a doctoral dissertation entitled "General and Special Education Teachers: Communication and its Effects on Co-Teaching". The purpose of the study is to better understand the impact that communication has on co-teaching teams and if this impacts their leadership within the classroom.

Description of Subject Involvement:

I am asking for your permission to complete the study within your district at one of your high schools. I am interested in working with co-teaching teams (each team will consist of one general education teacher and one special education teacher). These teachers will work with me for up to one semester. Each participant will be video recorded, audio recorded, complete a questionnaire, and interviewed to allow me to understand their role in the co-teaching team and to determine if communication impacts their team and leadership within the classroom. The interview and observation protocols are attached. Any information you and the teachers provide will remain confidential and locked in a secure location. Names of you district, schools, and participants will not be identified in any part of the research. The districts participation is totally voluntary and may choose to withdrawal from the study at any time.

Benefits:

There is no risk to participants that complete the interviews. In fact, the knowledge obtained by this study may help improve the relationships and skills of co-teachers and in turn improve special education student achievement in your district. The results of the study will be available upon request to all participants.

Risks and Discomforts:

There are no risks associated with this study because the data collection is completely anonymous and the topic is not sensitive. Any information you and the other teachers provide will remain confidential and locked in a secure location. Names of you district, schools, and participants will not be identified in any part of the research. Your participation is totally voluntary and may choose to withdrawal from the study at any time.

Confidentiality:

We plan to publish or present the results of this study, but will not include any information that would identify you. There are some reasons why people other than the researchers may need to see information you provided as part of the study. This includes organizations responsible for making sure the research is done safely and properly, including the University of Michigan, government offices or the study sponsor.

To keep your information safe, the researchers will ensure that all data is locked and secured in a secure location.

Storage and future use of data:

The data you provide will be stored for a minimum of 5 years

The researchers will retain the data for a minimum of 5 years.

The researchers will dispose of your data. Paper records will be shredded and recycled. Records stored on a computer hard drive will be erased using commercial software applications designed to remove all data from the storage device. Data stored on USB drives or recorded data on tapes, CDs, or DVDs, the storage devices will be physically destroyed. Records stating what records were destroyed, and when and how they were destroyed will be kept on record.

Voluntary nature of the study:

Participating in this study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. If you decide to withdraw early, all information that you provided will be shredded and disposed.

Contact Information:

If you have questions about this research, including questions about scheduling you may contact me, Jennifer Hiller, at any time concerning the study at my email address or (248) 762-7356. You may also contact Dr. Bonnie Beyer of the Educational Leadership Program at the University of Michigan Dearborn at (313) 593-5583 or beyer@umich.edu.

If you have questions regarding your rights as a research participant, or wish to obtain information, ask questions, or discuss concerns with someone other than the researcher(s), You may contact the Dearborn IRB Administrator in the Office of Research and Sponsored Programs, 1055 Administration Building, University of Michigan-Dearborn, Evergreen Rd., Dearborn, MI 48128-2406, (313) 593-5468; the Dearborn IRB Application Specialist at (734) 763-5084, or email Dearborn-IRB@umich.edu.

If you agree to participate in this study, please sign your name in the space provided below; you will be given a copy of this consent form for you to keep. If you would like to learn the findings of this study, please email me at (your email) and I will be happy to forward that information to you. Thank you for your participation in this study.

I agree to participate in the study.

_____

Printed Name

_____   _____

Signature   Date

Appendix C: Request for Consent to Participate in a Research Study

Finding Their Voice: Co-teaching, Communication, and Collaboration

You are invited to participate in a research study about Co-teaching relationships

entitled "General and Special Education Teachers: Communication and its Effects on Co-

Teaching". The purpose of the study is to better understand the impact that communication

has on co-teaching teams and if this impacts their leadership within the classroom.

If you agree to be part of the research study, you will be asked to complete the study

with you and your general education co-teacher. I am interested in working with both of you

for one semester. Each of you will be audio and video recorded one class period per day. In

addition, I would like to audio record planning times outside of the classroom and have

copies of emails, lesson plans, and other notes that you and your co-teacher exchange to

better understand your communication. There will be an open-ended interview and a

questionnaire as well.

Benefits:

There is no risk to participants that complete the interviews. In fact, the knowledge

obtained by this study may help improve the relationships and skills of co-teachers and in

turn improve special education student achievement in your district. The results of the study

will be available upon request to all participants.

Risks and Discomforts:

There are no risks associated with this study because the data collection is completely

anonymous and the topic is not sensitive. Any information you and the other teachers provide

will remain confidential and locked in a secure location. Names of you district, schools, and

participants will not be identified in any part of the research. Your participation is totally

voluntary and may choose to withdrawal from the study at any time.

Participating in this study is completely voluntary. Even if you decide to participate

now, you may change your mind and stop at any time. You may choose not to answer any

survey question, continue with the interview, release emails and correspondence with your

teacher, or be audio or video recorded for any reason. If you decide to withdraw early, all

information that you provided will be shredded and disposed.

If you have questions about this research, including questions about scheduling you

may contact me, Jennifer Hiller, at any time concerning the study at my email address,

Jennifer.hiller@farmington.k12.mi.us or (248) 762-7356. You may also contact Dr. Bonnie

Beyer of the Educational Leadership Program at the University of Michigan Dearborn at

(313) 593-5583 or beyer@umich.edu.

The University of Michigan Dearborn Institutional Review Board has determined that

this study is exempt from IRB oversight.

I confirm that I am 18 years old or older and agree to participate in the study.

_____   _____

Signature   Date

Appendix D: Letter to Participants

Good Afternoon,

Thank you for agreeing to participate this study focused on co-teaching relationships entitled "General and Special Education Teachers: Communication and its Effects on Co-Teaching". The purpose of the study is to better understand the impact that communication has on co-teaching teams and if this impacts their leadership within the classroom.

Please remember that participation in this study is completely voluntary and if you have questions about this research, including questions about scheduling you may contact me at any time. I look forward to working with you and I will come and bring the recoding equipment this week. At that time, I will introduce myself to everyone.

Thank you for all your support,

Jennifer Hiller

Appendix E: Script for Participant Interview

Script: "Thank you for participating in this interview. As you know, I am going to audiotape this so that I can be sure to have an accurate record of your responses. Also, you have the right to refuse to answer any questions if you feel that something is too personal. You have the right to end this interview at any time. There are no consequences to you if you decline a question or decide to end the session. Do you have any questions before we get started? [Take time to answer the questions.] Do you agree to be audio recorded during this interview? [If the response is yes, then device is turned on; if the response is no, then let the teacher know that I will be taking notes so as to not forget anything that is said.] Ready?

Pseudonym: _____

1. Describe for me your current co-teaching situation.

2. Which methods of co-teaching do you use (give examples if necessary)?

3. How do you designate the responsibilities within the classroom?

4. What are your daily responsibilities in the classrooms?

5. What are your co-teachers daily responsibilities within the classroom?

6. Who is responsible for grading of assignments?

7. Do you lesson plan together? Who sets the goals and objectives for the lessons?

8. Do you feel comfortable with the current curriculum for your grade level? Do you feel that your co-teacher is comfortable with the current curriculum for your grade level?

9. How often do you meet together?

10. How do you typically correspond (in person, email, before school, after school, phone)?

11. Explain each of your roles within the classroom.

12. How does a co-taught classroom benefit students with disabilities?

13. Do you see co-teaching with your partner as beneficial for the students?

14. Do you feel that you work with general and special education students equally?

15. Do you feel you have learned any new skills from your co-teaching partner?

16. Has co-teaching improved your teaching?

17. I there anything else you'd like to add before we end?

Script: If something comes to mind later may I have permission to contact you for a follow up question? Thank you for your participation in this interview. [Turn the recording device off.]

Appendix F: Script for Special Education Teacher Interview

Script: "Thank you for participating in this interview. As you know, I am going to audiotape this so that I can be sure to have an accurate record of your responses. Also, you have the right to refuse to answer any questions if you feel that something is too personal. You have the right to end this interview at any time. There are no consequences to you if you decline a question or decide to end the session. Do you have any questions before we get started? [Take time to answer the questions.] Do you agree to be audio recorded during this interview? [If the response is yes, then device is turned on; if the response is no, then let the teacher know that I will be taking notes so as to not forget anything that is said.] Ready?

Pseudonym: Angela

Introduction: I am in the process of writing my research and realize that there are some details that would help. I'm sure you remember 3 years ago when you agreed to participate in my dissertation study. At that time, you worked with two teachers. I'd like to get more information about that time. As it's been awhile, you may not remember all the details. That's okay. I know you worked with Brenda and Carol for two more years after this study completed.

1. Can you describe to me the typical day in [real teacher's name] classroom?

2. Do you remember where the camera was placed in the classroom and why that location was selected? Let's look at this video to help you recall.

3. Do you remember when you would turn on and off the camera? Do you remember why it was turned on and off at those times? How was this decision made?

4. I see you sat in student desks during class lessons. Do you remember why? Do you do this in all classrooms in which you are co-teaching? Why or why not? Do the content

teachers sit in students' desks, why or why not? Did you feel that you needed your own space or did you have a designated space?

5. Tell me about your relationships with your co-teachers? Is this different with other co-teachers you have co-taught with? Were you always friends?

6. What do you see as positives and negatives to co-teaching and did you experience any of these with your [real teacher's name]?

7. Can we watch a few videos of the lessons and discuss them?

    a. Tell me what we are seeing here?

        i. How did you determine who would be the lead teacher of this lesson?

        ii. Have you taught this lesson before?

        iii. Do you feel that either of you could have been the lead teacher for this lesson?

        iv. What made you decide to interject at this point?

        v. How did you feel when Brenda interjected here?

        vi. Did you ever feel that Brenda was interrupting you during the lesson?

        vii. Did you have to do any additional re-teaching or discussions with students after this lesson?

        viii. Would you have changed anything in this lesson?

Script: If something comes to mind later may I have permission to contact you for a follow up question? Thank you for your participation in this interview. [Turn the recording device off.]

Appendix G: Co-Teaching Questionnaire

Co-Teaching Questionnaire

The purpose of this questionnaire is to learn about your co-teaching experience. The results of this questionnaire will be used to help improve co-teaching practices. Your participation is voluntary and all responses will be confidential.

How many total years of teaching experience do you have?

Your answer

What is the highest level of education you have achieved?

Your answer

What are you certified to teach?

Your answer

How many years have you been a co-teacher?

Your answer

How many years have you taught with your current co-teacher?

Your answer

Number of co-teachers with whom you co-teach daily.

Choose ▼

Number of classes you co-teach daily.

Your answer

What content areas do you co-teach?

Your answer

Did you volunteer for your current co-teaching experience?

Your answer

Approximately how much time per week do you spend planning with your co-teacher(s)?

Your answer

What aspect of your co-teaching experience has been the most beneficial/positive?

Your answer

Please list any areas of concern regarding your co-teaching experiences.

Your answer

My current co-teaching partner and I work very well together. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

I do more than my partner in my current co-teaching experience. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

I feel that our responsibilities within the classroom are equitable. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

My co-teacher and I communicate frequently enough. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

I have learned new skills from my co-teaching partner. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

My co-teacher and I both understand the curriculum. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

Grading is shared equally among co-teachers. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

Classroom management and discipline matters are shared equally. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

I feel comfortable making accommodations for students. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

My co-teaching partner feels comfortable making accommodations for students. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

My co-teacher and I have enough time to plan together. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

Co-teaching is a worthwhile experience. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

Students learn better in co-taught classes. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

Co-teaching benefits students with special needs. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

Co-teaching benefits students at risk fro failure. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

My co-teacher and I are friends. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

I communicate with the same groups of teachers as my co-teacher. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

During Professional Development we sit together. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

Check all that apply. What do you believe are the greatest barriers to successful co-teaching:

- ☐ Lack of training or professional development

- ☐ Lack of communication between teachers

- ☐ Scheduling issues

- ☐ Lack of time

- ☐ Lack of administrative support

- ☐ Personality or teaching philosophy clashes

What co-teaching approach do you and your co-teacher use the most?

Choose ▼

Please complete one of the following sections for each co-teaching experience that you have. For example, if you only have one co-teaching partner, complete only one section. If you have two co-teaching partners, complete one section for each experience.

	Special Education Teacher	General Education Teacher	Shared
Planning Lessons	○	○	○
Teaching Lessons	○	○	○
Grading	○	○	○
Small Group Instruction	○	○	○
Whole Group Instruction	○	○	○
Taking Attendance	○	○	○
Accommodations/Modifications	○	○	○
Monitoring Students	○	○	○
Parent Phone Calls	○	○	○

Please complete one of the following sections for each co-teaching experience that you have. For example, if you only have one co-teaching partner, complete only one section. If you have two co-teaching partners, complete one section for each experience.

	Special Education Teacher	General Education Teacher	Shared
Planning Lessons	○	○	○
Teaching Lessons	○	○	○
Grading	○	○	○
Small Group Instruction	○	○	○
Whole Group Instruction	○	○	○
Taking Attendance	○	○	○
Accommodations/Modifications	○	○	○
Monitoring Students	○	○	○
Parent Phone Calls	○	○	○

Please complete one of the following sections for each co-teaching experience that you have. For example, if you only have one co-teaching partner, complete only one section. If you have two co-teaching partners, complete one section for each experience.

	Special Education Teacher	General Education Teacher	Shared
Planning Lessons	○	○	○
Teaching Lessons	○	○	○
Grading	○	○	○
Small Group Instruction	○	○	○
Whole Group Instruction	○	○	○
Taking Attendance	○	○	○
Accommodations/Modifications	○	○	○
Monitoring Students	○	○	○
Parent Phone Calls	○	○	○

Please complete one of the following sections for each co-teaching experience that you have. For example, if you only have one co-teaching partner, complete only one section. If you have two co-teaching partners, complete one section for each experience.

	Special Education Teacher	General Education Teacher	Shared
Planning Lessons	○	○	○
Teaching Lessons	○	○	○
Grading	○	○	○
Small Group Instruction	○	○	○
Whole Group Instruction	○	○	○
Taking Attendance	○	○	○
Accommodations/Modifications	○	○	○
Monitoring Students	○	○	○
Parent Phone Calls	○	○	○

Please complete one of the following sections for each co-teaching experience that you have. For example, if you only have one co-teaching partner, complete only one section. If you have two co-teaching partners, complete one section for each experience.

	Special Education Teacher	General Education Teacher	Shared
Planning Lessons	○	○	○
Teaching Lessons	○	○	○
Grading	○	○	○
Small Group Instruction	○	○	○
Whole Group Instruction	○	○	○
Taking Attendance	○	○	○
Accommodations/Modifications	○	○	○
Monitoring Students	○	○	○
Parent Phone Calls	○	○	○

SUBMIT

Never submit passwords through Google Forms.

This form was created inside of Brighton Area Schools. Report Abuse - Terms of Service - Additional Terms

Google Forms

Appendix H: Permission for use of Survey Instrument

 Hi Jennifer,

Absolutely! You are more than welcome to use and adapt my survey as best suit the needs of

your dissertation research project. Please let me know if you have any questions relative to

the survey or interview script.

Very best regards,

Vance Austin

Vance Austin

Chair, Special Education Department

vance.austin@mville.edu

914-323-7262

References

Asan, O., & Montague, E. (2014). Using video-based observation methods in primary care

    health encounters to evaluate complex interactions. *Informatics in Primary Care,*

    21(4) 161-170.

Ashton, J. L. (2010). *Surviving inclusion: A critical discourse of a middle school co-teaching*

    relationship (Doctoral dissertation). Retrieved from ERIC. University of Rochester:

    Rochester, NY.

Ashton, J. R. (2016). Keeping up with the class: A critical discourse analysis of teacher

    interactions in a co-teaching context. *Classroom Discourse, 7*(1), 1-17.

Austin, V. L. (2001). Teachers' beliefs about co-teaching. *Remedial and Special Education*,

    22, 245-255.

Berry, R. A. W. (2006). Inclusion, power, and community: Teachers and students interpret the

    language of community in an inclusion classroom. *American Educational Research*

    Journal, 43(3), 489-529.

Beninghof, A. (2016). To clone or not to clone? *Educational Leadership, 73*(4), 10-15.

Beyer, B. M. & Johnson, E. S. (2014). *Special programs and services in schools: Creating*

    options, meeting needs (Revised, 2nd ed.). Lancaster, PA: DEStech Publications.

Blanton, L. P., Pugach, M. C., & Florian, L. (2011). Preparing general education teachers to

    improve outcomes for students with disabilities. *American Association of Colleges for*

    Teacher Education & National Center for Learning Disabilities, 1-32.

Brown v. Board of Education of Topeka, 347 U.S. 483, 74 S.Ct. 686 (1954).

Brownell, M. T., Sindelar, P. T., Kiely, M. T., & Danielson, L. C. (2010). Special education

    teacher quality and preparation: Exposing foundations, constructing a new model.

    Exceptional Children, 76(3), 357-377.

Caldwell, K. (2005). Non-participant observation: Using video tapes to collect data in

    nursing research. *Nurse Researcher 13*(2), 42-54.

Cocklin, J. T. (2004). Swissair 111 human factors: Checklists and cockpit communication.

    Journal of air transportation, 9(3), 19-42.

Co-Teaching Questionnaire (n. d.). *Co-Teaching Questionnaire*. Retrieved from

    http://www.myschoolresource.com/shop/co-teaching-questionnaire

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods*

    approaches. (3rd ed.). Los Angeles: Sage.

Conderman, G. (2011). Methods for addressing conflict in cotaught classroom. *Intervention*

    in school and clinic, 46(4), 221-229.

Conderman, G. (2011). Middle school co-teaching: Effective practice and student reflections.

    Middle School Journal, 42(4), 24-31.

Conderman, G., & Hedin, L. (2017). Two co-teaching applications: Suggestions for school

    administrators. *Kappa Delta Pi Record, 53*(1), 18-23.

Conderman, G., Johnston-Rodriguez, S., & Hartman, P. (2009). Communicating and

    collaborating in co-taught classrooms. *Teaching Exceptional Children Plus, 5*(5), 2-

    17.

Damore, S. & Murray, C. (2009). Assessing urban teachers' perceptions of teacher

    collaboration. *Remedial and Special Education, 30*, 234-244.

Deno, E. (1970). Special education as developmental capital. *Exceptional Children, 37*(3), 229-237.

Dieker, L. (2007). *The co-teaching lesson plan book.* (3rd ed.). Council Exceptional Children

Dieker, L. (n.d.). C*ooperative teaching*. Retrieved from http://www.specialconnections.ku.edu/?q=collaboration/cooperative_teaching

Dieker, L. A. & Murawski, W. W. (2003). Co-Teaching at the secondary level: Unique issues, current trends, and suggestions for success. *The High School Journal, 86*(4), 1-13.

Dugan, K., Letterman, M. (2008). Student Appraisals of Collaborative Teaching. *College Teaching*, 56, 11-15.

Dunn, L. M. (1968). Special education for the mildly retarded: Is much of it justifiable? *Exceptional Children, 35*, 5-22.

Education Amendments Act of 1974, Pub. L. 93-380, 93 U.S.C.

Education for All Handicapped Children Act of 1975, Pub. L. 94-142, 94 U.S.C.

Elementary and Secondary Education Act of 1965, Pub. L. 89-10, 79 Stat. 27, codified as amended by 20 U.S.C.

Every Student Succeeds Act of 2015, Pub. L. 114-95, 129 Stat. 1803, codified as amended at 20 U.S.C. § 1001.

Fairclough, N. (2001). *Language and power*. (2nd ed.). England: Pearson Education Limited.

Ferguson, J. & Wilson, J. C. (2011). The co-teaching professorship: Power and expertise in the co-taught higher education classroom. *Scholar-Practitioner Quarterly, 5*(1), 52-68.

Friend, M. (2005). *Co-teaching: Creating effective classroom teams.* [Presentation Handout].

Retrieved from

http://ies.iroquoissd.org/UserFiles/Server/Server_12188065/File/Academics/Faculty/

Special%20Education/Co-Teaching%20Guide.pdf

Friend, M. (2007). The coteaching partnership. *Educational Leadership, 64*(5), 48-52.

Friend, M. (2014). *Co-Teaching: Strategies to improve student outcomes*. Naples, FL:

National Professional Resources.

Friend, M. & Cook, L. (2016) *Interactions: Collaboration skills for school professionals.* (7th

ed.). Boston, MA: Pearson.

Friend, M., Cook, L., Hurley-Chamberlain, D., & Shamberger, C. (2010). Co-Teaching: An

illustration of the complexity of collaboration in special education. *Journal of

Educational & Psychological Consultation*, *20*(1), 9-27.

Gordon, L., Rees, C., & Ker, J. (2017). Using video-reflexive ethnography to capture the

complexity of leadership enactment in the healthcare workplace. *Advances in Health

Sciences Education, 22*(5), 1101-1121.

Hanrahan, M. U. (2005). Highlighting hybridity: A critical discourse analysis of teacher talk

in science classrooms. *Science Education*, 1-36.

Hang, Q., Rabren, K. (2009). An examination of co-teaching perspectives and efficacy

indicators. *Remedial and Special Education,* 30, 259-268.

Howard, L. & Potts, E. A. (2009) Using co-planning time: Strategies for a successful co-

teaching marriage. *Teaching Exceptional Children Plus, 5*(4), 1-12.

Hung, L., Phinney, A., Chaudhury, H., & Rodney, P. (2018). Using video-reflexive

    ethnography to engage hospital staff to improve dementia care. *Global Qualitative*

    Nursing Research, 5, 1-10.

Husserl, E. (2012). *Ideas: General introduction to pure phenomenology*. New York:

    Routledge.

Ikeda, M. J. (2012). Policy and practice considerations for response to intervention:

    Reflections and commentary. *Journal of Learning Disabilities, 45*(3), 274-277.

Individuals with Disabilities Education Act of 1997, H.R. 37, 101st Cong. (1997).

Individuals with Disabilities Education Improvement Act of 2004, Pub. L. 108-446, 118 Stat.

    2647, codified as amended 20 U.S.C.

Jang, S. (2006). Research on the effects of team teaching upon two secondary school teacher.

    Educational Research, *48*, 177-194.

Johnson, B., & Christensen, L. (2008). *Educational research: Quantitative, qualitative, and*

    mixed approaches (3rd ed.). Thousand Oaks, CA: Sage.

Jordan, A., Schwartz, E., & McGhie-Richmond, D. (2009). Preparing teacher for inclusive

    classrooms. Teacher and teacher education: *An International Journal of Research and*

    Studies, 25(4), 535-542.

Joyce, B. (2004). How are professional learning communities created? History has a few

    messages. *Phi Delta Kappan, 86*(1), 76.

Kavale, K. A., & Forness, S. R. (2000). History, rhetoric, and reality: Analysis of the

    inclusion debate. *Remedial and Special Education, 21*(5), 279-295.

Keefe, E. B., Moore, V., Duff, F. (2004). The four "knows" of collaborative teaching.

    Teaching Exceptional Children, 36(5), 36-42.

King-Sears, M., Brawand, A., Jenkins, M., & Preston-Smith, S. (2014). Co-teaching

    perspectives from secondary science co-teachers and their students with disabilities.

    The Association for Science Teacher Education 25, 651-680.

Kluth, P. & Causton, J. (2016). *30 days to the co-taught classroom: How to create an*

    amazing, nearly miraculous & frankly earth-shattering partnership in one month or

    less. Middleton, DE: North Loop Books.

Kohler-Evans, P. (2006). Co-teaching: How to make this marriage work in front of the kids.

    Education, 127(2), 260-264.

Kurth, J. A., & Gross, M. (2014). *The inclusion toolbox: Strategies and techniques for all*

    teachers. (1st ed.). Thousand Oaks, CA: Corwin.

Kusuma-Powell, O., & Powell, W. (2016). Lifting the status of learning support teachers.

    Educational Leadership, 62-67.

Little, M. E., & Dieker, L. (2009). Co-teaching: Two are better than one. *Principal*

    Leadership, 9(8), 43-46.

Logan, K. R., Malone, M. (1998). Comparing instructional contexts of students with and

    without severe disabilities. *Exceptional Children 64*(3), 343-359.

Manojlovich, M., Harrod, M., Hofer, T.P., Heshmati, A., Umberfield, E., Frankel, R., &

    Krein, S. (2018). A formative evaluation of the video reflexive ethnography method,

    as applied to the physician/nurse dyad. *BMJ Quality and Safety*.

Marshall, C., & Rossman, G. B. (2011). *Designing qualitative research* (5th ed.). Thousand

    Oaks, CA: Sage.

Mastropieri, M. A., Scruggs, T. E., Graetz, J., Norland, J., Gardizi, W., McDuffie, K. (2005). Case studies in co-teaching in the content areas: Successes, failures, and challenges. *Intervention in School and Clinic*, *40*, 260-270.

McIntosh, R., Vaughn, S., Schuum, J. S., Haager, D., & Lee, O. (1993). Observations of students with learning disabilities in general education classrooms. *Exceptional Children 60*(3), 249-261.

 Mills v. Board of Education of District of Columbia, 348 F. Supp. 866 (D.D.C. 1972).

Murawski, W. W., (2006). Student outcomes in co-taught secondary English classes: How can we improve? *Reading & Writing Quarterly, 22*, 227-247.

Murwaski, W. W., & Bernhardt, P. (2015). An administrator's guide to co-teaching: Follow these five steps to support a vision of successful co-teaching in your school. *Educational Leadership, 73*(4),30-34.

Murawski, W. W., & Dieker, L. A. (2004). Tips and strategies for co-teaching at the secondary level. *Teaching Exceptional Children, 36*(5), 52-58.

Murawski, W. W., & Hughes, C. E. (2009). Response to intervention, collaboration, and co-teaching: A logical combination for successful systemic change. *Preventing School Failure, 53*(0), 1-9.

Murwaski, W. W., & Lochner, W. W. (2011). Observing co-teaching: What to ask for, look for, and listen for. *Collaboration Forum, 46*(3), 174-183.

Naraian, S. (2010). General, special, and …inclusive: Refiguring professional identities in a collaboratively taught classroom. *Teaching and Teacher Education, 26*(8), 1677-1686.

National Archives (2018). *America's founding documents*. *The Bill of Rights: A transcription (Amendment X)*. Washington, D.C.: The U. S. National Archives and Records Administration. Retrieved from: https://www.archives.gov/founding-docs/bill-of-rights-transcript

National Center for Educational Statistics. (2016). The condition of education 2016. Retrieved from the National Center for Educational Statistics: https://nces.ed.gov/pubs2016/2016144.pdf

Office for Civil Rights (2006). *Your rights under the Americans with disability act* [PDF document]. Retrieved from http://www.hhs.gov/ocr/civilrights/resources/factsheets/ada.pdf

Oh, K., Murawski, W., & Nussli, N. (2017). An international immersion into co-teaching: A wake-up call for teacher candidates in general and special education. *Journal of Special Education Apprenticeship, 6*(1), 1-20.

Patterson, J. T. (2002) Brown v. Board of Education: A civil rights milestone and its troubled legacy. New York: Oxford University Press.

Pennebaker, J. W. (2002). What our words can say about us: Toward a broader language psychology. *Psychological Science Agenda, 15*, 8-9.

Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania, 334 F. Supp 1257 (E.D. Pa. 1971), 343 F. Supp. 279 (E.D. Pa. 1972).

Pugach, M. C., & Wesson, C. L. (1995). Teachers' and students' views of team teaching of general education and learning-disabled students in two fifth-grade classes. *The Elementary School Journal*, *95*, 279-295.

Pugach, M. C., & Winn, J. A. (2011). Research on co-teaching and teaming: An untapped

    resource for induction. *Journal of Special Education Leadership, 24*(1), 36-46.

Rehabilitation Act of 1974, Pub. L. 93-112, 87 Stat. 355, codified as amended by 29 U.S.C. §

    701 et seq.

Reschly, D. J. (1996). Identification and assessments of students with disabilities. *Special*

    Education for Students with Disabilities, 6(1), 40-53.

Roethlisberger, F. J., & Dickson, W. J. (2003). *The early sociology of management and*

    organizations: Management and the worker. (Vol. 5). K. Thompson (Ed.). New York:

    Routledge.

Sacks, A. (2014). Eight tips for making the most of co-teaching. Education Week. Retrieved

    from:

    https://www.edweek.org/tm/articles/2014/10/15/ctq_sacks_coteaching.html?print=1

Sailor, W. (2014). Advances in schoolwide inclusive school reform. *Remedial and Special*

    Education, 36(2), 94-99.

Saldaña, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA:

    Sage.

Scheeler, M. C., Congdon, M., & Stansbery, S. (2010). Providing immediate feedback to co-

    teachers through bug-in-ear technology: An effective method of peer coaching in

    inclusion classrooms. *The Journal of the Teacher Education Division of the Council*

    for Exceptional Children, 33, 83-96

Schultz, J. (2002). Hear what they're saying: The influence of culture on cockpit

    communication. *Quest, 5(1). Retrieved from*

    http://ww2.odu.edu/ao/instadv/quest/CockpitCommun.html

Scruggs, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-teaching in inclusive

classrooms: a metasynthesis of qualitative research. *Exceptional Teacher*, 73, 392-

416.

Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. §794. Retrieved from

http://www2.ed.gov/about/offices/list/ocr/504faq.html

Sedgwick, P. & Greenwood, N. (2015). Understanding the Hawthorne effect. *British Medical

Journal, 351*, 1-2.

Sexton, J. B., & Helmreich, R. L. (2000). Analyzing cockpit communications: The links

between language, performance, error, and workload. *Journal of human performance

in extreme environments, 5*(1), 63-68.

Shamberger, C., Williamson-Henriques, K., Moffett, N., & Brownlee-Williams, Y. (2014).

Special educators speak out on co-teaching knowledge and skills. *Journal of

Research Initiatives, 1*(2), 2-10.

Sileo, J. M. (2011). Co-teaching: Getting to know your co-teaching partner. *Teaching

Exceptional Children, 34(*5), 32-38.

Smith, V. (2012). *Co-teaching: A case study of teachers' perceptions* (Doctoral dissertation).

Retrieved from ERIC. Northeastern University, Boston.

Solis, M., Vaughn, S., Swanson, E., McCulley, L. (2012). Collaborative models of

instruction: The empirical foundations of inclusion and co-teaching. *Psychology in

the Schools, 49*(5), 498-510.

Stivers, J. (2008). 20 ways to strengthen your co-teaching relationship. *Interventions in

School and Clinic, 44*(2), 121-125.

Swanson, L. H., & Bianchini, J. A. (2015). Co-planning among science and special education

    teachers: How do different conceptual lenses help to make sense of the process?

    Cultural Studies of Science Education, 10(4), 1123-1153.

The No Child Left Behind Act of 2002, Pub. L. 107-110, 115 Stat.1425, codified as amended

    by 20 U.S.C. § 1001.

Villa, R. A., & Thousand, J. S. (2005). *Creating an inclusive school* (2nd ed.). Alexandria,

    VA: Association for Supervision and Curriculum Development.

Villa, R. A., Thousand, J. S., & Nevin, A. I. (2008). *A guide to co-teaching: Practical tips for

    facilitating student learning* (2nd ed.). Thousand Oaks, CA: Corwin.

Weintraub, F. & Abeson, A. (1974). New education policies for the handicapped: The quiet

    revolution. *The Phi Delta Kappan, 55*(8), 526-529, 569.

Weiss, M. P., (2004). Co-teaching as science in the schoolhouse: More questions than

    answers. *Journal of Learning Disabilities*, 37, 218-23.

Yell, M. L., Rogers, D., & Rogers, E. L. (1998). The legal history of special education: What

    a long strange trip it's been. *Remedial and Special Education, 19*(4), 219-228.

Yell, M. L., Katsiyannis, A., & Hazelkorn, M. (2007). Reflections on the 25th anniversary of

    the U.S. supreme court's decision in the Board of Education v. Rowley. *Focus on

    Exceptional Children, 39*(9), 1-12.

Appendix A

Observation Protocol

Teachers: _____

Date: _____

Grade:_____

Time Observed: _____

9. Today's topic:

10. Who is doing the main teaching/model using:

11. What are both teachers doing during the lesson:

12. Materials used, who passes them out, who obtains them:

13. Utterances of general education teacher:

14. Utterances of special education teacher:

15. Times general educator was asked a question by a student:

16. Times special educator was asked a question by a student:

Appendix B

Request for Consent by School District for Research Study

The University of Michigan-Dearborn

[Finding Their Voice: Co-teaching, Communication, and Collaboration]

Purpose of the study: I am a doctoral student in the Educational Leadership department at the University of Michigan Dearborn. I am currently completing a doctoral dissertation entitled "General and Special Education Teachers: Communication and its Effects on Co-Teaching". The purpose of the study is to better understand the impact that communication has on co-teaching teams and if this impacts their leadership within the classroom.

Description of Subject Involvement:

I am asking for your permission to complete the study within your district at one of your high schools. I am interested in working with co-teaching teams (each team will consist of one general education teacher and one special education teacher). These teachers will work with me for up to one semester. Each participant will be video recorded, audio recorded, complete a questionnaire, and interviewed to allow me to understand their role in the co-teaching team and to determine if communication impacts their team and leadership within the classroom. The interview and observation protocols are attached. Any information you and the teachers provide will remain confidential and locked in a secure location. Names of you district, schools, and participants will not be identified in any part of the research. The districts participation is totally voluntary and may choose to withdrawal from the study at any time.

Benefits:

There is no risk to participants that complete the interviews. In fact, the knowledge obtained by this study may help improve the relationships and skills of co-teachers and in turn improve special education student achievement in your district. The results of the study will be available upon request to all participants.

Risks and Discomforts:

There are no risks associated with this study because the data collection is completely anonymous and the topic is not sensitive. Any information you and the other teachers provide will remain confidential and locked in a secure location. Names of you district, schools, and participants will not be identified in any part of the research. Your participation is totally voluntary and may choose to withdrawal from the study at any time.

Confidentiality:

We plan to publish or present the results of this study, but will not include any information that would identify you. There are some reasons why people other than the researchers may need to see information you provided as part of the study. This includes organizations responsible for making sure the research is done safely and properly, including the University of Michigan, government offices or the study sponsor.

To keep your information safe, the researchers will ensure that all data is locked and secured in a secure location.

Storage and future use of data:

The data you provide will be stored for a minimum of 5 years

The researchers will retain the data for a minimum of 5 years.

The researchers will dispose of your data. Paper records will be shredded and recycled. Records stored on a computer hard drive will be erased using commercial software applications designed to remove all data from the storage device. Data stored on USB drives or recorded data on tapes, CDs, or DVDs, the storage devices will be physically destroyed. Records stating what records were destroyed, and when and how they were destroyed will be kept on record.

Voluntary nature of the study:

Participating in this study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. If you decide to withdraw early, all information that you provided will be shredded and disposed.

Contact Information:

If you have questions about this research, including questions about scheduling you may contact me, Jennifer Hiller, at any time concerning the study at my email address or (248) 762-7356. You may also contact Dr. Bonnie Beyer of the Educational Leadership Program at the University of Michigan Dearborn at (313) 593-5583 or beyer@umich.edu.

If you have questions regarding your rights as a research participant, or wish to obtain information, ask questions, or discuss concerns with someone other than the researcher(s), You may contact the Dearborn IRB Administrator in the Office of Research and Sponsored Programs, 1055 Administration Building, University of Michigan-Dearborn, Evergreen Rd., Dearborn, MI 48128-2406, (313) 593-5468; the Dearborn IRB Application Specialist at (734) 763-5084, or email Dearborn-IRB@umich.edu.

If you agree to participate in this study, please sign your name in the space provided below; you will be given a copy of this consent form for you to keep. If you would like to learn the findings of this study, please email me at (your email) and I will be happy to forward that information to you. Thank you for your participation in this study.

I agree to participate in the study.

_____

Printed Name

_____   _____

Signature   Date

Appendix C

Request for Consent to Participate in a Research Study

Finding Their Voice: Co-teaching, Communication, and Collaboration

You are invited to participate in a research study about Co-teaching relationships entitled "General and Special Education Teachers: Communication and its Effects on Co-Teaching". The purpose of the study is to better understand the impact that communication has on co-teaching teams and if this impacts their leadership within the classroom.

If you agree to be part of the research study, you will be asked to complete the study with you and your general education co-teacher. I am interested in working with both of you for one semester. Each of you will be audio and video recorded one class period per day. In addition, I would like to audio record planning times outside of the classroom and have copies of emails, lesson plans, and other notes that you and your co-teacher exchange to better understand your communication. There will be an open-ended interview and a questionnaire as well.

Benefits:

There is no risk to participants that complete the interviews. In fact, the knowledge obtained by this study may help improve the relationships and skills of co-teachers and in turn improve special education student achievement in your district. The results of the study will be available upon request to all participants.

Risks and Discomforts:

There are no risks associated with this study because the data collection is completely anonymous and the topic is not sensitive. Any information you and the other teachers provide

will remain confidential and locked in a secure location. Names of you district, schools, and participants will not be identified in any part of the research. Your participation is totally voluntary and may choose to withdrawal from the study at any time.

Participating in this study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to answer any survey question, continue with the interview, release emails and correspondence with your teacher, or be audio or video recorded for any reason. If you decide to withdraw early, all information that you provided will be shredded and disposed.

If you have questions about this research, including questions about scheduling you may contact me, Jennifer Hiller, at any time concerning the study at my email address, Jennifer.hiller@farmington.k12.mi.us or (248) 762-7356. You may also contact Dr. Bonnie Beyer of the Educational Leadership Program at the University of Michigan Dearborn at (313) 593-5583 or beyer@umich.edu.

The University of Michigan Dearborn Institutional Review Board has determined that this study is exempt from IRB oversight.

I confirm that I am 18 years old or older and agree to participate in the study.

_____   _____

Signature   Date

APPENDIX D

Letter to Participants

Good Afternoon,

Thank you for agreeing to participate this study focused on co-teaching relationships entitled "General and Special Education Teachers: Communication and its Effects on Co-Teaching". The purpose of the study is to better understand the impact that communication has on co-teaching teams and if this impacts their leadership within the classroom.

Please remember that participation in this study is completely voluntary and if you have questions about this research, including questions about scheduling you may contact me at any time. I look forward to working with you and I will come and bring the recoding equipment this week. At that time, I will introduce myself to everyone.

Thank you for all your support,

Jennifer Hiller

APPENDIX E

Script for Participant Interview

Script: "Thank you for participating in this interview. As you know, I am going to audiotape this so that I can be sure to have an accurate record of your responses. Also, you have the right to refuse to answer any questions if you feel that something is too personal. You have the right to end this interview at any time. There are no consequences to you if you decline a question or decide to end the session. Do you have any questions before we get started? [Take time to answer the questions.] Do you agree to be audio recorded during this interview? [If the response is yes, then device is turned on; if the response is no, then let the teacher know that I will be taking notes so as to not forget anything that is said.] Ready?

Pseudonym: _____

18. Describe for me your current co-teaching situation.

19. Which methods of co-teaching do you use (give examples if necessary)?

20. How do you designate the responsibilities within the classroom?

21. What are your daily responsibilities in the classrooms?

22. What are your co-teachers daily responsibilities within the classroom?

23. Who is responsible for grading of assignments?

24. Do you lesson plan together? Who sets the goals and objectives for the lessons?

25. Do you feel comfortable with the current curriculum for your grade level? Do you feel that your co-teacher is comfortable with the current curriculum for your grade level?

26. How often do you meet together?

27. How do you typically correspond (in person, email, before school, after school, phone)?

28. Explain each of your roles within the classroom.

29. How does a co-taught classroom benefit students with disabilities?

30. Do you see co-teaching with your partner as beneficial for the students?

31. Do you feel that you work with general and special education students equally?

32. Do you feel you have learned any new skills from your co-teaching partner?

33. Has co-teaching improved your teaching?

34. I there anything else you'd like to add before we end?

Script: If something comes to mind later may I have permission to contact you for a follow up question? Thank you for your participation in this interview. [Turn the recording device off.]

APPENDIX F

Script for Special Education Teacher Interview

Script: "Thank you for participating in this interview. As you know, I am going to audiotape this so that I can be sure to have an accurate record of your responses. Also, you have the right to refuse to answer any questions if you feel that something is too personal. You have the right to end this interview at any time. There are no consequences to you if you decline a question or decide to end the session. Do you have any questions before we get started? [Take time to answer the questions.] Do you agree to be audio recorded during this interview? [If the response is yes, then device is turned on; if the response is no, then let the teacher know that I will be taking notes so as to not forget anything that is said.] Ready?

Pseudonym: Angela

Introduction: I am in the process of writing my research and realize that there are some details that would help. I'm sure you remember 3 years ago when you agreed to participate in my dissertation study. At that time, you worked with two teachers.   I'd like to get more information about that time. As it's been awhile, you may not remember all the details. That's okay. I know you worked with Brenda and Carol for two more years after this study completed.

8. Can you describe to me the typical day in [real teacher's name] classroom?

9. Do you remember where the camera was placed in the classroom and why that location was selected? Let's look at this video to help you recall.

10. Do you remember when you would turn on and off the camera? Do you remember why it was turned on and off at those times? How was this decision made?

11. I see you sat in student desks during class lessons. Do you remember why? Do you do this in all classrooms in which you are co-teaching? Why or why not? Do the content teachers sit in students' desks, why or why not? Did you feel that you needed your own space or did you have a designated space?

12. Tell me about your relationships with your co-teachers? Is this different with other co-teachers you have co-taught with? Were you always friends?

13. What do you see as positives and negatives to co-teaching and did you experience any of these with your [real teacher's name]?

14. Can we watch a few videos of the lessons and discuss them?

   a. Tell me what we are seeing here?

      i. How did you determine who would be the lead teacher of this lesson?

      ii. Have you taught this lesson before?

      iii. Do you feel that either of you could have been the lead teacher for this lesson?

      iv. What made you decide to interject at this point?

      v. How did you feel when Brenda interjected here?

      vi. Did you ever feel that Brenda was interrupting you during the lesson?

      vii. Did you have to do any additional re-teaching or discussions with students after this lesson?

      viii. Would you have changed anything in this lesson?

Script: If something comes to mind later may I have permission to contact you for a follow up question? Thank you for your participation in this interview. [Turn the recording device off.]

APPENDIX G

Co-Teaching Questionnaire

10/28/2018 Co-Teaching Questionnaire

Co-Teaching Questionnaire

The purpose of this questionnaire is to learn about your co-teaching experience. The results of this questionnaire will be used to help improve co-teaching practices. Your participation is voluntary and all responses will be confidential.

How many total years of teaching experience do you have?

Your answer

What is the highest level of education you have achieved?

Your answer

What are you certified to teach?

Your answer

How many years have you been a co-teacher?

Your answer

How many years have you taught with your current co-teacher?

Your answer

Number of co-teachers with whom you co-teach daily.

Choose ▼

Number of classes you co-teach daily.

Your answer

What content areas do you co-teach?

Your answer

Did you volunteer for your current co-teaching experience?

Your answer

Approximately how much time per week do you spend planning with your co-teacher(s)?

Your answer

What aspect of your co-teaching experience has been the most beneficial/positive?

Your answer

Please list any areas of concern regarding your co-teaching experiences.

Your answer

My current co-teaching partner and I work very well together. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

I do more than my partner in my current co-teaching experience. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

I feel that our responsibilities within the classroom are equitable. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

My co-teacher and I communicate frequently enough. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

I have learned new skills from my co-teaching partner. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

My co-teacher and I both understand the curriculum. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

Grading is shared equally among co-teachers. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

Classroom management and discipline matters are shared equally. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

I feel comfortable making accommodations for students. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	○	○	○	○	○	Strongly Disagree

My co-teaching partner feels comfortable making accommodations for students. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

My co-teacher and I have enough time to plan together. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

Co-teaching is a worthwhile experience. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

Students learn better in co-taught classes. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

Co-teaching benefits students with special needs. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

Co-teaching benefits students at risk fro failure. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

My co-teacher and I are friends. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

I communicate with the same groups of teachers as my co-teacher. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

During Professional Development we sit together. (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree)

	1	2	3	4	5	
Strongly Agree	◯	◯	◯	◯	◯	Strongly Disagree

Check all that apply. What do you believe are the greatest barriers to successful co-teaching:

☐ Lack of training or professional development

☐ Lack of communication between teachers

☐ Scheduling issues

☐ Lack of time

☐ Lack of administrative support

☐ Personality or teaching philosophy clashes

What co-teaching approach do you and your co-teacher use the most?

Choose ▾

Please complete one of the following sections for each co-teaching experience that you have. For example, if you only have one co-teaching partner, complete only one section. If you have two co-teaching partners, complete one section for each experience.

	Special Education Teacher	General Education Teacher	Shared
Planning Lessons	○	○	○
Teaching Lessons	○	○	○
Grading	○	○	○
Small Group Instruction	○	○	○
Whole Group Instruction	○	○	○
Taking Attendance	○	○	○
Accommodations/Modifications	○	○	○
Monitoring Students	○	○	○
Parent Phone Calls	○	○	○

Please complete one of the following sections for each co-teaching experience that you have. For example, if you only have one co-teaching partner, complete only one section. If you have two co-teaching partners, complete one section for each experience.

	Special Education Teacher	General Education Teacher	Shared
Planning Lessons	○	○	○
Teaching Lessons	○	○	○
Grading	○	○	○
Small Group Instruction	○	○	○
Whole Group Instruction	○	○	○
Taking Attendance	○	○	○
Accommodations/Modifications	○	○	○
Monitoring Students	○	○	○
Parent Phone Calls	○	○	○

Please complete one of the following sections for each co-teaching experience that you have. For example, if you only have one co-teaching partner, complete only one section. If you have two co-teaching partners, complete one section for each experience.

	Special Education Teacher	General Education Teacher	Shared
Planning Lessons	○	○	○
Teaching Lessons	○	○	○
Grading	○	○	○
Small Group Instruction	○	○	○
Whole Group Instruction	○	○	○
Taking Attendance	○	○	○
Accommodations/Modifications	○	○	○
Monitoring Students	○	○	○
Parent Phone Calls	○	○	○

Please complete one of the following sections for each co-teaching experience that you have. For example, if you only have one co-teaching partner, complete only one section. If you have two co-teaching partners, complete one section for each experience.

	Special Education Teacher	General Education Teacher	Shared
Planning Lessons	○	○	○
Teaching Lessons	○	○	○
Grading	○	○	○
Small Group Instruction	○	○	○
Whole Group Instruction	○	○	○
Taking Attendance	○	○	○
Accommodations/Modifications	○	○	○
Monitoring Students	○	○	○
Parent Phone Calls	○	○	○

Please complete one of the following sections for each co-teaching experience that you have. For example, if you only have one co-teaching partner, complete only one section. If you have two co-teaching partners, complete one section for each experience.

	Special Education Teacher	General Education Teacher	Shared
Planning Lessons	○	○	○
Teaching Lessons	○	○	○
Grading	○	○	○
Small Group Instruction	○	○	○
Whole Group Instruction	○	○	○
Taking Attendance	○	○	○
Accommodations/Modifications	○	○	○
Monitoring Students	○	○	○
Parent Phone Calls	○	○	○

SUBMIT

Never submit passwords through Google Forms.

This form was created inside of Brighton Area Schools. Report Abuse - Terms of Service - Additional Terms

Google Forms

APPENDIX H

Permission for use of Survey Instrument

Hi Jennifer,

Absolutely! You are more than welcome to use and adapt my survey as best suit the needs of

your dissertation research project. Please let me know if you have any questions relative to

the survey or interview script.

Very best regards,

Vance Austin

Vance Austin

Chair, Special Education Department

vance.austin@mville.edu

914-323-7262