

2017

Teacher Perceptions of the Successful Implementation of Co-teaching Services

Vanna Raybould
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

 Part of the [Special Education Administration Commons](#), and the [Special Education and Teaching Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

COLLEGE OF EDUCATION

This is to certify that the doctoral study by

Vanna Raybould

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Michael Jazzar, Committee Chairperson, Education Faculty

Dr. Crissie Jameson, Committee Member, Education Faculty

Dr. Mary Howe, University Reviewer, Education Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University
2017

Abstract

Teacher Perceptions of the Successful Implementation of Co-teaching Services

by

Vanna E. Raybould

M.Ed, Grand Canyon University, 2011

BS, University of North Georgia, 2006

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

June 2017

Abstract

This project study addressed a lack of consistent instructional delivery of co-teaching practices in a rural high school in middle Georgia. Though co-teaching services are provided, teachers are not implementing co-teaching models with fidelity. Because co-teaching teams are not trained together, teachers' efficacy in the delivery of co-taught instruction has often been negatively affected. This project study provided insight into the perceptions of co-teachers regarding the implementation of co-teaching practices.

Bandura's self-efficacy theory served as the conceptual framework for this study. Using a qualitative, bounded, single case study design, the study explored the perceptions of co-teachers and the planning practices that were used by teachers in a rural high school in middle Georgia. A total of 9 general and special education co-teachers were recruited to participate in the study. Qualitative data for the study were gathered through semistructured interviews, a focus group interview, and lesson plan documentation. The transcribed interviews and lesson plan documents were analyzed through open and axial coding to generate themes. The findings revealed that teachers perceived a need for further training in co-teaching methods to improve their self-efficacy in collaboration and the implementation of co-teaching practices. The results of the study were used to develop a professional learning project that benefits teachers by improving collaboration, the implementation of co-teaching models, and co-teaching instructional strategies. The project may contribute to positive social change by improving co-teachers' skills to deliver effective instruction and increasing the self-efficacy of teachers to create a supportive learning environment within their co-taught classrooms.

Teacher Perceptions of the Successful Implementation of Co-teaching Services

by

Vanna E. Raybould

MA, Grand Canyon University, 2011

BS, University of North Georgia, 2006

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Curriculum, Instruction, and Assessment

Walden University

June 2017

Dedication

This doctoral project is dedicated to my grandfather, Dr. Royce Turner, who always encouraged me to learn and succeed. His memory will forever inspire me.

Acknowledgements

To my husband, John, thank for supporting me through this doctoral journey. You helped me to persevere even when I felt like giving up, and you gave me encouragement and a reason to succeed. I love you very much! To my family and friends, I appreciate all of your kind words and motivation. I look forward to being able to spend time with you again now that my project is finally complete! To my chair and committee members, thank you for providing me with guidance and challenging me to improve myself. I would not be here without your support!

Table of Contents

Section 1: The Problem.....	1
Introduction	1
Definition of the Problem.....	2
Evidence of the Problem at the Local Level.....	5
Evidence of the Problem from the Professional Literature	7
Definitions	8
Significance.....	9
Guiding/Research Question.....	10
Current Research	16
Implications	27
Summary	28
Section 2: The Methodology.....	30
Introduction	30
Qualitative Design.....	30
Research Design and Approach.....	30
Description of the Setting and Participants	31
Participants	32
Procedures to Gain Access to the Participants	33

Establishing a Researcher-Participant Working Relationship.....	33
Ethical Considerations	34
Data Collection Plan.....	35
Justification for the Choice of Data.....	35
Data Collection Instruments	35
Data Generation.....	37
Potential Participant Response	38
The Role of the Researcher	39
Data Collection.....	40
Data Analysis	41
Coding Procedures and Software Applications.....	41
Evidence of Quality.....	43
Discrepant Cases.....	44
Data Findings	44
Research Questions 1 and 2	45
Theme 1: Efficacy to Collaborate	47
Theme 2: Efficacy to Implement Co-teaching	50
Theme 3: Relevant Training to Support the Implementation of Co-teaching.....	53
Research Question 3.....	55

Theme 1: Co-teaching Models	56
Theme 2: Grouping Strategies.....	58
Theme 3: Accommodations	58
Outcomes.....	59
Conclusion.....	60
Section 3: The Project.....	61
Introduction	61
Description and Goals of the Project.....	61
Rationale.....	62
Project Genre Rationale	62
Project Content Rationale.....	63
Review of the Literature.....	63
Conceptual Project Alignment.....	64
Teacher Collaboration	65
Instructional Strategies	67
Differentiation of Instruction.....	69
Faculty Professional Development.....	71
Project Description	72
Potential Resources and Existing Supports	73

Potential Barriers	73
Proposal for Implementation and Timetable	74
Roles and Responsibilities of Student and Others	80
Project Evaluation Plan	81
Type of Evaluation	81
Justification for Evaluation.....	82
Outcomes of the Project	82
Project Implications.....	83
Social Change	83
Local Stakeholders	83
Larger Context.....	84
Conclusion.....	84
Section 4: Reflections and Conclusions.....	86
Introduction	86
Project Strengths and Limitations	86
Strengths	86
Limitations.....	87
Recommendations for Alternative Approaches	87
Scholarship, Project Development, and Leadership and Change.....	88

Scholarship	88
Project Development	89
Leadership and Change	90
Reflection on the Importance of the Work.....	92
Implications, Applications, and Directions for Future Research	92
Potential Impact for Social Change.....	93
Conclusion.....	94
References.....	95
Appendix A: The Project	112
Appendix B: Semistructured Interview Questions.....	158
Appendix C: Focus Group Questions	160
Appendix D: Sample Lesson Plan	162

List of Tables

Table 1. Student Demographics of District.....	32
Table 2. Participant Demographics.....	39
Table 3. Day One Agenda.....	76
Table 4. Day Two Agenda.....	78
Table 5. Day Three Agenda.....	80

Section 1: The Problem

Introduction

In general education classrooms, educators are required to meet the needs of a diverse range of students, many of whom qualify for special education services and have individual education plans (IEPs). These individualized programs influence the curricular access and academic achievement of students with special needs by providing an explanation of how their disability adversely affects their educational performance and by identifying the services needed to support meaningful growth (La Salle, Roach, & McGrath, 2013). Teachers are legally bound to provide the accommodations, modifications, and services delineated in the IEPs to support students with disabilities in mastering the state performance standards.

In order to meet the demand for the placement of students with disabilities in the least restrictive environment (LRE) required by the Individuals with Disabilities Education Improvement Act ([IDEIA], 2004), 20 U.S.C. § 1400, many students with IEPs are placed in general education classes to participate alongside their nondisabled peers. This practice, known as inclusion, ensures that students with disabilities are involved to the greatest extent possible in the general curriculum, providing equitable instructional opportunities to all students irrespective of their disability status (IDEIA, 2004). Within inclusive classrooms, students with IEPs are educated alongside students without identified disabilities, providing them with equal access to learning opportunities (Almon & Feng, 2012; Murawski & Lochner, 2011). However, inclusion also poses challenges to educators who must provide differentiated instruction to students with

wide-ranging achievement levels and individual needs (DeMatthews & Mawhinney, 2013).

Co-teaching is an instructional delivery model that can be implemented to support students with IEPs placed in inclusion classes alongside their general education peers. The objective of co-teaching is to provide specialized instructional strategies to students with disabilities in order to support their learning in the general education environment (Chanmugam & Gerlach, 2013). In this effort, general education teachers and their special education counterparts unite to deliver joint instruction to an inclusive group of students to meet their learning needs. Achieving the goal of the full inclusion requires teachers to have the skills and experience necessary to navigate the shared physical and instructional space of the co-taught classroom (Brinkmann & Twiford, 2012; Petrick, 2014). Successful co-teaching poses many challenges to educators who must overcome the traditional teaching paradigm and adjust to new roles and responsibilities related to the curriculum, instruction, and assessment of students with disabilities.

In the first section of the project study, I provide the definition of problem along with a rationale for evidence of the problem both locally and in educational research. I present a review of the literature surrounding the topic of co-teaching, and define special terms. I also provide an explanation of the significance of the problem, as well as guiding research questions and implications for possible project directions based on the findings of the study.

Definition of the Problem

There is a problem in a local high school in middle Georgia in a lack of consistent instructional delivery of co-teaching practices at the secondary level. When co-teaching is

implemented with fidelity, students with disabilities often learn more and achieve higher scores on state assessments (Walsh, 2012). The co-teaching program at the local high school was originally implemented because of the low achievement of students with disabilities on high stakes assessments, which affected the school's ratings of adequate yearly progress. Co-teaching allows teachers to support the learning of students with disabilities in the general education environment, which was hoped to improve student test scores (Chanmugam & Gerlach, 2013). Though limited progress has been made, the students with disabilities subgroup has failed to meet a single state performance target since the College and Career Readiness Performance Index (CCRPI) began monitoring accountability in 2012 (Georgia Department of Education, 2016). Effective co-teaching in inclusion classrooms is associated with high student achievement and can be used to support the reduction of the achievement gap (Tremblay, 2013).

There are well-documented methods of implementing co-teaching models and strategies to increase student achievement (Fenty & McDuffie-Landrum, 2011; Solis, Vaughn, Swanson, & McCulley, 2012). However, high school co-teachers at the local level are not consistently implementing these practices. The special education department chair of the local setting feels that the lack of consistent instruction is based in teachers' perceptions towards co-teaching practices and their experiences with collaborative teaching in high school classrooms (personal communication, November 4, 2016).

Currently, the school system is attempting to improve the consistent instructional delivery of co-teaching by providing teachers with professional development on the co-teaching practices they should implement in their classrooms. Special education co-

teachers participate in professional development at the district level, in which high school teachers are trained alongside elementary and middle school teachers. However, the special education department chair is concerned that teachers at the high school are struggling with implementing consistent co-teaching instructional strategies because the teachers do not view the strategies recommended in professional development sessions as appropriate for high school classrooms (personal communication, October 3, 2016). Additionally, while general education teachers have participated in professional learning activities in department meetings, they have not received dedicated training with their special education co-teaching partners for the past 3 years, affecting their perceptions and confidence in implementing co-teaching practices (personal communication, October 3, 2016). This lack of preparation may be affecting co-teachers and influencing their implementation of co-teaching instructional strategies consistently.

There are many possible factors contributing to the problem, among which are the co-teaching selection process and a lack of dedicated trainings for high school co-teaching partners. School administrators select co-teaching teams based on teacher availability per period. Special education teachers co-teach during the periods when they are not assigned to resource or self-contained classes. These general educators are not trained with their co-teaching partners, which influences the development of the teams. Instead, special educators attend professional development with elementary and middle grades teachers, which leads to the unique needs of high school teachers not being appropriately addressed (personal communication, October 3, 2016).

Co-teachers at the secondary level face distinct challenges related to the rigor of the subject matter, levels of courses, and pressure to help students gain credits for graduation

(Friend, 2012). A greater understanding of teachers' perceptions regarding effective co-teaching practices could lead to more appropriate training opportunities, increased self-efficacy regarding the consistent implementation of co-teaching instruction, and improved student achievement. During January 2016, I conducted a study on the perceptions of co-teachers to gain insight into the local problem of a lack of consistent delivery of co-teaching practices. The study I conducted contributed to the body of knowledge needed to address this gap in practice by providing a means to gain awareness of the perceptions of high school teachers to develop supports to increase the effectiveness of the instructional delivery of co-teaching practices within the local setting.

Rationale

Evidence of the Problem at the Local Level

The co-teaching program at the local high school has existed for approximately 9 years. During this time, the turnover rate among co-teachers has been approximately 40%, which is higher than the national teacher turnover average of 16% (NCES, 2012). The turnover rate is primarily influenced by financial factors because the district does not withhold earnings for social security. All other surrounding districts do contribute to social security, so teachers often leave the local system to increase their earnings and prepare for retirement. This faculty turnover poses difficulty for the local co-teaching program because co-teaching teams are constantly in flux. The consistent instructional delivery of co-teaching services is hindered by the lack of stability in team relationships. According to the special education department chair, half of the current special education co-teachers have joined the high school within the past two years, and their general education partners continually rotate, causing difficulty in establishing stable co-teaching

teams (personal communication, June 12, 2015). Not all current teachers have received the same level of professional development on the topics of co-teaching and the consistent implementation of various models within inclusion classes. According to the department chair, co-teaching teams are not trained together and receive no dedicated professional learning on the instructional delivery of co-teaching practices at the high school level (personal communication, October 3, 2016).

Both special and general education teachers at the local level face challenges in the consistent instructional delivery of co-teaching services due to their knowledge of the content and specialized instruction. Special educators co-teach within multiple academic content areas, including English, mathematics, science, and social studies. Although each special education teacher is certified in special education, not all special education co-teachers are certified to teach the subject area independently at the high school level, which has implications for their overall knowledge of the subject matter (Mason-Williams, 2015). The state only requires general education co-teachers to be certified in academic areas, so special education co-teachers are often assigned to content areas in which they have little experience, according to the local special education department chair (personal communication, October 3, 2016). Though the general education teachers do have content area expertise, the department chair expressed that they have difficulty delivering instructional strategies that meet the needs of diverse learners who lack functional academic skills (personal communication, October 3, 2016).

According to the Georgia Department of Education (Georgia Department of Education [GADOE], 2016), the local high school's students with disabilities being served through IEPs failed to meet state performance targets on every high stakes core

academic assessment from 2012 to 2016, despite receiving the co-teaching services prescribed in their IEPs to support their learning. These assessments include end of course assessments in the content areas of English, mathematics, science, and social studies, as well as the graduation rate of students with disabilities. The consistent instructional delivery of co-teaching practices is associated with significant gains in the achievement of students with disabilities (Walsh, 2012), but improvement is limited at the local level. Although the school implemented system-wide professional development for special education teachers, student test scores remained stagnant, indicating a problem with the delivery of co-teaching services. By seeking to gain knowledge of the perspectives of local high school teachers regarding the instructional delivery of co-teaching practices, necessary professional development and supports were implemented to improve the educational experiences of teachers and students.

Evidence of the Problem from the Professional Literature

A lack of consistent instructional delivery of co-teaching practices exists within a large, national context. The National Center for Education Statistics (National Center for Education Statistics [NCES], 2013) reported that 12.9% of students in the United States were eligible for special education services. Mandates from the federal level, such as the IDEIA (2004), require students to be placed within the LRE and sanction schools with too many students with disabilities placed in more restrictive settings, such as resource classes composed of only students with IEPs (DeMatthews & Mawhinney, 2013). Nichols, Dowdy, and Nichols (2010) asserted that many schools across the United States have implemented co-teaching programs for the wrong reasons. Instead of acting from the belief that co-teaching supports teaching and learning and allows for increased

opportunities for targeted instruction, schools have initiated programs only to meet federal requirements, devoting little time to professional development for co-teachers. When professional learning is not a priority, special education teachers are relegated to the position of assistants instead of true instructional authorities in the classroom, negatively affecting their teams' abilities to deliver quality instruction (Ashton, 2014).

The successful implementation of co-teaching practices requires more than physically placing a special education teacher in a general education classroom. Teachers' experiences and attitudes influence their instructional decisions and effectiveness. Experienced co-teachers demonstrate self-confidence and exhibit positive attitudes that shape the types of practices they use. Access to additional professional development opportunities stimulates teachers' interests in co-teaching and encourages them to develop positive views of the various co-teaching practices they can implement in the classroom (Pancsofar & Petroff, 2016).

Definitions

Co-teaching: "The partnering of two or more professionals delivering substantive instruction to a diverse, or blended, group of students in a single physical space" (Nierengarten, 2013, p. 74).

Inclusion: "Inclusion is a practice that requires all learners to be supported in academic settings by merging regular and special education services" (Nichols & Sheffield, 2014, p. 32).

Individuals with Disabilities Education Improvement Act of 2004 (IDEIA, 2004): The IDEIA is "the most recent reauthorization of the Individuals with Disabilities Education Act (IDEA), federal legislation specifically focused on the education of

children with disabilities" (Bradley et al., 2011, p. xxiii). The act "governs how states and public agencies provide early intervention, special education and related services to more than 6.5 million eligible infants, toddlers, children and youth with disabilities" (United States Department of Education, n.d., para 1.).

Least Restrictive Environment: "Students with disabilities should be educated with typically developing students in general education classes to the greatest extent possible" (Alquraini, 2013, p. 152).

Significance

The IDEIA (2004) compels school systems to provide students with disabilities with equal access to the standards of the general education curriculum. Combining the expertise of general and special educators within co-taught classrooms can provide students with the specialized instructional strategies and supports they need to participate with their peers in the regular setting (Cramer et al., 2010). The results from this project study may provide insight into the characteristics of successful co-teaching practices at the secondary level, assisting local high school teachers in improving their own implementation of co-teaching models.

The study of the problem may benefit the stakeholders of the local educational agency by improving the quality of instruction, thereby increasing the achievement levels of co-taught students. Teachers may benefit from the insights garnered by the project study by becoming better equipped to meet diverse learning needs and improving outcomes for students with disabilities. By supporting the participation of students with IEPs in the LRE of core academic classes, students will have equitable learning opportunities that may lead to a decrease in the achievement gap and an improvement in

the school's College and Career Readiness Performance Index (CCRPI) scores (GADOE, 2016).

Guiding/Research Question

This study addressed the lack of consistent instructional delivery of co-teaching practices within the local high in middle Georgia. Insufficient professional development and the co-teaching selection process by school administrators are negatively affecting the development of stable, effective co-teaching teams. This qualitative case study examined the perceptions of general and special education teachers regarding the implementation of co-teaching practices. In alignment with the problem, I posed the following research questions:

RQ1. What are teachers' perceptions of co-teaching practices in a rural school in middle Georgia?

RQ2. What are teachers' perceptions of their ability to implement co-teaching practices in a rural high school in middle Georgia?

RQ3. How do high school teachers in a rural school in middle Georgia plan for the instructional delivery of co-teaching practices?

These research questions were selected in order to provide focus for the study while remaining open to additional questions that may have emerged as data were gathered during the research process, as recommended by Bogdan and Biklen (2007). I designed Research Question 1 and 2 to be answered using data from semistructured and focus group interviews. I designed Research Question 3 to be answered using data from lesson plan documents. Through the project study, I identified areas of need in order to improve the instructional delivery of co-teaching practices.

Review of the Literature

In this section I review the conceptual framework of self-efficacy, as well as current research on the topic of co-teaching. In order to provide an in depth understanding of co-teaching, I will explain the joint instructional models implemented by general education teachers and special education teachers and will discuss current research trends on the subject of co-teaching (Friend et al., 2010). Within this review, I included an analysis of research related to the benefits and challenges of co-teaching, as well as the necessary organizational components for successful implementation of a co-teaching program (Sileo, 2011). The strategies used to obtain research articles included searching the ERIC, Education Research Complete, and Academic Search Complete databases through the Walden University Library. I conducted the searches using keywords, such as *self-efficacy*, *co-teaching*, *co-teaching models*, *special education* and *co-teaching*, and *roles of co-teachers*.

Conceptual Framework

The conceptual framework for this study was Bandura's (1977) self-efficacy theory. Self-efficacy is an appropriate framework for this study because this study focuses on teachers' perceptions of their skills to implement co-teaching practices. Self-efficacy measures people's perceptions of their skills to succeed in accomplishing tasks and influences the ways in which people approach challenges and goals (Bandura, 1997). This theory is helpful in providing insight into the self-efficacy of general and special education co-teachers on their skills to deliver consistent co-teaching instruction at the secondary level (Pancsofar & Petroff, 2013).

Bandura (1977) asserted that people make behavioral decisions based on psychological procedures. These processes create and strengthen their sense of personal efficacy, or "beliefs in ones' capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). Self-efficacy affects the efforts and actions people choose to pursue, as well as whether they will attempt to cope with a situation or avoid activities out of fear of inadequacy (Bandura, 1977).

Overview of self-efficacy. Researchers have applied Bandura's (1977) theory of self-efficacy to many contexts since the 1970s, including the areas of psychology, healthcare, and education. Self-efficacy refers to the idea that an individual's beliefs determine and influence his or her behavior. According to Bandura (1997), the more a person believes he or she has the capability of accomplishing a task, the more likely that person is to attempt the task and accomplish it. People with a higher sense of self-efficacy believe in their own capabilities to perform, demonstrate lower rates of depression and anxiety, and have more success in their occupational endeavors (Bandura, 1977, 1997).

Bandura (1977) posited that there are four main sources through which people base their personal levels of self-efficacy. These sources include: performance accomplishments, vicarious experiences, and verbal persuasion, and psychological states. Efforts to increase self-efficacy draw upon these areas to provide mechanisms for behavioral change. Much of Bandura's (1977) early work focused on the reduction of fear responses and phobias, but his later work exhibited a focus on teaching and learning (1997). Later areas of study included cognitive self-efficacy, self-regulation, and efficacy

in mastering different academic subjects while developing and maintaining social relationships.

Teacher self-efficacy regarding instructional delivery. Teachers' levels of self-efficacy influence their instructional performance and skills to create positive learning environments. Bandura (1997) elucidated that teachers must not only possess knowledge and skills, but they must also implement them effectively in the classroom. Teachers with a high sense of self-efficacy visualize successful scenarios to promote student performance, whereas teachers with lower self-efficacy experience more self-doubt and expend their energy focusing on everything that could go wrong. Teachers must manage their emotional reactions and employ their sense of efficacy to focus on academic learning in order to support students (Bandura, 1977, 1997).

Teacher self-efficacy and the extent to which teachers believe they can influence the learning of students are significantly related to student achievement (Ashton, 1984, Bandura, 1997). The belief that teachers can have a positive effect on student learning influences their instructional decisions, choice of activities, and perseverance with struggling students (Althausen, 2015). Holzberger, Philip, and Kunter (2013) described self-efficacy as a motivational construct that is related to effective teaching. Teachers with higher general efficacy work harder, seek continuous professional development, and are less stressed than their counterparts with lower senses of self-efficacy. They are more likely to devote the majority of instructional time to academic learning and to assist students struggling with the content (Gibson & Dembo, 1984). Teachers with higher levels of self-efficacy are better skilled to address the academic needs of their students

and provide positive learning experiences to improve student achievement (Tschannen-Moran, Hoy, & Hoy, 1998)

Increasing self-efficacy. Bandura (1977, 1997) identified four primary methods to increase a person's sense of self-efficacy: performance accomplishments or mastery experiences, vicarious experiences, social persuasion, and accurate interpretation of emotional states. Performance accomplishments are the most effective way to develop personal self-efficacy. When a person masters a task, he or she experiences a feeling of success that can lead to a greater estimation of personal performance. The person learns to view challenges as experiences to be mastered rather than focusing on limitations, providing a greater sense of self-efficacy (Bandura, 1997). In the context of co-teaching, when teachers experience success from implementing a new practice, they feel more capable in their skills to deliver co-taught instruction.

Vicarious experiences allow people to benefit from the successes of others. When a person observes the success of a similar individual, that person feels more confident in his or her own skill to succeed. Modeling can be used to raise self-efficacy levels when the model is similar to the observer (Bandura, 1989, 1997). The assignment of experienced mentors for co-teaching teams could increase the success of co-teachers in their delivery of instruction.

Social persuasion effects self-efficacy by convincing people that they possess the skills to be successful (Bandura, 1997). A person may be verbally persuaded that they are capable of mastering certain activities, though the results are usually temporary. Teachers can benefit from social persuasion by being surrounded by people who support them and encourage their performance. Teachers' perceptions of the levels of support

they receive from their administrators are positively associated with self-efficacy. When teachers feel supported and receive helpful feedback, they report higher levels of self-efficacy and maintain higher expectations for student performance (Stipek, 2012).

Emotional states influence feelings of self-efficacy. People must accurately interpret their emotions, moods, and physical reactions to stressors to interpret events in their lives accurately (Bandura, 1977, 1997). For example, a positive or negative mood affects teachers' perceptions of their potential to deliver effective instruction. Strong emotion influences teachers' capacity to anticipate the success or failure of classroom activities (Pajares, 1996). In order to increase self-efficacy, teachers must interpret emotions as energizers or catalysts to facilitate their performance instead of being consumed by self-doubt (Relajo, Pilao, & Dela Rosa, 2015).

As the framework of this study, self-efficacy provided insight into teachers' perceptions of their skills to implement the consistent instructional delivery of co-teaching practices. It aligns with the research questions and informs the qualitative research methods that were used to collect and analyze co-teachers' perspectives.

Through the research questions, I sought to identify how teachers in a rural high school in middle Georgia perceived co-teaching practices and their skills to plan and deliver co-taught instruction. The framework of self-efficacy is an essential part of understanding their perceptions of their skills and identifying supports to help teachers overcome challenges and deliver more effective instruction in the classroom (Strogilos & Stefanidis, 2015).

Current Research

Co-taught inclusion classes. The historical trends regarding the education of students with disabilities have progressed from children being isolated from their peers to receiving services within the least restrictive environment of the general education classroom (Spaulding & Pratt, 2015). Federal legislation, such as the IDEIA of 2004, the No Child Left Behind Act (NCLB) of 2001, and the Every Student Succeeds Act (ESSA) of 2015, has evolved to ensure that children with disabilities are provided with special education services to meet their diverse needs. This legislation requires schools to ensure that students with disabilities are involved to the greatest extent possible in the general curriculum in order to provide equitable instructional opportunities to all students.

Since the passing of the NCLB legislation, all teachers are required to be highly qualified in their subject areas by passing state certification tests (Robinson, 2011). In order to meet federal mandates, many schools began to transition into providing inclusion classes co-taught by highly qualified general and special education teachers, as opposed to resource classes taught by special education teachers who were only certified in special education (Brinkman & Twiford, 2012). Yell (2012) defined inclusion as the placement of a special education student alongside nondisabled peers in the general education environment. Co-taught inclusion classes began as an attempt to blend the content specialty of general educators with the pedagogical skills of special education teachers (Friend, 2012). However, as more students with disabilities have been placed in mainstream classrooms, teachers with little training in serving students with special needs have struggled to maximize the potential benefits implementing co-teaching models consistently (Casale-Giannola, 2012).

What is co-teaching? The intent of co-teaching is to provide targeted instruction to students with IEPs who require services in the inclusive environment of the general education classroom. Fenty and McDuffie-Landrum (2011) provided an overview of the six foundational co-teaching models for teachers to use when designing and implementing joint instruction. Nierengarten (2013) asserted that each model should be purposefully selected based on the needs of the students within the classroom and the intent of the instructional activity.

One teach, one observe. Within the one teach, one observe model, one teacher is accountable for the instruction of the whole class, while the other is engaged in the process of collecting data. These data may include academic or behavioral data on individual students, groups, or the classroom as a whole (Fenty & McDuffie-Landrum, 2011). Teachers may implement this model when working with specialists, such as speech-language pathologists and interpreters who are serving students in the classroom setting (Lindeman & Magiera, 2014) or media specialists collaborating within the classroom (Loertscher, 2014). Co-teachers can also collect data on each other in order to engage in reflective practice (Sileo, 2011).

One teach, one assist. The one teach, one assist model allows one teacher to lead the class while the other provides individualized attention to students who need further assistance. This co-teaching structure allows one teacher to move through the classroom in order to address the questions of struggling students (Fenty & McDuffie-Landrum, 2011; Sileo, 2011). Friend and Cook (2010) noted that this model is most appropriate for beginning co-teaching teams who are still in the initial phases of their team development. The one teach, one assist model is the most widely used among co-teaching teams. The

general education teacher most frequently assumes the role of the leader of whole-group instruction, while the special education teacher is consigned to the role of an assistant. Additionally, they noted that this model is not highly recommended in the literature because of a lack of equity among general education teachers and special education teachers. Teachers should alternate their roles in leading whole-group instruction to encourage parity between both educators (Almond & Feng, 2012).

Teaming. During team teaching, both the general education teacher and special education teacher instruct the whole group simultaneously. This model provides both teachers with opportunities for interaction with the group, as well as the presentation of opposing viewpoints and the modeling of different problem-solving processes (Fenty & McDuffie-Landrum, 2011; Sileo, 2011). Both co-teachers share responsibility in the delivery of instruction. However, this model does not take advantage of the benefits of flexible grouping and the reduced student-teacher ratio that co-teaching can provide.

Parallel. Within the parallel co-teaching model, the teachers divide the students into two groups and each deliver the same material to his or her small section. Witcher and Feng (2010) elucidated that the strength of parallel teaching is in the small group learning opportunities that it provides. Some students struggle to focus during whole-group instruction, and the parallel model allows them to receive instruction in a smaller setting with fewer distractions, increasing their focus on the content. Teachers are able to provide immediate feedback during parallel sessions because they can see students more directly. The use of the model increases both student participation and the ability of educators to implement formative assessments (Fenty & McDuffie-Landrum, 2011).

Station. During station teaching, the students are divided into two or more small groups. The groups of students rotate through different stations of instructional activities. Both the general and special education teachers provide direct instruction at their stations, while the remaining groups work independently on an assigned learning task (Sileo, 2011). The station co-teaching model provides teachers with opportunities to integrate varied instructional tasks into their lessons. The stations may teach or reinforce concepts through inquiry-based learning, hands-on activities, and high interest materials (Lee, 2012). Before engaging in station teaching, co-teachers should consider the pacing of the activities, potentials for noise, and the number of days it will take to complete a full rotation. Group sizes and composition may need to be altered depending on the purpose of each station, and teachers should take care to purposefully assign group members for maximum effectiveness (Almond & Feng, 2012).

Alternative. Alternative teaching allows one co-teacher to work with a large group while the other instructs a small group for the purposes of enrichment, remediation, or assessment (Fenty & McDuffie-Landrum, 2011). Learning activities suitable for the alternative teaching model include pre-teaching and re-teaching, acceleration, and test review (Lawter, 2013). This model may also include one co-teacher temporarily relocating to another classroom in order to provide specialized instruction to a smaller group of students. Student grouping can be determined through the use of formative assessment data (Fenty & McDuffie-Landrum, 2011).

Benefits of co-teaching. Co-teaching is designed to provide equitable educational opportunities to diverse learners through the marriage of skills from two teachers of equal status in the roles of content and instructional specialists (Chanmugam

& Gerlach, 2013). The expertise of special educators in the application of learning strategies can enhance the content delivery of general education teachers to reach students at varying levels of academic proficiency. Graziano and Navarrete (2012) identified some of the benefits of co-teaching as increased opportunities to provide individualized learning experiences, scaffolding of instruction, varied presentation of the content, and multiple assessment measures. These specialized instructional strategies allow students with IEPs to benefit from placement alongside their peers within the regular education setting (Friend et al., 2010).

Co-teaching allows for the reduction of the student-teacher ratio and creates opportunities for differentiation and flexibility of instruction (Moorehead & Grillo, 2013). When delivering joint lessons, co-teachers are able to provide more small-group learning opportunities and cognitive scaffolds to support the diversity of learners in the classroom (Cooper & Robinson, 2014). These flexible groups can provide teachers with the opportunities to implement team-based learning to increase student engagement and participation, which may lead to more positive learning outcomes for students (Haidet, Kubitz, & McCormack, 2014). Co-teachers can also provide students with more personalized learning experiences and assessments that consider their learning needs, preferences, and interests (Bray & McClaskey, 2013).

The collaborative nature of co-teaching benefits the personal and professional development of the team of educators. Co-teaching provides teachers with the impetus to examine their pedagogical skills and individual teaching styles, as well as to learn from the expertise and experience of their fellow team members (Chanmugam & Gerlach, 2013). Working with other teachers to plan for and deliver joint instruction allows

teachers to provide each other with peer feedback and engage in reflective practice (Kim, 2010). Tschida , Smith, and Fogarty (2015) encouraged teacher educators at the university level to capitalize on the opportunity for reflective practice among pre-service co-teachers in order to encourage candidates to develop strong relationships with cooperating teachers and to equip them with the valuable skills. In addition, Frey and Kaff (2014) echoed the need for universities to prepare teacher candidates for a future of collaboration and the sharing of knowledge and skills to improve the learning environment. Providing pre-service teachers with opportunities to co-teach with colleagues during their practicum will make them more successful in their professional lives (Hartnett, Weed, McCoy, Theiss, & Nickens, 2013).

Challenges of co-teaching. When working to develop a successful co-teaching program, school administrators must address several barriers to effective co-teaching. These barriers relate to the adequate training of co-teachers, as well as scheduling challenges, class configurations, educator parity, common planning time, and the enforcement of IEPs (Nierengarten, 2013). Kilanowski-Press, Foote, and Rinaldo (2010) explored the variables related to inclusion practices by surveying 71 inclusion teachers across the state of New York. These variables included teacher qualifications and professional development experiences, in addition to class size, the number of students with exceptionalities in the classroom, and the severity of the disabilities exhibited by the students. They found that co-teaching was the least used instructional model reported by participants, though it was associated with a larger number of students with disabilities in the general education environment. This discrepancy may be due to the organizational and scheduling challenges of co-teaching, as well as the perception of special education

co-teachers as being attached to students, not classrooms. Additionally, co-teachers are generally not able to choose their partners, causing compatibility issues to sabotage the harmony required for the effective delivery of joint instruction (Petrick, 2014). The personalities of teachers inevitably affect the co-teaching relationship and should be considered when establishing co-teaching teams (Simpson, Thurston, & James, 2014).

Co-teaching at the secondary level is especially challenging to implement due to the nature of the content. General educators are experts in content, while special education teachers are skilled in the use of instructional strategies. However, Moin, et al. (2009) noted a lack of crossover in content knowledge and awareness of the need for adaptations to the curriculum among special and general educators. These findings are echoed by those of McDuffie et al. (2009), who found similar disparities between the content knowledge and pedagogical expertise of co-teachers. Additionally, they asserted that students in co-taught and non-co-taught classes often receive the same type of instruction despite the opportunities to utilize different instructional models.

Within co-teaching relationships, it is important for general and special education teachers to have equal authority in both instruction and assessment (Kim, 2010). Embury and Kroeger (2012) surveyed and interviewed students to obtain their insights on participating in co-taught classes, which generated concern surrounding the parity of the general and special educators. In some instances, the general educator retained more authority as a teacher of record, and the role of the special educator was minimized (Petrick, 2014; Pugach & Winn, 2011). Solis et al. (2012) confirmed these results and stated that the special educator is typically in an inferior role to the general educator. In a qualitative case study, Ashton (2014) critically analyzed the balance of power within a

co-teaching team and the larger school context, examining the marginalization of special education teachers and students. Despite the challenges of co-teaching, the practice is generally viewed in a positive light for its potential to meet the needs of students with disabilities in the general curriculum. Prizeman (2015) provided evidence that students and teachers have positive perceptions of co-teaching due to increased academic outcomes, confidence, and self-esteem. Younger teachers report the most positive attitudes toward co-teaching and collaboration (Miltenienė & Venclovaitė, 2012).

Necessary components of co-teaching. Stakeholders in education must be prepared for the implementation of a co-teaching program in order to ensure that all of the required components are in place. Co-teaching requires teachers to revolutionize their planning, instruction, and assessment practices, which requires support on multiple levels (Murawski & Lochner, 2011). Factors affecting co-teaching success include administrative support, professional development for general education teachers and special education teachers, as well as time for common planning and reflective practices (Friend et al., 2010). Though teachers cannot select their co-teaching partners and may have different personalities and philosophies, they can learn to work together effectively and function as a harmonious team with support and on-going professional development (Petrick, 2014).

School leaders are required to arrange the schedules of students and teachers in a way that allows for the delivery of all services specified within the IEPs of students with disabilities. Students receiving co-teaching services must be grouped together in classes based on the number of available staff. Nierengarten (2013) encouraged administrators to purposefully schedule students who require co-teaching services to allow for the

maximum availability of courses. Once assigned as co-teaching partners, teachers must negotiate classroom academic and behavioral procedures to support students with IEPs, as well as typical learners (Dieker et al., 2013).

Professional development for both co-teachers and administrators is essential for maintaining an inclusive school culture and should be ongoing (Nichols & Sheffield, 2014). In order to improve co-teaching practices in secondary academic and vocational classes, schools must provide teachers with professional learning opportunities on the strategies needed to support students with disabilities in all subject areas, approaches to active learning, and positive behavior supports (Casale-Giannola, 2012). Training in co-instruction and assessment, in addition to a structured problem-solving model, enhances the relationship between special and general educators (Conderman & Hedin, 2012; Sileo, 2011). Greer and Meyen (2009) emphasized that special educators need additional training in content knowledge and skills to translate the curriculum effectively and align learning objectives. They may feel intimidated by the material, but their lack of familiarity with the content provides an opportunity for general educators to clarify their delivery of instruction (Johnson & Brumback, 2013).

Both pre-service and in-service professional development should be required to enhance the repertoires of inclusion teachers (Brinkman & Twiford, 2012; Conderman, Johnston-Rodriguez, Hartman, & Kemp, 2013; Graziano & Navarrete, 2012; Hamilton-Jones & Vail, 2012). Commitment to innovative professional learning exercises can improve co-teaching partnerships. Shaffer and Thomas-Brown (2015) emphasized the need for job-embedded professional development that is relevant to and meets the needs of both general and special education teachers. Scheeler, Congdon, and Stansbery (2012)

demonstrated the effectiveness of peer-coaching using earpiece technology to improve co-teaching performance. Professional development facilitated by professional learning communities improves co-teaching outcomes and student achievement, making co-teaching a noteworthy strategy in the school improvement process (Walsh, 2012).

Another approach to improve co-teaching implementation includes the scheduling of common planning time for lesson development. Co-teachers need regularly-scheduled meetings to discuss instructional strategies, accommodations, and individual student needs, as well as to reflect on their practices (Bryant Davis, Dieker, Pearl, & Kirkpatrick, 2012; Charles & Dickens, 2012; Conderman, 2011; Forbes & Billet, 2012; Lindeman & Magiera, 2014). Gurgur and Uzuner (2010) investigated the perceptions of co-teachers on preparation, planning, and application. Through their phenomenological research study that analyzed the semistructured interviews of a co-teaching team and their 35 students, they determined that schools must allocate time for co-planning and reflection to improve co-teaching approaches. In a mixed-methods study of 73 pre-service special education teacher candidates, Conderman, Rodriguez-Johnson, Hartman, and Kemp (2013) found that the candidates reported a greater need for information from general education teachers during co-planning because they lacked the content knowledge to be equal instructors in the classroom. Common planning time is associated with improved lesson planning among co-teaching teams because both parties can be sufficiently prepared to address the needs of the students. (Bryant Davis et al., 2012; Fenty & McDuffie-Landrum, 2011).

However, co-planned lessons must be acted upon in order to be successful. King-Sears and Bowman-Kruhm (2011) conducted a survey with 101 middle and high school

co-teachers who were randomly selected from four states. Survey items included questions about the use of IEPs during the planning and delivery of instruction, as well as the use of accommodations, instructional supports, and reading interventions for students with disabilities in co-taught classrooms. The survey results of special education teachers showed that 49% of teachers were concerned that specialized reading instruction was not being provided in co-taught classes, despite the use of the IEPs in co-planning by almost all teachers. Students with learning disabilities have a need for explicit, systematic instruction in reading (Ritchey, 2011). The effective delivery of specialized instruction is contingent upon proper planning among co-teachers and their willingness to implement evidence-based practices.

Co-taught inclusion research. Though the rates of co-teaching as a service-delivery model are growing, there is little empirical evidence regarding the effectiveness of co-teaching in general education classrooms. Sweigart and Landrum (2015) explained that there is a lack of experimental research on co-teaching because it is difficult to conduct and is very resource-intensive. Difficulty in identifying groups of students, teachers, and subjects that are comparable in co-taught and solo-taught settings further hinders researchers' abilities to conduct experimental or quasi-experimental research (Friend, 2014). Few studies report student outcomes or attempt to manipulate the influences of co-taught instruction (Solis et al., 2012). However, there is much qualitative research that identifies the strengths and weaknesses of the implementation of co-teaching practices (Sweigart & Landrum, 2015).

Co-teaching provides an opportunity for curriculum changes that benefit students, including cooperative learning groups, alternative small groups, and peer pairing (Solis et

al., 2012). General and special education teachers with complementary expertise can implement specialized instructional strategies to support students with disabilities in meeting their IEP goals and objectives (Friend, 2014). In order to provide more support for diverse learners, teachers can incorporate active-learning and multi-modal learning strategies into their lessons to accommodate for student needs (Casale-Giannola, 2012).

Co-teaching does have limitations and is not considered to be an intervention. Rather, co-teaching is a framework through which students with disabilities can benefit from evidenced-based practices. The effectiveness of co-teaching depends on the skills and consistency of the general and special education teachers implementing the models (Sweigart & Landrum, 2015). The act of placing two teachers in a room without providing training and support in co-teaching models and practices will not result in increased student achievement. Co-teachers may become confused about their roles and responsibilities in the delivery of joint instruction, leading the special education teacher to function as an assistant instead of an equal instructional authority (Nierengarten, 2013, Petrick, 2014). However, effective professional development can mitigate the limitations of co-teaching so that general and special education teachers can capitalize upon its strengths to support student achievement (Shaffer & Thomas-Brown, 2015).

Implications

The implications for this project study are wide-ranging on the local level. I sought to obtain teachers' perceptions regarding their skills to implement co-teaching practices. Professional learning sessions were developed to target areas for improvement that are highlighted by the research. Improving teacher effectiveness through professional development enhances the quality of instruction provided to students within

co-taught inclusion classrooms, helping to decrease the achievement gap between students with disabilities and their general education peers.

Students with IEPs have a right to equal educational opportunities and should interact with their general education peers as much as possible (IDEIA, 2004). The use of accommodations, curriculum adaptations, and specialized instruction can support students with disabilities and enable them to achieve in the regular education setting (King-Sears & Bowman-Kruhm, 2011). By improving understanding of effective co-teaching practices at the high school level, teachers can welcome students with disabilities into their classrooms and increase their sense of self-efficacy by including them alongside their peers. Teachers can also contribute to positive social change by modeling respect for individual learning differences and supporting the vision of a positive classroom and school culture (Bakken & Smith, 2011).

Summary

The practice of co-teaching is an effort to provide specialized instructional strategies to students with IEPs in order to support their learning in the general education environment (Friend, 2012). Co-teaching requires the development of relationships between team members in order to create parity and navigate varying instructional roles within the shared classroom. Difficulties may arise from conflicting perspectives of general and special education teachers on what constitutes effective co-teaching strategies that are appropriate for high school students. The problem in one local school was a lack of consistent instructional delivery of co-teaching practices at the secondary level. Strengths and weaknesses of co-teaching have been researched, as well as the necessary components of effective program implementation, but further insight is needed into the

experiences of teachers and their relationships with one another (Cooper & Robinson, 2014; DeMatthews & Mawhinney, 2013; Graziano & Navarette, 2012). Bandura's (1977) self-efficacy theory provided insight into the self-efficacy of general and special education co-teachers on their abilities to deliver consistent co-teaching instruction. Teachers benefited from the insights garnered by the study by learning about the characteristics of successful co-teaching and becoming better equipped to support positive social change by improving the academic and social outcomes of students receiving IEP services.

Section 2 will provide a description of the methodology for the study. An explanation of the qualitative, single case study design will be given, along with procedures for data collection and analysis. The ethical treatment of human participants will also be discussed.

Section 2: The Methodology

Introduction

I conducted this project study in order to obtain an understanding of the perceptions of high school teachers at a rural school in middle Georgia regarding their skills to implement and plan for co-teaching practices. This information provided the opportunity to form conclusions about the characteristics of successful co-teaching practices at the secondary level. Section 2 provides information on the proposed qualitative research design, as well as a description of the setting, participants, and measures used to protect their rights. The section also includes descriptions of the procedures that I used for data collection and analysis.

Qualitative Design

Research Design and Approach

I used a qualitative case study design to explore the perceptions of high school teachers regarding their ability to implement and plan for co-teaching practices. The framework of self-efficacy informed the following research questions because self-efficacy focuses on perceptions of skills to perform a task (Bandura, 1997). The self-efficacy levels of teachers are important to understand because the teachers must perform tasks related to the consistent instructional delivery of co-teaching practices, and their perceptions of self-efficacy influence their performance (Bedir, 2015). I used the following research questions to guide the study.

RQ1. What are teachers' perceptions of co-teaching practices in a rural school in middle Georgia?

RQ2. What are teachers' perceptions of their ability to implement co-teaching practices in a rural high school in middle Georgia?

RQ3. How do high school teachers in a rural school in middle Georgia plan for the instructional delivery of co-teaching practices?

Through the use of these research questions, I investigated teachers' perceptions of co-teaching practices and their skills to plan for and implement the practices at a rural high school in middle Georgia.

Creswell (2012) described a case study as an exploration of a bounded system, such as individuals separately or in a group, to understand a situation deeply. Yin (2014) elucidated that a case study allows for the understanding of complex social experiences, such as small group interactions and organizational procedures, within a real-world context. Other research methods, such as quantitative designs, would be ineffective in examining the depth of teachers' perceptions because they focus on numerical data and cannot capture the rich descriptions of teachers' narratives. This qualitative research design allowed for the exploration of the perspectives of a group of high school co-teachers in core academic subjects, providing viewpoints from both general educators and special educators.

Description of the Setting and Participants

The school district selected for the study was a high school in middle Georgia set within a rural community on the outskirts of a large metropolitan area. The district consists of four schools at the primary, elementary, middle, and high school levels. The local high school serves a total of 1,165 students. The school's student population is 89% White, 7% Black, 1% Hispanic, and 3% multiracial (Governor's Office of Student

Achievement [GOSA], 2015). The demographics of the district's student population are described in Table 1 below.

Table 1

Student Demographics of District

	District	High School
Student Population	3,517	1,165
General Education Students	3,225	1,066
Special Education Students	292	99

Note. From GOSA (2015).

Teachers serve students with IEPs under the eligibility categories of: (a) specific learning disability, (b) emotional and behavioral disorder, (c) intellectual disability, (d) autism, (e) traumatic brain injury, (f) speech/language impairment, (g) vision impairment, and (h) other health impairment. The school provides a continuum of special education services, placing students in the least restrictive environment based on their individual needs in order to support their academic outcomes and increase achievement (Aron & Loprest, 2012; Fuchs, Fuchs, & Stecker, 2010). Traditional course offerings set forth by the GADOE and aligned with the Georgia Standards of Excellence (GSE) are provided to students by highly qualified staff. There are a total of 102 staff members in the high school, including four administrators, 59 general education teachers, and eight special education teachers, in addition to secretaries, paraprofessionals, a school nurse, and cafeteria workers. Of the certified educators, 20 general education teachers and seven special education teachers co-teach within inclusive classrooms.

Participants

To qualify for participation in the study, the participants had to be current general or special education co-teachers in the core academic subjects of English language arts,

mathematics, science, or social studies in grades 9-12. The target population for this study was the 20 general education teachers and seven special education teachers involved in the co-teaching program. In order to obtain the necessary depth of inquiry of the research, I selected nine participants through purposeful sampling in order to reach saturation (Creswell, 2012). This number of participants allowed me to explore their perspectives on co-teaching practices in depth. By interviewing both special and general education teachers of different content areas, I was able to adequately account for alternative perspectives and collect evidence from multiple points of views, as recommended by Yin (2014).

Procedures to Gain Access to the Participants

To obtain authorization to conduct the study, I provided the school administrator with the letter of cooperation that described the recruitment and research activities that would take place at the site, such as teacher participation in individual and focus group interviews, as well as an analysis of lesson plans. I sent the letter to Walden University's Institutional Review Board (IRB) to confirm all required components before being sending it to the principal to obtain an ink or electronic signature indicating consent for the project study. After I gained permission to access the participants, I attended a faculty meeting in order to reach out to teachers and invite them to participate in the research activities. I also asked the principal to have his designee provide me with copies of lesson plans from co-taught classes from the school's shared server.

Establishing a Researcher-Participant Working Relationship

I established a working relationship with the participants by introducing myself at a faculty meeting and providing co-teachers with copies of forms to review. I provided

self-addressed envelopes so that interested teachers could mail the consent forms back to me if they chose to participate in the study. I used the consent forms to inform potential participants of the purpose of the study, provide them with information regarding the confidentiality of their responses, and inform them of how they would be protected from harm and of their ability to withdraw from the study at any time. Next, I contacted the respondents by phone to confirm their interest and scheduled a time to meet. I conducted both the interviews and focus group in a comfortable and convenient location for the participants at a time of their choosing. Creswell (2012) recommended that researchers develop a working relationship with their participants. Therefore, I was courteous to participants and strove to foster a sense of trust by assuring them of the confidentiality of their responses, being a good listener, and being respectful of their time. If the participants had questions, I was available to answer them through phone calls or email.

Ethical Considerations

To ensure the ethical treatment of human subjects, I submitted the proposed study to the Walden University IRB for approval before any data collection could take place. As a part of the informed consent process, I informed all participants of the purpose of the study, and I provided them with information regarding the confidentiality of their responses and how they would be protected from harm. I made participants aware of their ability to withdraw from the study at any time before they engaged in research. All participants signed a consent form to declare their voluntary participation.

Maintaining confidentiality is of utmost importance in order to make certain that no data can be traced back to the participants or misused through a breach of privacy. I guaranteed the confidentiality of participants and the security of their data by securing of

all electronic data, transcriptions, and digital consent forms in password protected files. I used generic identifiers in all transcripts so that they contained no information that could be used to identify participants. For example, "G1" stood for general education co-teacher number one, and "S1" referred to special education co-teacher number one. One page connecting the participants' names to their identifiers was stored in a locked filing cabinet, along with any other hard copies of consent forms and field notes.

Data Collection Plan

Justification for the Choice of Data

I collected the data for the study through the following three qualitative measures in order to allow for the triangulation of the data: semistructured interviews, a focus group, and document analysis. The interview methods allowed me to obtain open-ended responses of teachers, providing me with their personal insights regarding co-teaching at the high school level and answering the first and second research questions. Document analysis allowed me to examine lesson plan documents relevant to co-teaching in order to develop a better understanding of teachers' experiences with planning the instructional delivery of co-teaching, answering the third research question.

Data Collection Instruments

When I conducted the semistructured interviews with individual teachers, I used an interview protocol in order to provide a script for the interview and to offer a means for recording notes, as recommended by Creswell (2012). I obtained permission to modify and use Austin's (2001) Semistructured Interview: Perceptions of Co-teaching protocol. The questions covered the aspects of co-teaching, providing the participants with the opportunities to share their thoughts. I recorded the interviews and transcribed

them for later analysis by using open and axial coding to identify emergent themes and generate sufficient data to answer the research questions.

After I conducted the interviews, I reviewed the weekly co-taught lesson plans provided by the school. I analyzed and coded lesson plan documents using open and axial coding in order to determine the types of practices being used in classrooms and the extent to which co-teaching models were being implemented. During this process, I searched for commonalities among lesson plans and identified keywords, such as designated co-teaching models, grouping strategies, and accommodations, used by co-teaching teams. Analyzing the lesson plans allowed me to understand the descriptions of co-teaching practices from teachers in different subject areas. My review of these documents helped to answer the third research question by providing insight into how teachers document the instructional delivery of co-teaching practices in their lesson plans.

I conducted a final focus group interview using additional questions from Austin's (2001) interview protocol in order to allow participants to dialogue about the topic in a group setting. These questions are provided in Appendix F. All questions within the protocol remained unchanged so as to not threaten the validity or reliability of the instrument. This qualitative instrument was refined by a panel of expert educational consultants selected by the original researcher who reviewed the questions for content validity, clarity, and relevance and made suggestions for improvement (Austin, 2001). Austin (2001) conducted a pilot study to further validate the protocol. The questions were organized into sets and subsets that were presented to participants in the same order to ensure consistency and interrater reliability during the interviews (Austin, 2001). The only modification to the instrument was the six questions reserved for presentation to the

focus group. Creswell (2012) and Yin (2014) advocated for the use of focus groups because they allow the participants to interact in a social context. I conducted the focus group interview to allow teachers to discuss their perceptions about effective high school co-teaching practices so that a variety of perspectives could be obtained. After the individual and focus group interviews, I provided participants with a copy of their interview transcripts and a report of the themes emerging from the data to allow them the opportunity to confirm their statements or to clarify their thoughts on the topic, improving the credibility of the study.

Data Generation

I generated, gathered, and recorded the data for this project study using approved collection events. I obtained permission from Walden University's Institutional Review Board to begin participant recruitment and data collection for the study. I collected data through individual semistructured interviews with general education and special education co-teachers, a focus group interview, and the analysis of lesson plan documents. I then analyzed the data to determine patterns, relationships, and themes.

During the semistructured and focus group interviews, I used an audio recording device to record the discussions so that all verbal communication could be systematically transcribed once the interviews were completed. Before beginning the interviews, I confirmed the consent of the participants to being recorded, per Yin's (2014) recommendation. During the transcription process, I coded the participants' names using generic identifiers, such as "G1," so that personally identifying information could be kept confidential. I transcribed all of the audio data within 48 hours of the interview or focus

group session. Participants reviewed the transcribed data in order to ensure the accuracy of the recordings.

I gathered the data for the document analysis by reviewing digital copies of stored weekly lesson plans for elements of co-teaching, such as designated co-teaching models, flexible groupings, and the documented role of each co-teacher. I collected the descriptions within the lesson plans related to co-teaching to help develop a picture of the co-teaching practices that teachers regard as effective, providing insight into classroom implementation and corroborating the data generated by the interviews.

Potential Participant Response

In order to obtain the necessary depth of inquiry for the qualitative research design, I selected nine participants through purposeful sampling in order to reach saturation, as recommended by Creswell (2012). Only general education or special education co-teachers of core academic subjects were eligible to participate in the study. All teachers were required to be currently co-teaching one or more academic classes in the ninth through twelfth grades.

Eligible Participants. A total of 20 general education teachers and seven special education teachers were eligible to participate in the research. Of the 27 eligible teachers, 10 were initially interested in participating in the study. One decided not to participate in the interviews due to scheduling conflicts. A total of nine teachers participated in data collection activities, including four general education teachers and five special education teachers. All of the four academic content areas of English, mathematics, science, and social studies, as well as all four grade levels, were represented. Of the participating co-teachers, six teachers were White females and three were White males. All participants

were in their late 40s to early 50s, and their years of experience ranged from 15 to 30 years of experience in education. This sample of participants is representative of the race, gender, age, and experience of the school's population of co-teachers.

Table 2

Participant Demographics

Participant Code	Grade Levels Taught	Subject Area
G1	10, 11	English
G2	9, 10	Science
G3	11, 12	Mathematics
G4	10, 11	Social Studies
S1	9, 10, 11, 12	English
S2	9, 10, 11, 12	Social Studies, English
S3	9, 10, 11, 12	Science, Mathematics
S4	9, 10, 11, 12	Mathematics, Social Studies
S5	9, 10, 11, 12	Science, English

The Role of the Researcher

I had no past nor current professional roles at the setting selected for the study, nor have I had any relationships with the participants. Because I had never worked in the local system and I did not know the participants, my role was solely to collect data with limited biases toward the participants that may have harmed the integrity of the research (Yin, 2014). Participants felt free to share their perspectives with me because I had no prior knowledge of their performance or beliefs about co-teaching, and the honesty of their responses could not affect them negatively in any way.

My biases for the topic include my current role as a co-teacher in another system. I have served as a special education co-teacher for 10 years in the social studies content area, and I am interested in the improvement of co-teaching practices. While I was collecting and analyzing data for the study, it was important for me to remain neutral and

limit my biases toward the subject. Participants checked their transcripts to ensure that I recorded their responses correctly and later engaged in member checking to validate the accuracy of my interview interpretations and findings. Yin (2014) reported that one of the best ways to test possible bias is to examine the "degree to which you are open to contrary evidence" (p. 76). He recommended reporting the findings to critical colleagues who can present alternative explanations for the data. To this end, I used peer debriefing by asking an impartial colleague with experience in qualitative research to provide me with feedback to help me reduce my biases as much as possible.

Data Collection

Semistructured Interviews. I conducted a total of nine individual interviews in early 2016 in one of the media center conference rooms of the local setting. The participants chose this location because it was convenient to them after school hours and it was free of interruptions. The interviews were recorded on a device for later transcription and analysis. All of the interview data were included within the study.

Focus Group. I facilitated a focus group interview among five co-teachers in one of the media center conference rooms of the local high school. These teachers also participated in individual interviews. Three participants were special education co-teachers, while the other two were general education co-teachers. All of the academic content areas and grade levels were represented by either a general education teacher or a special education teacher with at least one co-taught class in that subject area. I posed questions to the group on the topics of collaborative teaching strategies, inclusive experiences, social development of co-taught students, and teaching experience in non-inclusive settings, such as general education or self-contained classes. I have provided a

copy of these questions in Appendix F. Teachers were able to interact while answering the questions, allowing for a conversation of varying perspectives.

Document Analysis. Teachers submit weekly lesson plans that are stored on the school's shared server. Because all teachers have access to the shared documents, department members can edit documents together in order to collaborate on lessons, ensuring equitable instruction and pacing between teachers. A designee of the principal provided me with copies of 18 weeks of lesson plans for co-taught classes. I reviewed lesson plans on a common template in 16 different subject areas in which co-teaching takes place. These areas included Ninth Grade Literature, World Literature, American Literature, British Literature, Coordinate Algebra, Analytic Geometry, Advanced Algebra, Math Finance, Biology, Physical Science, Environmental Science, Human Anatomy, World History, Civics, American History, and Economics. I reviewed a total of 280 lesson plan documents provided to me from the first semester of the 2015-2016 school year. An example of a lesson plan on the school's required template is provided in Appendix G.

Data Analysis

Coding Procedures and Software Applications

Merriam (2009) described data analysis as the process of discovering useful information from the data. The data analysis of this project study was on-going as data were collected, transcribed, and evaluated, following the procedures recommended by Creswell (2012), Merriam (2009), and Yin (2014). Data for this study included semistructured interviews, a focus group interview, and a review of lesson plan documents. Before beginning the data analysis, I created Microsoft Word® and Excel®

files for recording information in order to stay organized, as recommended by Yin (2014). I then followed Creswell's (2012) seven-step process for data analysis of qualitative research: (a) preparing for analysis, (b) reading and reflecting on the data, (c) coding the data, (d) using the coding process to establish themes, (e) representing the themes, (f) interpreting the findings, and (g) validating the accuracy of the findings.

To obtain textual data, I transcribed the recordings from each interview into a Word® document within a 48 hour period after each interview. I assigned all participants a letter and number in order to identify their interview transcripts. For example, "G1" stood for general education co-teacher number one, and "S1" referred to special education co-teacher number one. Lesson plan documents from a given co-teaching team were referenced by letter acronyms with a number, such as "CT1." I then pasted the data into an Excel® workbook in order to assign and filter the codes. To analyze the data, I used the open and axial coding strategies (Merriam, 2009). The following procedures were involved during the data analysis:

1. Open coding allowed me to break the data into concepts and categories and label them in order to find observed patterns. I read each line of text in order to identify specific words and phrases that related to my research questions. I continued coding until all of the text segments had been assigned a code.
2. I used axial coding to explore the relationships and connections between categories. I was able to link concepts to each other and explore the context and consequences of the categories.

The primary objective of the analysis was to determine how teachers describe and document the instructional delivery of effective co-teaching practices. After I read

through the data multiple times and actively engaged in the coding process, I was able to categorize themes, make inferences from the data, and connect the findings to the research questions, literature review, and conceptual framework. I summarized the findings in a narrative format and included detailed descriptions of the results. Rich descriptions exemplifying each theme with direct quotes from the participants are included in the analysis order to illustrate the findings, as recommended by Creswell (2012).

Evidence of Quality

I enhanced the quality of the analysis by following several procedures to address the accuracy of the data, including member checking, the use of a peer debriefer, and triangulation. Participants engaged in member checking to ensure the accuracy of my findings and interpretations of their data. After the completion of my data analysis, participants were encouraged to review the findings and verify the accuracy of their data. I met with participants individually, provided them with a copy of my findings, and explained the process of member checking. Participants concurred with the findings and verified that the analysis of the data was correct. I also used a critical colleague as a peer debriefer to identify errors and check for bias in order to increase the accuracy of the data. This colleague has a doctorate degree in education with multiple years of experience in engaging in qualitative research. We met for a debriefing session, during which she examined my coding processes and findings in order to check for bias and assumptions. This colleague provided alternate perspectives of the interpretation of the data and verified that the themes were identified accurately.

According to Yin (2014), a study is more accurate when it is based upon several sources of information because it allows for multiple measures of a given phenomenon. Multiple sources of data collection were used in order to produce a comprehensive understanding of the results. Through the triangulation process, I compared different sources of data to identify their commonalities and differences to confirm my research findings and increase the confidence in the results. For example, the analysis of lesson plan documents corroborated the statements provided within the semistructured and focus group interviews to allow for cross verification of the sources (Yin, 2014).

Discrepant Cases

In order to enhance the validity of the data analysis, I actively looked for discrepant cases and nonconforming data that were exceptions to the patterns found within the coding of the data. Merriam (2009) noted that actively seeking discrepant cases helps researchers achieve saturation and modify their understanding of the phenomenon being studied through analytic induction. Through my analysis of the data, the patterns within the coding were consistent. I found no discrepant cases, so all of the data were included in the analysis.

Data Findings

As I coded the data using the open and axial coding strategies, several themes emerged. The data outcomes support the study's problem and research questions. They align with the current body of literature surrounding the topic of co-teaching, as well as the conceptual framework of self-efficacy. Self-efficacy focuses on a person's perceptions of their skills to implement tasks, such as the tasks surrounding the implementation of co-teaching services (Pancsofar & Petroff, 2013). Through the research questions, I sought

to identify teacher perspectives surrounding co-teaching and their skills to plan for and implement co-taught instruction in order to gain insight into their self-efficacy regarding co-teaching practices.

Research Questions

In alignment with the framework of self-efficacy, I sought to identify how teachers in a rural high school in middle Georgia perceived co-teaching practices and their skills to plan and deliver co-taught instruction. The study was guided by the following questions:

RQ1. What are teachers' perceptions of co-teaching practices in a rural school in middle Georgia?

RQ2. What are teachers' perceptions of their ability to implement co-teaching practices in a rural high school in middle Georgia?

RQ3. How do high school teachers in a rural school in middle Georgia plan for the instructional delivery of co-teaching practices?

Research Questions 1 and 2 were designed to be answered using interview data from the semistructured interviews and focus group, while Research Question 3 was designed to be answered by the data from the analysis of lesson plan documents. The coding and analysis of the data answering the research questions is described below.

Research Questions 1 and 2

During individual interviews, the interview questions from Austin's (2001) Semistructured Interview: Perceptions of Co-teaching protocol were posed to the participants in three sets, or groups of questions, related to co-teaching in an inclusive classroom. Generally, each question allowed the participants to respond with a "yes" or

"no" before prompting them to elaborate on their answers and share their perceptions on topics related to co-teaching. These probing questions allowed me to engage the participants in conversations about their perceptions and descriptions of effective co-teaching, to ask questions for further clarification, and ultimately, to identify the themes emerging from their responses.

The second method of data generation was a focus group interview among five co-teachers. Three of participants were special education co-teachers, while the other two were general education co-teachers. All of the academic content areas were represented by either a general education teacher or a special education teacher with at least one co-taught class in that subject area. Questions from Austin's (2001) semistructured interview protocol were reserved for discussion within a group setting.

Open and axial coding allowed me to identify the central ideas of the data through the lens of the framework of self-efficacy. I developed the codes by classifying information and examining the relationships in the data. I broke the text from the interview transcripts into concepts and categories using open coding. These categories were created by identifying specific words and phrases that were repeated throughout the analysis, such as limitations for co-planning and use of instructional strategies in the classroom. I then used axial coding to explore the relationships between the categories and to determine how they connected to each other in order to create larger, higher-order categories, such as collaboration, implementation of co-teaching, and relevant training. Through the comparison of the categories through axial coding, the following themes revealed information from the conversations of the participants:

1. Efficacy to Collaborate

2. Efficacy to Implement Co-teaching

3. Relevant Training to Support the Implementation of Co-teaching

Both general and special education teachers expressed positive and negative perceptions of co-teaching and their skills to implement co-teaching practices effectively. Themes from the semistructured and focus group interviews are described below with supporting comments from the interviews.

Theme 1: Efficacy to Collaborate

Teachers' levels of self-efficacy affect their performance in creating a desired outcome, so it is important to understand co-teachers' perceptions of their collaborative skills. All of the participants responded that teacher collaboration was an important aspect of co-teaching, but not all teachers felt they had the skills to collaborate effectively. While all teachers felt that they exhibited strong interpersonal skills and could work together in the classroom, some teachers perceived that they lacked the skills needed for effective communication, especially when discussing issues that could result in tension among the team.

Collaborative skills. Special education teachers in particular felt that they struggled with communicating student needs to general education teachers. For example, S5 commented, "It can be hard to communicate effectively when trying to plan with general education teachers. I don't always know what to say or how to contribute my ideas on supporting students." S3 stated, "Some teachers are harder to communicate with than others, especially when they don't have an open mind. I always advocate for my students, but general education teachers don't always listen." Special education

teachers felt that general educators did not always hear their concerns when negotiating tasks and activities in order to reach a mutually-acceptable conclusion.

General education teachers expressed positive perceptions in their skills to collaborate effectively as co-teachers, but some teachers noted that they have had difficulty compromising when trying to find solutions to problems in the classroom. G1 stated, "Some of the disagreements I have had are because I have a tendency to want to get my own way and not compromise with my co-teachers. I will admit that it's hard for me to give up control." Collaboration requires compromise among co-teachers in order to move the team forward in planning and implementing co-taught instruction. Despite these perceived deficits in collaborative skills, teachers were confident that collaboration contributed to their professional knowledge and skills and had a positive effect on student achievement. When asked about disagreements among co-teaching teams, teachers cited shared beliefs as crucial to the success of effective co-teaching practices and the navigation of disagreements. S1 commented, "Having the same beliefs about co-teaching and its ability to help kids makes all the difference when working together. I know I can collaborate better with teachers who value inclusion, which makes us better co-teachers in the classroom."

Co-planning. Teacher collaboration is best exemplified through co-planning. The success of collaboration hinges upon the team's capacity to use their collaborative skills to co-plan the instructional delivery of co-teaching services. All of the participants stressed the importance of co-planning when discussing their responsibilities in the co-taught classroom, but some teachers did perceive struggles in their skills to collaborate.

Time, commitment, and a foundational knowledge of co-teaching practices are essential to effective co-planning.

Time. Teachers acknowledged the administration's effort to provide time for co-planning by attempting to establish common planning periods by departmental area. For example, all social studies teachers have second period planning. Despite administrative support, common planning by department is not possible for all special education teachers, who often co-teach in multiple subject areas. When common planning existed, teachers recognized the benefits to co-planning with their co-teaching partners. Many of the comments were positive, such as G1 who stated, "I have the same planning as my co-teacher, which makes life a lot easier. We can really bounce ideas off of each other." S2 affirmed the importance of co-planning, stating, "Co-planning is really the key to my success in US History versus American Lit. I'm comfortable with the content in both areas, but I have planning with social studies, so it makes it easier to collaborate."

Commitment. Because time for co-planning is limited, teachers must be committed to using their planning time to collaborate with co-teachers. S3 pointed out that there is limited time for collaboration, so "I have to make decisions on whether to spend my time planning with different co-teachers or to focus on other responsibilities, such as writing IEPs." Multiple teachers contended that they struggled to remain committed to co-planning when experiencing scheduling conflicts and competing responsibilities, such as special education paperwork or meetings. With a limited number of hours in the school day, teachers must know how to set priorities and budget their time effectively in order to accomplish tasks. Planning time is often sacrificed in order for teachers to complete other daily tasks. G2, G3, and S3 expressed a need for a co-

planning process to help them remain accountable during co-planning in order to use their time efficiently.

Foundational knowledge. Co-planning was reported to be easier among teams who possessed a foundational knowledge of both co-teaching practices, such as the spectrum of co-teaching models, and the content area standards. S3 identified his struggles with collaboration by stating, "I want to do a better job at collaborating with my math co-teacher, but I don't have the foundational knowledge of concepts needed to give input when planning." He elaborated, "While I can bring my knowledge of co-teaching models to the table, I struggle when trying to co-plan because it is hard to apply what I know about co-teaching and differentiation to a math-based context." The skills to combine knowledge of pedagogical strategies and content knowledge and apply them to a lesson during co-planning are essential to successful collaboration.

Special education teachers were especially concerned about their lack of content knowledge and how it influenced their co-planning skills. Their dissatisfaction with their perceived content knowledge deficits affects their self-efficacy and implementation of co-planning practices. S3 and S4 identified a need to increase their skills in adapting math activities to meet the needs of all learners. S3 stated, "I would like some more ideas on what kinds of activities to use in math classes. I am not very confident in planning with my co-teacher when I don't know how I can contribute."

Theme 2: Efficacy to Implement Co-teaching

Co-teachers reported their perceived strengths and weaknesses in their skills to implement co-teaching practices in inclusive classrooms. Overall, co-teachers felt that they were able to implement the basics of co-teaching and that it had a positive influence

on student achievement. However, they did identify areas of weakness that could be addressed in order to improve their self-efficacy in the implementation of co-teaching.

Content area fluency. While deficits in content knowledge affect teachers' collaborative skills, a lack of content area fluency also affects the implementation of instruction in the classroom. Special education teachers, in particular, felt that they did not have the skills or competencies in the academic content areas to deliver instruction to the class. S3 stated, "Having a math class this year has been difficult for me because it is not my area of strength. I don't lead instruction in the class because it's hard for me to explain concepts to the students." Science and math teachers most frequently cited the initial inexperience of their co-teachers as a detriment to co-planning and the delivery of co-instruction. G3 described the problem at the beginning of her partnership with one of her current co-teachers.

When we first started teaching together, my co-teacher hadn't had a math class in years, so he was limited in what actual co-teaching he was able to do, content wise. He was learning right along with the kids, which made it difficult for them to treat him as an equal teacher, even though he's very knowledgeable about special ed. strategies, how the brain works, and would go above and beyond for the class.

Participants felt that students identified inequity among co-teachers and often do not consider the special education co-teacher to be a legitimate teacher. S2 shared, "There's a running joke that special ed. teachers are just helpers. I can't count the times a student has asked me when they are going to let me have my own classroom so I can be a real teacher." This lack of parity among co-teachers affects their classroom

responsibilities, which hinders their skills to deliver effective co-teaching practices consistently.

Classroom management style. The level of parity among co-teachers is often affected by their compatibility as a team and willingness to share responsibilities with each other. Teachers reported that the responsibility for student behavior and classroom management varied greatly depending on the characteristics and personalities of each co-teaching team. Responsibilities for classroom management were divided based on the strengths of the individual team members. Essentially, teachers who demonstrated greater self-efficacy for classroom management naturally took charge of the responsibility. Two general education teachers, G3 and G4, who also serve as coaches at the school, stated that they were primarily in charge of classroom discipline. Other teams, such as G1 and S1, expressed that the special education teacher took charge of classroom management because they had the most experience with positive behavior supports.

All participants agreed that classroom management was essential to providing structure for students with disabilities and facilitating the implementation of co-teaching practices. G3 communicated, "I have a different style than my co-teacher. Hers is a little more like organized chaos during stations and small groups, but we both work together to maintain structure and expectations for the classroom." Overall, co-teaching teams distributed the responsibility for classroom management to the teacher better suited to managing behavior by personality or experience. Both team members shared responsibilities when implementing co-teaching models, such as station or parallel-teaching models, which created student groups and increased volume levels. While some

teachers expressed a preference for the models they like to implement in their classrooms, they exhibited a willingness to try new models even when it is out of their comfort zone based on their relationship with their co-teachers.

Classroom management can be an area of contention because teachers have different styles that can affect team compatibility. G4 described his compatibility issues by revealing, "She's more strict, and I'm more go-with-the-flow. We've had conversations, so I know it bugs her, but I want to do things my way because she's only in there one period a day, whereas I'm in there seven." Several teachers noted that they had previously had conflict surrounding differences in classroom management style that affected instruction. In most of these cases, teachers disagreed over noise levels, tolerance toward behavioral infractions, and movement of students in the classroom. Personal compatibility conflicts pose a larger challenge in rural school systems because there are no alternative team members available when a team cannot overcome their personality conflicts and share responsibilities in the classroom.

Theme 3: Relevant Training to Support the Implementation of Co-teaching

Participants commented that further professional development is needed to support the implementation of co-teaching practices in the local high school. Relevant professional learning activities can be used to address teachers' perceived areas of weakness and increase their self-efficacy in implementing co-taught instruction.

Lack of training. One reason teachers noted that they struggled to implement co-teaching practices was a lack of training dedicated to co-teaching. Participants indicated that while the high school had provided in-house professional learning opportunities, some co-teachers still had participated in more professional development than others,

causing some inequality among team members that left gaps in their skill sets. General and special education teachers are not trained together with their co-teaching team members. Instead, special education teachers receive training at the district level and must redeliver to their co-teaching partners. G5 stated, "I know I still have a lot more to learn about co-teaching. I hope that one day we can do some training with our team members because it would be helpful to have a dedicated time for professional learning."

Teacher turnover. The turnover of co-teachers in the local school has a negative effect on the sum of teachers' experiences with professional development. S3, a special education teacher, articulated the differences among co-teachers by disclosing, "Turnover among co-teaching teams naturally keeps us a little unbalanced. I've been here for years, so I've been through several cycles of PD initiatives. Newer teachers don't have the same experience, so they kind of have to learn as they go." Participation in professional development activities has a positive influence on co-teaching performance, and discrepancies in the professional learning opportunities available to co-teachers can negatively affect their teams.

High school co-teaching strategies. A common strand amongst participant interviews was that, though professional learning on co-teaching is provided by the system, there is a lack of professional development dedicated to high school co-teaching strategies. S1 stated, "We've learned about co-teaching models, for example. Some work really well in elementary school but not so much in high school." S5 described the shortcomings of the system's own professional development programs by stating, "When we do PD with special ed. teachers across the district, so much of it doesn't really apply to the high school level."

Areas in which further professional development is needed include differentiated instructional strategies for high school students and the implementation of a variety of co-teaching models in the classroom. General education teachers would like new ideas on differentiating in the different content areas to better plan with their special education partners. G3 indicated, "I would like to explore new instructional strategies to differentiate high school math content, which would make co-planning more productive when we are developing lessons." On the topic of co-teaching models, G1 revealed, "We do sometimes get stuck in a rut with team teaching. More training and practice with the different co-teaching models and when to use them in our classrooms would help me feel more confident with them". Co-teachers want more dedicated training opportunities that they feel are relevant to their positions at the high school in order to increase their skills in implementing co-teaching practices.

Research Question 3

The final method of data generation consisted of document analysis. Through the analysis of the lesson plan documents, several categories became apparent as commonalities among the plans, regardless of the difference in subject area. Several co-teaching models and grouping strategies appeared frequently throughout the documents, providing insight into how high school co-teachers plan for the delivery of co-teaching practices, aligning with the research question. Upon analysis, the following themes emerged from the data.

1. Co-teaching Models
2. Grouping Strategies
3. Accommodations

Theme 1: Co-teaching Models

Three co-teaching models were referred to most frequently within the co-teaching lesson plan documents, including team teaching, station teaching, and parallel teaching. Of these popular co-teaching models, team teaching was the most referenced co-teaching practice, indicating that teachers rely on this model for most of their instruction. References to co-teaching models within the lesson plans tended to follow a similar format, such as "Teacher Actions: Day 1 - Team Co-teaching Model" or "For co-taught classes, teachers will . . ." Some teachers provided more details on how the lessons would be adapted in a co-taught section. Teachers tended to remain consistent in their formatting throughout the semester.

Teachers identified specific models in the lesson plans, but little information was given on the exact content to be taught by the team. The column containing student actions generally included an outline of the content for that day. These actions contained items such as bell work, notes, discussion, and student activities. For example, one lesson plan from CT4 described the activities in a co-taught social studies class as "Take notes and discuss Civil War battles; complete battle chart graphic organizer." In following this plan, teachers would instruct the group together and both assist individual studies during the work session on the graphic organizer. The CT2 team preferred to number activities, such as "1. Complete bell ringer problem. 2. Take notes on linear functions. 3. Break into groups to create function tables on chart paper." Stating that the lesson would be team taught implies that both co-teachers would address the whole group during instruction, but any descriptions of the models were vague and seemed to serve as an outline or reminder to teachers, as opposed to a detailed account of the plan.

The station teaching model was the next most cited model after team teaching. Teachers tended to provide more information about what stations would be used and how they would operate, but none identified which stations were the responsibilities of the general or special education co-teacher. Descriptions of stations primarily included a list of activities, such as "Station 1: Into the Air vocabulary foldable, Station 2: Section review questions from pg 310, Station 3: Video review." Stations typically had three or more group activities through which students rotated. Many stations included review activities, such as stations for previously learned vocabulary, review questions from prior units, and independent practice on material already addressed in the classroom. Few stations included initial learning activities, though some did include a note-taking station, presumably with the general education teacher delivering new instruction.

Parallel teaching, in which co-teachers each address half of the class, was mentioned in lesson plans throughout the semester, but not with the frequency of team or station teaching. The use of this model indicated that the special education teacher was an equal authority in the classroom because the model necessitates that he or she will independently lead half of the class in an instructional activity. When teachers indicated that they were using a parallel co-teaching model, many plans identified that the day's activity was note taking. For example, "Students will take notes on the similarities and differences of the House of Representatives and the Senate." In this scenario, each co-teacher would deliver instruction to half of the class, reducing the student-teacher ratio. Other lesson plans indicated that the parallel strategy would be used for teachers to address learning styles among the groups, such as "Students will choose between reading

a passage and creating character sketches of Romeo and Juliet or acting out a scene with a partner."

Theme 2: Grouping Strategies

Flexible groups were a frequently used grouping strategy within the lesson plans of all content areas. Teachers frequently identified both homogeneous and heterogeneous groupings across all core academic content areas, regardless of the co-teaching model used. Both teacher-led and student-centered groups were identified. Teachers used ability grouping primarily in math classes so that they could be assigned problems on their ability level. Heterogeneous groups composed of multiple ability levels were used in ELA, science, and social studies classes, as well as some math activities, so that students could teach and learn from each other.

Theme 3: Accommodations

Student accommodations among co-taught classes were listed at the bottom of every lesson plan. Notations for testing accommodations from student IEPs included small group (SG), extended time (ET), and read aloud (RA). Other instructional accommodations included "printed/guided notes, extended time, visual cues, graphic organizers, preferential seating, proximity control, and simplified directions." After the first few weeks of school, the list of accommodations per class period stopped being updated. Teachers left the lists the same after pulling the information from student IEPs, either copying and pasting the information into their plans each week or saving the accommodations as a part of their template. No student names were identified in the lesson plans, only generic lists that could be used to help co-teachers inform their instructional and assessment practices.

Outcomes

The problem this study addressed was a lack of consistent instructional delivery of co-teaching practices in a local high school in middle Georgia. The purpose of this study was to gain an understanding of high school teachers' perceptions regarding their skills to plan for and implement co-teaching practices, which can inform administrators and teachers about improvements needed within the co-teaching program. Common themes among participants' interview responses, focus group responses, and lesson plan documents were identified. The major findings of the study identified teachers' perceptions on their skills to collaborate and implement effective co-taught instruction. In order to facilitate the development of co-teaching relationships, participants emphasized the importance of co-planning time, professional development, and administrative support in scheduling and the assignment of co-teaching teams.

Although participants shared positive views of co-teaching practices within their local school system, they felt that they would benefit from professional development involving dedicated training opportunities that they feel are relevant to their positions at the high school. Co-teachers shared their perspectives on challenges unique to co-teaching at the secondary level. The level of rigor of the content, as well as the lack of content knowledge of some special educators, hindered the establishment of co-teachers as equal authorities in the classroom. This inequality impeded instruction and contributed to a lack of compatibility between some co-teaching teams. For these teachers to be more successful, they need appropriate training opportunities. Professional development could lead to increased self-efficacy regarding the consistent implementation of co-teaching instruction and improved student achievement. To

address teachers' professional learning needs, I created a project in the form of a professional development workshop to support the instructional delivery of co-teaching practices at the high school level.

Conclusion

The single case study explored high school teachers' perceptions regarding their skills to plan for and implement co-teaching practices through the collection of data gathered from general and special education teachers. Qualitative data were collected to answer the following research questions: What are teachers' perceptions of co-teaching practices in a rural school in middle Georgia? What are teachers' perceptions of their ability to implement co-teaching practices in a rural high school in middle Georgia? How do high school teachers in a rural school in middle Georgia plan for the instructional delivery of co-teaching practices? The sample of participants included nine general education teachers and special education teachers who co-teach within core academic classes in order to reach saturation. The data were collected through semistructured interviews, a focus group interview, and document analysis.

The results of the completed study were used to develop a project to influence positive social change within the local setting by improving co-teaching practices to better support students with disabilities. Improvement in co-teaching methods will provide students with equitable instructional opportunities, increasing their achievement and self-efficacy. The details of this project will be described in Section 3.

Section 3: The Project

Introduction

In this study, I focused on the perceptions of high school co-teachers regarding their skills to plan for and implement co-teaching practices. The study's findings suggested a need for professional development training for general and special education teachers who deliver co-teaching services at the secondary level. During the data analysis process, I discovered key areas of focus concerning teachers' experiences that could be used to help them establish stronger co-teaching relationships. There is a lack of dedicated training for high school co-teaching partners. Teacher interviews revealed that teachers are dissatisfied with their current professional learning opportunities and want more training on co-teaching strategies. They stressed the need for more time to co-plan with their partners and greater administrative support involving co-teaching assignments and leadership of the program. Through this project study, I sought to incorporate these areas into a professional development project that delivers an opportunity for high school co-teachers to strengthen their knowledge in research-based practices and develop the skills needed to accelerate student achievement within inclusive classrooms.

Description and Goals of the Project

The project for my doctoral study is a professional learning program for general and special education co-teachers in grades 9-12. I will also invite administrators, such as the school principal, assistant principals, and special education director, to attend the training. This training consists of a 3-day workshop dedicated to high school co-teaching strategies in the academic content areas of English, math, science, and social studies. Co-teachers at the high school level face many unique challenges, such as the difficulty of

the subject matter and inequality among co-teaching teams. The goals of this professional learning workshop will emphasize training teachers in co-teaching models, co-teaching strategies, and collaboration. The project will focus on multiple ways to use effective instructional strategies across the curriculum. Teachers will learn how to differentiate by content, process, product, and tiered instruction to address and accommodate the needs of diverse learners.

Rationale

Project Genre Rationale

Through this study, I sought to obtain teachers' perceptions regarding their skills to implement co-teaching practices in order to address the problem of a lack of consistent instructional delivery of co-teaching practices within the local setting. The analysis of the data indicated several key areas for improvement to develop a co-teaching program with a foundation in effective, research-based practices. These areas include: (a) the need for improved collaboration among co-teaching teams, (b) the implementation of specialized instructional strategies to meet the needs of students with disabilities, (c) the differentiation of instruction for tiered ability levels, and (d) on-going professional learning opportunities. Because these areas of improvement relate to the betterment of practices between co-teaching partners, I selected the project genre of a training curriculum for professional development to address the problem of the study. The project will target general and special education co-teachers who are currently responsible for the direct instruction of students in core academic high school classes. I will invite

administrators to attend to allow for dialogue between administrators and teachers concerning the expectations of co-taught classrooms.

Project Content Rationale

The content of the professional development workshop will assist teachers in improving their self-efficacy regarding the consistent implementation of co-teaching instruction. General and special education co-teachers need a professional development program that addresses the spectrum of co-teaching models and how to apply them in the high school classroom, as well as specific instructional strategies that can be used to support co-taught students. Both teachers and administrators need to understand the foundations of co-teaching and gain exposure to new ideas relevant to teaching high school aged students. This professional learning opportunity will provide current co-teachers with the skills and resources they need to establish positive co-teaching relationships, incorporate new learning strategies, and adapt to joint instructional roles in their classrooms.

Review of the Literature

The literature review includes an analysis of scholarly, peer-reviewed journal articles published within the last 5 years. These publications relate to both the genre and content of the professional development project, as well as the research findings from Section 2. The search engines used to obtain research articles included the ERIC, Education Research Complete, and Academic Search Complete databases that I accessed through the Walden University Library. I conducted the searches using keywords and phrases, such as *co-teaching*, *co-teaching relationships*, *teacher collaboration*, *co-*

planning strategies, instructional strategies, project-based learning, personalized learning, differentiation of instruction, differentiation and technology, and professional development for co-teachers.

The literature review is divided into five subsections that I derived from the project study findings. These include conceptual project alignment and the workshop content areas of teacher collaboration, instructional strategies, differentiation of instruction, and faculty professional development. The analysis of the literature will provide an overview of current trends regarding collaborative teaching, engaging teaching methods, and professional learning opportunities for co-teaching teams.

Conceptual Project Alignment

Both theory and research must align to support the content of the professional development project. Because the target audience of the workshop consists of high school co-teaching teams, two frameworks from the literature emerged to support the project. These theories include Bandura's (1977) theory of self-efficacy and Knowles's (1980) adult learning theory of andragogy. The conceptual frameworks, described below, align with the project genre and content because they provide insight into co-teaching relationships and offer a means of addressing the needs of adult learners participating in professional development activities.

Self-efficacy. Bandura's (1977) theory of self-efficacy refers to the idea that an individual's beliefs determine and influence his or her behavior. This theory can be applied to co-teaching to provide insight into the self-efficacy of general and special education co-teachers on their abilities to deliver consistent co-teaching instruction. The self-efficacy of teachers and the extent to which they believe they can positively

influence the learning and behavior of students are significantly related to student achievement (Ashton, 1984, Bandura, 1997). Professional development can increase the self-efficacy of teachers by providing a platform for collaborative inquiry and increasing teacher confidence in pedagogical skills (Bruce & Flynn, 2013).

Andragogy. Knowles's (1980) adult learning theory of andragogy is another framework that has direct implications for the development of a professional learning workshop for high school co-teachers. His theory assumes that adults have a diverse range of experiences and abilities, a readiness to learn tasks that are beneficial in solving real-world problems, and intrinsic motivation for self-improvement (Knowles, 1980). Because the target audience of the project consists of adult learners who need to understand the relevancy of the topic, I designed activities to equip participants with skills to benefit them immediately in the classroom. Experiential learning activities that are task-oriented will engage the participants and provide them with a context of learning to transform their practices (Vrchota, 2015; West, 2013).

Teacher Collaboration

The ability of co-teachers to collaborate effectively is critical to the success of the co-teaching relationship (Tzivnikou, 2015). Teachers should collaborate on an on-going basis both to improve their instructional practices and to develop practical lesson and unit plans to address the needs of the students in their shared classrooms (Shaffer & Thomas-Brown, 2013). By collaborating with team members and other professionals, co-teachers can engage in self-reflection on their co-teaching styles, as well as learn from the styles and experiences of their partners (Chanmugam & Gerlach, 2013).

Brinkman and Twiford (2012) conducted a qualitative study seeking to identify the perceived skills sets needed for successful collaboration among general and special education co-teachers. Their analysis of the focus group interview data indicated that both groups of teachers prioritized communication as the most necessary skill for collaboration. Special education teachers reported self-advocacy as the second most needed skill, possibly because the role of the special educator is often minimized in co-taught classes (Petrick, 2014; Pugach & Winn, 2011; Solis et al., 2012). Their general education counterparts identified interpersonal skills and differentiation as equally important. When co-teachers collaborate, the knowledge and expertise of both general and special education teachers must be applied for effective planning (Ahmed-Hersi, Horan, & Lewis, 2016).

Co-teachers need regularly scheduled meetings to ensure that collaboration takes place (Charles & Dickens, 2012; Conderman, 2011; Forbes & Billet, 2012). Lindeman and Magiera (2014) asserted that "Successful collaboration requires explicit expectations for all students in the inclusive classroom, including the student with a disability" (p. 42). To identify those expectations, the team should hold weekly meetings to discuss the needs of the students and tailor instructional activities to accommodate their learning differences. Murawski (2012) recommended that a minimum of 20 minutes per week should be spent co-planning, preferably at a regularly scheduled time in an environment without distractions. Teachers within the local setting expressed a need for more time for co-planning because many of their schedules do not allow for common planning periods. Due to these logistical challenges, Ploessl and Rock (2014) stressed that professional development in co-teaching should include training on how to use planning time

effectively and efficiently. Solutions to co-planning challenges and alternatives to face-to-face meetings will be included in the project curriculum because collaboration is necessary to increasing co-teaching effectiveness, according to Tzivinikou (2015).

Instructional Strategies

Co-teaching provides the opportunity for two teachers to work together to implement specialized instructional strategies in the classroom to improve students' critical thinking skills, increase communication, and teach college and career readiness skills. Research suggests that one current trend regarding effective instructional strategies is the integration of technology into learning activities (West & Borup, 2014). New instructional strategies regarding the integration of technology will be presented during the professional development workshop. The incorporation of technology in instructional activities assists teachers in distributing learning materials, providing individualized instruction, and connecting with students to enhance the learning process.

Lumpkin, Achen, and Dodd (2015) analyzed students' perceptions on a variety of technology tools and found that they had positive feelings toward learning management systems, PowerPoint presentations, blogs, video clips, and classroom response systems. While some participants were currently using technology for multimedia presentations, more strategies will be presented on learning management and student response systems that can be used to enhance co-teaching. The creative use of technology tools motivates students to learn by providing them with the means to share ideas and propose solutions to real-world problems (Powell, Cleveland, Thompson, & Forde, 2012). Teachers within the local setting support the use of technology in lessons, but they have limited technological tools available to them due to budgeting constraints. The professional

development workshop will contain content on new programs and tools that can be used to support the delivery of co-taught instruction at no cost to the district.

Another trend in instructional methods focuses on project-based learning (PBL), a student-centered approach where learners explore a problem and attempt to generate solutions (Leh, 2014). In PBL, teachers serve as facilitators, rather than transmitters of knowledge. Teachers assist students in developing higher-order thinking skills as they investigate driving questions, acquire knowledge, and develop products (Lee, 2015). PBL provides an opportunity for co-teachers to share the workload equitably because the development of lessons involves knowledge of the curriculum and an understanding of strategies that support the learning process. They should collaborate on the project, assist in locating and developing resources, share responsibilities during the implementation phase, and work as a team to facilitate student learning (Kodkanon & Pinit, 2013). Teachers who participate in the professional learning workshop will have the opportunity to work with their co-teaching partners to develop projects that are appropriate to their content areas.

Personalized learning is an instructional strategy that is becoming increasingly popular in schools because it is student-centered. Providing students with a choice in their curricular materials and learning environments both supports their needs and gives them an additional sense of agency over the learning process (Waldrup et al., 2014). By utilizing personalized learning methods, teachers can consider the cognitive styles of students, as well as account for their prior knowledge. This allows teachers to accommodate for their students' learning differences (Chen, Huang, Shih, & Chang, 2016). Abawi (2015) advocated for the use of personalized learning because it provides

students with a sense of empowerment over their learning progress. She added that teachers of inclusive classrooms should help students set academic targets and build their self-confidence. Personalized learning provides an opportunity for special education teachers to get involved in instruction by monitoring individualized learning targets and modeling learning for the class by using think-aloud strategies (Abawi, 2015).

Differentiation of Instruction

Instructional planning is an important part of the co-teaching process. A special education teacher's primary area of expertise involves the adaptation of classroom learning materials and instructional activities in consideration of the needs of the students. Because a classroom consists of students with diverse learning styles, abilities, interests, cultures, and economic situations, teachers must consider the intent of their lessons and creatively plan to accommodate the needs of each student. Differentiated instruction is the process through which teachers adapt the learning activities and assessments to support the growth of each student (Darrow, 2015).

Taylor (2015) elucidated that teachers can differentiate their lessons in six ways: content, process, product, below target, on target, and above target. Content involves curricular materials and learning resources, as well as levels of complexity. For example, teachers can utilize different reading materials for students at different levels of readiness. Differentiating the process involves the learning activities themselves. Teachers can adjust the instructional processes to incorporate different learning styles and interests. They can also provide multiple opportunities for student response, such as through response cards or comprehension self-checks (Nagro, Hooks, Fraser, & Cornelius, 2016). The products, or outcomes, of a lesson provide students with a way to

demonstrate mastery of the learning objectives. Teachers can adapt the products based on the abilities of the group and provide students with a choice of how to illustrate their learning (Taylor, 2015). To differentiate based on learning targets, teachers must use pre-assessments to identify the performance levels of their students (Rayfield, Kroom, Stair, & Murray, 2011). Strategies that vary the content, process, and product have been found to increase student achievement because they provide multiple avenues for students to master the learning objectives in a way that is meaningful for them (Bal, 2016).

Teachers can also use technology as another means of differentiating instruction. For example, assistive technology, such as screen readers and text-to-speech software, can be used to enhance the functioning of students with visual impairments and reading disabilities (Kraglund-Gauthier, Young, & Kell, 2014). Technology can also be used to vary the content of a lesson to increase student engagement. Students need to be cognitively and emotionally engaged in their learning in order to access the curriculum effectively (Rappolt-Schlichtmann et al., 2013). Providing them with multiple means of engagement and expression allows teachers to tailor instruction towards their needs and interests, providing different paths to the same learning outcomes (Hartmann & Weismer, 2016).

In order to optimize learning, Maich and Hall (2016) recommended the use of hand-held devices, such as iPads or android tablets and smartphones, as a student research platform because of the ease in differentiating for individual students. Through the use of devices, teachers are able to provide more personalized learning options for students by sharing resources, apps, and individualized learning materials (Huang, Liang, Su, & Chen, 2012). Devices also allow students to view animations, which can help

them gain meaning of abstract content by making it more concrete with visualizations (Altıparmak, 2014). The use of multimedia technology can address multiple learning styles and provide adaptable content for students, ensuring equal access to information through universal design for learning (Shepherd & Alpert, 2015). By being flexible in the delivery of content, teachers can compensate for or bypass disabilities and learning challenges to allow students to access instruction and improve their performance (Edyburn, 2013). Through this project, teachers will learn about technology tools that can be integrated into the delivery of co-taught instruction, such as learning management systems, apps, and extensions to differentiate instruction based upon student needs.

Faculty Professional Development

Faculty members engaged in the delivery of co-teaching services require ongoing, job-embedded professional development (Strieker, Logan, & Kuhel, 2012). A higher number of in-service learning opportunities is associated with higher teacher satisfaction, positive attitudes, and confidence in co-teaching roles (Pancsofar & Petroff, 2013). All teachers need professional learning to continue to enhance their teaching methods and to meet the unique needs of the students in their classrooms. Professional development allows teachers to develop their skills and is the most effective way to improve teaching and learning because it provides teachers with the support they need to enact change (Holm & Kajander, 2015).

Shaffer and Thomas-Brown (2013) asserted that co-teaching professional development has a dual purpose, which involves increasing the content knowledge of special education teachers and the pedagogical skills of general educators. Friend (2014) affirmed that professional development on co-teaching should include the models of co-

teaching, developing lesson plans, creating assessments, defining roles and responsibilities, and establishing parity among team members. By attending and participating in professional learning activities together, co-teaching teams can reflect upon their practices with their partners and develop a shared vision of co-teaching success (Fluijt, Bakker, & Struyf, 2016).

Co-teachers also need additional learning opportunities in the area of differentiated instruction. Dixon, Yssel, McConnell, and Hardin (2014) asserted that differentiation requires significant practice and guidance by a trained facilitator. Because teachers must ultimately take charge of adaptations in the classroom, they must have a thorough understanding of the characteristics of learning and how to apply them to differentiating lessons. Professional development should allow teachers the opportunity to practice these skills with the guidance of the facilitator. Hands-on learning opportunities during professional development workshops allow teachers to practice designing instructional modifications while developing foundational skills that increase their self-efficacy. Watts-Taff et al. (2012) highlighted the need for facilitators of professional development to be well-versed in literacy strategies when supporting teachers in learning about differentiation because much instruction revolves around accessing texts and reading materials.

Project Description

I designed the co-teaching professional development project for new and current high school co-teachers of core academic subjects. School administrators will also be invited to attend the workshop. The project is a 3-day training program that will explore how to establish successful co-teaching relationships, utilize innovative instructional

strategies, and implement research-based co-teaching models in inclusive high school classrooms. This professional development workshop includes training materials and resources, a timeline of activities, and an evaluation plan. These materials are located in Appendix A.

Potential Resources and Existing Supports

Resources required to implement the professional development workshop for high school co-teachers include a comfortable meeting place for faculty participants, internet access, laptop computers, a projector, and training materials. The existing supports for the project implementation would come from a local high school in middle Georgia, which would secure the meeting venue and provide access to needed technology devices and equipment. A school administrator would designate time for the training, identify the co-teaching teams that should participate in the project, and arrange classroom coverage for teachers attending the workshop. I would provide an outline of the training to faculty members and share copies of all training materials and activities.

Potential Barriers

Allocating time for the workshop is a significant barrier to the implementation of the training. If the workshop takes place during the school day, class coverage would have to be arranged for participating teachers. Three consecutive days of dedicated professional development is costly to the school, which has to provide substitute teachers, as well as to teachers, who would lose instructional time with their students. Ideally, the workshop could take place during non-instructional days already dedicated to professional learning. If that is not possible, the workshop could be divided into sessions that take place one day per month, which provides more flexibility to the local school.

Other options, such as virtual training, could also be considered in order to provide training opportunities to teachers while lessening the effect of lost instructional time.

Proposal for Implementation and Timetable

The professional development workshop includes timetables with hour-by-hour details for three full days of training. As the facilitator of the workshop, I will coordinate with school administrators to set dates, times, and a location for the trainings and to identify participating co-teaching teams. I will prepare to deliver the workshop, taking the size and specialties of my audience into consideration. I will then email them the goals and objectives of the workshop, as well as the full agendas for each day of training. In the following section, I will discuss the daily breakdown of the project.

Day one agenda. The first day of the training will begin by making introductions between the facilitator and the participating faculty members and identifying the goals and objectives of the workshop. As the facilitator of the workshop, I will explain the following goals of the training:

- Improve the classroom experiences of high school co-teachers
- Enhance collaboration among co-teaching teams
- Assist teachers in understanding the best practices of co-teaching
- Equip teachers with new ideas for implementing co-teaching models

After this discussion, teachers will participate in an ice breaker activity to assist them in feeling comfortable in talking with each other and to prepare them for interaction within the group. Teachers will then discuss how to build co-teaching partnerships and strengthen relationships between general and special education teachers. Teachers will

learn about the roles and responsibilities of general and special education co-teachers and how to develop their team. After a quick break, teachers will participate in a self-assessment activity to allow them to evaluate their contributions to their teams. This can help them identify their personal characteristics that could help or hinder their team's development. The assessment will raise awareness of teachers' strengths and opportunities for growth in building and maintaining co-teaching partnerships by having teachers identify their strengths and liabilities within co-teaching relationships. They will learn how to take advantage of what each team member contributes and reflect on their partnerships.

After lunch, the group will receive instruction on the elements of effective collaboration in order to learn how co-teachers should collaborate and interact in the classroom and to share their experiences with co-planning. Because teachers may or may not have common planning periods, they will be able to discuss the strategies they have used to co-plan, as well as learn about recommendations for co-planning to maximize their use of time. Participants will be paired with their co-teaching partners in order to complete a self-assessment of their team's progress. Some partnerships may be new, while others are well established. Co-teaching teams will discuss their perceptions with their partners, allowing teams to work cooperatively to identify the contributions of each team member. After exploring Friend's (2012) co-planning protocol, the group will brainstorm the topics that they believe are the most essential for the effective collaboration of their teams. Before dismissing for the day, participants will answer questions for a brief formative assessment on the results of the first day of training and

what I can improve during the subsequent days. An outline of the day's agenda is included in Table 3.

Table 3

Day One Agenda

Timeline	Topic
8:00 am - 8:50 am	Introductions, Goals and Objectives, Breakfast
9:00 am - 9:20 am	Ice Breaker Activity
9:20 am - 10:20 am	Building the Partnership
10:20 am - 10:30 am	Break
10:30 am - 11:00 am	Self-Assessment Activity
11:30 am - 12:30 pm	Lunch
12:30 pm - 1:00 pm	Elements of Collaboration
1:00 pm - 2:00 pm	Assess your Team, Think/Pair/Share
2:00 pm - 3:00 pm	Discussion Topics for Collaboration
3:00 pm - 3:30 pm	Wrap-up, Formative Assessment, and Dismissal

Note. The timelines may shift based on discussions during the actual training.

Day two agenda. The second day of the training focuses on the implementation of co-teaching models and the incorporation of specialized instructional strategies into classroom activities. After recapping the highlights of the material learned the previous day, the group will receive instruction on co-teaching models, watching several video clips that demonstrate the models in action. They will have an opportunity to discuss their successes and challenges with implementing the models at the high school level. The group will then discuss their experiences with grouping strategies and learn how to purposefully group students for different instructional activities. Each co-teaching team will be assigned a grouping strategy. They will collaborate with a partner on how to implement the strategy in a lesson in their content area. After lunch, participants will

examine different scenarios in which they can apply grouping and instructional strategies, sharing their chosen techniques with the whole group.

Because special and general education teachers have different roles in the classroom, the next part of the session will address strategies for differentiation, providing the opportunity for both teachers to have an equal voice in planning lessons for their classrooms. Teachers will first receive instruction on differentiation through content, process, and product. The group will then discuss different strategies for adapting curricular, instructional, and environmental activities for high school students in different content areas. These strategies serve the dual purpose of increasing the success of students with varying levels of readiness, as well as providing a means for special education teachers to take an active role in planning, instruction, and assessment. In order to provide time for planning, teachers will participate in an experiential learning activity with their co-teaching team members in order to develop lesson plans for their own classes. These plans must include co-teaching models, flexible grouping strategies, and differentiated instructional strategies. At the end of the day, participants will wrap-up discussions, answer questions for another brief formative assessment, and dismiss for the day. An outline of the day's agenda is included in Table 4.

Table 4

Day Two Agenda

Timeline	Topic
8:00 am - 9:00 am	Review, Goals and Objectives, Breakfast
9:00 am - 9:50 am	Co-teaching Models
9:50 am - 10:00 am	Break
10:00 am - 10:30 am	Using Grouping Strategies
10:30 am - 11:00 am	Differentiation in the Co-taught Classroom
11:00 am - 12:00 pm	Lunch
12:00 pm - 12:30 pm	Adaptations for Student Success
12:30 pm - 3:00 pm	Experiential Learning
3:00 pm - 3:30 pm	Wrap-up, Formative Assessment, and Dismissal

Note. The timelines may shift based on discussions during the actual training.

Day three agenda. The final day of the training emphasizes specific teaching methods that teachers can use in English, mathematics, science, and social studies classes at the high school level. After recapping the events of the previous day, teachers will have the opportunity to share the lesson plans they created on day two and engage in discussion about how the strategies could be applied to different content areas. Teachers will work with their co-teaching partners to practice applying the strategies they have been taught by developing products for their students and sharing with the group. This session is both relevant and practical for adult learners because they can engage in collaboration on real teaching activities.

After lunch, participants will be taught how to consider the options for student participation in their lessons, accounting for students with ranging ability levels. For example, a student with a learning disability in math problem solving may need accommodations in algebra class, while a general education student with strengths in math may need enrichment. Teachers will be instructed that participation can be the

same, adapted, supplemented, or multi-level, depending on the needs of the student. Finally, the group will learn strategies to enhance their co-teaching skills, such as incorporating technology during the planning and instructional process and will identify the professional development needs that they anticipate they would need in the future. Identifying topics of interest for on-going opportunities for professional development can help to maintain momentum as they return to the classroom and implement strategies they learned during the workshop.

For the closing event of the third day of training, I will summarize objectives of the workshop by asking the following questions:

1. What have you learned about co-teaching overall?
2. How can you and your co-teaching partner collaborate effectively in the future?
3. What instructional strategy do you think will be most beneficial to your classroom?
4. Do you have any final thoughts or questions?

Teachers will then have the opportunity to complete confidential summative evaluation forms to evaluate the co-teaching training workshop so that changes can be made to improve its future implementations. An outline of the day's agenda is included in Table 5.

Table 5

Day Three Agenda

Timeline	Topic
8:00 am - 9:00 am	Review, Goals and Objectives, Breakfast
9:00 am - 9:50 am	Share Your Lesson Plans
9:50 am - 10:00 am	Break
10:00 am - 10:30 am	Effective Instructional Strategies
10:30 am - 11:00 am	Lunch
11:00 am - 12:00 pm	Student Participation Options
12:00 pm - 12:30 pm	How to Move to the Next Level
12:30 pm - 3:00 pm	Future Professional Development Needs
3:00 pm - 3:30 pm	Wrap-up, Summative Evaluation, and Dismissal

Note. The timelines may shift based on discussions during the actual training.

Roles and Responsibilities of Student and Others

I will serve as the facilitator of the workshop during its implementation, which will allow me to engage directly with faculty members and tailor the training to meet their unique needs. Professional learning days have been designated by the district, with available dates beginning in January 2018 after teachers return from winter break. By holding the training at the beginning of the second semester, all co-teaching teams will have participated in at a least one semester of co-teaching. The roles and responsibilities of teachers participating in the workshop are to attend the training with an open mind, engage in hands-on activities, and share both their successful and unsuccessful co-teaching experiences with others in the group. Teachers and administrators will have the responsibility to commit to implementing the strategies learned during the workshop to improve the consistent implementation of co-teaching practices and increase student achievement.

Project Evaluation Plan

Type of Evaluation

Both formative and summative assessments will be used to evaluate the success of the project by allowing participants to assess their learning and provide constructive criticism. While the workshop is in progress during the first and second days of training, participants will be given a 3x5 index card on which to write their thoughts. On one side, they will answer the formative assessment questions, and on the other, they will write down any questions they may have that I can address during the next training day. I will pose the following formative assessment questions to teachers:

1. What is one new idea you have that you can use when implementing co-teaching models?
2. How can you use what you learned today when collaborating with your co-teacher?
3. Which parts of the workshop could be changed to support the improvement of the experiences of high school co-teachers?

At the end of day three, participants will be invited to participate in a summative assessment, evaluating the workshop as a whole. I will provide them with a professional development evaluation form, located with the project in Appendix A. Several Likert scale questions will ask teachers to reflect upon their understanding of the implementation of co-teaching practices. Open-ended questions will allow them the opportunity to provide their thoughts on the effectiveness of the professional development workshop.

Justification for Evaluation

Workshop participants should be able to provide feedback on the content and overall quality of training sessions to the facilitator (Dagenais, Dargis-Damphousse, & Dutil, 2011). This information can be used to gauge the effectiveness of the program and to determine improvements that I can make before future training sessions. I selected both formative and summative assessments so that I could make changes and provide clarification to participants during the training days, as well as obtain their opinions on the workshop overall.

Using open-ended questions provides participants with opportunities to share their thoughts about different aspects of the training and to ask questions about the workshop content (Alsofyani, Aris, & Eynon, 2013). The daily formative assessment of the effectiveness of the workshop offers multiple chances for teachers to convey their opinions, which will allow me time to adjust the training to meet their needs. This feedback can help me further refine the workshop curriculum, materials, and activities.

Outcomes of the Project

At the conclusion of the workshop on day three, participants will provide a final summative assessment of the workshop activities. After completing the professional development workshop, co-teachers may be better prepared to (a) build and maintain co-teaching relationships, (b) collaborate with colleagues, (c) implement instructional strategies in co-taught classrooms, and (d) understand the best practices of co-teaching at the high school level. They will have participated in training on the six models of co-teaching, developing lesson plans, defining roles and responsibilities, and establishing

parity among team members. This information will be useful for key stakeholders involved in the improvement of the local co-teaching program, including high school administrators, the special education director, general and special education teachers, and ultimately the students in inclusive classrooms.

Project Implications

Social Change

This project has the potential to benefit high school co-teachers and the students they serve. By equipping teachers with the skills they need to co-teach effectively, they can improve their skills to collaborate with colleagues to support the needs of all students, as well as contribute to a culture of inclusion within their school. Students with disabilities who receive co-teaching services through their IEPs are a vulnerable population. For students to participate with their peers in regular education classes, they need the support of both the general and special education teachers. Successful co-teaching provides students with the opportunity to receive equitable educational opportunities, despite their learning challenges. Co-teaching supports positive social change by increasing the confidence and self-efficacy of students with disabilities and embracing diversity in the classroom, school, and community.

Local Stakeholders

Local stakeholders, including teachers, administrators, parents, and students could benefit from the project through the improvement of the local co-teaching program. General and special education co-teachers will be better equipped to collaborate with each other and to implement instructional strategies to benefit the students in their classrooms. Teachers will understand how to capitalize on the strengths of their

specialties and contribute to the success of their co-teaching relationships. By improving co-teaching practices, students will gain access to equitable learning opportunities that will allow them to master the content standards while benefitting from the social development they gain from participating with peers. Successful collaboration between general and special educators both improves their practices and raises student achievement.

Larger Context

By adding to the current body of knowledge surrounding professional development, this project has the potential to reach beyond the local setting of a rural high school in middle Georgia. The improvement of co-teaching ultimately benefits the students with disabilities who receive co-teaching services. By providing them with support to help them succeed in the general education environment, co-teachers can help these students participate with their peers instead of being isolated in special education classrooms. They benefit from increased social and academic development, resulting in exposure to more rigorous learning activities and social opportunities. These students then graduate and move into the adult world, confident in the fact that, though they may have learning differences, they are capable of overcoming challenges and enjoying their future successes.

Conclusion

Section 3 outlined the project I developed for high school co-teachers of core academic subjects. The project consists of a 3-day professional development workshop that I derived from the qualitative data analysis in Section 2 and a review of research-based practices. A copy of the training materials is located in Appendix A. In this

section, I discussed a rationale for the project genre, conducted a literature review, described the implementation and evaluation plans for the project, and identified potential implications for social change. In Section 4, I will discuss my reflections and conclusions regarding the completed project study.

Section 4: Reflections and Conclusions

Introduction

The purpose of this study was to gain an understanding of high school teachers' perceptions regarding their skills to implement co-teaching practices. The resulting co-teaching professional development project incorporated many ideas to improve co-teachers' skills to collaborate and deliver joint instruction in their shared classrooms. In the following section, I will discuss the strengths and limitations of the deliverable project, as well as make recommendations for alternative approaches. I will also reflect on research processes and my personal growth as a scholar, practitioner, and project developer. Finally, I will discuss recommendations for practice and future research.

Project Strengths and Limitations

Strengths

This project can enhance the co-teaching practices of high school teachers, taking into consideration the unique challenges they face at the secondary level. The professional development workshop can equip teachers with a solid understanding of the foundational co-teaching models, as well as provide practical tips for applying the models to different subject areas. General education participants have the opportunity to learn more about instructional strategies, while special educators can receive ideas on how to contribute to their partnership and step into an active role during classroom instruction (Brinkman & Twiford, 2012; Johnson & Brumback, 2013). This project will support teachers and, by extension, students receiving co-teaching services.

Limitations

Many reasons exist for the lack of success of high school co-teaching teams. A limitation of the project is that some factors are beyond the control of the local school system, administrators, or classroom teachers. While the workshop provides professional development to co-teachers to assist them in co-planning and co-instruction, organizational challenges may prevent them from maximizing their potential as a team. A lack of time, difficulties with scheduling, and personality conflicts may inhibit their success, no matter how much they invest in professional development (Nierengarten, 2013). Teachers lack control of outside influences but must work within the constraints to co-teach effectively.

Recommendations for Alternative Approaches

The problem described in Section 1 focused on a lack of consistent instructional delivery of co-teaching practices at the secondary level. I could have addressed the local problem of the study in many ways, depending upon how I chose to frame the problem. For example, an alternate definition of the problem could have been a lack of teachers volunteering for co-teaching positions, which could have a negative effect on teachers' efficacy when being required to teach classes for which they did not volunteer. An alternate way to address the problem could have been to change the design of the study. Instead of choosing a qualitative case study to examine the perceptions of the participants, an alternate approach could be to use quantitative, quasi-experimental design to determine the effectiveness of specific co-teaching practices on student achievement. In this scenario, one class would serve as the control group, whereas the other could be assigned the parallel teaching model. I would then be able to determine if there was a

significant difference between the performances of students in each classroom. This approach would provide additional insight into the practices of the local co-teaching program and determine if a particular strategy was successful on a quantifiable level.

Alternatively, I could have used a mixed methods design to incorporate a survey of the participants, in addition to qualitative data collection. Conducting a survey or distributing a questionnaire could have allowed for a larger sample size and more generalizable results. In contrast, a program evaluation could have provided a more holistic view of the overall program, providing a larger context to understand the problem beyond the level of classroom teachers.

Scholarship, Project Development, and Leadership and Change

Scholarship

Throughout the research process, I grew as a scholar. In my 5 years of study at Walden University, I learned to navigate the challenges of scholarly research to complete both my coursework and culminating doctoral project, overcoming setbacks along the way. As time passed, I grew more confident in my ability to understand the different methodologies available to me when engaging in research, as well as in my ability to identify and align the problem, research questions, and design elements. I gained an appreciation for the processes and procedures that guided me along this journey, as well as the mental, physical, and emotional discipline required for doctoral research.

As an educator, I am a proponent of life-long learning; I have a drive to seek out new information to help me learn and grow as a teacher, leader, and person. I am keen to take advantage of databases of scholarly, peer-reviewed journal articles and primary sources that are available to me. The research process has inspired me to take an interest

in educational theory and to understand the different frameworks that can be used to inform my work. The influence of theory on classroom practices has become more meaningful to me, and I am committed to honing my scholarly research skills to address and solve future educational problems.

Project Development

I reviewed the findings of the study and carefully examined the data provided by teachers to discover the practices that they truly believed to be effective in their classrooms. They provided me with a wealth of information on the challenges they faced as co-teachers at the secondary level, as well as offered strategies they have successfully implemented with co-taught students. Guided by these findings and a review of research-based practices, I designed a 3-day professional development workshop to address the needs of high school co-teachers. The workshop focuses on improving collaboration among general and special education teachers and supporting the implementation of instructional strategies in order to address the lack of consistent instructional delivery of co-teaching practices.

My experiences as a co-teacher enhanced my ability to develop a workshop that would be meaningful for new and current educators. Familiarity with the subject helped me to select activities purposefully, choosing those that I believed would be most beneficial to participants based on the research. Having to account for formative and summative evaluations helped me to maximize the opportunities for teacher feedback, which would allow me to determine if the workshop's goals were met and to continue to refine the workshop content and activities. The experience I gained through the

development of the project will assist me in designing and facilitating future professional learning activities.

Leadership and Change

During the process of completing my project study, I learned more about what it takes to be an effective leader and to inspire change within an organization. In my professional life, I took on the role of the chair of the special education department within my school, and I became an active participant of the building leadership team. I also served on several system-level committees, and I earned a reputation as a strong teacher leader throughout my district. The doctoral study process helped me to develop my leadership capabilities by causing me to think critically about change and how to engage stakeholders in the process. I now feel better equipped to recognize problems, conduct scholarly research, and devise solutions that align with both theory and research.

Scholar. I became more systematic and methodical with research while on my doctoral journey. I scoured databases for current academic journal articles, and I made lists and outlines, highlighting key points that I could incorporate into my final product. Putting forth the initial effort of creating an outline provided me with direction and helped me to stay on task. While I have always considered my analytical skills to be a source of strength, I grew in my ability to stay organized by developing a framework for each section of my study and working in stages.

The main lesson I learned as a scholar involved overcoming procrastination and the associated writer's block. I would list procrastination as one of my worst habits because I have a tendency to put everything off until the last minute. Throughout my bachelor's, master's, and doctoral coursework, I would inevitably write all of my papers

on the day that they were due, which is not a practice I would recommend. To complete the project study, I had to overcome my natural inclination to procrastinate. I used outlining as a way to begin the task of writing, and I usually gained enough momentum to continue writing, section by section. Throughout this scholarly writing process, I learned to be patient with myself and to practice perseverance in pursuit of my goal.

Practitioner. This process has given me more confidence in my abilities as an educational practitioner, and it has encouraged me to continue my professional growth. A former principal shared an analogy with me that likened teachers to speed boats, barges, and rocks. The speed boats are early adopters who want to take risks and engage in innovative practices. The barges are teachers who are much slower at adopting changes, but they are willing to move consistently in the right direction, and the rocks are resisters who protest every step of the way. I have always endeavored to be a speed boat, striving to remain on the cutting edge of education and embracing new technologies and practices that have the potential to make a difference for my students.

Project developer. Choosing a project genre was somewhat difficult for me because I could see how each type of project could be used to address the findings of my study. I was initially drawn to a professional development project because I thought it would address effective co-teaching practices, though I struggled to commit to one genre. My committee chair helped me to consider all of my options and to refine my ideas into a project deliverable that aligned with my purpose. Having some experience in delivering professional development to faculty and staff members helped me to create a project that applies to both the local site and co-teachers in general. I feel confident in my abilities to

design future projects, organize necessary resources, and deliver meaningful professional learning experiences for teachers within my school system.

Reflection on the Importance of the Work

As a special educator, I am a steadfast advocate for students with disabilities, and I have a desire for their inclusion in all areas. Co-teaching provides these students with the support they need to participate in general education classes, gaining social and academic exposure denied to them in resource settings by the nature of the classroom. By listening to the perceptions of high school co-teachers and considering their specific professional development needs, the services for both students with and without disabilities can be improved. Supporting the needs of general and special education teachers increases the diversity of the classroom because it allows for the participation of all students and respects their individual differences. Through the doctoral study process, I learned to appreciate the work of giving teachers a voice and taking action to support them in improving their practices.

Implications, Applications, and Directions for Future Research

This project can benefit teachers beyond the local level by providing an overview of effective co-teaching practices. Many secondary schools at the state and national levels struggle to implement effective co-teaching programs because of the unique challenges they face in teaching upper-level classes (Nierengarten, 2013). Further applications of the project could involve implementing the training in districts in other geographic areas. Additional targeted professional development could be provided to specific co-teaching teams to analyze their specific stages of development as they evolve in their co-teaching relationships.

Teachers and leaders in local school systems need to engage in continuous research into the practices that sustain co-teaching programs and influence student achievement. In this project study, I specifically addressed the perceptions of high school co-teachers. Future research opportunities could involve gaining empirical evidence of the effects of co-teaching practices. Quantitative data involving student test scores could provide insight into whether or not certain co-teaching practices are worthwhile endeavors in meeting state accountability targets. Changes in graduation rates may also provide verification of the success of co-teaching programs, illustrated by decreasing drop-out rates of students with disabilities.

Potential Impact for Social Change

Through the completion of the project study, I have learned that co-teaching can positively affect individual classrooms, schools, districts, and communities. Co-teachers help to bring students with disabilities out of segregated special education classrooms and provide equitable learning opportunities for all students. By providing professional development to co-teaching teams and equipping teachers with the skills they need to co-teach effectively, they are better able to serve the students in their classrooms. Students with disabilities will then have increased opportunities to participate with their peers, and they can gain confidence as learners. They will have access to more rigorous instruction in the general education environment, which will increase their college and career readiness. As they graduate and transition into post-secondary opportunities, they will be better prepared to seek higher education and increase their earning potential, contributing to a shift in the community's economy. Because these students with disabilities received support in high school classrooms, they will be better prepared to participate in society as

adults. The confidence of their teachers in adjusting instructional methods to meet all students' needs directly contributes to the inclusion and future success of their students.

Conclusion

In Section 4, I reflected upon my growth during the doctoral process and analyzed myself as a scholar, practitioner, and project developer. I recommended alternative approaches and identified implications, applications, and directions for future research. During the completion of the project study, I had positive experiences which increased my respect of fellow co-teachers and my appreciation of the collaborative process. I strengthened my beliefs in the beneficial effects of co-teaching and inclusion as a result of the project. By conducting research to investigate the problem and designing a program to address it, I feel that I made a contribution to improve the practices of co-teachers, the effects of which extend far beyond the classroom. Because of my journey through Walden University's doctoral program, I am better equipped as a scholar, teacher, and leader in my field.

References

- Abawi, L. (2015). Inclusion from the gate in: Wrapping students with personalized learning support. *International Journal of Pedagogies & Learning*, 10(1), 47-61.
- Allen, D., Perl, M., Goodson, L., & Sprouse, T. (2014). Changing traditions: Supervision, co-teaching, and lessons learned in a professional development school partnership. *Educational Considerations*, 42(1), 19-29.
- Ahmed-Hersi, A., Horan, D. A., & Lewis, M. A. (2016). Redefining "community" through collaboration and co-teaching: A case study of an ESOL specialist, a literacy specialist, and a fifth-grade teacher. *Teachers and Teaching: Theory And Practice*, 22(8), 927-946.
- Almon, S., & Feng, J. (2012). Co-teaching vs. solo-teaching: Effect on fourth graders' math achievement. *Online Submission*, Retrieved from ERIC database. (ED536927)
- Alsofyani, M., Aris, B., & Eynon, R. (2013). A preliminary evaluation of a short online training workshop for TPAK development. *International Journal of Teaching and Learning in Higher Education*, 25(1), 118-128.
- Altıparmak, K. (2014). Impact of computer animations in cognitive learning: differentiation. *International Journal of Mathematical Education In Science & Technology*, 45(8), 1146-1166.
- Althaus, K. (2015). Job-embedded professional development: Its impact on teacher self-efficacy and student performance. *Teacher Development*, 19(2), 210-225.
- Aron, L., & Loprest, P. (2012). Disability and the education system. *Future of Children*, 22(1), 97-122.

- Austin, V. L. (2001). Teachers' beliefs about co-teaching. *Remedial and Special Education, 22*(4), 245-55.
- Alquraini, T. (2013). An analysis of legal issues relating to the least restrictive environment standards. *Journal of Research in Special Educational Needs, 13*(2), 152-158.
- Ashton, J. R. (2014). Beneath the veneer: Marginalization and exclusion in an inclusive co-teaching context. *International Journal of Whole Schooling, 10*(1), 43-62.
- Ashton, P. (1984). Teacher efficacy: A motivational paradigm for effective teacher education. *Journal of Teacher Education, 35*(5), 28-32.
- Bakken, J. P., & Smith, B. A. (2011). A blueprint for developing culturally proficient/responsive school administrators in special education. *Learning Disabilities: A Contemporary Journal, 9*(1), 33-46.
- Bal, A. (2016). The effect of the differentiated teaching approach in the algebraic learning field on students' academic achievements. *Eurasian Journal of Educational Research, (63)*, 185-204.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 34*(2), 191-215.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist, 44*, 1175-1184.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28*(2), 117-148.
- Bandura, A. (1997). Self-efficacy. *Harvard Mental Health Letter, 13*(9), 4-7.

- Bedir, G. (2015). Perception of teaching efficacy by primary and secondary school teachers. *International Electronic Journal of Elementary Education*, 8(1), 41-54.
- Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods* (5th ed.). Boston, MA: Allyn & Bacon.
- Bradley, M. C., Daley, T., Levin, M., O'Reilly, R., Parsad, A., Robertson, A., & Werner, A. (2011). *IDEA national assessment implementation study (NCEE 2011-4027)*. Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U. S. Department of Education.
- Brinkmann, J., & Twiford, T. (2012). Voices from the field: Skill sets needed for effective collaboration and co-teaching. *International Journal of Educational Leadership Preparation*, 7(3), 1-13.
- Bray, B., & McClaskey, K. (2013). A step-by-step guide to personalized learning. *Learning & Leading with Technology*, 40(7), 12-19.
- Bruce, C. D., & Flynn, T. (2013). Assessing the effects of collaborative professional learning: Efficacy shifts in a three-year mathematics study. *Alberta Journal of Educational Research*, 58(4), 691-709.
- Bryant Davis, K. E., Dieker, L., Pearl, C., & Kirkpatrick, R. (2012). Planning in the middle: Co-planning between general and special education. *Journal of Educational & Psychological Consultation*, 22(3), 208-226.
- Casale-Giannola, D. (2012). Comparing inclusion in the secondary vocational and academic classrooms: Strengths, needs, and recommendations. *American Secondary Education*, 40(2), 26-42.

- Chanmugam, A., & Gerlach, B. (2013). A co-teaching model for developing future educators: Teaching effectiveness. *International Journal of Teaching and Learning in Higher Education*, 25(1), 110-117.
- Charles, K. J., & Dickens, V. (2012). Closing the communication gap: Web 2.0 tools for enhanced planning and collaboration. *Teaching Exceptional Children*, 45(2), 24-32.
- Chen, S. Y., Huang, P., Shih, Y., & Chang, L. (2016). Investigation of multiple human factors in personalized learning. *Interactive Learning Environments*, 24(1), 119-141.
- Cobb, C., & Sharma, M. (2015). I've got you covered: Adventures in social justice-informed co-teaching. *Journal of the Scholarship of Teaching and Learning*, 15(4), 41-57.
- Conderman, G. (2011). Middle school co-teaching: Effective practices and student reflections. *Middle School Journal*, 42(4), 24-31.
- Conderman, G., & Hedin, L. (2012). Purposeful assessment practices for co-teachers. *Teaching Exceptional Children*, 44(4), 18-27.
- Conderman, G., Johnston-Rodriguez, S., Hartman, P., & Kemp, D. (2013). Preparing preservice secondary special educators. *Preventing School Failure*, 57(4), 196-205.
- Cooper, J. L., & Robinson, P. (2014). Using classroom assessment and cognitive scaffolding to enhance the power of small-group learning. *Journal on Excellence in College Teaching*, 25(3/4), 149-161.

- Cramer, E., Liston, A., Nevin, A., & Thousand, J. (2010). Co-teaching in urban secondary school districts to meet the needs of all teachers and learners: Implications for teacher education reform. *International Journal of Whole Schooling*, 6(2), 59-76.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (Laureate custom ed.). Boston, MA: Pearson Education.
- Dagenais, C., Dargis-Damphousse, L., & Dutil, J. (2011). The essential skills series in evaluation: Assessing the validity of the ESS participant workshop evaluation questionnaire. *Canadian Journal of Program Evaluation*, 26(2), 89-100.
- Darrow, A. (2015). Differentiated instruction for students with disabilities: Using DI in the music classroom. *General Music Today*, 28(2), 29-32.
- DeMatthews, D., & Mawhinney, H. (2013). Addressing the inclusion imperative: An urban school district's responses. *Education Policy Analysis Archives*, 21(61), 1-27.
- Dexel, L., Martin, B., Black, L., & Yoshino, A. (2010). Re-thinking group development in adventure programming: A qualitative examination. *Research in Outdoor Education*, 10(1), 74-86.
- Dieker, L., Finnegan, L., Grillo, K., & Garland, D. (2013). Special education in the science classroom. *Science Scope*, 37(4), 18-22.
- Dixon, F., Yssel, N., McConnell, J., & Hardin, T. (2014). Differentiated instruction, professional development, and teacher efficacy. *Journal for the Education of the Gifted*, 37(2), 111-127.

- Edyburn, D. (2013). Critical issues in advancing the special education technology evidence base. *Exceptional Children, 80*(1), 7-24.
- Embury, D., & Kroeger, S. D. (2012). Let's ask the kids: Consumer constructions of co-teaching. *International Journal of Special Education, 27*(2), 102-112.
- Fenty, N., & McDuffie-Landrum, K. (2011). Collaboration through co-teaching. *Kentucky English Bulletin, 60*(2), 21-26.
- Fluijt, D., Bakker, C., & Struyf, E. (2016). Team-reflection: The missing link in co-teaching teams. *European Journal of Special Needs Education, 31*(2), 187-201.
- Flynn, P. (2010). New service delivery models: Connecting SLPs with teachers and curriculum. *ASHA Leader, 15*(10), 22-23.
- Frey, L. M., & Kaff, M. S. (2014). Results of co-teaching instruction to special education teacher candidates in Tanzania. *Journal of the International Association of Special Education, 15*(1), 4-15.
- Forbes, L., & Billet, S. (2012). Successful co-teaching in the science classroom. *Science Scope, 36*(1), 61-64.
- Friend, M. (2012). *Best practices in co-teaching: Practical solutions for difficult and challenging issues*. Bellevue, WA: Bureau of Education and Research.
- Friend, M. (2014). *Co-teach! Building and Sustaining Effective Classroom Partnerships in Inclusive Schools*. Greensboro, NC: Marilyn Friend, Inc.
- 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.

- Fuchs, D., Fuchs, L. S., & Stecker, P. M. (2010). The "blurring" of special education in a new continuum of general education placements and services. *Exceptional Children, 76*(3), 301-323.
- Georgia Department of Education. (2016). *College and Career Ready Performance Index (CCRPI)*. Retrieved November 26, 2016 from:
<http://www.gadoe.org/CCRPI/Pages/default.aspx>
- Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*(4), 569-82.
- Governor's Office of Student Achievement. (2015). *Enrollment by subgroup programs 2015* [Data set]. Retrieved June 9, 2016 from: https://gosa.georgia.gov/sites/gosa.georgia.gov/files/related_files/site_page/Enrollment_by_Subgroups_Programs_2015_Dec_2_2015.csv
- Georgia Learning Resource System. (2014). [Co-teaching project walk-through data]. Unpublished raw data.
- Greer, D. L., & Meyen, E. L. (2009). Special education teacher education: A perspective on content knowledge. *Learning Disabilities Research & Practice, 24*(4), 196-203.
- Gurgur, H., & Uzuner, Y. (2010). A phenomenological analysis of the views on co-teaching applications in the inclusion classroom. *Educational Sciences: Theory and Practice, 10*(1), 311-331.
- Haidet, P., Kubitz, K., & McCormack, W. T. (2014). Analysis of the team-based learning literature: TBL comes of age. *Journal on Excellence in College Teaching, 25*(3/4), 303-333.

- Hamilton-Jones, B., & Vail, C. O. (2013). Preparing special educators for collaboration in the classroom: Pre-service teachers' beliefs and perspectives. *International Journal of Special Education*, 28(1), 56-68.
- Hartmann, E., & Weismer, P. (2016) Technology implementation and curriculum engagement for children and youth who are deafblind. *American Annals of The Deaf*, 161(4), 462-473.
- Hartnett, J., Weed, R., McCoy, A., Theiss, D., & Nickens, N. (2013). Co-teaching: A new partnership during student teaching. *SRATE Journal*, 23(1), 5-12.
- Holm, J., & Kajander, A. (2015). Lessons learned about effective professional development: Two contrasting case studies. *International Journal of Education in Mathematics, Science and Technology*, 3(4), 262-274.
- Holzberger, D., Philipp, A., & Kunter, M. (2014). Predicting teachers' instructional behaviors: The interplay between self-efficacy and intrinsic needs. *Contemporary Educational Psychology*, 39(2), 100-111.
- Huang, Y., Liang, T., Su, Y., & Chen, N. (2012). Empowering personalized learning with an interactive e-book learning system for elementary school students. *Educational Technology Research & Development*, 60(4), 703-722.
- Individuals with Disabilities Education Improvement Act, 20 U.S.C. § 1400 (2004).
- Jahng, N. (2012). An investigation of collaboration processes in an online course: How do small groups develop over time? *International Review of Research in Open & Distance Learning*, 13(4), 1-18.
- Johnson, N., & Brumback, L. (2013). Co-teaching in the science classroom: The one teach/one assist model. *Science Scope*, 36(6), 6-9.

- Kilanowski-Press, L., Foote, C. J., & Rinaldo, V. J. (2010). Inclusion classrooms and teachers: A survey of current practices. *International Journal of Special Education*, 25(3), 43-56.
- Kim, M. (2010). A narrative inquiry of a Korean English teacher's first journey through co-teaching. *English Teaching*, 65(4), 179-207.
- King-Sears, M. E., & Bowman-Kruhm, M. (2011). Specialized reading instruction for adolescents with learning disabilities: What special education co-teachers say. *Learning Disabilities Research & Practice (Wiley-Blackwell)*, 26(3), 172-184.
- Kodkanon, K., & Pichet, P. (2013). Project based learning: A conceptual model of interdisciplinary teams in science-based technology schools. *Review of Higher Education & Self-Learning*, 6(18), 171-183.
- Kraglund-Gauthier, W., Young, D., & Kell, E. (2014). Teaching students with disabilities in post-secondary landscapes: Navigating elements of inclusion, differentiation, universal design for learning, and technology. *Transformative Dialogues: Teaching & Learning Journal*, 7(3), 1-9.
- La Salle, T. P., Roach, A. T., & McGrath, D. (2013). The relationship of IEP quality to curricular access and academic achievement for students with disabilities. *International Journal of Special Education*, 28(1), 135-144.
- Lawter, L. (2013). Countdown to co-teaching: Are you ready? *New Teacher Advocate*, 20(4), 10-11.
- Lee, C. (2015). Project-based learning and invitations: A comparison. *JCT: Journal of Curriculum Theorizing*, 30(3), 63-73.

- Lee, H., & Link, R. (2012). Learning measurement with interactive stations. *Ohio Journal of School Mathematics, 1*(65), 30-39.
- Leh, A. (2014). Using project-based learning and Google docs to support diversity. Paper presented at the International Conferences on Educational Technologies and Sustainability, Technology and Education, New Tapei City, Taiwan.
- Lindeman, K. W., & Magiera, K. (2014). A co-teaching model: Committed professionals, high expectations, and the inclusive classroom. *Odyssey: New Directions in Deaf Education, 1*(15), 40-45.
- Loertscher, D. V. (2014). Collaboration and co-teaching. *Teacher Librarian, 42*(2), 8-19.
- Maich, K., & Hall, C. (2016). Implementing iPads in the inclusive classroom setting. *Intervention in School and Clinic, 51*(3), 145-150.
- Mason-Williams, L. (2015). Unequal opportunities: A profile of the distribution of special education teachers. *Exceptional Children, 81*(2), 247-262.
- McDuffie, K. A., Mastropieri, M. A., & Scruggs, T. E. (2009). Differential effects of peer tutoring in co-taught and non-co-taught classes: Results for content learning and student-teacher interactions. *Exceptional Children, 75*(4), 493-510.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Miltenienė, L., & Venclovaitė, I. (2012). Teacher collaboration in the context of inclusive education. *Special Education, (2)*, 111-123.
- Moin, L. J., Magiera, K., & Zigmond, N. (2009). Instructional activities and group work in the US inclusive high school co-taught science class. *International Journal of Science & Mathematics Education, 7*(4), 677-697.

- Monsen, J., Ewing, D., & Kwoka, M. (2014). Teachers' attitudes towards inclusion, perceived adequacy of support and classroom learning environment. *Learning Environments Research, 17*(1), 113-126.
- Moorehead, T., & Grillo, K. (2013). Celebrating the reality of inclusive STEM education: Co-teaching in science and mathematics. *Teaching Exceptional Children, 45*(4), 50-57.
- Moriña, A., Cortés-Vega, M. D., & Molina, V. M. (2015). Faculty training: an unavoidable requirement for approaching more inclusive university classrooms. *Teaching In Higher Education, 20*(8), 795-806.
- Murawski, W. W. (2012). Ten tips for using co-planning time more efficiently. *TEACHING Exceptional Children, 44*(4), 8-15.
- 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*(4), 267-277.
- Murawski, W. W., & Lochner, W. W. (2011). Observing co-teaching: What to ask for, look for, and listen for. *Intervention in School and Clinic, 46*(3), 174-183.
- Nagro, S., Hooks, S., Fraser, D., & Cornelius, K. (2016). Whole-group response strategies to promote student engagement in inclusive classrooms. *Teaching Exceptional Children, 48*(5), 243-249.
- National Center for Education Statistics. (2012). *Teacher attrition and mobility: Results from the 2012–13 teacher follow-up survey*. Retrieved March 15, 2017 from: <https://nces.ed.gov/pubs2014/2014077.pdf>

- National Center for Education Statistics. (2013). Table 204.70. Number and percentage of children served under Individuals with Disabilities Education Act (IDEA), part B, by age group and state or jurisdiction: Selected years, 1990–91 through 2011–12. In *Digest of Education Statistics, 2013*. Washington, DC: U.S. Department of Education, Institute of Education Sciences. Retrieved October 19, 2014, from http://nces.ed.gov/programs/digest/d13/tables/dt13_204.70.asp
- Nichols, J., Dowdy, A., & Nichols, C. (2010). Co-teaching: An educational promise for children with disabilities or a quick fix to meet the mandates of No Child Left Behind? *Education, 130*(4), 647-651.
- Nichols, S., & Sheffield, A. N. (2014). Is there an elephant in the room? Considerations that administrators tend to forget when facilitating inclusive practices among general and special education teachers. *National Forum of Applied Educational Research Journal, 27*(1/2), 31-44.
- Nierengarten, G. (2013). Supporting co-teaching teams in high schools: Twenty research-based practices. *American Secondary Education, 42*(1), 73-83.
- Nierengarten, G., & Hughes, T. (2010). What teachers wish administrators knew about co-teaching in high schools. *Electronic Journal of Inclusive Education, 2*(6), 1-20.
- Pajares, F. (1996). Self-efficacy beliefs in educational settings. *Review of Educational Research, 66*(4), 543-578.
- Pancsofar, N., & Petroff, J. G. (2013). Professional development experiences in co-teaching: Associations with teacher confidence, interests, and attitudes. *Teacher Education and Special Education, 36*(2), 83-96.

- Pancsofar, N., & Petroff, J. G. (2016). Teachers' experiences with co-teaching as a model for inclusive education. *International Journal of Inclusive Education*, 20(10), 1043-1053.
- Petrick, D. (2014). Strengthening compatibility in the co-teaching relationship: A four step process. *Global Education Journal*, 2014(1), 15-35.
- Ploessl, D. M., & Rock, M. L. (2014). eCoaching: The effects on co-teachers' planning and instruction. *Teacher Education and Special Education*, 37(3), 191-215.
- Porter, H., & Wimmer, G. (2012). A winning strategy: Using "Glory Road" to illustrate the stages of group development. *Journal of Leadership Education*, 11(2), 247-256.
- Powell, N., Cleveland, R., Thompson, S., & Forde, T. (2012). Using multi-instructional teaching and technology-supported active learning strategies to enhance student engagement. *Journal of Technology Integration in the Classroom*, 4(2), 41-50.
- Prizeman, R. (2015). Perspectives on the co-teaching experience: Examining the views of teaching staff and students. *Reach*, 29(1), 43-53.
- Pugach, M. C., & Winn, J. A. (2011). Research on co-teaching and teaming. *Journal of Special Education Leadership*, 24(1), 36-46.
- Rappolt-Schlichtmann, G., Daley, S. G., Lim, S., Lapinski, S., Robinson, K. H., & Johnson, M. (2013). Universal design for learning and elementary school science: Exploring the efficacy, use, and perceptions of a web-based science notebook. *Journal of Educational Psychology*, 105(4), 1210-1225.

- Rayfield, J., Croom, B., Stair, K., & Murray, K. (2011). Differentiating instruction in high school agricultural education courses: A baseline study. *Career & Technical Education Research, 36*(3), 171-185.
- Relojo, D., Pilao, S., & Dela Rosa, R. (2015). From passion to emotion: Emotional quotient as predictor of work attitude behavior among faculty members. *Journal on Educational Psychology, 8*(4), 1-10.
- Robinson, H. (2011). Highly qualified teacher status and the reading achievement of students with disabilities. *American Secondary Education, 39*(3), 42-66.
- Ritchey, K. D. (2011). Evidence-based reading instruction for students with learning disabilities. *Theory into Practice, 50*(1), 28-34.
- Scheeler, M., Congdon, M., & Stansbery, S. (2012). Providing immediate feedback to co-teachers through bug-in-ear technology: An effective method of peer coaching in inclusion classrooms. *Teacher Education & Special Education, 33*(1), 83-96.
- Scruggs, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-teaching in inclusive classrooms: A metasynthesis of qualitative research. *Exceptional Children, 73*(4), 392-416.
- Shaffer, L., & Thomas-Brown, K. (2015). Enhancing teacher competency through co-teaching and embedded professional development. *Journal of Education and Training Studies, 3*(3), 117-125.
- Shepherd, C., & Alpert, M. (2015). Using technology to provide differentiated instruction for deaf learners. *Journal of Instructional Pedagogies, 2015*(16), 1-7.
- Sileo, J. M. (2011). Co-teaching: Getting to know your partner. *Teaching Exceptional Children, 43*(5), 32-38.

- Simpson, J. F., Thurston, R. J., & James, L. E. (2014). Exploring personality differences of teachers for co-teaching. *Journal of Instructional Psychology, 41*(1-4), 100-105.
- 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.
- Spaulding, L. S., & Pratt, S. M. (2015). A review and analysis of the history of special education and disability advocacy in the United States. *American Educational History Journal, 42*(1/2), 91-109.
- Stipek, D. (2012). Effects of student characteristics and perceived administrative and parental support on teacher self-efficacy. *Elementary School Journal, 112*(4), 590-606.
- Strieker, T., Logan, K., & Kuhel, K. k. (2012). Effects of job-embedded professional development on inclusion of students with disabilities in content area classrooms: results of a three-year study. *International Journal of Inclusive Education, 16*(10), 1047-1065.
- Strogilos, V., & Stefanidis, A. (2015). Contextual antecedents of co-teaching efficacy: Their influence on students with disabilities' learning progress, social participation and behavior improvement. *Teaching and Teacher Education, 47*(1), 218-229.
- Sweigart, C. A., & Landrum, T. J. (2015). The impact of number of adults on instruction: Implications for co-teaching. *Preventing School Failure, 59*(1), 22-29.

- Tremblay, P. (2013). Comparative outcomes of two instructional models for students with learning disabilities: Inclusion with co-teaching and solo-taught special education. *Journal of Research in Special Educational Needs, 13*(4), 251-258.
- Tschida, C. M., Smith, J. J., & Fogarty, E. A. (2015). "It just works better": Introducing the 2:1 model of co-teaching in teacher preparation. *Rural Educator, 36*(2), 11-26.
- Tschannen-Moran, M., Woolfolk Hoy, A. & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research, 68*, 202 - 248.
- Tzivinikou, S. (2015). Collaboration between general and special education teachers: Developing co-teaching skills in heterogeneous classes. *Problems of Education in the 21st century, 64*(1), 108-119.
- United States Department of Education. (n.d.) Building the legacy: IDEA 2004. Retrieved October 19, 2014, from: <http://idea.ed.gov/>
- Vrchota, D. (2015). Cross-curricular consulting: How WAC experts can practice adult learning theory to build relationships with disciplinary faculty. *WAC Journal, 26*(1), 56-75.
- Waldrip, B., Cox, P., Deed, C., Dorman, J., Edwards, D., Farrelly, C., & ... Yager, Z. (2014). Student perceptions of personalized learning: Development and validation of a questionnaire with regional secondary students. *Learning Environments Research, 17*(3), 355-370.
- Walsh, J. M. (2012). Co-teaching as a school system strategy for continuous improvement. *Preventing School Failure, 56*(1), 29-36.
- West, J. (2013). Deep and lifelong learning: When theory and SoTL intersect. *Journal of the Scholarship of Teaching and Learning, 13*(4), 11-20.

West, R., & Borup, J. (2014). An analysis of a decade of research in 10 instructional design and technology journals. *British Journal of Educational Technology*, 45(4), 545-556.

Witcher, M., & Feng, J. (2010). Co-teaching vs. solo teaching: Comparative effects on fifth graders' math achievement. *Online Submission*, Retrieved from ERIC database. (ED533754)

Yell, M. (2012). *The law and special education* (3rd ed.). Upper Saddle River, New Jersey: Pearson Education, Inc.

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oakes, CA: Sage Publications.

Appendix A: The Project

Co-teaching Faculty Training Program	
Purpose	This professional development project was created to address the needs of local high school co-teachers regarding the implementation of co-teaching practices. The purpose of this project is to provide teachers with research-based information about co-teaching models, to practice developing collaborative lesson plans, and to provide time to reflect and discuss how they can implement these strategies to improve student achievement in their classrooms.
Target Audience	The target audience of the project consists of general and special education co-teachers of high school English/language arts, mathematics, science, and social studies. School administrators and the special education director will also be invited to attend.
Guiding Questions	<p>Day 1</p> <ol style="list-style-type: none"> 1. How can we build co-teaching partnerships and strengthen relationships between general and special education teachers? 2. What topics are essential for effective collaboration? <p>Day 2</p> <ol style="list-style-type: none"> 1. How can you implement the co-teaching models in high school classrooms? 2. How can you use flexible grouping to give co-teachers an equal role in instruction? <p>Day 3</p> <ol style="list-style-type: none"> 1. What are some effective instructional strategies to use with high school students? 2. How can co-teaching teams differentiate instruction for all content areas? 3. What kind of participation options can you consider for all students?

Learning Outcomes	<p>This professional development project is designed to address the following learning outcomes:</p> <ol style="list-style-type: none"> 1. Faculty members will understand the importance of co-planning and be able to identify the keys to successful collaboration. 2. Faculty members will understand and be able to implement co-teaching models in high school classrooms. 3. Faculty members will be able to differentiate instruction by content, process, and product, and gain ideas to implement effective instructional strategies into their classrooms.
Evaluation	<p>Teachers will complete anonymous formative and summative evaluations. The formative evaluations will be recorded on 3x5 index cards. The summative evaluation consists of professional development evaluation worksheet that will be completed at the conclusion of the workshop.</p>
Resources/ Materials	<ul style="list-style-type: none"> • PowerPoint Presentation • Projector • Internet connection • Laptop • 100 Teaching Methods handout • Index cards • Sticky notes • Pens/pencils/markers • Chart paper • Cardstock for name tents • Candy for ice breaker activity • Summative evaluation worksheet

Co-teaching Faculty Training Program



INSTRUCTIONAL PRACTICES FOR HIGH SCHOOL CO-TEACHING TEAMS

VANNA E. RAYBOULD

Note to Trainer: Welcome co-teachers to the workshop. Explain the purpose of the training and how it can help improve co-teaching at the high school level.

Housekeeping

- Welcome, teachers and administrators.
- Sign-in
 - Create a name tent
- Necessities
 - Restroom locations
 - Vending machines
 - Exits



Note to Trainer: Explain general housekeeping items for 2-3 minutes and have teachers and administrators create name tents. Distribute copies of the Power Point presentation so that teachers have the option of taking notes on the handout.

Introduction

- The workshop is based on a study of the perceptions of high school co-teachers.
- Some research findings will be incorporated into the training.
 - Teachers felt that they needed
 - ✦ More professional development on co-teaching to improve their self-efficacy
 - ✦ Improved collaboration and co-planning
 - ✦ Administrative support in scheduling

Note to Trainer: Introduce the purpose of the workshop. Allow 5-10 minutes to discuss the purpose, explain your connection to co-teaching, and share information about the research and findings.

Training Program Goals

- Improve the classroom experiences of high school co-teachers
- Enhance collaboration among co-teaching teams
- Assist teachers in understanding the best practices of co-teaching
- Equip teachers with new ideas for implementing co-teaching models

Note to Trainer: Introduce the training program goals. Allow 5 to 10 minutes to discuss the training program and its goals.

Day 1 Agenda

Timeline	Topic
8:00 am - 8:50 am	Introductions, Goals and Objectives, Breakfast
9:00 am - 9:20 am	Ice Breaker Activity
9:20 am - 10:20 am	Building the Partnership
10:20 am - 10:30 am	Break
10:30 am - 11:00 am	Self-Assessment Activity
11:30 am - 12:30 pm	Lunch
12:30 pm - 1:00 pm	Elements of Collaboration
1:00 pm - 2:00 pm	Assess your Team, Think/Pair/Share
2:00 pm - 3:00 pm	Discussion Topics for Collaboration
3:00 pm - 3:30 pm	Wrap-up, Formative Assessment, and Dismissal

Note to Trainer: Provide teachers with an overview of the day's activities.

Ice Breaker: M&M Game

- Take a fun size pouch of M&Ms from the basket.
- Introduce yourself and tell how long you have been co-teaching and in what subject areas.
- For every color of M&Ms you have, share something about yourself
 - **Red:** Favorite hobbies
 - **Green:** Favorite superheroes
 - **Yellow:** Favorite movies
 - **Orange:** Favorite places to travel
 - **Brown:** Anything you want
 - **Blue:** Why you love your school



Note to Trainer: Lead the ice breaker activity to learn about the participants. Have teachers sit at tables with their co-teaching team members. Allow 10 to 20 minutes for the activity.

Co-teaching

- **What is co-teaching?**
 - General and special education teachers work together to deliver joint instruction to students with and without disabilities in the same classroom.
 - Both teachers are actively involved in co-planning, co-instruction, and co-assessment.
- **What are the benefits of co-teaching?**
 - Compliance with federal law
 - Supporting students with disabilities in the general curriculum
 - Reduction of the achievement gap
 - Capitalizing on the strengths of two adults in the room

Note to Trainer: Instruct participants on the definition and benefits of co-teaching and provide examples of each.

Guiding Questions

- How can we build co-teaching partnerships and strengthen relationships between general and special education teachers?
- What topics are essential for effective collaboration?

Note to Trainer: Engage teachers in a discussion about co-teaching relationships. Allow them to brainstorm answers to the guiding questions. Record their responses on chart paper and discuss the answers to the guiding questions.

Building the Partnership



- Why do we co-teach in the first place?
 - Legal obligations
 - Instructional benefit

- What makes co-teaching different at the high school level?
 - Examples: Scheduling, level of difficulty, older students

- How can you make the “marriage” work?
 - Roles of the general and special education teachers

Note to Trainer: Discuss the reasons for co-teaching. Instruct teachers on their legal obligations and how co-teaching can benefit students within inclusive classrooms. Teachers will learn the purposes of co-teaching to establish the relevance and benefit of the training to their own careers. Allow participants to share their experiences on what makes co-teaching different at the high school level. Answer the last question by introducing the roles of general and special education teachers that will be discussed in future slides.

How to Collaborate

- Approach to Interaction – Used within the context of planning or problem solving
- Parity – Each participant’s contribution is valued
- Interaction Processes – Use communication skills to solve problems and respond appropriately
- Shared Responsibility and Accountability– Share responsibility for decisions and activities

Note to Trainer: Instruct participants on the essentials of collaboration to provide a framework for their collaborative endeavors. Give examples to co-teachers of how they should use these points to collaborate with each other while planning.

Roles of the General Ed Teacher

- Be the content expert. You are knowledgeable of the curriculum and pacing
- Be open to new ideas and instructional models.
 - Co-teaching models, flexible groups, differentiated activities
- Take advantage of the opportunities provided by two adults in the room.

Note to Trainer: Share information on the roles of general education teachers. Describe your past experiences with general education teachers and provide teachers with an overview of new instructional models that will be presented in the workshop. Have general educators share their experiences.

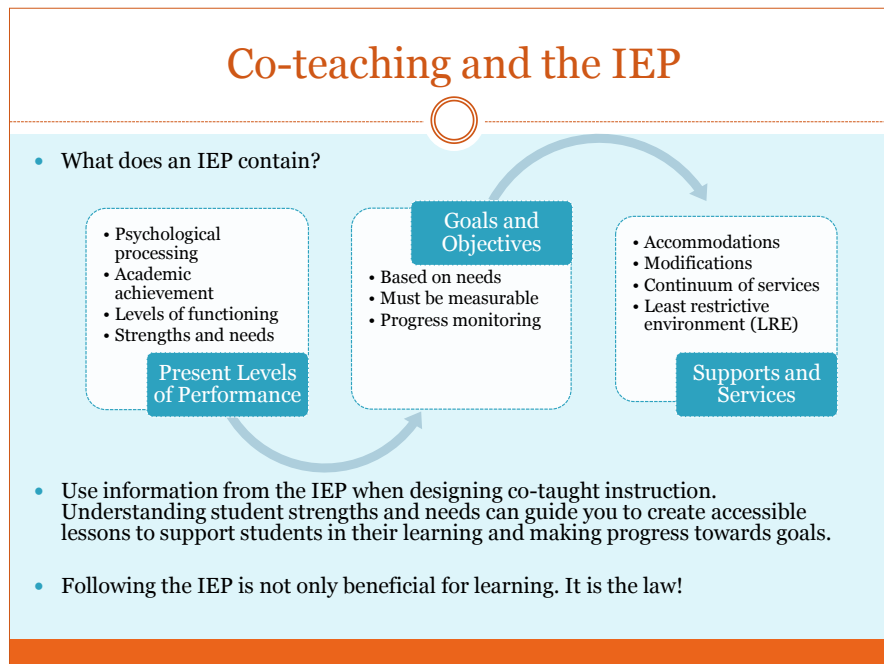
Roles of the Special Education Teacher

- Be responsible for specialized instructional strategies in the classroom.
- Advocate for your students.
- Ensure that the services and accommodations in your students' IEPs are provided.

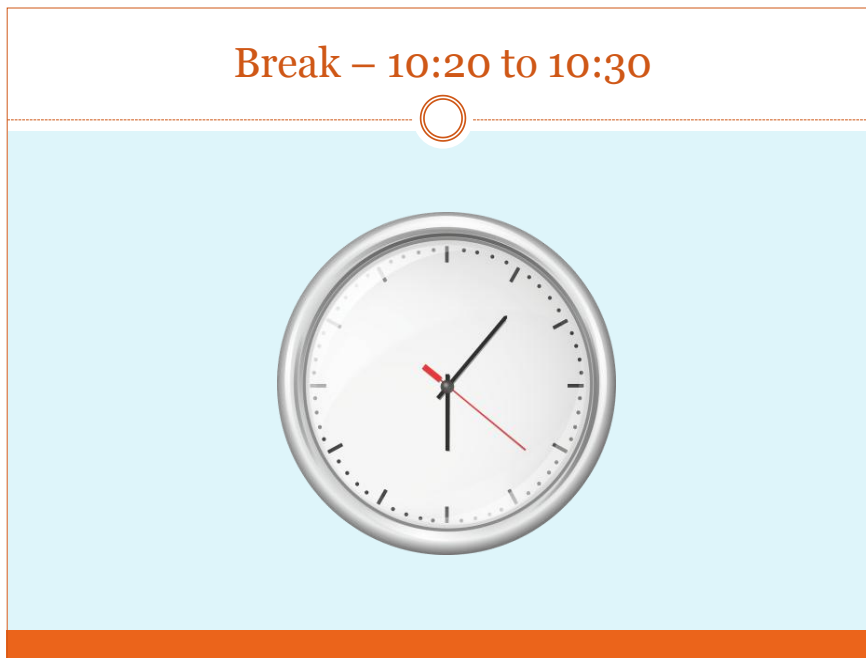
Specialized Instruction

- Vocabulary - Build students' background knowledge
- Instruction/Attaining Concepts – learning and processing strategies
- Assessment - Progress monitoring and planning for instruction

Note to Trainer: Share information on the roles of special education teachers. Use the slide as an outline for instruction. Provide examples of specialized instructional strategies, and explain to SPED teachers that they can advocate for their students by understanding the needs identified in their IEPs and actively working to support their learning. Explain to general education teachers that IEPs are binding legal documents that identify the services and supports for students with disabilities that they must provide in their classrooms. Instruct participants that special education teachers can use vocabulary, learning, processing, and assessment strategies with all students, regardless of whether they know the content of the course. Have special educators share their experiences.



Note to Trainer: Instruct teachers on the importance of the IEP, and provide special education teachers with guidance on how to use the IEP when developing instruction. Students' present levels of performance can be used to identify their levels of functioning and academic achievement. Understanding the strengths and needs of the students allows teachers to overcome instructional challenges by providing accommodations and modifications as needed. Co-teaching is an IEP service that must be fulfilled by law, and special education teachers can use their expertise in the IEP process when planning and instructing co-taught classes.



Note to Trainer: Take a 10 minute break.

Self-Assessment Activity

- Self-assessment and discussion on personal characteristics

Strengths I bring to the co-teaching partnership	Liabilities I bring to the co-teaching partnership

(Friend, 2012)

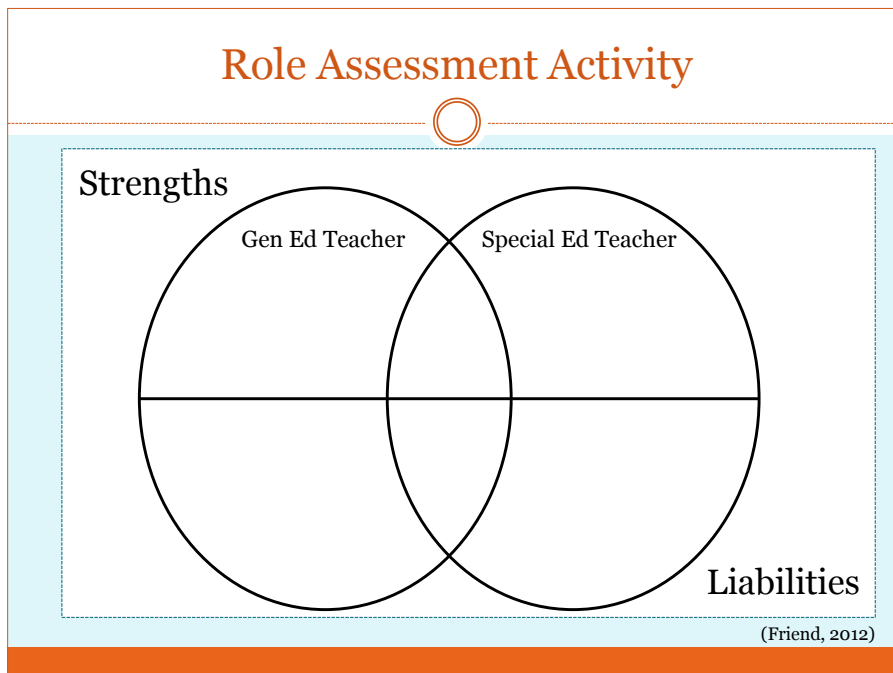
Note to Trainer: Explain the purpose of the self-assessment activity. Have teachers complete the activity individually. Then have them discuss their findings with the group. This will allow teachers to reflect on their strengths and opportunities for growth. Teachers will learn to identify their strengths and needs and use them to reflect on how they can capitalize upon the contributions of team members to enhance their co-teaching relationships. Allow teachers to keep their self-assessment activities so that they can review them in the future.

Blending Strengths for a Strong Partnership



- General and special education teachers are equal in the co-teaching partnership.
- Co-teachers do not have the same roles, but they can each make valuable contributions.
 - Unique expertise
 - Two minds to support student learning
 - Shared responsibility for planning and instruction
 - Small group learning opportunities
 - Shared resources

Note to Trainer: Instruct teachers on how they can use their strengths to collaborate effectively. Explain that, to develop strong partnerships, they need to share their expertise, responsibility for instruction, and resources with their partners. Remind them that, though their roles are different, they must equally contribute to the partnership in order to be successful.



Note to Trainer: Have a printed copy of the graphic organizer to place at the front of the room. Have individual teachers at each table record strengths and liabilities of the roles regular and special education teachers on sticky notes. Then, have the teachers stick them on the chart paper where appropriate. Lead a group discussion over the results and instruct teachers on how to use their strengths while collaborating with co-teachers in order to overcome their weaknesses.

Follow-up Questions

- Which of these areas can be used to enhance your instruction?
- How can you work to incorporate your strengths in order to collaborate successfully?



Note to Trainer: Ask questions to participants to elicit answers for discussion. Then instruct participants on how to use their strengths during collaboration. For example, general education teachers need to consider the curriculum and pacing. Special education teachers need to discuss learning strategies and accommodations. Co-teachers must talk to each other to collaborate effectively.

Lunch – 11:30 to 12:30



Note to Trainer: Dismiss the group to lunch.

Elements of Collaboration



- **Professional Relationships**
 - Co-teachers must be able to work effectively with another adult.
 - Parity, communication, trust, and respect
- **Shared Philosophies**
 - Co-teachers must share common beliefs to guide their practices and establish a vision for their partnership.
- **Interpersonal Skills**
 - Co-teachers must be able to communicate and interact with each other.
 - Negotiation and conflict management
- **Interactions in the Classroom**
 - Co-teachers must clearly define their roles and responsibilities in the classroom.
 - They must work together as equals to manage the classroom and support student needs, as well as monitor their success as co-teachers.
- **How can you contribute?**

Note to Trainer: Instruct participants on each of the elements of collaboration. They will learn to work together effectively and monitor their success as a partnership. Ask teachers to share their experiences.

Assess Your Team



- Complete handout on “Tracking Our Progress through the 3 Stages”

- Think/Pair/Share
 - How can we both have active roles in the classroom?
 - How can I contribute if I don’t know the content?
 - What if he/she really gets on my nerves?

Note to Trainer: Distribute the worksheet on Tracking Our Progress. Instruct co-teaching teams to work together to evaluate themselves on the stages of collaboration. Teachers will learn how to evaluate their progress and monitor their success as a team. Instruct teachers on the stages and elements and allow them time to collaborate on the arrangement of their classroom, curriculum goals, instruction, assessment, and classroom management. Use the think/pair/share method as a collaborative learning strategy to stimulate discussion and allow for the application of collaboration. Walk around the room to engage in discussions with teams and answer questions.

Discussion Topics for Collaboration

- Content and expectations
- Format of instruction
- Planning – when, where, and who?
- Parity
- Space, Noise
- Routine, chores
- “Help”
- Feedback
- Pet peeves

(Friend, 2012)

Note to Trainer: Instruct participants on topics for collaboration. Provide a description of each element to teachers and allow them time to collaborate with their team members on the topics they need to discuss in their own co-teaching relationships. For example, explain the importance of parity as an aspect of co-teaching success in the literature and provide suggestions to achieving it. Allow them to discuss how to achieve parity in their own classroom with their co-teachers. Have them select a spokesperson to share their insights with the group.

Co-Planning Protocol



Time Allotted	Focus
12 minutes	Upcoming curriculum and content
10 minutes	Data/assessment results, determine direction
15 minutes	Points of difficulty, barriers students face, how to overcome them through universal design
15 minutes	Co-teaching approaches, differentiation
8 minutes	Partnership discussions, concerns, housekeeping

(Friend, 2012)

Note to Trainer: Instruct teachers on the importance of co-planning and how to use appropriate time management through Friend's (2012) co-planning protocol. Explain the benefits of using a protocol to managing their time and incorporating considerations for co-taught students. Allow co-teaching teams time to co-plan an upcoming lesson/unit together using the protocol.

Day 1 Wrap-up: Thoughts from Today

- On your 3x5 index card, answer the following questions.
 - What is one new idea you have that you can use when implementing co-teaching models?
 - How can you use what you learned today when collaborating with your co-teacher?
 - Which parts of the workshop could be changed to support the improvement of the experiences of high school co-teachers?
- On the back of your card, please list any questions you may have after today's training.

Note to Trainer: Distribute index cards to teachers and allow them to complete the formative evaluation questions. Place a container at the door for teachers to drop off the cards as they exit.

Day 2 Agenda

Timeline	Topic
8:00 am - 9:00 am	Review, Goals and Objectives, Breakfast
9:00 am - 9:50 am	Co-teaching Models
9:50 am - 10:00 am	Break
10:00 am - 10:30 am	Using Grouping Strategies
10:30 am - 11:00 am	Differentiation in the Co-taught Classroom
11:00 am - 12:00 pm	Lunch
12:00 pm - 12:30 pm	Adaptations for Student Success
12:30 pm - 3:00 pm	Experiential Learning
3:00 pm - 3:30 pm	Wrap-up, Formative Assessment, and Dismissal

Note to Trainer: Provide teachers with an overview of the day's activities.

Guiding Questions

- How can you implement the co-teaching models in high school classrooms?
- How can you use flexible grouping to give co-teachers an equal role in instruction?

Note to Trainer: Engage teachers in a discussion about what they know about co-teaching models in order to activate their prior knowledge of co-teaching models and flexible groupings. They have foundational knowledge of the topics but will receive instruction on how to implement them effectively in their co-taught classrooms. Allow them to brainstorm answers to the guiding questions.

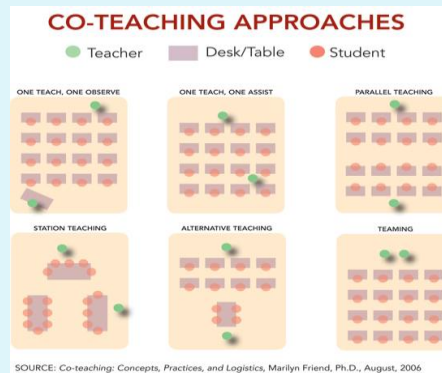
Co-teaching Models

Level 1: 30% of the time

- One Teach, One Observe
- One Teach, One Assist
- Team Teaching

Level 2: 70% of the time

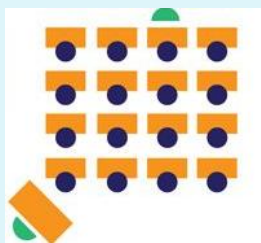
- Station Teaching
- Parallel Teaching
- Alternative Teaching



Note to Trainer: Introduce the topic of co-teaching models. Explain that there are six co-teaching models in which co-teachers provide specialized instruction to their students. Some models should be used more often than others, but all of them have a purpose during instruction. Briefly survey teachers to determine which models they currently use in the classroom.

One Teach, One Observe

- One teacher instructs the class while the other observes.



- Uses

- Formative Assessment
- Conducting functional behavior assessments
- Collecting progress monitoring data

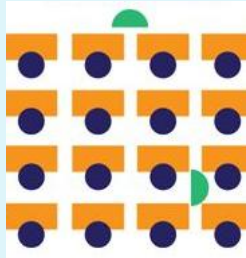
- Cautions

- The model should only be used a fraction of the time.
- Teachers should alternate roles to maintain parity

Note to Trainer: Introduce the one teach, one observe model. Explain the definition to teachers and describe examples of what it looks like in the classroom. Instruct teachers on the uses of the model and caution against using the model too frequently. Both teachers should rotate the instructional and observational roles so that the special education teacher is not always observing. Teachers should maintain parity in the classroom. Ask teachers if they see the model working for them and what they need to do to implement it.

One Teach, One Assist

- One teacher instructs the whole group while the other supports instruction.

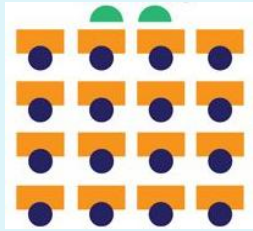


- Uses
 - Use when closely monitoring and assisting students
 - Use when one teacher has particular expertise in an area
- Cautions
 - Most abused model
 - Treats one teacher as an assistant instead of an instructional equal
 - Be careful not to overuse

Note to Trainer: Introduce the one teach, one assist model. Explain the definition to teachers and describe examples of what it looks like in the classroom. Instruct teachers on the uses of the model and caution against relying on it too much because it treats one teacher, usually the special education teacher, as an assistant. Choose this model when one teacher has the most expertise in the topic and when individual students need more assistance. Ask teachers if they see the model working for them and what they need to do to implement it.

Team Teaching

- Both teachers provide instruction to the whole class at the same time.




- Uses

- Instructional conversations
- Debates
- Modeling note-taking
- Explaining materials

- Cautions

- You may end up with two “general ed” teachers
- Doesn’t take advantage of flexible grouping

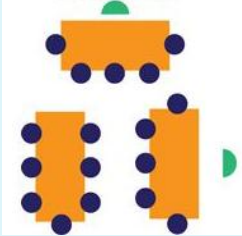
Note to Trainer: Introduce the team teaching model. Explain the definition to teachers and describe examples of what it looks like in the classroom. Instruct teachers on the uses of the model for explaining the material, class debates, and instructional conversations. Warn teachers against becoming two "general ed" teachers and the need to maintain the role of the specialist. Ask teachers if they see the model working for them and what they need to do to implement it.



Level 2


Station Teaching

- Lesson content is divided into sections. Each teacher instructs one group, while a third works independently.



- Uses
 - Divide and conquer
 - Remediation or acceleration
 - Reduces student-teacher ratio
- Cautions
 - Make sure concepts aren't sequential and that stations can be taught independently
 - Consider movements around the room

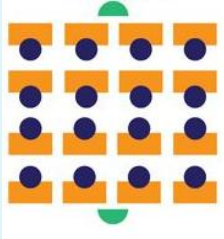
Note to Trainer: Introduce the station teaching model. Explain the definition to teachers and describe examples of what it looks like in the classroom. Instruct teachers on the uses of the model for remediating or accelerating students, reducing the student-teacher ratio, and dividing content into manageable chunks. Remind teachers to ensure that the station content is independent because students will be moving through them in different orders. Consider movement and the flow of the stations through the classroom. Ask teachers if they see the model working for them and what they need to do to implement it.



Level 2


Parallel Teaching

- Class is divided into two heterogeneous groups, and one teacher instructs each group.



- Uses
 - Opportunity to present content in different ways
 - Increased number of student responses
 - Drill & Practice, re-teaching, review
- Cautions
 - Watch your pacing
 - Both teachers must know the content
 - Control noise level
 - Arrange groups so there is no confusion

Note to Trainer: Introduce the parallel teaching model. Explain the definition to teachers and describe examples of what it looks like in the classroom. Instruct teachers on the uses of the model for teaching content in different ways, increasing student responses, and the use of re-teaching and review. Explain that both teachers must know the content to use this model effectively. Limit confusion by purposefully arranging groups and controlling the noise level. Ask teachers if they see the model working for them and what they need to do to implement it.



Level 2

Alternative Teaching

- One teacher instructs the large group, while the other instructs the small group.

- Uses
 - Remediation or acceleration
 - Pre-teaching concepts/vocab
 - Students with absences
- Cautions
 - Don't pull the same group every time (no "smart" or "slow" labels)
 - Must be adequate space in the classroom

Note to Trainer: Introduce the alternative teaching model. Explain the definition to teachers and describe examples of what it looks like in the classroom. Instruct teachers on the uses of the model remediation and acceleration, pre-teaching concepts and vocabulary, and review for students with absences. Caution teachers against pulling the same group every time. They should vary the groups so students do not begin to label the small group as "smart" or "slow". Ensure that there is adequate space for both groups. Ask teachers if they see the model working for them and what they need to do to implement it.

Video Clips

- Co-teaching in action
- http://faculty.virginia.edu/coteaching/video_5formats.html

Note to Trainer: Co-teachers will watch video clips of co-teaching models being implemented successfully in the classroom. All six co-teaching models will be presented so that teachers can visualize what they actually look like when implemented in the classroom. After watching the videos, have teachers rank the co-teaching models in the order in which they feel most competent in implementing them.

Break – 9:50 to 10:00



Note to Trainer: Take a 10 minute break.

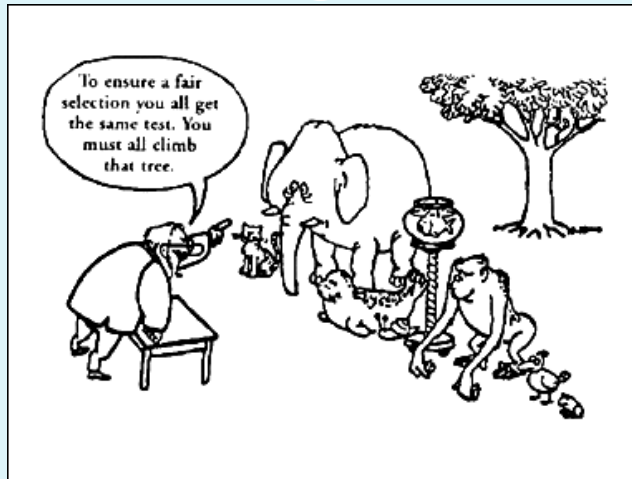
Grouping Strategies

- What is flexible grouping?
 - Grouping based on formative assessment
 - Short periods of time
 - Targeted instructional strategy

- What are some grouping strategies you can use?
 - Heterogeneous – mixed-ability groups
 - Homogeneous – group based on similar ability levels
 - Teacher-led vs. student led – different levels of autonomy
 - Performance-based – performing tasks related to the content
 - Four corners – students divide based on their stance on a question
 - Group Tasks – students are grouped based on assigned roles in a task

Note to Trainer: Instruct participants on the use of grouping strategies within the co-teaching models. Explain each of the grouping strategies listed on the slide and why teachers should consider incorporating them into their lessons. After the grouping strategies have been discussed and any questions have been answered, assign each co-teaching team a grouping strategy. They will collaborate with a partner on how to implement the strategy in a lesson in their content area and share with the whole group.

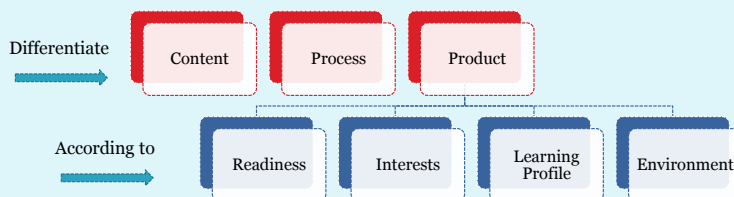
Differentiation



Note to Trainer: Ask a participant to read the text in the picture. Have teachers discuss how this relates to the classroom.

Differentiation in the Co-taught Classroom

- What the literature says: Assessment, knowledge, and reflection (Parsons, Dodman, & Burrowbridge, 2013)



- Special ed teachers, it's your time to shine!

Note to Trainer: Instruct teachers on how to differentiate instruction for their classes. Introduce the concepts of content, process, and product that you will explain on the next several slides. Engage participants in a discussion on how to differentiate instruction.

Content



- Content is everything that a student should know, be able to do, and understand about the curriculum.
 - Varied resource materials – use more than just the textbook
 - Multimedia sources – audio-visual material
 - Leveled readings – vary based on reading proficiency
 - Scaffolding – divide the learning and provide tools for support
 - Peer/adult assistance – some students need more support
 - Vocabulary instruction – consider pre-teaching, direct instruction, need for visuals
 - Mini lessons – instruction on a skill that will relate to a larger concept
 - Accommodations for access – use universal design for learning

Note to Trainer: Explain how to differentiate by content. Describe each of the examples and instruct teachers on how they could apply them to their own classrooms. Have co-teachers brainstorm other ways to differentiate by content.

Process

- **Process is how students make sense of the content, think about ideas, and use information.**
 - Flexible groups – divide students into groups so that they can work together
 - Peer tutors – students can teach each other, teaching provides the greatest amount of retention of the concepts
 - Learning stations – divide learning activities into stations
 - Voice and choice – allow students choice in the way they complete assignments
 - Present options – allow students to choose different assignments to demonstrate their mastery
 - Tiered assignments – tier assignments based on ability

Note to Trainer: Explain differentiation by process. Describe each of the examples and instruct teachers on how they could apply them to their own classrooms. Have tables discuss how these strategies could work for them and their students.

Product

- **Product is how students demonstrate what they know and are able to do. Products can take many forms and provide a good opportunity for differentiation.**
 - Make presentations – Power Points, Google Slides, Prezis, Voice Threads
 - Write books for children – explain the concepts at a basic level to teach to younger children
 - Develop songs and poems – write a poem about the stages of the water cycle, or a song about the steps of the quadratic formula
 - Create a game – students can create questions and answers about content in the format of a game
 - Perform a skit – allow students to write and act out scenes
 - Record instructional videos – create how-to videos in which they explain the steps of a concept
 - Do hands-on science labs – apply their knowledge to a lab in order to write a lab report
 - Hold a debate – divide students into groups that represent both sides of the debate for stimulating discussion

Note to Trainer: Explain differentiation by product. Describe each of the examples and instruct teachers on how they could apply them to their own classrooms. Have tables discuss how these strategies could work for them and their students. Ask participants to share ideas about the products they use now and how they could be differentiated.

Lunch – 11:00 to 12:00



Note to Trainer: Dismiss the group to lunch.

Adaptations for Success

- You can make additional adaptations in the classroom to differentiate for students.
- Adaptations can be curricular, instructional, or environmental.
- Consider these ideas for adaptations when co-planning:
 - Size – number of items learners are expected to complete, physically enlarging the page
 - Time – time allotted for learning and task completion, may need extended time
 - Place, schedule – where learning takes place, classroom, media center, computer or science lab
 - Level of support – increase assistance for certain students who need more help
 - Input – change the way instruction is delivered to the learner
 - Output – change the skill level, type of problems, or rules
 - Level of difficulty – increase or decrease difficulty for certain students
 - Participation – change the extent to which the student is involved in the task

Note to Trainer: Instruct teachers on different ways for teachers to adapt lessons for their students in order to make lessons more accessible for diverse learners. Have participants share the adaptations they use now and what they would like to implement in the future.

Experiential Learning: Doing the Work

- Design an activity with your partner based on an upcoming lesson.
- **Include:**
 - Purpose
 - Learning objectives/outcomes
 - Grouping strategies
 - Differentiation strategies
 - Time for student thinking and discussion
 - Co-teaching model(s)
- Be as detailed as possible!

Note to Trainer: Direct co-teachers to participate in a work session in which they must use strategies discussed during the workshop. Distribute the handout on Co-teaching in the Classroom to generate ideas. They will present their lesson plans tomorrow.

Day 2 Wrap-up: Thoughts from Today

- On your 3x5 index card, answer the following questions.
 - What is one new idea you have that you can use when implementing co-teaching models?
 - How can you use what you learned today when collaborating with your co-teacher?
 - Which parts of the workshop could be changed to support the improvement of the experiences of high school co-teachers?
- On the back of your card, please list any questions you may have after today's training.

Note to Trainer: Distribute index cards to teachers and allow them to complete the formative evaluation questions. Place a container at the door for teachers to drop off the cards as they exit.

Day 3 Agenda

Timeline	Topic
8:00 am - 9:00 am	Review, Goals and Objectives, Breakfast
9:00 am - 9:50 am	Share Your Lesson Plans
9:50 am - 10:00 am	Break
10:00 am - 10:30 am	Effective Instructional Strategies
10:30 am - 11:00 am	Lunch
11:00 am - 12:00 pm	Student Participation Options
12:00 pm - 12:30 pm	How to Move to the Next Level
12:30 pm - 3:00 pm	Future Professional Development Needs
3:00 pm - 3:30 pm	Wrap-up, Summative Evaluation, and Dismissal

Note to Trainer: Provide teachers with an overview of the day's activities.

Guiding Questions

- What are some effective instructional strategies to use with high school students in co-taught classrooms?
- How can co-teaching teams differentiate instruction in their content areas?
- What kind of participation options can you consider for all students?

Note to Trainer: Explain to teachers that these questions will guide the day's discussions about effective instructional strategies. Allow them to brainstorm answers to the guiding questions, considering their content area and the students in their classrooms. Teachers may want to share different instructional strategies that have worked for them with their colleagues.

Share Lesson Plan Examples

- Strategies for:
 - ✦ English
 - ✦ Math
 - ✦ Science
 - ✦ Social Studies
- Small group break out session

Note to Trainer: Teachers will share their co-taught lesson plans from yesterday's work session. Encourage teachers to provide feedback. After each team presents, direct co-teachers to work together to develop the products needed to implement their lessons.

Break – 9:50 to 10:00



Note to Trainer: Take a 10 minute break.

Effective Instructional Strategies

- 100 Teaching Methods Handout
- Put a check mark ✓ beside the ones you have tried.
- **Circle** the ones you found effective.
- **Highlight** the ones you would like to try.

Note to Trainer: Have each table discuss the effective instructional strategies they use and would like to try in the future.

Lunch – 11:00 to 12:00



Note to Trainer: Dismiss the group to lunch.

Student Participation Options

- Consider the diverse learners in your classes. Students may belong to multiple categories.
 - SWDs – needs described in IEPs
 - ELLs – needs described in ESOL accommodation plans
 - RTI – needs described in tier 2 and tier 3 plans
 - Gifted/honors – academic enrichment

- Participation can be:
 - Same – Same objectives and activities with accommodations
 - Adapted/Supplemented – Prioritized objectives, different materials
 - Multi-level – Same area but different objectives, using same or different materials

Note to Trainer: Instruct teachers on diversity in the classroom and explain where they can find the identified needs of students in their class to use while planning lessons. Students may belong to multiple categories and have a variety of needs that should be considered. Special education teachers should take the lead on identifying the needs of diverse learners so that they can be incorporated into the lessons. Instruct teachers on how to modify student participation options in class activities based on individual learning characteristics.

How to Move to the Next Level

- **Review with a partner:**
 - What are the roles and responsibilities of special and general education teachers?
 - How can you implement co-teaching practices consistently in your classroom each day?
 - What new instructional strategies can you use in your high school co-taught classrooms?

Note to Trainer: Have teachers answer the review questions with their co-teaching partner and then discuss as a group.

How to Move to the Next Level Continued..

- **Incorporating technology in the classroom**
 - Resources
 - ✦ Learning Management Systems
 - Google Classroom, Edmodo, Moodle
 - ✦ Blogs
 - Google Sites, Weebly, Word Press
 - ✦ Class Response Systems
 - Activ Votes, Socrative, Plickers
 - Making feedback (and your life) easier
 - ✦ For teachers - Virtual lesson planning tools
 - Google Drive, Team Drives, Keep
 - ✦ For Students - Survey tools, formative assessment, and grading
 - Poll Everywhere, Google Forms, Doctopus, Goobric

Note to Trainer: Instruct teachers on how they can incorporate technology into the classroom in order to enhance their co-taught instruction. Learning management systems provide an easy way to differentiate activities because different resources and product options can be distributed to students. Blogging provides students with a meaningful way to create content instead of passively receiving it. Class response systems allow for all students to respond to questions, instead of only one student who raises his or her hand. Provide teachers with instruction on how they can give feedback on lessons to their co-teaching partner during co-planning through Google Drive. Explain that they can get feedback from students using survey tools and distribute feedback to students through online formative assessment and grading tools, such as Goobric. Allow teachers time to choose a site to look at on their devices. Circulate through the room to engage in discussion with teachers and answer questions about any of the technology tools shown.

Administrative Support

- **Expectations for co-teachers:**
 - Co-teachers should share responsibilities in the classroom.
 - Administrators should hold teachers accountable for implementing co-teaching practices consistently.

- **To support the co-teaching program:**
 - Attempt to keep co-teaching teams together
 - Attempt to provide common planning
 - Attempt to assign special education teachers to the same content areas
 - Provide on-going professional development

Note to Trainer: Instruct any administrators attending the session on the expectations of co-teachers. General and special education teachers are equal authorities in the classroom and should share responsibilities. Administrators must hold teachers accountable to implementing co-teaching practices with fidelity and providing the services required by student IEPs. The local setting is a small, rural school, and it is not always possible for administrators to keep special education teachers in one content area. With that said, encourage them to attempt to keep co-teaching teams together to allow partnerships to flourish and to attempt to provide common planning time for co-teachers to support co-planning. Emphasize the need for continued professional development with co-teaching partners in the future.

Future Professional Development Needs



- Professional development (PD) should be on-going.
- Discuss future PD needs with partners at your tables.
- What do you need to be successful?
- What would you like to learn?

Note to Trainer: Teachers will need time to implement the strategies they learned in the workshop. A follow-up session could be held at the end of the semester to check teachers' progress and evaluate the consistent implementation of co-teaching practices. Have them discuss their future PD needs and share with administrators that are attending the session. Encourage them to share their PD needs with their department chair before the end of the semester in order to plan for their next professional development day.

Day 3 Wrap-up: Thoughts from Today

- Did you meet your objectives in attending this workshop?
 - What have you learned about co-teaching overall?
 - How can you and your co-teaching partner collaborate effectively in the future?
 - What instructional strategy do you think will be most beneficial to your classroom?
 - Do you have any final thoughts or questions?

Note to Trainer: Lead a discussion on the wrap-up questions from this slide.

Adjournment – Summative Evaluation

- Please complete the summative evaluation worksheet as your ticket out the door.
 1. Did you meet the learning objectives of the workshop?
 2. What information was most valuable to you?
 3. What information was least valuable to you?
 4. Overall, what improvements would you recommend for the workshop?

Note to Trainer: Distribute summative evaluation forms. Direct teachers to place them on the table as they exit.

References



- Friend, M. (2012). *Best practices in co-teaching: Practical solutions for difficult and challenging issues*. Bellvue, WA: Bureau of Education and Research.
- Parsons, S. A., Dodman, S. L., & Burrowbridge, S. C. (2013). Broadening the View of Differentiated Instruction. *Phi Delta Kappan*, 95(1), 38-42.

100 Teaching Methods

1. Assignment to outline notes
2. Biographic reports
3. Brainstorming groups
4. Bulletin boards
5. Captions
6. Card sorts
7. Case studies
8. Choice boards
9. Choral response
10. Class data
11. Class discussion
12. Coaching
13. Community resources
14. Create a brochure
15. Create a You Tube channel
16. Create your own test
17. Creating pictures
18. Crossword puzzles
19. Debate
20. Design a stamp
21. Design an album cover
22. Detect propaganda
23. Develop a webpage
24. Diagrams and tables
25. Diary entries
26. Dioramas
27. Drama, plays, and skits
28. Editorials
29. Experiential learning
30. Field trips
31. Film strips
32. Flags
33. Flash cards
34. Floor maps
35. Flowcharts
36. Forums
37. Gaming
38. Group student reports
39. Guest speakers
40. Hall of fame
41. Illustrated timelines
42. Individual student reports
43. Interpretive dance
44. Interviews
45. Investigate a life
46. Jigsaw reviews
47. Join an organization
48. Lap experiments
49. Learning logs
50. Lecture
51. Library research
52. List menus
53. Magazines
54. Make a yearbook
55. Making announcements
56. Maps, globes
57. Mock newspaper
58. Models
59. Movies, documentaries
60. Murals
61. Museum exhibits
62. Music
63. Open-note tests
64. Pen pals
65. Photographs
66. Placemat process
67. Posters
68. Post-tests
69. Power Points
70. Pre-tests
71. Problem solving
72. Project-based learning
73. Puppets
74. Puzzle maps
75. QR Codes
76. Question wheels
77. Reading aloud
78. Reading assignments
79. Role playing
80. Scrapbooks
81. Service projects
82. Simulation
83. Socratic seminar
84. Stations or centers
85. Story telling
86. Student presentations
87. Supervised study
88. Surveys
89. Synectics, forced choice between unrelated topics
90. Term papers
91. Textbook assignments
92. Tic tac toe boards
93. Tutorials
94. Vocabulary drills
95. Word association
96. Workbooks
97. Write a children's book
98. Write a poem
99. Write a song
100. Write a soundtrack

Summative Evaluation of the Workshop

Thank you for participating in this professional development workshop on the successful implementation of co-teaching practices at the high school level.

Instructions: Please rate the following statements.

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I was satisfied with the workshop sessions.					
I understand how to collaborate with my co-teacher effectively to establish parity.					
I understand each of the co-teaching models and how to implement them with my co-teacher.					
I learned new instructional strategies that I can use in my classroom.					
I know how to incorporate differentiated instruction into my co-taught lesson plans.					
I will continue to explore new ways to enhance my co-teaching skills.					

How did collaborating with your co-teacher help you develop effective lesson plans for your co-taught classroom?

How helpful were the materials presented in supporting your knowledge of co-teaching strategies?

What additional supports do you predict you will need as you delivery co-taught instruction in your classroom?

Do you have any helpful information that can be used in future presentations to others?

Appendix B: Semistructured Interview Questions

Directions to the Interviewees:

The following questions are designed to provide additional information about your co-teaching experience. You are encouraged to answer these questions as candidly and as completely as possible; the confidentiality of your responses is assured. The responses of all those teachers interviewed in the course of this study will be reported as group data according to trends that are identified. The interview is designed to last for approximately one hour, although you may take as much time as you need to answer the questions.

SET 1

1. What are your responsibilities in the inclusive classroom? Which of these are exclusively your responsibilities? Which of these is exclusively the responsibility of your partner? Which of these do you share?

The following are suggested areas of teacher responsibility in the classroom:

	My Job	Shared Responsibility	Partner's Job
<input type="checkbox"/> Planning lessons	_____	_____	_____
<input type="checkbox"/> Instruction	_____	_____	_____
<input type="checkbox"/> Modifying curriculum	_____	_____	_____
<input type="checkbox"/> Remedial instruction	_____	_____	_____
<input type="checkbox"/> Administering discipline	_____	_____	_____
<input type="checkbox"/> Classroom management	_____	_____	_____
<input type="checkbox"/> Assessment and grading	_____	_____	_____

SET 2

1. Would you describe your co-teaching experience generally as a positive one?

If yes...would you describe the positive aspects for me?

If no...would you describe the negative aspects for me?

2. Have you and your teaching partner ever disagreed about an important aspect of co-teaching?

If yes...what was the disagreement?

If no...go to set 3.

Were you able to resolve the disagreement?

If yes...how was it resolved?

If no...go to set 3.

SET 3

1. Have you used any new instructional techniques, management strategies, or curriculum adaptations in your co-teaching?

If yes...would you describe these?

If no...would you describe the teaching methods you currently use?

If yes...which of these do you consider to be most effective? Why?

If no...which of these do you consider to be most effective? Why?

If yes...which of these you consider least effective? Why?

If no...which of these do you consider to be least effective? Why?

2. Has the collaborative teaching experience contributed to your professional knowledge and skill?

If yes...would you describe these contributions?

If no...would you describe the some of its shortcomings?

Appendix C: Focus Group Questions

1. Do you think the collaborative teaching strategies that you are using are effective in educating students without disabilities in your classroom?

If yes...why are they effective?

If no...why are they not effective?

2. Do you think the collaborative teaching strategies that you are using are effective in educating students with disabilities in your classroom?

If yes...why are they effective?

If no...why are they not effective?

3. To what extent do you think that participation in an inclusive experience contributes to the social development of some students without disabilities?

In what ways does it contribute?

4. To what extent do you think that participation in an inclusive experience contributes to the social development of students with disabilities?

In what ways does it contribute?

What type of disability?

What level of severity?

5. Are the students in your inclusive classroom generally receptive to collaborative teaching?

If yes...how do you determine this?

If no...how do you determine this?

6. Have you taught in a regular education classroom (non-inclusive) or a self-contained special education classroom?

If yes...which type?

How does your recollection of that experience compare with your co-teaching experience?

Appendix D: Sample Lesson Plan

Unit Theme/Topic: Islam	
Lesson Title/ Topic:	Islam and the Middle East
Expected Student Learning Outcomes:	What will the students know and be able to do as a result of this lesson? (Be Specific) Students will be able to... Explain the growth of Islam and its achievements
Essential Questions	<ul style="list-style-type: none"> • According to Muslim tradition, how did Islam begin? • How did Islam impact the economy of the Middle East? • What caused the split between the Shia and Sunni Muslims? • What contributions did Islam make in the fields of medicine and geography? • How are Islam, Christianity, and Judaism similar? • Explain the expansion of Islam and its impact on the world.
GA Academic Standards Addressed:	<p>Which Georgia Academic Content and Performance Standards will your lesson address?</p> <p>SSWH5 The student will trace the origins and expansion of the Islamic World between 600 CE and 1300 CE.</p> <p>a. Explain the origins of Islam and the growth of the Islamic Empire.</p> <p>b. Identify the Muslim trade routes to India, China, Europe, and Africa and assess the economic impact of this trade.</p> <p>c. Explain the reasons for the split between Sunni and Shia Muslims.</p> <p>d. Identify the contributions of Islamic scholars in medicine (Ibn Sina) and geography (Ibn Battuta).</p> <p>e. Describe the impact of the Crusades on both the Islamic World and Europe.</p> <p>f. Analyze the relationship between Judaism, Christianity, and Islam.</p>
Vocabulary Acquisition:	<p>Monday- mosque, hajj, jihad</p> <p>Tuesday- caliph, minaret, muezzin, sultan</p> <p>Wednesday/ Thursday - arabesque, sultanate, rajah</p> <p>Friday- millet janizary, shah</p>
Materials Used:	<p>What instructional materials and equipment/supplies will you use in this lesson?</p> <p><input checked="" type="checkbox"/> Handouts ___ Computer Lab <input checked="" type="checkbox"/> Audio Equipment <input checked="" type="checkbox"/> Projector</p> <p>___ Workbook <input checked="" type="checkbox"/> Teacher Textbook</p>
Lesson Outline:	
<p>Beginning activity (5-10 Minutes)- Students will work on a bell ringer activity such as answering questions over previous day's discussion, watching a five minute video, copying and using key vocabulary terms, or writing in their journal notebooks.</p> <p>Major Activities (35 minutes)- Teacher and student will engage in class discussion of key ideas, events, people, and concepts in world history. Students will take notes, ask questions, and participate in class talks.</p> <p>Closing Summation (5 minutes)- Students will answer the daily questions written on the board to prove their understanding of the content material/ performance standards.</p>	

TIME	Teacher Actions Teacher will...	Student Actions/Activities (What is the student doing?) Students will...
Day 1	<ul style="list-style-type: none"> • Bell ringer activity • Teacher will show a brief YouTube video to activate students' prior knowledge on Islam. • Teacher will assign a main ideas worksheet for Chapter 11, Section 1 (the rise of Islam) • Teacher will assign an Edmodo quiz that will be due by Oct. 26. • Teachers will use a graphic organizer to explain the five pillars of Islam as well as the complex relationship between Islam, Christianity, and Judaism. • *For co-teaching class, the teachers will use the team teaching strategy to teach students the five pillars of Islam and assist with the main ideas worksheet. • Summary activity 	<ul style="list-style-type: none"> • Complete the bell ringer activity • Students will watch a brief YouTube video on Islam. • Students will complete a main ideas worksheet on Chapter 11, Section 1. • Students will complete a graphic organizer on the five pillars of Islam. • Summary activity
Day 2	<ul style="list-style-type: none"> • Bell ringer activity • Teacher will explain the spread of Islam (via trade routes) and the movements within the religion. • Teacher will have students create a map to show the spread of Islam. • *For co-teaching class, teachers will use the station teaching strategy to teach the spread of Islam. • Summary activity. 	<ul style="list-style-type: none"> • Complete the bell ringer activity • Students will listen, ask questions, and take notes over the spread of Islam. • Students will create a map to show the spread of Islam. • Summary activity
Day 3 and 4	<ul style="list-style-type: none"> • Bell ringer activity • Teacher will split classes into groups to complete station assignments about the cultural and social achievements of Islam. Groups will include Society, Art and Literature, and the World of Learning. • Teacher will explain the impact of Islam in India including the Mughal Empire, Babur, and Akbar. • *For co-teaching class, teachers will use the team teaching model. • Summary activity 	<ul style="list-style-type: none"> • Complete the bell ringer activity • Students will be put into groups to learn the social and cultural achievements on Islam. • Students will ask questions, listen, and take notes over the Islamic influence in India. • Summary activity
Day 5	<ul style="list-style-type: none"> • Bell ringer activity • Teacher will explain the Ottoman and Safavid Empires. • Teacher will assign a Venn diagram for students to demonstrate a mastery of the lesson. 	<ul style="list-style-type: none"> • Complete the bell ringer activity • Students will listen, ask questions, take notes, and participate in a discussion of the Ottoman and Safavid Empires. • Students will complete a Venn diagram to compare and contrast the two empires.

	<ul style="list-style-type: none"> • *For co-teaching classes, teachers will use the parallel teaching strategy to explain the Ottoman and Safavid Empires as well as assist students with the completion of the Venn diagram. • Summary activity. 	<ul style="list-style-type: none"> • Summary activity
Monitoring & Assessment:	<p>How will you monitor student learning during the lesson? How will you assess student work?</p> <p>I will monitor the students during the class discussion to ensure that students are on task and actively engaged in the lesson. The class discussion and questioning methods used will allow me to gauge students' understanding of the lesson.</p>	
Differentiation & Modifications to Address Individual Student Learning Styles and Needs:	<p>How will you differentiate and modify your instruction as needed to ensure that your lesson reaches more than one modality of learning as well as students meeting learning outcomes?</p> <p>The teacher will present the information in a variety of ways. The teacher will use PowerPoint presentations and the chalk board notes to engage visual learners. The teacher will also use class discussion to gain the attention of the auditory learners.</p> <p>To help engage students with vocabulary acquisition, the teacher will use the "Hip Hop History" presentations to engage students.</p> <p>The following accommodations will be made for students with special needs in 6th Period:</p> <ul style="list-style-type: none"> • SG, ET, RA • Printed/ guided notes • Extra time on formal assessments • Visual cues during class discussions • Preferential seating in the class • Proximity control • Simplified directions 	
Follow-up Activities/ Homework:	<p>How will you follow up this lesson with homework or other extension activities?</p> <p>Assignments not finished in class will be completed as homework. Enrichment and remediation will be assigned on an individual basis for students that need it. Students will also need to recall the information for future projects and review games.</p>	