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Examining Teachers' Preparation for Effective Coteaching

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Walden University 2021

Abstract

Examining Teachers' Preparation for Effective Coteaching

by

Janice L. Orr

MA, Pittsburg State University, 1998

BS, Missouri Southern State University, 1982

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

February 2021

Abstract

A critical part of teacher education programs is preparing educators for their careers, including assuring that coteaching is performed in an effective manner, particularly in inclusive classrooms. The purpose of this exploratory case study was to gain an understanding of the preparation teachers received for coteaching. The conceptual framework was social learning and communities of practice developed by Lave and Wenger. Four local school districts in the southwest region of a centrally located state participated in the study. Data collection included interviews with 4 school principals, 4 teachers, and 4 special education directors. The data were analyzed utilizing Hatch's topological analysis to reveal themes that addressed the research questions. Research questions involved identifying methods to improve coteaching through training, providing opportunities for participant involvement, developing effective techniques, and developing an improved understanding of teacher's perceptions regarding coteacher training. Key findings included participants' reports of little training in coteaching prior to being assigned a coteaching position, few college courses in coteaching offered during teacher education training, and few role models for coteaching among instructors. They also perceived a need to continue training with follow-up and review on a regular basis and for provision of administrator training on how to evaluate coteachers. These findings perhaps revealed a lack of understanding of skills needed to be successful in coteaching by institutions responsible for teacher education. Implications for positive social change include better preparing teachers to enter the coteaching classroom and enhancing learning for students through creating collaborative communities of practice among coteachers, administration and higher education faculty at the district level.

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Dedication

To teachers past and present who have worked together to bring educational opportunities for learning, and to the future teachers who will be working together to develop a better education through coteaching, benefitting all students.

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First of all, I would like to thank our Heavenly Father for giving me the ability and strength to complete the research and written work of this dissertation.

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Chapter 1: Introduction to the Study

To meet the requirements of the reauthorization of Individuals with Disabilities Education Improvement Act of 2004, many school districts have chosen to use the inclusion model to provide equal opportunity to students with special educational needs (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). The coteaching approach has become a method to provide access for students with special educational needs to the general education curriculum in the inclusive setting as well as access to highly qualified teachers (Individuals with Disabilities Education Act, 1975). Although coteaching has been a part of education since the 1960s, research has indicated that teacher education programs are not keeping up with training in coteaching to meet the needs of the diverse population of students in an inclusive classroom (Utley, 2009). A problem with many teacher preparation programs across the United States is the need to provide more training in coteaching (Faraclas, 2018). How general education teachers as well as principals and special education directors are being prepared for coteaching was examined in this study. There is a need to improve instruction for teachers in coteaching with opportunities for preservice teachers to experience methods in coteaching during their coursework (Hamilton-Jones & Vail, 2013).

Background

The Path that Led from Inclusion to Coteaching

Coteaching has been a part of education for several decades, dating back to the 1960s (Villa, Thousand, & Nevin, 2008). The origins of coteaching can be traced back to an alternative method of teaching known as team teaching (Friend et al., 2010). With

team teaching, teachers would take turns presenting the lecture. The most knowledgeable instructor would deliver the lecture to a grouping of two or four classes at one time while the other teachers would answer questions or assist students. Team teaching appeared to be a more efficient way to deliver instruction instead of teachers giving four separate lectures. Often high school teachers would plan interdisciplinary studies where two classes were combined to explore two subjects such as literature and history (Friend et al., 2010).

The collaboration of teachers working together often incorporated coteaching, which has been a significant strategy for the inclusion classroom. After the Individuals with Disabilities Act of 1997 required school systems to provide education for students with disabilities in the least restrictive environment, inclusion became a popular choice to provide the least restrictive environment (Nierengarten, 2013). Coteaching was the choice for many schools to meet the requirements of Individuals with Disabilities Education Improvement Act and No Child Left Behind (2001). With the enactment of these acts, school districts implemented coteaching on a regular basis as a strategy to meet the needs of the diverse population within the inclusive classroom (Fenty & McDuffie-Landrum, 2011). More recently, the Common Core State Standards Initiative (CCSSI, 2014) and Every Student Succeeds Act (2015) have pressured schools by requiring more accountability and rigor for the success for all students.

Training in coteaching has been accessed through seminars or workshops as part of professional development on a recurring basis, but studies confirm the need for more training in coteaching for teachers in an inclusion setting (Friend et al., 2010; Glazzard,

2011). With the continuous changes in educational law, a restructuring of teacher preparation programs may be fundamental to generating the modifications that are required to impact major education reform (Florian, 2010). For instance, instruction in coteaching may be more beneficial to teachers if taught as part of the teacher education program. Until preservice teachers are provided these opportunities to experience coteaching, many school districts will have to rely on professional development and other presentations for training coteachers.

Coteaching has slowly progressed forward. From Cook and Friend (1995), who developed models for coteaching in the 90s, to Scruggs, Mastropieri, and McDuffie (2007), who provided evidence of a positive impact on preschool through 12th grade students with disabilities in the 2000s, the issues with coteacher training continue to occur. It is important to continue research about how coteaching is implemented (Isherwood & Barger-Anderson, 2008). A nationwide pilot program for coteacher training was launched in fall 2013, which took place during the clinical experiences of teacher candidates throughout the country. This study addressed the progress of the implementation of coteacher training programs since the pilot program was introduced in 2013 by examining teachers', principals', and special education directors' views on coteaching training to see what may need to improve.

Problem Statement

There continues to be a lack of guidelines and standards for instruction of coteaching training at the college and university level. The focus of this study was to explore the instruction teachers receive in coteaching. Teacher candidates have reported

that they have not received enough training and/or have a need for more training to feel adequately prepared to teach in an inclusion setting or cooperative teaching despite coteaching becoming a significant strategy for the inclusion classroom (Guise, Habib, Thiessen, & Robbins, 2017; Kilanowski-Press, Foote, & Rinaldo, 2010; Kinne, Ryan, & Faulkner, 2016). Teachers have felt more prepared and confident to collaborate after completing coursework that included cooperative teaching in an inclusive setting (Hamilton-Jones & Vail, 2013).

Although cooperative teaching has been utilized in the classroom for over 60 years, classes on coteaching are not found in many colleges and universities (Friend et al., 2010). The need exists to better understand how teachers are prepared for coteaching who have received training from the State Department of Elementary and Secondary Education (DESE) or through other professional presentations. Data were collected and analyzed to make recommendations to improve how teachers are prepared for the coteaching environment.

Purpose of the Study

The purpose of this study was to better understand the preparation teachers receive for coteaching and to help identify what changes, if any, might be needed to improve the training practices of teachers offered by the State Department of Elementary and Secondary Education or other coteacher training sessions. The data collected from principals, special education directors, and teachers were analyzed to reveal themes that address the research questions. Identifying these themes helped in the determination of what changes might be needed, if any, to improve the training practices of teachers in the

local setting. Other institutions may use the results of this study to improve their teacher education programs and how they prepare teachers for coteaching.

Research Questions

The fundamental question that guided this study was "What changes can be made to improve coteaching training?" Four subquestions are included as part of the research:

- How did training sessions prepare teachers for coteaching?
- What opportunities were provided within the training sessions to prepare teachers for coteaching?
- What techniques were utilized within the training sessions to prepare teachers for coteaching?
- What were the perceptions of principals, teachers, and special education directors on the preparation teachers receive for coteaching?

Conceptual Framework

The selection of an effective conceptual framework for this study required careful examination of the issues addressed in this study. The conceptual framework acted as the lens used to view the topics of concern regarding the opportunities and techniques employed in the teacher education programs, specifically coteacher preparation. Thus, the conceptual framework of this study was based on communities of practice, which was developed by Lave (1991) as the basis of a social theory of learning (Wenger, 2000). Lave defined communities of practice as "groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (Wenger, 2000, p. 1). Within the educational setting, teacher candidates become a

member of a community of practice as they work together to reach the goal of success for all students (Iyer & Reese, 2013). According to Wenger (2000), the first applications of communities of practice were in teacher training. Each member of the community of practice brings collaborative development in learning to the teachers' growth in practical knowledge, confidence in teaching, and self-awareness (Saccomano, 2013). As an essential component of coteaching, collaboration is regarded as an important element in teacher preparation (Milteniene & Venclovaite, 2012; Stang & Lyons, 2008). Traditional segregated teacher education programs are contrary to the concept of communities of practice and will be addressed in Chapter 2.

Nature of the Study

The nature of this study was a qualitative approach utilizing a case study design to investigate the training opportunities and methods used in training teachers for coteaching. There is a lack of information on how teachers are prepared for the inclusive classroom (Brownell, Griffin, Leko, & Stephens, 2011). In seeking more information, the main question of this study asked was "What changes can be made to improve coteaching training?" The purpose of this study was to investigate aspects of how teachers are prepared for coteaching through the State Department of Elementary and Secondary Education and/or other coteacher training sessions. The examination of handout materials and the perceptions of principals, teachers, and special education directors, who received coteacher training through the Department of Elementary and Secondary Education or other coteacher training presentations.

Definitions

The following operational terms were used throughout this study. Although inclusion, coteaching, collaboration, and cooperative teaching are defined in this chapter as having different meanings, in this study the terms may be interchanged. Authors of the literature that was utilized in this study often referred to these terms as having the same or similar meanings.

Coteaching or Cooperative teaching: Coteaching is a model of instruction where two or more teachers work together in a classroom, sharing responsibilities for planning and implementing the lesson. Teachers also share responsibilities for grading, discipline, and conferences (Pugach & Winn, 2011).

Collaboration: Collaboration is a process when teachers of equal status, cooperate in the education of students through shared planning, resources, knowledge, and student assessment (Friend et al., 2010).

Inclusion: Inclusion is a federal mandate of the Individuals with Disabilities

Education Act (2004) to include disabled students in the general education classroom. All students regardless of abilities are provided the opportunity to learn in the least restrictive environment, which is recognized as the general education classroom (Dotger & Ashby, 2010).

Assumptions of the Study

It was assumed that the teachers, special education directors, and principals who attended training for coteaching would be willing and available to provide accurate responses to interview questions. Confidentiality was provided and the participants were

volunteers who may have withdrawn from the study at any time without consequence. It was assumed that examination of workshop syllabus or lesson plans and handout materials would reveal procedures of instruction for coteaching.

Scope and Delimitations

This study focused on the preparation teachers received for coteaching. Research was conducted at four school districts. The participants of this study included four teachers, four special education directors, and four principals who received some kind of training for coteaching. Demographics were included as part of the research for a demographic comparison in the selection of the participants. Delimitations of this study included the geographical location of the school districts. The participants were representative of teachers, special education directors, and principals from four area school districts.

Limitations of the Study

This study was limited to participants from four school districts. The study included 12 participants and therefore limited the amount of data that were collected and may not be a representation of a larger population. This study was also limited by the data provided by the participants based on their experiences. Examination of handout materials was limited to the instruction on coteaching at the present time. Syllabi and lessons plans were not provided by participants and therefore limited any examination or comparison to other documentation.

Significance of the Study

There is a need to examine how teachers are being prepared for coteaching. It is difficult to identify the skills that are being taught to teacher candidates in preparation for the inclusive classroom because there is a limited amount of research on teacher preparation in coteaching (Brownell et al., 2011). How teachers were prepared for coteaching through the State Department of Elementary and Secondary Education and/or other presentations was examined in this study. Significant findings were derived from this study, adding to the limited body of information and therefore benefiting further studies on the topic.

This study can help fill a void in educational literature regarding the types of course content and experiences in preparation of teachers in coteaching (Brinkmann & Twiford, 2012; Vermette, Jones, & Jones 2010). There is limited research on teachers learning and the focus was on the impact coteaching had on student learning (Yopp, Ellis, Bonsangue, Duarte, & Meza, 2014). Researchers have concentrated on the relationships and perceptions of coteaching, the need for training in coteaching, and how coteaching has impacted student learning outcomes (Fenty, McDuffie-Landrum, & Fisher, 2012; Jones & Harris, 2012; Kroeger et al., 2012; Nierengarten, 2013; Pugach, Blanton, & Correa, 2011). With a continued lack of studies focused on what is needed for coteacher training, future research should be conducted to address the approach to coteacher training (Faraclas, 2018). Results of this study can be used to raise awareness about the need to improve instruction for teachers in coteaching. This study can also help close the gap in the literature regarding effective teacher education programs for coteaching.

Professional Applications

A better understanding of the need to improve instruction for teachers in coteaching was provided through this study. It is important that research is conducted on how implementation of coteaching occurs (Isherwood & Barger-Anderson, 2008). The findings of this study can impact colleges and universities in the way coteaching is addressed and how instruction in coteaching is provided to teacher candidates.

Preparation for coteaching can add to the teachers' knowledge base, promote professional development, and increase self-confidence of the teacher (Ferguson & Wilson, 2011).

Coteaching presents the opportunity for each coteacher to learn from the other as they observe and participate in the partnership (Ferguson & Wilson). The implications of this study include providing useful information to researchers who utilize data to improve the implementation of inclusion through coteaching.

Implication for Social Change

The implication for social change from this study include new coursework to prepare teacher candidates in coteaching such as coursework incorporating collaboration and coteaching (Kamens, 2007; McHatton & Daniel, 2008). This continues to be a suggestion in more recent research (Kinne et al., 2016). Exposure to coteaching and collaboration during teacher education coursework will provide structured experiences to prepare teacher candidates for coteaching. Training teachers in coteaching may lead to providing quality instruction to all students by highly qualified teachers using the general education curriculum. Students in a high-quality coteaching setting have demonstrated increased academic performance (Heck, Bacharach, & Dahlberg, 2008). The goal of

coteaching is to impact all students through the collaborative relationship of the special education and general education teachers (Dieker & Murawski, 2003). An outcome of this study is advancing the instruction of teachers in coteaching, which will lead to the improvement of student achievement through the collaboration of coteachers.

Improvement of the Local Program

Teachers do not instinctively know how to coteach (Nierengarten, 2013), so teacher candidates should have opportunities to learn and experience coteaching before entering the education field (Grazlano & Navarrete, 2012). The collected data from this study can impact local universities by influencing the manner in which the elements and components of coteaching will be presented to teacher candidates. Improvements in the program of instruction for coteaching can be made through changes or additions to current programs (Walsh, 2012). A course in coteaching can be designed to add to the program of instruction provided to teacher candidates (Ferguson & Wilson, 2011). The development of a community of practice will facilitate a common focus, a common language, and common goals that will bring about an understanding of how coteaching will meet the needs of each student (Saccomano, 2013).

Summary

The first chapter of this study contained a brief introduction describing the rationale of the study, which is addressing preparation for coteaching in colleges and universities as well as other coteacher training programs. There is a need to improve instruction for teachers in coteaching (Hamilton-Jones &Vail, 2013; Kinne et al., 2016). The purpose of this study was to gain understanding of the preparation teachers receive

for coteaching and to help identify what changes, if any, might be needed to improve the training practices of teachers offered by the Department of Elementary and Secondary Education or other coteacher training presentations. The conceptual framework and the research questions that guided the study were also included in this first chapter. The limitations, assumptions, the scope and delimitations of the study were also provided. Also discussed was the nature of the study and the potential contribution to the field of coteaching.

Contained in Chapter 2 is a review of literature related to the preparation of coteaching. Current research supporting communities of practice for preservice teachers in training for coteachers is also discussed as the conceptual framework for this study. The review provides the progression of coteacher training included topics of concern and provides discussion on the need for more training in collaboration and coteaching. The use of professional development for coteaching training was discussed as well as instructors as coteachers in college and university classrooms. Also included in Chapter 2 is a discussion of components in the preparation of coteachers.

Chapter 3 includes the methodology that was utilized to conduct this study. The fourth chapter of this study is focused on the findings of the study. The final chapter includes a summary of why and how the study was completed. The conclusions that were drawn from the findings are included with any recommendations for further research. The implications for social change as to improvements of organizations or institutions, as well as individuals, communities, cultures, or societies, are also included.

Chapter 2: Literature Review

Introduction

The intention of the literature review is to contribute to the knowledge base of this study. Additionally, it addresses the problem driving this study, which is the need to improve instruction for teachers in coteaching at the college and university level and through professional development (Faraclas, 2018; Ferguson & Wilson, 2011; Kinne et al., 2016). Inclusion and coteaching have been part of education for years, yet the collaborative training with special education and general education teachers at the preservice level has experienced little change (Brinkmann & Twiford, 2012; Friend et al., 2010). Although there has been a shift in education toward a focus on clinical experiences rather than coursework (Strieker, Lin, Rosengrant, & Wright, 2020), there continues to be a lack of research regarding the instruction of teaching specific coteaching skills prior to coteaching as was evident (Brinkmann & Twiford, 2012; Cramer, Liston, Nevin, & Thousand, 2010).

In this chapter, a review of the literature is included on the preparation teachers received in coteaching before entering the coteaching environment. Discussions of the literature are presented related to the preparation of coteaching, professional development used for coteacher training, and instructors as coteachers in the college and university classroom. The preparation of teacher candidates in coteaching is also examined. A review of current research supporting communities of practice helped substantiate the conceptual framework for this study. The literature related to the preparation of

coteachers is followed by a review of the literature related to the methodology selected for this study. Finally, a summary of the chapter is presented.

Literature Search Strategy

The search methods used to develop this literature review began with the ProQuest and EBSCO host databases. The search also included the following databases: U. S. Department of Education, ERIC database, SAGE publications, Council for Exceptional Children, and various state departments of education. This review utilized indepth searches of peer reviewed journal articles, book reviews, and dissertations pertaining to the subject of coteaching. Some of the journals accessed in this research were: Remedial and Special Education, Journal of Special Education, International Journal of Teaching and Learning in Higher Education, Teacher Education and Special Education, Journal of Educational and Psychological Consultation, and Journal of the Scholarship of Teaching and Learning. The initial search included the use of the terms best practices, coteaching, collaboration, inclusion, teacher candidates, and teacher preparation. A review of the reference lists of each article resulted in a list of additional journal articles. The databases were further searched for articles relating to teacher training, mentoring, team teaching, No Child Left Behind, Individuals with Disabilities Education Improvement Act, highly qualified teachers, and mainstreaming. The databases were also searched for articles relating to *individual development*, patterns of learning, learning environments, diverse cultures, collaborative learning, self motivation, engaged learners, methods of assessment, instructional strategies, planning for instruction, and leadership roles.

The review of literature in the search for peer reviewed articles pertaining to the preparation of coteachers for coteaching was limited to many articles and research conducted between 2008 and 2014 with few studies within the last 5 years. This is due to a lack of current studies engaged in research presenting specific aspects of coteacher training, which is a significant part of this present study. Sources published before 2015 provided background information and served as foundational publications. Several research studies from 2010 through 2014 were examined and included to provide a background of special education promoting coteaching throughout the states including the state where this study took place. Researchers continue to focus on the success of coteaching with students and their perceptions, educators and their perceptions as well as the need for coteacher training for preservice teachers.

Conceptual Framework

The conceptual framework of this study was grounded in situated learning theory with the focus on communities of practice. During the 70s Lave (1982) studied apprenticeship training in West Africa, which guided her idea that knowledge is gained through learning in the environment or situation. She continued her studies of learning and teamed with Wenger in the development of communities of practice. Lave maintained that learning is situational and occurs normally within the activity surrounded by the situation and culture (Lave, 1991). The general idea of situated learning is to put the learner in a real-world situation to interact with the members of the community, and then learning will occur by providing knowledge in context (Anderson, Reder, & Simon,

1996). As learners become involved in a community of practice, social interaction and collaboration become essential components of the learning experience (Lave, 1991).

Situated Learning

Situated learning utilizes cooperative teaching methods in the actuation of knowledge. Anderson et al. (1996) stated that the situated learning experience has four major premises: (a) learning exists in a complex, social environment created by the actions of the members and the situations; (b) knowledge is acquired from the situation and transferred to similar situations; (c) learning develops from the actions of everyday situations; and (d) learning is a result of the process of thinking, perceiving, problem solving, and interacting. Through situated learning within the community of practice, the members will generate and share ideas, develop tools, learn content, and learn the vocabulary (Lave, 1991). Through the community of practice specific beliefs and behaviors as well as a common language emerge from the dialogue among the learning community (Lave, 1997). Situated learning puts the learner in the center of the instructional process. The learner observes the expert in the setting that provides the proper context for the learning to take place and then the learner, with the expert work together to solve the problem (Lave, 1991).

Four elements of situated learning also include the community, context, content, and participation to be integrated in the classroom as a practice environment (Lave, 1988). Ssituated learning has been proposed as a model of instruction for classroom practice, immersing students in the natural environment of the learning experience for meaningful learning by providing social and physical context (Brown, Collins, & Duguid,

1989). Within the situated learning environment, the student can also access the expert, observing the task as it is modeled before the student attempts the process (Herrington & Oliver, 1995). The situated learning environment provides coaching and scaffolding for support to students within the community (Herrington & Oliver, 1995). In Lave's (1991) concept, the purpose of the community of practice is to learn through talk and not from talk as experienced in the traditional approach of education. With the teacher education program as the community of practice, the teacher candidates are included in an environment in which they can reflect and engage in dialogue with support and guidance from the expert members of the community (Saccomano, 2013).

Literature Related to the Key Concepts in Preparation for Coteaching

Since the enactment of Individuals with Disabilities Act of 1997, more students with individual education plans are being included in the general education classroom. Inclusion was a popular choice with schools to meet the requirements mandated after No Child Left Behind 2001 was enacted (Howard & Potts, 2009; Pugach & Winn, 2011). Special education teachers continue to be found in the general education classroom, where the general education and special education teachers are expected to work alongside of each other as coteachers with little preparation of either teacher in the coteaching environment (Badiali & Titus, 2010; Faraclas, 2018; Ricci & Fingon, 2018).

There are many aspects of coteaching training that should be considered as part of the curriculum in teacher education programs. Several of these aspects are addressed as topics of concern. How researchers approached the issues in coteaching and addressed

the problems in training teachers for coteaching will be discussed in the following sections. The components of coteaching are also provided.

Training at the Preservice Level

A review of literature reflected that instruction in coteaching has not been providing opportunities for experience and training before teacher candidates enter the field of teaching in a coteaching environment (Cramer et al., 2010; Faraclas, 2018; Hamilton-Jones & Vail, 2013; Ricci & Fingon, 2018). General education teachers are usually only required to take an introductory course in special education during their teacher preparation program (Blanton & Pugach, 2011), but one course does not prepare general education teachers for collaboration with special education teachers (Pugach, Blanton, & Correa, 2011). Training for coteaching often takes place during professional development workshops or seminars during employment (Cramer et al., 2010; Faraclas, 2018; Ricci & Fingon, 2018). But there has been a problem in connecting what teacher candidates were being taught during coursework and the experiences during the practicum (Brinkmann & Twiford, 2012), and teacher candidates should experience training in coteaching before moving into the classroom as a teacher.

There has been a need for the development of curricula at the college and university level relevant to the trend toward inclusion (Austin, 2001; Villa, Thousand, & Chapple, 1996). Approximately 77% of teacher candidates will teach in a coteaching setting after graduation (Kohler-Evens, 2006). The curricula at the college and university level regarding inclusion need to be improved to address the requirements of Individuals with Disabilities Education Improvement and No Child Left Behind as well as the

standards of the National Board for Professional Teacher Standards, the Council for Exceptional Children, the Interstate New Teacher Assessment and Support Consortium (INTASC), and the National Council of Accreditation for Teacher Education with respect to coteaching, collaboration, and inclusive teaching (Carmer et al., 2010).

Research on coteacher training programs has shown limited success in preparing teacher candidates as well as a need for further research. Willis (2015) examined the responses of teacher candidates and cooperating teachers during the first years of a state mandated program for coteacher training implemented during the student teacher clinical session. Five local colleges graduated 315 teachers since 2013, and not one of the student teachers failed their student teaching experience. Cooperating teachers also reported valuable coteaching insights acquired during their partnering with the student teachers (Willis, 2015). Kinne et al. (2016) also conducted a study of a coteaching pilot program that was part of the first year of Kentucky's mandated coteaching clinical experience. Results of the study showed positive views of coteaching, coteaching does not prepare teacher candidates for their own classrooms, teacher candidates need to exert more leadership, and the level of understanding and commitment by the teacher candidates to coteaching was questioned. Thus, coteaching programs may need to include rubrics and lesson plan forms that provide expectations with suggestions of several coteaching strategies as well as theoretical and practical components of coteaching, which should be introduced early in the program (Kinne et al., 2016).

Professional Development and Coteaching

Coteaching has become the service delivery model that allows all students to be included and benefit from highly qualified content teachers, so there is a need for more training in coteaching (Walsh, 2012). Training for coteachers continues through professional development or in-service workshops (Faraclas, 2018). Teachers who were not provided the opportunity of instruction in coteaching during their preservice years may feel they are not prepared to provide the instructional support for a diverse student classroom (Faraclas, 2018; McCray & McHatton, 2011). General educators and special education teachers have desired additional in-service training on the implementation of coteaching (Conderman, Johnston-Rodriguez, Hartman, & Walker, 2012). Therefore, professional development programs on coteaching can provide training to teachers who did not have the opportunity to study coteaching and keep teachers current with other areas of education.

Continued research is needed to identify the types of content and experiences preservice teachers are receiving and what professional development is providing to beginning teachers, so the skill sets needed to successfully implement coteaching can be addressed during professional development (Brinkmann & Twiford, 2012). Both general educators and special education teachers must feel adequately trained in coteaching to successfully share teaching responsibilities (Bean & Lillenstein, 2012; Nichols & Sheffield, 2014). Professional development can provide the knowledge and specific training in collaboration for teachers to be effective in the inclusive classroom (Faraclas, 2018). With the increase of a diverse student population and the inclusion of students

with disabilities in the general education classrooms, there is a need to prepare both general education teachers as well as the special education teachers for the inclusive classrooms.

Instructors as Coteachers in the College and University Classroom

It is vital that preservice teachers observe collaboration during the college classes if teachers are expected to collaborate in their classroom (Stang & Lyons, 2008). The introduction of coteaching by instructors in the college level classroom would allow teacher candidates to witness how coteaching should work. Researchers have even developed courses to provide a model for coteaching and to expose future educators to a firsthand experience of coteaching (Changmugam & Gerlach, 2013; Hamilton-Hones & Vail, 2013). Both general education teachers and special educators would benefit from more experience and training in coteaching (Bocala, Morgan, Mundry, & Mello, 2010).

Conflicting teaching styles and personality differences are areas of possible concern in coteaching, but with training in coteaching, teacher candidates can prepare for challenges that they might face in the cotaught classroom and can become accustomed to the idea of two teachers in one room (Stang & Lyons, 2008). Faculty modeling of coteaching has been a valued contributing factor in the increase in knowledge of coteaching (Stang & Lyons, 2008). Exposing teacher candidates to scenarios and role playing during coteaching training can provide experience in problem solving and opportunities to develop positive attitudes. Sessions in conflict resolution could prepare teacher candidates for issues between coteachers that may arise during class or after school as well as problem solving issues with students (Newton, Horner, Todd,

Algozzine, & Algozzine, 2012). If teachers are expected to teach in a coteaching setting, teacher candidates should experience firsthand what coteaching looks like (Ricci & Fingon, 2008).

Colleges and universities are forging new partnerships to create yearlong clinical experiences that include coteaching and coaching, but although these partnerships are growing in number, little is known concerning the value of specific coaching approaches and practices that support teacher candidates during the cotaught clinical experience (Strieker et al., 2020). However, research has indicated that effective coaches engage in collaborative dialogue that moves candidates toward self-directed learning and show practices of goal setting with the candidates, mentoring of candidates and teaching by demonstration (Strieker et al., 2020). Teacher candidates' observation of professors as coteachers is important (Strieker et al., 2020).

Planning and Partnership in Segregated Teacher Education Programs

Changes in the requirements to meet the needs of all students have put teachers in a coteaching position without adequate preparation (Faraclas, 2018). The demand for reform in teacher preparation programs required skills of teachers who are much different from those who were part of the teachers' preparation programs a few decades ago (Smith, Robb, West, & Tyler, 2010). Teachers should be prepared to coteach and should be taught the approaches to coteaching at preservice training (Badiali & Titus, 2010).

More recent research indicated a need for more training in collaboration and coteaching during college preservice coursework. Teacher preparation programs should be designed to include both special education preservice teachers and general education

preservice teachers (Ricci & Fingon, 2017). Teacher candidates should be assigned to an inclusive classroom during the student teaching practice, as teachers have often been assigned to coteaching without proper training in coteaching. Teacher preparation programs should provide training in the area of collaboration and coteaching for not only special education teachers but also general education teachers to work together in the cotaught classroom (Ricci & Fingon, 2017).

Sanchaz, Humphreys, and Carroll (2019) examined the experiences of three coteachers at the graduate level. The researchers and coteachers of the study wanted to explore their first coteaching experiences through open ended questioning to better understand the drawbacks and strengths of coteaching. The coteaching model was utilized by a university assistant professor and two principals. The university course for principal preparation was to be revised. The class was taught one day per week. The two principals alternated weeks so that each one took a turn with the university professor as a coteacher team. Meetings to revise group decisions occurred during the week, but the professor and two principals met on a weekly basis, one hour before class to set lesson plans, reflect, and make any refinements to the program.

The coteachers met prior to the first coteaching experience at the beginning of the year. It was focused on the development of the class outline and eight research questions. The first four open ended questions were written to better understand each coteachers' lens, experiences, and person motivations to work on the revising of the principal preparation course through the employment of coteaching. The last four open ended questions were based on coteaching research to examine the benefits and drawbacks

when utilized in a higher educational setting. The findings and outcomes of this study provide insight to cotaught college and university course work, preparation, planning, execution, and evaluation. These authors suggested discussion and resolution of specific issues at the beginning of the partnership were critical for success.

Researchers have recommended that in preparation for coteaching, teacher candidates should be introduced and instructed in the coteaching model (Blanton & Pugach, 2011. Special education teachers and regular educators often come together in the cotaught classroom with different backgrounds. This would affirm that special education teachers and general educators need to collaborate and view teaching and learning in the same way (Brinkmann & Twiford, 2012). Special education teachers' programs were often segregated from the general education teachers' programs as described by Hamilton-Jones & Vail (2013) and teacher's education programs continue to be segregated at many colleges and universities according to Faraclas (2018). Many teacher education programs continue instruction of teacher candidates in separate programs and do not allow for the training and experience that is needed for the collaborative experiences between the general education and special education teachers (Cramer et al., 2010; Guise, Habib, Thiessen, Robbins. 2017). This instructional segregation of general education and special education teacher candidates would appear to be disadvantageous to both groups of teacher candidates. This approach is in opposition with the concept of communities of practice during the training (Wenger, 2000).

Utilizing communities of practice as their theoretical framework, Guise, Habib, Thiessen, and Robbins (2017) conducted a mixed method study which examined the incorporation of the coteaching model during the teacher candidates' student teacher experience. This study provided insight into the conditions that are necessary for successful coteaching. A community of practice was established during the coteaching experience. Eight preservice teachers were paired with cooperating teachers for this study. Data were collected from weekly reflections, university supervisor observations, three individual interviews with the preservice teacher, cooperating teacher and the university supervisor. Guise et al. suggested several ideas for presentations during workshops. The authors indicated that teacher education programs provide a type of roadmap for leadership by showing how roles of the teachers can change with coplanning, co-instruction, and co-assessment. They also suggested to provide opportunities for the teacher pairs to get to know each other better through different planned activities. As a reminder, the authors stated that coteacher preparation takes a commitment of time, thought and openness by the coteaching pair.

Communities of practice provide a realistic example of a society of shared learning (Saccomano, 2013). Instruction during traditional teacher training compels teachers to take ownership of their classrooms at the beginning of their career. The segregation of special educators' and general educators' training does not prepare teacher candidates to share a classroom in a coteaching environment. Saccomano suggested that building communities of practice at the preservice level will provide tools which allow teacher candidates to transform challenges during the teacher candidate practicum into

valuable professional experiences. Teacher candidates are provided an opportunity to practice in an environment to engage in reflection and critical dialogue within the communities of practice at the preservice level (Saccomano, 2013). With the implementation of communities of practice, teacher candidates are encouraged to ask questions, evaluate teaching practices, develop viewpoints, and take part in activities (Saccomano, 2013). Saccomano noted that in communities of practice opportunities exist to explore alternative teaching methodologies and the reflection of practices are established as routine and allow teacher candidates to become more comfortable as coteachers.

Providing the appropriate training in coteaching during the teacher education program may alleviate some of the issues and challenges new teachers face in their first employments. Collaboration skills in coteaching could become part of the classroom training (Chanmugam & Gerlach, 2013).

With instruction of special education teacher candidates in a separate setting from the general education teachers, teacher candidates often do not experience the opportunities for collaboration. In order to achieve best practices, colleges and universities should include elements of coteaching during the teacher education courses prior to teachers entering the teaching field (Guise, Habib, Thiessen, & Robbins, 2017).

Plans that make the partnership work. To help make the partnership of coteaching successful, a plan is needed as to how the lessons will be delivered, how activities will be presented, and how other daily procedures will be carried out. Although, Nichols et al. (2010) pointed out the number one challenge appeared to be the lack of

mutual planning time this continues to be a problem. Coteachers are expected to plan a number of activities that will be part of the daily routine. Specific time slots for planning are not always available during the day and co-planning may require teachers to stay after school Smith, Hurst, and Murakami (2016).

The implications for teacher education were to encourage early training in collaboration skills and coteaching at the preservice level should be implemented with both general and special education teacher candidates. Early on, McHatton and Daniel's (2008) mixed method study, suggested the need for teacher candidates to engage in coteaching, to model best practice, to provide teacher candidates skills regarding working with and meeting the needs of all students. Findings also revealed differences in the training of general education teacher candidates and of special education teacher candidates, which reinforces the focus of this study, to explore the need to improve instruction for both special education and general education teacher candidates in coteaching. Researchers continue to find this a problem (Ricci, Persiani, & Williams, 2019).

Issues with planning time and planning styles. Nichols et al. (2010) and Pugach & Winn (2011) recognized that ample time for planning is necessary to achieve effective coteaching. The lack of coordinated planning time has been problematic for a successful relationship in coteaching. These authors realized that common planning time is not always possible if the special education teacher works with more than one general education teacher. This continues to be seen as a problem and for this reason, it is

important that teachers learn about scheduling planning time to be able to fully prepare for the task of coteaching (Nierengarten, 2013).

Early research of McHatton and Daniel (2008) recommended that open communication is necessary, revealing personal preferences, values, beliefs, and teaching styles. Also acknowledged by Stang and Lyons (2008), these authors recommended that teacher candidates would benefit if teacher education programs included skills in coplanning to address how to collaborate with other teachers. Collaboration provides the opportunities for critical analysis of teacher practices and also offers support for teachers to augment knowledge and professional growth (Bronson & Dentith, 2014).

Ferguson and Wilson (2011) realized a struggle for power often existed between coteachers and was identified as a challenge. These authors addressed the role each teacher would take in coteaching. According to Ferguson and Wilson there are two possible drawbacks in coteaching with the impact of having two experts in the classroom. These authors discussed how one teacher might feel threatened by the other's abilities and knowledge. The second problem would be how a new teacher may manage feelings of inadequacy when partnered with a more experienced teacher (Ferguson & Wilson, 2011). The findings of the Ferguson and Wilson's study suggested research a needed to address issues of collaboration in the coteaching setting.

More recently, Ricci, Persiani, & Williams (2019) analyzed coteaching as it relates to recruiting and preparing high quality teachers in urban schools in a mix method of research. Data included a survey on coteaching and the use of a self assessment tool on

collaboration collected from the participants with the evaluation of reflections of highlights and challenges of the coteaching experiences.

The authors noted that learning to coteach is a developmental process. The implementation of coteaching models begin with utilizing the easiest form of coteaching, which is one who teaches and one who observes or assists. As the year progressed more difficult models were implemented resulting in a more natural process between the two teachers.

Suggestions to enrich the coteaching experience were provided by the authors that would be considered helpful when preparing for coteaching. These suggestions were to establish rapport, identify teaching styles, discuss strengths and weaknesses, discuss individual education plans, establish regular education goals, formulate a plan of action while acting as a unified team, and be willing to take risks and grow.

Findings revealed participants presented positive observations engaging at least 1-2 times a week in effective coteaching, sharing ideas related to communication and feedback, offering varied perspectives, sharing ideas, providing benefits for the students, improving logistics for coteaching, sharing authority, and motivating to do better.

Components of Coteacher Preparation

With the mandate of No Child Left Behind, many school districts implemented inclusion to provide access to the general education curriculum to students with special educational needs. Coteaching has been utilized to provide instruction by highly qualified teachers in an inclusion setting. Several researchers expressed the need for the development of curricula at the college and university level that was relevant to the

earlier trend toward inclusion (Cramer et al., 2010; Villa et al., 2008). They noted that teacher candidates should be prepared for teaching in a collaborative setting.

In a earlier study, Brinkmann and Twiford (2012) were also concerned about missing components of teacher preparation in collaboration and coteaching, as they sought to identify skills perceived as necessary to be successful in an inclusive setting. Their qualitative study utilized purposeful sampling of 19 teachers with 0-5 year's experience. The participants were formed into three focus groups, which represented three of the largest school districts surrounding the metropolitan area (Brinkmann & Twiford, 2012). The researchers utilized a modified beginning teacher questionnaire, which was based on the ten core principles of the Interstate New Teacher Assessment and Support Consortium. By utilizing the questionnaire, these authors endeavored to identify the skills that should be incorporated in the training programs for teacher candidates and beginning teachers. Brinkmann and Twiford revealed there is little evidence-based research on best practices for preservice training and recommended more research be completed on the type of courses and opportunities that are provided to preservice teachers.

Brinkmann and Twiford's (2012) study identified skill sets which they believed to be essential in order to retain a successful coteaching program. These authors recommended the alignment of the standards with college and university preservice programming which would provide a foundation in the preparation for coteaching based on the principles and standards of the Interstate New Teacher Assessment and Support Consortium. These standards were founded on scientific based research which included

the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge regarding education activities and programs as required by No Child Left Behind (Council of Chief State School Officers, 2013). The Council of Chief State School Officers, a nonprofit, nonpartisan group of public officials, provides leadership and advocacy on key educational issues, and originally developed the Interstate New Teacher Assessment and Support Consortium standards in 1992 as a model for licensing new teachers, which were updated in 2013 (Council of Chief State School Officers, 2013).

Proposed skills and recommendations for best practices of what effective training for coteaching should look like are provided through studies such as: Bacharach, Heck, & Dahlberg (2008); McHatton & Daniel (2008); Pugach & Winn (2011); Stang & Lyons, (2008) but have not been found in more recent studies. Several of these authors identified same or similar skills of effective training for coteaching. Other authors such as Badiali &Titus (2010), Chanmugam & Gerlach (2013), and Nierengarten (2013) also identified similar skills. The examination and discussion of same or similar skill sets or best practices have not been included in more recent research and therefore these studies are necessary to identify specific aspects of coteaching skills in this current study.

Results of Brinkmann and Twiford's (2012) study indicated that special and general education teachers agreed that skills such as collaboration on lesson planning, communication, classroom management, data collection, interpersonal skills, and differentiation of instruction, were important for the success in the development of coteaching. The results also revealed the largest gap was in the areas of classroom

management strategies and coteaching skills in preservice coursework for general education teachers. For special education teachers' preservice coursework, skills in behavior and classroom management strategies during coteaching as well as skills in effectively writing individual education plans were identified as areas of the largest discrepancies (Brinkmann & Twiford, 2012).

Recommendations by Brinkmann and Twiford (2012) were made for the improvement of the Virginia institutions of higher education, but these recommendations support the purpose of the call to continue research on the types of course work and the experiences provided to preservice teachers. It was also recommended to continue research to identify the professional development that is provided to beginning teachers to supplement those teachers who have not received collaborative or coteaching training. A third suggestion was to identify if institutions of higher education are utilizing the Interstate New Teacher Assessment and Support Consortium standards to measure the preparedness of preservice teachers. Brinkman and Twiford asked the question of why coteaching has been around for 15 to 20 years or more while the process of implementation continues to be unclear. Generalizability of the study was limited by the small number of participants and the focus of the geographical location, but Brinkmann and Twiford laid a foundation for similar studies that could add to the research field. Brinkmann and Twiford's (2012) research is key in the recognition of the skill set that are missing in more recent research studies, which makes their study significant to this current study.

Coteaching Preparation to Improve Quality Performance

Coteaching preparation at the preservice level provides direction for the teacher candidates' in making decisions and taking actions that will affect the atmosphere in the classroom setting. Early on, the evidence of quality performance in coteaching can be observed when effective coteaching takes place in the classroom was identified in Magiera & Simmons' (2005) study. These researchers added that (a) professionalism, (b) classroom management, (c) instructional process, (d) learning groups, and (e) student progress are areas of coteaching that should be part of coteaching preparation. Brinkmann and Twiford (2012) included (a) team building, (b) communication, (c) problem solving, and (d) conflict resolution skills to be added to collaboration training as part of coteaching programs. In order to enhance the effectiveness of cotraining, all preservice teachers, general and special education, should be allowed to experience training together at the college level (Blanton & Pugach, 2011). Bacharach et al. (2008) grouped five themes from their research into key elements of coteaching. The five themes were; (a) sharing leadership, (b) communication, (c) relationship-building, (d) classroom applications, and (e) knowledge base of coteaching. The authors suggested that activities, assignments, readings, and all class work would be designed with these components in mind. Using the same standards as Brinkmann and Twiford (2012), Bacharach et al. (2008) suggested activities and class work at the preservice level could be aligned with the Interstate New Teacher Assessment and Support Consortium standards discussed earlier in this chapter.

Bacharach, Heck, and Dahlberg's (2010) research was based on a 4 year study of two independent measures, the Minnesota Comprehensive Assessment and the Research Edition of the Woodcock Johnson Psychoeducational Battery. Bacharach et al. (2010) identified a statistically significant increase in the academic performance of students in cotaught mathematics and reading classrooms. Bacharach and Washut-Heck (2012) utilized the data from the Bacharach, Heck, and Dahlberg (2010) study in an attempt to reform teacher preparation programs much like Brinkmann and Twiford (2012) to include coteaching during the practicum. Bacharach and Washut-Heck also supported improvements in teacher preparation programs regarding coteaching.

Bacharach and Washut-Heck (2012) compared the reading and mathematics scores of the Minnesota Comprehensive Assessment and Woodcock Johnson Psychoeducational Battery to the Bacharach, Heck, and Dahlberg (2010) study of students who were included in a cotaught classroom and students who were not included in a cotaught classroom. The students in the non cotaught classrooms either had a teacher candidate in the traditional student teaching setting with a host teacher or a single teacher in a traditional classroom. The Minnesota Comprehensive Assessment data indicated that students in the cotaught classroom statistically outperformed the students in the mathematics and reading classrooms that were taught by one teacher or a cooperating teacher with a teacher candidate in a traditional model of student teaching (Bacharach & Washut-Heck, 2012). As a result, Bacharach and Washut-Heck (2012) argued that colleges and universities should provide a coteaching model for student teaching to better prepare teachers for coteaching in a diverse school population. The study provides a

foundation for future studies to increase the body of knowledge concerning the need to provide more training in coteaching for preservice teachers.

In a more recent study, Faraclas (2018) conducted an experimental study which included 48 special and regular education teachers. This study employed randomized pretest and posttest to examine how professional development in coteaching can affect coteachers performance. The participants were divided into 24 teams. Half of the teams would be the control group; the other teams would receive coteacher training for the treatment group. Although 87.5% of the participants had Master's degrees, they had little training in coteaching. Over half of the participants did not receive college coursework in coteaching.

Faraclas (2018) observed each coteaching team for about 55 minutes before the beginning of the professional development training. During this time Faraclas utilized a self developed instrument, Performance Assessment for Coteachers (PACT). This was used to assess each team's performance in classroom management, instruction, planning, assessment and behavioral management. The researcher also noted how often each participant took the lead or supported the instructional participant, and whether the participants shared responsibilities for the students.

During the first phase of the researched based professional development, the treatment group of participants received five two-hour training sessions. These sessions included instruction and practice in five areas of coteaching. In the second phase of the treatment, Faraclas again observed each team during the cotaught classes. After the observation, the researcher met with the participants to provide feedback.

Faraclas recognized the benefit of providing a well developed program of training for teachers who are seeking training in coteaching. She found that the treatment group's Performance Assessment for Coteachers scores were consistently higher than those of the control group. She stated that the outcome strongly suggests there was evidence of collaboration with the teams that received training and are consistent with previous studies. Faraclas' findings support the purpose of this current study by stressing the importance of providing a well developed training program in coteaching.

Hurd & Weilbacher (2017) studied the benefits of coteaching in middle level education programs. The authors noted that exemplary middle schools use interdisciplinary teaming which includes co-planning, coteaching, co-assessing with two or more teachers coming from different subject areas. Hurd & Weilbacher report that caseloads for special education teachers continued to increase while more students with disabilities enter the regular education program. These increasing demands require that teachers are well equipped to effectively work together.

The qualitative research design used a variety of data sources which examined the professional educational benefit of coteaching for teacher candidates, middle school teachers, and university faculty members. A convenience sample population of consenting middle school teachers and their assigned teacher candidates was produced. Data were derived from interviews and focus groups. The target middle schools were located in a small urban city in the Midwest. Data on participant experiences were collected over one academic year through two interrelated phases of individual and focus group interviews.

Results of the study identified benefits of coteaching for the teacher candidate, the cooperating teacher, and the middle school students. Overall shared benefits were also identified which included (1) better preparation of content and increased opportunities for students; (2) a focus on the needs of middle schoolers with another set of eyes; (3) increased respect for colleagues; and (4) extended time. The focus of the study adds to the research of coteacher training.

Educators working in a coteaching setting should have a common conceptual framework, language, and skills set (Thousand, Nevin, & Villa, 2008). These authors described the skills as a differentiation in approaches to coteaching and design included approaches to instruction, collaborative planning, and cooperative group learning. A foundation for teacher candidates is necessary to assure skills development in coteaching.

Review of Literature Related to Key Concepts by Methodology

A case study is used to discover meaning, to investigate processes, or in the evaluation of a program (Patton, 2002). The analysis of key studies in this proposal will provide the methodologies utilized in each study. These methods will be compared and contrasted with each study. A variety of methods will be analyzed and explored to potentially add to the body of knowledge concerning the need to provide more training in coteaching for preservice teachers.

Bogdan and Biklen (2007) pointed out that the case study focuses on an in-depth or prolonged examination of a single person or a small number of individuals or particular event. Creswell (2012) explained that a case study is an exploration of a bounded system. The in-depth examination of the local university's teacher education

program and the limited time, setting, and number of participants included in the practicum would be consistent with the definitions of these authors. Therefore, a case study research design is appropriate to accomplish the purpose of this proposed study. A case study will provide data through interviews of individuals' experiences, attitudes, and beliefs and the examination of documents (Yin, 2009).

Methods of Quantitative Research Reviewed

In the quantitative approach, the researcher gathers numerical data for purposes of summarization, classification, interpretation, and generalization (Rumrill, Cook, & Wiley, 2011). Quantitative research can be descriptive, experimental, correlational or causal comparative (McMillan & Schumacher, 2010). A survey is often used when a large sample size is required in the research. Researchers may use a survey to gather data in a descriptive or correlational study to measure variables and determine what relationships exist (McMillan & Schumacher, 2010). Data are collected to assist in the foundation to develop a hypothesis. To test the hypotheses, an experimental study would be utilized to determine cause and affect relationships (Rumrill et al., 2011). The causal-comparative study examines if one or more pre-existing conditions have caused differences within the group (McMillan & Schumacher, 2010). Although quantitative methods were not utilized in this proposal, quantitative studies were reviewed to provide support from the findings and recommendations.

Strieker, Lin, Rosengrant, & Wright (2020) created a quantitative study to analyze practices in coaching cotaught preservice clinical experiences. The authors noted a shift in education toward a focus on clinical experiences rather than coursework. This resulted

in colleges and universities forging new partnerships to create yearlong clinical experiences that included coteaching and coaching. Data were produced by 13 coteacher coaches through reviewing their resumes, monthly reports, protocols, reflections, and brief surveys on their monthly activities which included attendance records and seminars. The initial method to quantify the coaches' practices relied on the university data base for recruitment, professional development, and accountability of coaches. The results of the study indicated that effective coaches engaged in collaborative dialogue that moved candidates toward self-directed learning. In addition effective coaches evidenced practices of goal setting with the teacher candidates, mentoring of teacher candidates and teaching by demonstration.

The authors contend that while partnerships are growing in number, little is known concerning the value of specific coaching approaches and practices which support teacher candidates during the cotaught clinical experience. The research of Strieker, Lin, Rosengrant, and Wright (2020) reflected similar findings as those found in this present study.

Mixed Methods

Other studies utilized as support in this proposal made use of the mixed methods approaches in data collection and data analysis. To provide a historical perspective, the examination of Bacharach and Washut-Heck (2012) shed light on the progress colleges and universities were making in the area of coteacher training. Bacharach and Washut-Heck are researchers who embraced coteacher training and helped develop a coteaching program that was introduced nationwide and adopted by hundreds of colleges and

universities throughout the county as a pilot program in teacher education and certification. These authors utilized the quantitative data from a previous study conducted by Bacharach, Heck, and Dahlberg (2010). Bacharach and Washut-Heck (2012) examined the quantitative data collected on the academic performance of elementary students in the areas of mathematics and reading after the students attended classes in a cotaught setting. As reported by Bacharach et al. (2010) the students were administered two different measures over a four year period. The two measures were analyzed separately and generated comparable results regarding the effect of coteaching on the students' achievement in reading and mathematics (Bacharach & Washut-Heck, 2012). The results from one test indicated a statistically significant increase in mathematics and reading scores by students in the cotaught classroom as compared to students who were not included in a cotaught classroom (Bacharach et al., 2010). These authors reported the second test indicated statistically significant gains in the four years of students in the cotaught reading class and two of the four years in mathematics.

Qualitative data were collected from a summative assessment of the observation of each teacher candidate at the end of the practicum. The assessment was based on the Interstate New Teacher Assessment and Support Consortium standards and a standard to measure professional disposition was scored on a four point Likert type scale (Bacharach & Washut-Heck, 2012). These researchers collected qualitative data from the results of the end of the year survey answered by the teacher candidates. Teacher candidates were invited to participate in focus groups, which provided discussion on the coteaching model of the student teaching experience. Bacharach and Washut-Heck (2012) included an end

of experience survey which many of the participants reported increased classroom management skills, better understanding of the curriculum, and improved collaboration skills as a result of their participation in coteaching. Through the qualitative data which Bacharach and Washut-Heck gathered and the quantitative data of Bacharach, Heck and Dahlberg (2010) from an earlier study, a strong argument was made for colleges and universities to make the changes in the curriculum to include a coteaching model for the practicum.

More recently, Ricci, Zetlin, and Osipova (2017) used a mixed method approach to study the importance of special education teacher preparation programs that explicitly trains future teachers in collaboration and coteaching skills. Participants were 57 preservice special educators enrolled in one of two 10-week terms at a Southern California university. Thirty participants were enrolled in the first 10-week term and 27 participants enrolled in the second 10-week term. The study utilized various surveys to develop data for analysis. The surveys included an evaluation of the participants' collaboration skills and those of their coteachers and another survey of their beliefs concerning their competence and their perceptions of collaboration and coteaching. In addition, university supervisors completed a survey at the end of the quarter where they rated the skills of the preservice special educators in collaboration and coteaching.

Both quantitative and qualitative methodology was used for this study. The Statistical Package for Social Sciences (SPSS) software was utilized for the quantitative analysis to evaluate descriptive statistics using frequency counts, percentage of responses, and paired sample t-tests to determine trends. The quantitative analysis was conducted at

the mid-quarter and at the end of fieldwork. The results showed a significant difference in how preservice special educators rated themselves regarding their collaboration at the middle and end of the quarter. They also found a significant difference in how these educators evaluated their coteaching partner's collaboration from mid-quarter to the end of the quarter. The majority of participants reported growth in their teaching skills as the main outcome of the field work. They indicated this growth in skills would serve them in meeting the diverse learning needs of children in their own communities. The study helps to highlight the importance of special education teacher preparation programs that explicitly train aspiring teachers in collaboration and coteaching skills.

Conderman et al., (2013) conducted a mixed method study. Beginning teachers report a disconnection between what they learned in teacher preparation and what they experienced in their field assignments. Conderman's et al. collected data through open ended questions and forced choice answers of a four point Likert Scale. During the analysis of data, a software program was used to provide descriptive and correlation statistics to summarize the results of the first two parts of the survey. The third part of the responses were read and coded separately by the researchers to form categories and themes. The authors concurred twice to compare results of the coded categories into 10 themes. The study provided a number of results that can be helpful in improvement in teacher education programs. Conderman et al. used an inductive process of open coding to establish theme and categories. The authors looked for phrases and regularities examining line by line to establish topics and patterns. As a result of the study,

skills, planning, and providing individualized instruction as having the highest preparation scores. The lowest scores were found in transition assessment and support for students with deficiencies in language. Participants reported the need for additional training in classroom management, reading, collaboration, transition planning, and teaching students with Autism. Teacher candidates were asked to complete surveys to rank their level of preparation and confidence in program competencies. Data from this study can add to the evidence to encourage universities to update their teacher preparation programs to equip teacher candidates for the inclusive education.

Ricci, Persiani, & Williams (2019) developed a mixed method study to analyze coteaching as it relates to recruiting and preparing high quality teachers for traditionally underserved urban schools. Study participants were 37 residents and 35 mentors in three cohorts of a yearlong urban residency program. Data were collected from the residents and mentors through the use of surveys on the implementation of coteaching and collaboration. In addition, reflections on highlights and challenges of the coteaching experiences were also evaluated.

The authors noted that underserved, high-need urban areas faced significant difficulties in recruiting and retaining a sufficient number of teachers, particularly to teach math and science. According to the authors, urban teacher residencies have emerged as a promising way to address the need for recruiting, preparing, and retaining teachers for these underserved urban schools. A key contention of this study is that learning to coteach is a developmental process. The models begin with utilizing the easiest form of coteaching, which is one who teaches and one who observes or assists,

especially when a novice teacher is involved. As the year evolves different models are implemented resulting in a more natural give and take between the two teachers. The authors indicate that both students and teachers benefit when coteaching occurs on a regular basis and the experience becomes more organic.

This study incorporated six steps that were considered as helpful when preparing for a coteaching experience. The steps identified were establish rapport, identify teaching styles, create a cohesive classroom, discuss strengths and weaknesses, discuss individual education plans and regular education goals, and formulate a plan of action while acting as a unified team willing to take risks and grow. Six models of teaching were implemented in the urban teacher residency program. The six models were, one teach-one observe, one teach-one assist, station teaching, parallel teaching, alternative teaching, and team teaching. Progressing through each model in the coteaching experience is consistent with the authors' contention that learning to coteach is a developmental process.

As stated previously this study used both qualitative and quantitative data for a mixed method analysis. Quantitative analysis used SPSS to develop descriptive statistics through frequency counts, percentages of responses, and independent paired sample t-tests. Qualitative data were analyzed with grounded theory and followed accepted procedures for conducting qualitative research.

Findings revealed that both residents and mentors had positive perceptions concerning the benefits of residential coteaching. Positive observations included engaging at least 1-2 times a week in behaviors associated with effective coteaching, sharing ideas related to communication and feedback, offering varied perspectives,

sharing ideas, providing benefits for the students, improving logistics for coteaching, sharing authority, and motivating to do better. This research supports the foundation for a need to continue research by establishing that coteaching can be successfully implemented with the systemic program of training for both special education and general education teachers.

Methods of Qualitative Research Reviewed

The analysis of qualitative data will add to the knowledge base in the research of this concerning the need to provide more training for teacher candidates in coteaching. Similar studies have been conducted using a qualitative approach and various methods of data collection and analysis. The research of Nichols et al. (2010) was significant in findings supporting a need for training for coteachers. Nichols' et al. qualitative study focused on surveys of 24 school districts. The results indicated that coteaching was initiated without proper training for regular and special education teachers, as well as administrators. Nichols et al. illuminated the idea that coteaching was being initiated primarily to meet the mandates of No Child Left Behind and was not necessarily implemented for students with special educational needs to supply quality instruction. Although Nichols' et al. study took place in 24 school districts, the authors concluded that the majority of teacher did not receive training in coteaching during their course work at college or during profession development programs. Nichols' study supported the need to examine the teacher education programs and look at what teacher candidates were being taught regarding coteaching before entering a cotaught classroom. This study

was supportive in providing a background in the current research to examine how far coteacher training has evolved.

A comparative study by Sanchaz, Humphreys, and Carroll (2019) examined the experiences of three coteachers at the graduate level. The researchers and coteachers of the study wanted to explore their first coteaching experiences through open ended questioning to better understand the drawbacks and strengths of coteaching. The coteaching model was utilized by a university assistant professor and two principals. The university course for principal preparation was to be revised. The class was taught one day per week. The two principals alternated weeks so that each one took a turn with the university professor as a coteacher team. Meetings to revise group decisions occurred during the week, but the professor and two principals met on a weekly basis, one hour before class to set lesson plans, reflect, and make any refinements to the program.

The coteachers met prior to the first coteaching experience at the beginning of the year. It was focused on the development of the class outline and eight research questions. The first four open ended questions were written to better understand each coteachers' lens, experiences, and person motivations to work on the revising of the principal preparation course through the employment of coteaching. The last four open ended questions were based on coteaching research to examine the benefits and drawbacks when utilized in a higher educational setting. The findings and outcomes of this study provide insight to cotaught college and university course work, preparation, planning, execution, and evaluation. These authors suggested discussion and resolution of specific issues at the beginning of the partnership were critical for success.

Won, Liu & Bukko (2019) constructed a qualitative study which implemented the elements of action research where the authors also functioned as participants in the study. Participants consisted of a program leader, faculty and K-12 teacher leader. Participants also included six student teachers, seven cooperating teachers, and three university supervisors. The authors examined data developed during a 16-week clinical placement in a multiple subject (K-8) teacher credential program. The purpose of the action research was to analyze perceptions of feedback from teacher candidates, cooperating teachers, and university supervisors to inform and benefit teacher training and protocols.

Data for this study were primarily derived from individual interviews of each participant. An additional close ended survey was included to help verify validity. Student teachers responded to a survey pertaining to receiving feedback. Cooperating teachers and university supervisors responded to a different survey addressing the provision of feedback. Survey questions were designed to incorporate elements that are understood to be qualities of effective feedback. This study was one cycle of planning, acting, observing, and reflecting during a multi-year continuous improvement evaluation of the teacher education program.

The key components of the feedback process were identified as goals, relationship, and effect. It was found that the relationship between the student teacher and the supervisor providing feedback significantly influenced student teacher perception and application of feedback. The effect of the study resulted in programmatic changes in the selection criteria for student teachers, coteacher training, regular triad meetings, and rubric based feedback protocols.

A comparative study by Downton, Muir & Livy (2018) utilized a qualitative case study which examined the coteaching situation between a mathematics teacher and a primary classroom teacher. In this study the authors present two snapshots of the coteaching experience which describes how coteaching can help preservice teachers develop the ability to illicit mathematical thinking and make connections between theory and practice while engaged in mathematical discourse.

Participants for this study included one cohort of 35 preservice teachers their mathematics teacher educator and a primary school teacher. Data were collected from preservice teachers during weeks six and seven of a 12-week semester. Data gathered consisted of tutorial observations, post-tutorial reflections, and interviews. Data were analyzed to help identify evidence of meaningful mathematical discourse for supporting preservice teachers to make connection between theory and practice of mathematics teaching.

Finding identified four key benefits of engaging in a coteaching situation. The four benefits are as follows:

- Utilizing a school teacher as a coteacher assisted the preservice teachers in making connections between practice and teaching.
- Utilizing a classroom teacher working with the preservice teacher each week enabled greater preservice teacher engagement and was also helpful for the preservice teacher to see the need for a greater depth and breadth of mathematical understanding.

- 3. There was greater opportunity to elicit preservice teacher mathematics thinking, facilitate discourse, and develop a rich community of practice.
- 4. Having a coteacher in the classroom provided additional support for the preservice teacher to provide more individualized instruction and assistance.

The authors contended that the findings suggest that the preservice teachers found the experience helpful. This research supports the foundation for a need to continue research by establishing that coteaching can be successfully implemented with the systemic program of training for both special education and general education teachers.

Summary

This literature review provided a number of studies that covered coteaching in various settings. Research supporting communities of practice for preservice teachers was included in the literature review as the conceptual framework for this study. The review provided discussions on the need for more training in collaboration and coteaching.

Professional development used to provide training in coteaching was discussed as well as instructors modeling coteaching in college and university classrooms.

Included in Chapter 2 was a discussion of components in the preparation of coteachers. Skills needed to be successful in coteaching were also reviewed.

Recommendations for best practices of what effective training for coteaching should look like were provided in this literature review. Finally, a review of the methodologies of studies that were related to this study and differing methodologies covering the outcomes of interest were provided as part of this literature review.

Chapter 3 of this study contains the methodology of the study. In Chapter 3, a discussion on the research design of the study is presented. The approach that was taken for the research is included with descriptions of several other approaches that were not selected for the research. The context of the study is included to provide a broader background to the study. My role as the researcher, any experiences, and biases I may have are presented. Chapter 3 also includes the criteria used for selecting the participants and the procedures for gaining access to the participants. Measures for ethical protection of the participants and the working relationship between me and the participants was established and presented in this chapter. Also, included in Chapter 3 is the discussion of data collection procedures and how the data will be analyzed. The method to address validity appears in the final part of this chapter.

Chapter 3: Research Method

Introduction

As a result of the reauthorization of Individuals with Disabilities Education

Improvement Act of 2004 many school districts have implemented the inclusion model to provide equal opportunity to students with special educational needs (Friend et al., 2010). To meet the requirements of this act, many school districts have recognized that special education teachers and general educators should collaborate in providing education for students with special educational needs in the least restrictive environment with highly qualified teachers (Brinkmann & Twiford, 2012; Pugach & Winn, 2011). The coteaching approach has become a method to provide access to least restrictive environment with the general education curriculum (Individuals with Disabilities Education Act , 1975).

Research confirms that teacher candidates will benefit from training for coteaching in an inclusion setting (Bond, 2011; Graziano & Navarrete, 2012). The purpose of this study was to investigate the preparation that teachers receive for coteaching to examine how teachers are being prepared for coteaching through the State Department of Elementary and Secondary Education or other presentations on coteaching.

This study utilized a case study design of a qualitative approach to develop an indepth understanding and explore an issue in a contemporary setting. The description of the design of the study, the research questions, and the context for the study are included as part of this chapter. The participant selection and the criteria for selecting the participants as well as the role of the researcher and experiences biases of the researcher are also contained in this chapter. Finally, a discussion of the data collection procedures, data analysis procedures, and methods which are used to address validity are included in this chapter.

Research Design of the Study

A case study design was determined to be the best approach for this study. An understanding of the preparation of teachers for a coteaching environment requires a thorough examination of the training that the teachers have encountered, and a case study is an in-depth exploration of a program, activity, or process, bounded by time and activity that provides insight on a situation (Creswell, 2009). A case study is a detailed examination of the setting, subject, collection of documents, or a specific event (Bogdan & Biklen, 2007). This study included the examination of workshop handout materials and interviews of principals, teachers, and special education directors to investigate how teachers are exposed to coteaching methods, strategies, and techniques. However, syllabi and lesson plans were not available for analysis.

Possible qualitative approaches, such as grounded theory, ethnography, and phenomenology would have been less appropriate for achieving the goals of this study. The grounded theory approach is used to generate a theory of a process or action based on the information collected from the views of the participants (Creswell, 2009). The data are continually reviewed and constantly compared as it is collected to build a theory (Corbin & Strauss, 2008). The grounded theory was not considered for this study because the study will not be conducted to create a theory about attitudes toward coteaching.

The ethnographic method is utilized to describe a cultural group's shared beliefs, behavioral patterns, or conditions of the cultural groups (LeCompte & Schensul, 1999).

An ethnographic study includes a group of participants with the researcher immersed in the daily interaction of the members of the culture sharing group (Creswell, 2009). As the researcher, I was not engaged in the experiences with the participants. The participants were only in the environment that was studied for a short time, which set them in a bounded system.

Finally, in the phenomenological method of research, the way in which people view their world defines their reality (Rumrill et al., 2011). In a phenomenological study, the researcher attempts to understand the meaning of events and interactions of the participants in a specific setting (Bogdan & Biklen, 2007). The approach describes the lived experiences of a specific group of individuals and what the individuals have in common from the encounter of the same event (Creswell, 2013). Phenomenological research depends almost exclusively on multiple interviews from a carefully selected sample of participants (Richards & Morse, 2007). Although the participants in this study may have experienced similar workshops to prepare for coteaching, they did not experience the same presentation at the same setting with the same instructor, which would not match the phenomenological method of study.

Research Questions

The primary question that guided this study was "What changes can be made to improve coteaching training?" Four subquestions are included as part of the research:

- How did training sessions prepare teachers for coteaching?
- What opportunities were provided within the training sessions to prepare teachers for coteaching?

- What techniques were utilized within the training sessions to prepare teachers for coteaching?
- What were the perceptions of principals, teachers, and special education directors on the preparation teachers receive for coteaching?

Context for the Study

This study took place in various locations in the southwest region of a centrally located state. Interviews with principals, teachers, and special education directors took place in a private setting at four different school systems.

The Role of the Researcher

The researcher's role is the primary instrument in the data collection process (Creswell, 2012). As the researcher, my role was to collect the data through interviews and the examination of documents. I was aware of how personality and experiences may influence or bias the study (Rumrill et al., 2011). However, I am in no way personally associated with anyone at the sites of this study.

Experiences and Biases of the Researcher

My career in special education included roles as teacher, supervisor, and most recently as director of special education in a small school district of kindergarten through eighth grade. At different points in my career I have cotaught in a special education setting and a general mathematics classroom. As a college student during the early 1980s, I attended a cotaught class where the professors incorporated the team-teaching approach. An explanation was not provided to the class for the changing of professors during the instruction of the course. My role in a cotaught classroom was required as a teaching

assistant in a mathematics class. The lead teacher presented the lecture then I was instructed to roam the room and assist the students. My experiences in these settings as a student and a teacher were not necessarily considered negative and did not influence my understanding of the coteaching approach to teaching. In each of these encounters, problems regarding coteaching possibly existed because the teachers were not provided training in coteaching prior to the implementation of coteaching in an inclusive environment.

As a person with extensive experience in special education, I hold a strong desire to improve instructional processes for students with special educational needs. This interest includes an ambition to improve the educational program for training special education teachers, with focus on training in coteaching. In my experiences as a special education teacher, I noted a lack of training in coteaching.

I was aware of the possible bias that may exist, and I took steps to bracket my perspectives and control personal biases that could distort the interpretation of data gather in the study. Bracketing is the process a researcher utilizes to control personal preconceived ideas and to understand the participants' point of view through their own experiences (Johnson & Christensen, 2004). To help minimize bias, I also utilized member checking to allow the participants to provide feedback on my interpretations of their data.

Establishing the Working Relationship

Introductions to each potential participant were initially made through emails. I made the participants aware that I have experienced coteaching, but I did not have the

benefit of participating in coteaching training. I provided the purpose of the study to the participants, and I also explained the process of how the study would be conducted.

Methodology

Participants

Purposeful sampling is the selection of key informants who offer rich information and insight into the focus of the research (Patton, 2002). Purposeful sampling was utilized to select participants who attended a coteaching session and are currently employed by several area school districts. Four principals, four teachers, and four special education directors were invited to participate in interviews. Demographic information was collected and utilized in the selection of participants. Additionally, the criteria for the selection of in this study included the completion of a coteaching training session.

Participation in this study by all participants was on a voluntary basis.

Determining the sample size depends on the researcher's reasoning to collect information and establish conclusions, several authorizes of research have suggested between 1 to 15 participants (Creswell, 2012; Guest, Bunce, & Johnson, 2006; Johnson & Christensen, 2004). Additionally, the sample size is driven by the aim of the study and the design; a small study might achieve saturation quicker than a study that would span disciplines (Charmaz, 2006). Given the limited scope of the study, 12 participants were selected.

Measures for Ethical Protection of Participants

Researchers have ethical responsibilities to the participants. It is important to protect the privacy and confidentiality of the participants of the study (Creswell, 2012).

Teachers, special education directors, and principals were asked to review and sign a consent form. These participants were assured that the study in no way would affect their evaluation and were reminded that they could withdraw from the study at any time. I also informed the participants that all personal information would be kept confidential. Any risks to the participants were made known. The participants were made aware of the purpose of the study and the procedures that were used in the data collection. These participants were also informed of the benefits of the study and that no compensation would be offered.

Participants were not identified by name. Pseudonyms were selected for the participants and added to the consent form to keep their identity confidential throughout the study. All participants were identified by Ms. or Mr. with the addition of a color to represent the participant's name. The letter "T" indicated teacher, "D" indicated director, and "P" indicated principal, which preceded the color names of the participants to designate the position each participant held at their school location. There were no foreseeable risks or discomforts for participants in this study and measures were used to protect the participants in this study. A prevention of deception and reciprocal benefits from the study were identified in the consent form. As an added measure, the data will be kept for 5 years in a secure place as required by Walden University.

Procedures for Gaining Access to Participants

Permission to conduct the study was approved by Walden University Institutional Review Board (IRB) (10-21-20 0259734) prior to beginning the study. An introduction and invitation provided a description of the study, which explained the purpose, the time

required of the participants, and how the data would be used. Teachers, principals, and special education directors received emails inviting them to participate in this research study with a consent form was attached that allowed them to return the form through email. The form also indicated that participating in the study is voluntary and in no way would place the participants at undue risk or have any effect on their evaluation or certification. I informed the participants that they may discontinue participation in the study at any time without penalty.

Data Collection Procedures

The first phase of the data collection process was to gather data from the syllabi or lesson plans and handout materials from the participants. Workshop syllabi and lesson plans were not available for examination, but the examination of handouts provided by three of the participants offered topics that were addressed during the work sessions. The protocol (Appendix A) was a self-designed table developed as a summary sheet to record information gathered from the handout sheets gather in this study. The protocol included a list of six approaches to coteaching with the addition of specific components of coteaching, which researchers have presented as necessary to successfully implement coteaching. Examination of the handout materials from the workshops provided data on the teaching techniques and types of opportunities utilized during training in coteaching and activities or assignments that were made were recorded on the protocol (Appendix A) Such activities as acting out scenarios, reading or writing about coteaching, or any other method to provide instruction for coteaching was also noted on protocols. As part of Phase 1, principals and special education directors provided input of the preparedness of

teacher which participated in coteaching sessions. Data were recorded on the protocol (Appendices B and C). Interview protocols were used to record information and provide organization and structure to the interviews.

The second phase of the data collection included interviews with the teacher participants. The teacher interview protocol (Appendix D) was utilized for recording data and with follow up questions to clarify or expand on comments made by the participant. The follow up questions were assigned letter beginning with (A) with the addition of the number in relationship to the original question. All interview protocols (Appendices B, C, and D) listed the date the interview took place and identify each participant as Mr. or Ms. with the addition of a color to represent their name, such as Mr. Green or Ms. White. Additionally, the letter "P", "T", or "D" was added to the name to identify each participants' position as "P" for principal, "T" for teacher, or "D" for director. In order to ensure accuracy of transcription of the interviews, the interviews were recorded on an audio recorder and took place at the school district in a private room previous arranged with the school building principal. Each interview was recorded and identified by the date and pseudo-name listed on the recording.

A variety of open ended questions were asked during the interview to each teacher who participated in the study. Open ended questions allowed the participants to express their experiences in their own words regarding any challenges during the program or the need for more training for the coteaching environment. To ensure clarifications of explanations, the protocol included probes to guide the interview (Bogdan & Biklen, 2007).

The interviews with teachers were conducted and audio recorded in a room that provided privacy, locate in the school building and took approximately 45 to 90 minutes. Interviews provided data that were cross-referenced and compared with the other participants' interviews and with the examination of any handout as part of triangulation of data during data analysis.

The recording, protocols, and transcriptions of each participant's interview were kept in separated sections of a notebook in a locked file cabinet, inside a locked office. Informed consent forms were filed in a separate area of the notebook. Any other notes were cataloged into the notebook by dates and cross-referenced by themes, patterns or categories.

Data Analysis

The analysis of data were accomplished by utilizing topological analysis as described by Hatch (2002). Hatch summarized nine steps for topological analysis. The process for analysis of data for this study will follow these steps:

- 1. Identify the categories to be analyzed with a color to represent each category.
- 2. As the data are read, mark the words or phrases related to the categories with the color for the category.
 - 3. Read only the data within the typology of interest and write brief statement.
- 4. Look for patterns, relationships, or themes within the typologies. Patterns are regularities. Relationships are links. Themes are integrating concepts.
- 5. Read data, code entries according to identified patterns. Keep a record of what entries go with which elements of the patterns.

- 6. Determine if the patterns are supported by data.
- 7. Look for relationships among the identified patterns.
- 8. Write patterns to express the relationship between two or more concepts in one sentence generalizations.
 - 9. Select data that support generalizations (Hatch, 2002).

Coding of words and phrases was recorded manually as predetermined categories based on approaches to coteaching and the skills needed for the successful implementation of coteaching as discussed in a number of studies found in review of this study. These categories were used in the coding of data from all participants' interviews. The examination of data from the interviews also produced words or phrases as patterns, themes, or categories that were not part of the predetermined typologies. Bogdan and Biklen (2007) remarked that certain phrases and words will begin to appear as patterns, themes, or categories. Words and phrases appeared to create a pattern but did not fall into predetermined typologies were listed under new labels. Bogdan and Biklen (2007) explained that some categories will appear while collecting data. Emerging coding allowed for other categories that appeared as data were examined in which a new category was developed.

The first phase consisted of color coding the information from the handout materials provided by the participants. The examination of the handouts provided very little added information on topics and activities as they listed definitions and introductive information on the models of coteaching. Any mention of the manner in which coteaching techniques and other collaboration issues were addressed, and the

opportunities that were provided during work sessions in preparation for coteaching were color coded with yellow highlight.

Within the first two weeks of the analysis of the data began, data from the handouts were collected and analyzed. The second phase began as interviews from the principals, and special education directors were completed. Data gathered from the interviews were coded based on the predetermined patterns or themes which aligned with the conceptual framework. Any data that produced words or phrases that were not part of the predetermined categories were listed under separate categories. I completed the transcription of the recorded interviews. The participants were asked to read over their own transcript to check for accuracy. All participants were asked whether the description was complete as well as realistic and if the interpretations appeared to be fair and representative of their experiences. There were no changes according to the participant's report. I summarized the findings of phase one using narratives with a rich, thick descriptive narrative to interpret the results of this research study.

Teacher interviews were analyzed during the third phase. Data were recorded by hand for the analysis of the information and were coded according to predetermined categories. Any data that produced words or phrases that were not part of the predetermined categories were listed under separate categories. Participants were asked to review the draft findings of the study to check for accuracy of my interpretation of their own data used in the findings and for the viability of the findings in the setting. They examined the preliminary analyses consisting of phrases and descriptions from the interviews. The participants were asked whether the description was complete as well as

realistic and if the interpretations appeared to be fair and representative of their experiences. They were asked to comment on the information gathered from the interview and if any changes were to be made. I did not make any changes to the participants' report, as there were no changes to be made. I offered a copy of their own interview transcript to each participant.

Data were organized in relationship to the six approaches of coteaching and the skills needed for the successful implementation of coteaching as discussed in a number of studies found in the literature review of this study. All data were charted for organization purposes. The data from all the interviews were presented in a rich thick narrative. Similarities and differences of the participants' perceptions of the preparation for coteaching were noted. Themes and phrases that appeared in the handout material provided by the participants were noted and compared to the interviews of the participants. Perceptions of the participants on the need for changes were examined and findings were presented in narrative form.

On occasion, some data that were gathered during a study may not support a researcher's conclusions. According to Rumrill et al. (2011) discrepant data must be examined and compared to supporting data in a rigorous manner. Data were not discarded but were included in the report of findings.

Confidentiality

All records of the study were kept private. All participants' confidentiality and welfare were protected by the use of pseudonyms to substitute for their actual names.

Pseudonyms were used on all records and written reports. Informed consent forms were

stored in a note book separate from other data in a locked file drawer. All research data were stored in a secure locked file drawer within a locked office. All audio tapes were permanently deleted after recordings were transcribed and checked for accuracy. All research data will be stored for a five-year period after the completion of the study, and then the data will be destroyed.

Trustworthiness

Validity, according to Creswell (2012), is the development of evidence to determine that the concept matches the proposed purpose of the study. To ensure the reliability and accuracy of this study, procedures for validating a research study was utilized. Creswell (2013) addressed issues of trustworthiness and discussed eight strategies of validation. These strategies include prolonged engagement in the field, peer review, clarifying of the researcher bias, negative case analysis, rich thick descriptions, triangulation, member checking, and external audits. Four of Creswell's validation strategies were employed in this proposed study.

Triangulation is a strategy that useful to establish the validity of findings.

Triangulation was used as a means to cross-reference information gained during interviews and documentation interpretations made during data analysis (Rumrill et al., 2011). They added that triangulation also assisted in reducing the likelihood of reporting inaccurate interpretations and conclusions. This study used several sources of data, which included interviews from special education directors, principals, teachers, and handout materials provided by the participants to search for regularities in the data.

I used bracketing to clarify any researcher bias. Bracketing is the process a researcher uses to control personal preconceived ideas and to better understand the point of view of each participant's experience (Johnson & Christensen, 2004).

Member checking was used to validate the accuracy of the findings (Creswell, 2012). The participants were sent an emailed copy of the draft of the interpretations regarding analysis, reductions, and findings. This allowed the participants to check the accuracy and credibility of the overall findings and to suggest any changes that were needed to present a more accurate description of my interpretation of their own data used in the findings. No changes were made to the drafts and each participant agreed that the drafts presented as a true account of the findings according to the participants report.

Creswell (2009) expressed that the value of the qualitative study exists in the detailed descriptions and themes developed at a particular site. Creswell (2013) went on to say details emerge through movement, activity, or physical description. As a final procedure for validation in this study, strong specific interconnected detailed descriptions of the data will allow the reader to transfer information to other settings. Although the data gathered in a case study are specific to the study, the details of this study are provided in rich details and specific descriptions, which could provide support for another study or starting point for a larger study.

Summary

In this chapter, the research design was first discussed with the list of research questions. The context for the study was described, providing the background of the setting for the study. Procedures for gaining access to participants were discussed as well

as the criteria for selecting the participants and the measures for ethical protection of the participants were presented. The role of the researcher was described along with the professional roles at the setting and the relationships with the participants. The methods of establishing a working relationship between the researcher and the participants was described. Also, any experiences and biases of the researcher were described. Data collection procedures were explained in detail and how the data would be analyzed. Methods to address validity were used, such as rich, thick description, bracketing, member checking, and triangulation were also addressed.

In the triangulation process the data which had been gathered during interviews with the participants were compared to determine the areas of agreement as well as any discrepant information. In the case of this study; interviews from principals, special education directors, and general education teachers were compared with each other and documentation to find evidence to support a theme. The triangulation helped to ensure the findings were accurate because it is drawn from multiple sources. Member checking and bracketing were also utilized to prevent bias of the researcher.

A final procedure was used for validation in this study is rich, thick description. The descriptions and details of the study allowed the reader to transfer information to other settings. Rich, thick description was used in this study to provide strong specific details that could be transferable. Creswell (2009) expressed that the value of the qualitative study exists in the detailed description and themes developed at a particular site. Although the data gathered in a case study are specific to the study, the details of this study could provide support for another study or starting point for a larger study.

Chapter 4: Results

The intent of this qualitative case study was to examine the preparation teachers receive for coteaching, addressing the question "What changes can be made to improve coteaching training?" as well as four subquestions related to how training has prepared teachers, what opportunities were provided with training, what techniques were used in training, and the perceptions of principals, teachers, and special education directors on the preparation teachers receive for coteaching. Although coteaching has been included as a part of the classroom for more than three decades, many teachers are not meeting the needs of the diverse population of students in the inclusive classroom due to having limited training in coteaching practices (Sanchez, Humphreys, & Carroll, 2019; Shady, Luther, & Richman, 2013). Most research on coteaching has been focused on student success from coteaching, the perceptions of coteaching, and methods of delivery (Hurd & Weilbacher, 2017; Jao & McDougall, 2015). In this study, the perceptions of special education directors, principals, and general education teachers on the preparation teachers receive for coteaching were examined. This chapter includes a detailed explanation of the data collection process, description of data analysis, results, and evidence of trustworthiness. With the use of Hatch's (2002) topological analysis, categories and key themes were identified.

Setting

This study was carried out at four different school districts. I conducted one individual interview with each of the 12 participants, which each lasted between 45 to 90 minutes. The participants were identified by pseudonyms. Rooms for the interviews were

designated by the principal of each school building where the interviews took place before, during, and after school in their private office, classroom, or in the teacher's workroom. Each interview was private and without interruption. Before beginning the interviews, the consent form was reviewed with each participant. All participants were reminded that they had the right to end their participation in the study at any time. There were no unexpected disruptions during the interviews that might have influenced the results of the interviews. At the end of each interview, I requested copies of any handouts or materials that were provided during workshops, in-service programs, or seminars. Handout materials were received from three participants. Data for this study were organized according to Hatch (2002) into patterns, relationships (see Tables 2 and 3).

Demographics

This study included 12 participants. Four of the participants were general education teachers, four were special education directors, and the remaining four were principals. The participants were selected from four different school districts. Table 1 presents the specific demographics of the participants of this study.

Table 1

Participant's Demographics

Name	Gender	Years Experience	Ethnicity	Position	Level Served
Ms. P. Blue	Female	20 +	Native American	Principal	Jr. High
Ms. D. Red	Female	20	Caucasian	Director	All
Ms. T. Yellow	Female	6	Caucasian	Teacher	Jr. High
Ms. P. Pink	Female	17	Caucasian	Principal	Primary
Ms. D. Tan	Female	9	Caucasian	Director	All
Ms. T. Teal	Female	3	Native American	Teacher	Middle
Ms. P. Purple	Female	15	Caucasian	Principal	Middle
Ms. D. Orange	Female	20	Caucasian	Director	All
Mr. T. Green	Male	8	Caucasian	Teacher	Middle
Mr. P. Black	Male	9	Caucasian	Principal	Middle
Ms. D. White	Female	20	Caucasian	Director	All
Ms. T. Brown	Female	8	Caucasian	Teacher	Middle

Data Collection

I conducted face-to-face, individual semistructured interviews in May 2018. The interviews were held at four different school districts. Approved by Walden University IRB, we met for approximately 45 to 90 minutes in classrooms, offices, and teachers' workrooms. Interviews were recorded on a digital recorder and an interview protocol (Appendices B, C, and D), which included open ended questions which were used to help guide the interviews. The participants were asked several questions about coteacher training, coteaching experiences, teacher education training, components of coteaching preparation, improvement of quality performance, and general questions about coteaching.

At the end of each interview, I asked the interviewee if he or she would provide copies of lessons plans, syllabi, or any handouts or materials from workshops or seminars that they attended on coteaching. Several of the teachers informed me that they were not required to have lesson plans, so I was not able to collect lessons plans or syllabi for part of documentation. However, six pages of handouts were collected from three participants. These handouts provided definitions and introductive information about coteaching.

After the transcription of the interviews was completed, as part of the member checking process, each participant was emailed a copy of a draft of the interpretations regarding analysis, reductions, and findings to verify if it was an accurate presentation of their interview and to provide any comments to make changes for an accurate account. Six of the 12 participants returned emails indicating no additions or changes were

suggested or made. The other six participants did not reply.

Data Analysis

After interviews were completed, I followed Hatch's (2002) nine steps outline of a typological analysis model (p. 153). All interviews were recorded on an electronic recording device and transferred onto a word document. I followed Steps 1 and 2 as I read through the printed dialogues of the interviews and highlighted the words or phrases that fit specific categories that had been preselected. These words and phrases were recorded on a summery sheet for each participant (Appendix E) as suggested by Hatch (p. 154). Step 3 included a brief statement of the main idea of the excerpt and was written for each category. Table 2 provides a display of categories, key phrases, and emerging themes gleaned from the process described in Step 4 to look for patterns, relationships, and themes. For Step 5, I read data and coded entries according to identified patterns. I recorded what entries went with which elements of the patterns. During Step 6, I determined if the patterns were supported by data and if any data contradicts any of the findings. In Step 7, I looked for relationships among the identified patterns. I listed short generalizations of the patterns to identify the relationship between two or more concepts in step eight. With the final step, I selected strong examples that supported the generalizations.

Table 2 provides a visual of the categories, key phrases and the emerging themes during the first part of recording the analysis of the data collected during the interviews.

Table 3 displays patterns found in answers of the subquestions and were examined to recognize the relationships within the answers provided by the participants.

Table 2

Categories, Key phrases, and Emerging Themes

Categories	Key phrases	Emerging Themes
Training	Need more training, provide	Professional
	more training, not enough	Development. College or
	training, not demonstrated or	University Professors as
	explained well enough.	Coteachers. Impression
	Regular and special education	of Coteaching training.
	teachers should be trained	Colleges need to do more
	together. Teachers and	training in coteaching.
	administrators would benefit	Supervisors need to be
	from training.	trained. Process
Coteaching	One class was great the others	Coordinators can be used
Training	not so good. Enjoyed it with	for training. Issues,
Experiences	the teacher I was trained with,	Personalities, Planning
	but after she moved to another	time, Teaching style
	school, I didn't like the	
	experience with my new coteacher.	
Components of	I'm not sure what those are. I	Skills needed for
Coteaching	couldn't tell you. Trust,	Successful Coteaching.
Cotcaching	organization, collaboration,	Best Practices.
	responsibility.	Best Fractices.
Improve quality of	Both teachers need to work	Challenges. Suggestions.
Coteach	together, not my kids and your	2 22
	kids, but our kids. Be honest	
	and open. Allow the special	
	education teacher to teach	
Overall Impression	What was told is not what	Impressions, Advice for
of Need for	coteaching is. Didn't learn	New Coteachers
Ongoing	anything I didn't know from	
Coteaching	reading a book. We need to	
Training for All.	continue to retrain. It can be	
	overwhelming. It is how it's	
	delivered that counts. To ask	
	questions. Spent time together	
	before school starts. Learn	
	each other's teaching style,	
	strengths and weaknesses.	

Table 3

Research Subquestions, Patterns, and Relationships

Research Question	Patterns	Relationships
SQ 1: How do current training session prepare teachers for coteaching?	Professional presentations, held in district. Participants are sent to another location. Webinars, videos, and book studies.	8 participants attended some kind of professional development and 4 participants attended instructional meetings or seminar. 6 participants needed more information, 2 of the participants mentioned the need for regular updates or reviews. 2 participants replied that their training was great and was very helpful.
SQ 2: What opportunities are provided within the training sessions to prepare teachers for coteaching?	Modeling, role playing, discussion, assignments, readings, practice.	No real opportunity to do anything except learn to plan lessons. No real opportunity to do anything but listen. No practices or role playing. Could have just read it in book
SQ 3: What techniques are utilized within the training sessions to prepare teachers for coteaching?	Videos, lectures, hands on activities, scenarios	One participant attended a Book Study which provided a good review. Two attended lectures, which one said they could have read it from a book and got the same information. Another participant received handouts with introductive information. Teamed up and discussed plans for the year. Two participants attended a meeting which used "True Colors" a personality test to match up teams.
SQ 4: What are the perceptions of principals, teachers, and special education directors on the preparateachers receive for coteaching?	special education directors	Teachers mainly agreed in all areas of questioning Principals expressed differences because of background experiences and training. Special education directors agreed in most areas of questioning. Colleges need to do more training in coteaching. Supervisors need to be trained.

Results

During this study, I conducted interviews with 12 participants who were identified as Mr. or Ms. with a color assigned as their pseudonym. The letter "P," "T," or "D" was

added to the name to identify the position of the principal, teacher, or director. The subquestions were addressed with comments and statements made by the participants within categories and themes in the following discussions. Predetermined categories were utilized to help in analyzing of the data. Words and phrases were selected to determine themes from the data.

Subquestion 1: How did Training Sessions Prepare Teachers for Coteaching?

For many of the participants, coteaching was introduced during teacher education course work, but most of their training was acquired during professional development workshops or on their own. According to Ms. D. Tan, "Training sessions are provided throughout the state for supervisors to attend, then return back to their district and present the information they acquired to the teachers at the local school level." Four participants attended meetings discussing how coteaching works. The remaining eight participants attended some kind of professional development workshop or presentation on coteaching after they were employed by a school district. Six of these participants attended presentations provided by authors of books on coteaching, whereas the two other participants attended training through the Regional Professional Development Center. The data for this question were organized into the category of training/instruction of coteaching with two themes: college or university professors as coteachers and the lack of meaningful professional development.

Category 1: Training/Instruction of coteaching. A mixed group of eight participants included principals, teachers, and directors received training for coteaching through professional development workshops or presentations. Some participants

attended a workshop through their local school district, and others attended a presentation for coteaching at the state level or private seminar. Six participants agreed that there should be more information provided during the workshop sessions. Two of the participants mentioned the need for regular updates or reviews. Two participants asserted that their training was great and was very helpful but did not speak of specifics.

Theme 1: College and university professor's as coteachers. To gain background information, I asked each participant if they could recall attending a college class that utilized coteachers. All 12 participants denied the experience of university or college professors coteaching in their classrooms. Ms. D. White remarked, "Colleges are not doing a good enough job about teacher training. Colleges could do a better job in preparing teachers for coteaching. They should lead by example and demonstrate what coteaching looks like." In agreement, Ms. T. Teal said, "We are not sure what it supposed to look like, because there are so many models we have never seen it implemented effectively. It would have been great to see the instructors in college model it." Ms. D. Red also added in agreement, "It would be great if we had teachers in colleges who used different models of coteaching."

Theme 2: Lack of meaningful professional development. Professional development is utilized by school districts to provide active learning for teachers to study new teaching strategies, to engage in collaboration, and to review and expand on foundational techniques as well as provide models of best practices (Mizzel, 2013). Each of the school districts where the participants in this study are employed provide professional development programs, but the school districts did not appear to be focused

on coteaching at this time. Ms. D. Tan reported that her training was provided by another school district while she was employed as a teacher. She also added, "Although the district encourages coteaching and has a number of coteachers, this district does not provide any kind of coteaching training." She noted that the state provides training through the Regional Professional Development Center. Training is provided to supervisors separate from teachers who will be engaged in the coteaching process.

Ms. P. Pink revealed, "The district used to have training for coteaching in the past, but no longer. They used to send information about a day or a day and a half workshop on coteaching, but I never attended." She further added, "As best that I can recall, none of the teachers in this building have had any real coteaching training."

Ms. T. Brown commented, "What we were told, what coteaching is, was not how we do coteaching." Ms. T. Teal added, "I don't think I learned anything I didn't already know from reading a book on coteaching. It was like an overview of coteaching. It was not deep enough. I don't want an overview; I want to see how it works." Ms. T. Brown revealed, "It can be overwhelming for a new teacher who is just starting out. We were sent to a coteaching workshop and given all these plans. Nothing quite fit with what was happening in your world. We were given a book and told to try different things. It is never too late for training but it is how it's delivered that counts." Ms. D. White explained, "It was years ago and was not enough, we need to continue to retrain."

Subquestion 2: What Opportunities Were Provided Within the Training Sessions to Prepare Teachers for Coteaching?

When asked this question, the participant's comments were often short. One participant stated, "There were no real opportunities to do anything except learn to plan lessons" another participant remarked, "There were no real opportunities to do anything but listen and take notes." Comments also included, "There were no practices or role playing." One participant remarked, "I could have just read it in a book." Opportunities were limited to only three options; learn to plan lessons, listen and take notes, and review.

Other responses to this question addressed what is needed to make improvements in coteacher training sessions. This discussion can be found under research sub-question four: "What are the perceptions of principals, teachers, and special education directors on the preparation teachers receive for coteaching?"

Data gathered to answer the question; "what opportunities were provided within the training sessions to prepare teachers for coteaching?" was organized into the category of coteaching components. Two themes appeared under this category; skills needed for successful coteaching and best practices in coteaching. These themes provide insight into the teachers', special education directors', and principals' knowledge and understanding of coteaching components acquired sometime during their career in education, but not necessarily from coteacher training.

Category 2: Coteacher training obstacles. Ten of the participants stated that regular and special education teachers should be trained together for coteaching purposes.

All of the participants agreed that teachers and administrators would benefit from

coteacher training. This section addresses several areas that become obstacles to successful training and coteaching. Areas that are address include coteaching assignments, consideration of teaching styles, differences in teachers' personalities, and common planning time.

Theme 1: Coteaching assignments. At the beginning of teacher education course work, education majors attend many classes together. Courses are later aligned so each education major attends classes specific to the subject area they will be teaching. When teachers come back together in an inclusive classroom, issues in coteaching can make for a very long school year. How do they determine who does which job? Who defines the roles and responsibilities? How is discipline handled? Who grades the papers or post the grades? These questions are only a few that should be answered before the match up of the coteachers and before the start of the school year begins. The next discussions may provide some insight to help answer these questions.

Theme 2: Personality conflicts. Found in the cotaught classroom, personality conflicts can become a barrier in the development of the coteaching relationship. When setting up a coteaching system, consideration of the personalities of the teachers who will make up the coteaching teams should be examined. Ms. P. Purple suggested, "When selecting new teachers, we need to keep in mind personalities, but it is important to select someone who is comfortable or excels in the content area." Ms. D. White's district used a color coding program, "True Colors", to determine who would work with whom. She explained how some personalities would not work well together. She said, "When the district started making coteaching assignments, the teachers were given surveys to fill out

and answer questions for the color coding process." Personality checking was also mentioned by Ms. D. Orange. She recommended that this should be done before the school year begins. Mr. T. Green stated, "You need two really good teachers who know their stuff, which are willing to work with each other and are not worried about stepping on each other's toes." Ms. D. Orange added, "It is important that both teachers are respected as equals. The regular education teacher is the content specialist and the special education teacher is the strategy specialist."

Theme 3: Teaching styles conflicts. New coteaching teams may work in a guarded manner if they have not made a connection before the beginning of the school year. The general education teacher may feel as though his or her classroom has been invaded, where as the special education teacher may feel uncomfortable or unwanted. Teaching styles may differ from; authoritarian or lecture style, to a demonstrator or coach. A teacher may present as a facilitator, delegator or provide group work. A permissive or a democratic teacher's ideals may enter in as a problem in the classroom. Ms. T. Yellow voiced an opinion she believed is held by many teachers, "I want to be chief of my own teepee." For me, it was like the clash of the Titians the first year." Ms. T. Brown recalled her first coteaching experience;

My first coteacher and I are still friends even thought she has moved out of the district. Coteaching is a relationship. My coteacher is the first person I talk to in the morning, so you have to have a great foundational relationship with them to make it work. It takes time to develop. My first coteacher and I worked together for three years. By that time, if I was called out of the room, she could pick up

instruction right where I left off. That's learning personalities and instruction style. You have to be secure in the relationship. You can teach each other stuff and become the best team of teachers you can be.

Mr. T. Green stated the need for both teachers to want to work together. He commented, "Both of us know the curriculum, we talk some before class, we both flow through the room using a kind of banter. You need to not step on each other's toes. Help each other out and not be rude." It was the general consensus of the participants that as Ms. T. Brown remarked, "We all teach different."

Theme 4: Lack of common planning time. The scheduling of common planning time has always been a major concern for teachers involved in coteaching. Due to the lack of common planning time, the general education teacher is often left out of decision making and cannot help plan for specific accommodations or modifications for students with individual education plans. Ms. T. Brown admitted that she was not good at preplanning. "I know what I want to teach and it's all in my head. I am organized. The coteacher will ask where she can find that, and I will say it's up here (as she pointed to her head). There are no lesson plans to look over. We don't have enough time to plan."

Ms. D. Orange revealed that they were not required to have lesson plans. Mr. T. Green spoke about a computer program that divides the lesson into parts and they each take parts of the lesson and present their parts as the teacher. Ms. T. Teal explained that while she has planning time, the coteacher is working with the other general education teacher, so none of them have common planning time. She said, "We have no lesson plans we just use an outline."

All of the participants admitted that before the beginning of the school year, district teacher meetings are held, which would appear to be an appropriate time for coteachers to meet, but this is not possible as reported by 10 of the participants.

According to Ms. D. White and Mr. P. Black, the presentations at the meetings are scheduled prior to the start of the school year are prioritized and there just isn't time for the teachers to meet as part of the school calendar. Ms. D. Orange commented, "Planning before the beginning of the school year doesn't work because the administration already has plans." Ms. T. Teal suggested, "If they could give us a day, all coteachers could set down and talk about what we would like to see happen. We could discuss what our strengths are, what are our weaknesses. Give us that time to get to know each other and time to get a game plan. Provide a book that gives a check list of what each day or week should look like, and have time to set down and discuss those before the kids get here."

Six of the participants of two different school districts spoke about how their school districts have designed a plan that appeared to allow for common planning time with all teachers. Ms. D. Orange described how her special education department was able to be somewhat successful in overcoming this problem. The two school districts set up a work day for teachers on Fridays. One school district conducts classes for the first half of the day on Fridays and then scheduled a half day of workshops for teachers each Friday. By scheduling each Friday the parents know to arrange childcare for their children. This school district also provided after school care for parents who cannot afford childcare or unable to secure after school care for their children. The other school district scheduled the first Friday of each month for teacher workshops. Time was

planned for teachers to meet per subject but time was also scheduled for coteachers to meet. Group meetings were also conducted as well as time to work in the classroom.

Category 3: Coteaching components. There are many components of coteaching. Friend and Cook (2007) listed four components; two certified teachers, instruction delivered by both of the teachers, a heterogeneous group of students, and a single classroom. Gately and Gately (2001) expanded the list to eight additional components; interpersonal communication, physical arrangement, familiarity with the curriculum, curriculum goals and modifications, instructional planning instructional presentation classroom management, and assessment. More recently, Faraclas (2018) added five components; co-planning, co-classroom management, co-instruction, cobehavior management, and co-assessment. Ricci, Persiani, and Williams (2019) added components they described as steps; establish rapport, identify teaching styles, discuss strengths and weaknesses, discuss individualized educational plans and regular education goals, formulate a plan of action and act as a unified team, take risks and grow. Participants were not as quick to answer and required some prompting. A variety of the components that were listed in the earlier research as well as those components mentioned by Faraclas (2018); Ricci, Persiani, and Williams (2019) were mentioned in addition to several others described by the participants. Data gathered from the interviews were divided into themes of skills and best practices.

Theme 1: Skills needed for successful coteaching. The participants of this study provided one to four suggestions of skills they believed to be necessary to make coteaching successful. Only three of the skills were repeated by participants, they were:

flexibility, organization, and good communication skills. The list of skills developed from the interviews, included (a) the ability to develop a good relationship, (b) trust, (c) personable, (d) flexible, (e) open minded, (f) organized, (g) consciousness of environment, (h) understand the needs of the kids, (i) interdependent, (j) good listener, (k) ability to speak up, (l) make suggestions, (m) not be offensive, (n) ability to collaborate, (o) take responsibility, (p) good communication skills, and (q) good base knowledge of content area. In comparison to a list of skills set, an early study by Brinkmann and Twiford (2012), included (a) team building, (b) communication, (c) problem solving, (d) conflict resolution skills, (e), skills in collaboration, (f) data collection, (g) interpersonal skills, (h) differentiation of instruction, and (i) skills in behavior and classroom management. The participants provided a number of methods they used to learn about such skills. Their comments ranged from, "The skills are ones I learned about as part of teacher education classes," to "I read about them" to "They are just something you pick up with experience." The participants expressed that they learned about the skills on their own, and "did not get them from any coteacher workshop."

Theme 2: Best practices in coteaching. The idea of best practices being provided in coteaching training was not as easily listed by the participants as providing suggestions of the skills need to improve coteaching. To each participant, I described a skill as the ability to use their knowledge they have acquired in an effective manner. For a description of best practices, I explained that best practices are derived from research and has been established as a standard to provide the best possible results. The participants

were able to make suggestion of what they believed to be best practices. The results are provided in following list:

- Differentiating in presentation of educational materials.
- Instruction driven from data.
- Provide multiple ways of presenting information.
- Collaboration.
- Utilize all models in correct way.
- Evidence based practices.
- Embed strategies into content.
- Provide specialized instruction.
- Organize and plan ahead.
- Working cohesively with one another.

All but three of the participants provided suggestions to answer the question of what are best practices in coteaching. One participant shrugged their shoulders and said, "I don't really know." Another participant commented, "It's the same as in regular teaching," but offered no other comment. A third participant replied, "I'm not sure." The three participants are employed by the same school district. Best practices, according to Alber (2015) included (a) check for understanding, use a variety of ways to check and check often. (b) Develop a well thought out plan for class time. (c) The next activity should be set up while the students are completing the previous one. (d) Use backward planning by designing the end goals and end product first. (e) Model for students or provide an example of the outcome you want the students to create. (f) Don't throw

anything away, you may need it later. Alber also expressed that best practices are often data driven. As a reminder she included that teachers have developed strategies that have been tested over and over, they've reflected on the outcomes, and they've worked for decades to perfect the strategies. The strategies work and provide positive results (Alber, 2015).

When asked how the participants learned of best practices, the participant's replies were similar in the answers. Seven of the participants admitted to learning about best practices from teacher education classes. One participant said that she must have picked them up in a workshop, while another participant said she was not sure, that she couldn't recall. Three participants claimed they really didn't know about best practices. Subquestion 3: What Techniques Were Utilized Within the Training Sessions to Prepare Teachers for Coteaching?

The participants provided only a few techniques that were utilized in the workshop or seminar presentations. These techniques included; traditional teaching techniques such as a leader explaining a topic, brainstorming, and the attendees taking notes. Some handouts were also provided to allow the attendees to follow along or look at later. Power point presentations were also utilized.

Much of the interviews on this topic lead to suggestions and recommendations which could add to or be utilized to improve the techniques used in training presentations. Ms. P. Pink recommended the use of instructive videos, lecture series, hands on projects, and more informative handouts to use as a reference during the school year. Mr. P. Black added to the list with, "The observation of a successful team and show

how they make it work." Ms. T. Teal's suggestion was, "Watch someone who has been doing it, talk to them about what works and what doesn't."

When asked specifically what techniques were used in workshops on coteaching that they attended, all the participants provided the most common techniques used in the presentations; lecture, taking notes, handouts, and brainstorming. The techniques mentioned by some of the participants were from brainstorming sessions conducted during workshops participants had attended.

More recommendations by the participants are included in category 4: improving the quality of coteaching. Two themes address the question of what techniques were used during the training sessions to prepare teachers in coteaching. The data were divided into challenges in coteaching and suggestion by the participants to improve coteaching.

Category 4: Improving the quality of coteaching. In order to improve the effectiveness of coteaching there should be evidence of quality in performance. During the interview phase of this study, the participants expressed several challenges that were seen as barriers to successfully implementing coteaching. One of the participant commented, "I felt like we were thrown into it," referring to her school district's teachers. I asked each participant to provide suggestions they believed could possibly make an improvement in addressing the challenges and problems in coteaching. The participants first described problems and obstacles that have interfered with the success of coteaching, then provided ideas for possible solutions to improve coteacher training and coteaching.

Theme 1: Challenges in coteaching. Although there are many benefits to coteaching, the participants of this study faced several challenges during their coteaching

experiences. The problem of not being able to have planning time together was mentioned by nearly all the participants, but several other challenges were revealed during the interviews. Such as Mr. T. Green's remarks were focused on getting used to having another teacher in the classroom all the time. Ms. D. White remarks added to the list of challenges with, "To convince a regular education teacher that they will be a coteacher when they haven't had any coteaching training, has been a big challenge." Ms. D. Orange and Ms. P. Purple agreed that planning the student schedule was also difficult. Making sure a special education teacher is available for a class when you are limited to only a few teachers for coteaching, was another challenge for a participant. "They can't be in two places at one time," Ms. P. Purple clarified. Mr. P. Black spoke about the turnover of teachers being a challenge. "The problem is hiring someone to step into a coteaching position and getting a team set up again." Ms. P. Pink, Ms. D. Tan, and Ms. D. Orange all described the struggle of establishing a good working relationship as a team working together as coteachers. Ms. P. Pink shared an experience about a first year special education teacher and a twenty-five year veteran teacher working as coteachers. "It didn't work," she said. "The first year teacher believed she knew more about the latest information on coteaching, whereas the veteran teacher knew she had more experience and knew more than the first year teacher. These two teachers could not work together. The first year teacher resigned and the veteran teacher continues to work here," explained Ms. P. Pink.

When asking the participants about challenges, the protocols were designed with a variety of questions so the participants reply from their level of involvement and

experience in coteaching as a teacher, special education director, or principal. All the participants expressed frustration from the challenges they had experienced during the implementation of coteaching. After the discussion of challenges, the participants were eager to provide suggestions they believed could make a positive impact on coteaching.

Theme 2: Suggestions by the participants to improve coteaching. All the participants were willing to express their suggestions to improve coteaching. The issue that was addressed the most was finding more time for planning. Several of the participants provided possible solutions to several areas of issues in coteaching. Many of these suggestions are being used by some of the school districts where the participants are employed. The suggestions were:

- Colleges need to do more training in coteaching.
- State should require certification in special education and general education subject.
- Supervisors need to be trained.
- Hold training sessions before the beginning of school.
- Don't overwhelm new teachers with too much information at one time. Try to
 present information at intervals.
- Define what is expected, provide check off list.
- Provide a mentor team that can demonstrate the different models.
- Match up teachers according to personality or teaching skills.
- When hiring special education teachers for coteaching make sure they have a good understanding of the subject they will be teaching.

- Set up coteachers for all day with same teacher.
- Administrators and Special Education Directors need to work together to plan
 for coteaching from setting up common planning time to students placement
 in class to selection and hiring of special education teachers as coteachers to
 organization meeting time before the school year starts.
- Provide common planning time on Friday afternoons.
- Utilize para-professionals or substitutes to allow coteachers common planning time each week.
- Utilize personal professional development plan for more training and to work on improving skills in coteaching.
- Focus on one area to improve on in coteaching, master it then move on to another area.
- Make sure the amount of students requiring special education is no more than
 1/3 of the student class ratio.
- Utilize the process coordinators for observation of coteachers, training, and review.
- Send out Monday Memos on due process law to all coteachers and principal.

These suggestions were not all provided after asking any specific question. Some of the suggestions were gather from different areas of the protocol. Some of the questions would bring out negative remarks about the coteacher training the participants might have experienced and they would add comments of how it could be remedied. Comments from participants would often included suggestions to improve the coteaching process.

Subquestion 4: What are the Perceptions of Principals, Teachers, and Special Education Directors on the Preparation Teachers Receive for Coteaching?

This question was answered by the participants expressing their opinions about coteacher training and coteaching experiences. Category 5 addresses the overall impression of the need for coteacher training. The themes address the lack of support from administration and advice about coteaching for new teachers.

Category 5: Overall impression of the need for coteaching training. All participants had positive comments about coteaching. The overall impression of coteacher training varied greatly in the participants' statements, but the participants were in agreement, there is a desire for more meaningful training.

Theme 1: Administrators' lack of training in coteaching. As a result of the interviews, I became aware that three of the participants never taught as a coteacher. The three participants were principals at the school districts where I conducted my studies and were not expected to have experience in coteaching. This was a noteworthy discovery to this study. One of the participants remarked, "I should get more training to understand it better for evaluation purposes." The lack of training a principal received for evaluating coteachers was made apparent during my first interview. With only one of the four principals having experienced coteaching as a coteacher, I investigated further about the possible need for principals to receive some kind of training in evaluating coteachers. All but two participants agreed that principals should have experience and/or training in coteaching. "I have not experienced any coteaching, but I have children in special education classes. I have learned more about coteaching on my own, but I suppose I

should get more training to understand it better for evaluation purposes," Ms. P. Purple replied. Ms. P. Pink added, "It is important that principals should be trained about coteaching. They are the people who evaluate the teachers. They need to know what to look for." Although, Ms. D. White disagreed with coteaching training for principals, she thought it would be good for principals to understand what they should be looking for when evaluating coteachers. The research of Kamens, Susko, and Elliott (2013) revealed that many administrators acquired knowledge of coteaching through course work in college, professional development, or on the job. The administrators in Kamens, Susko, and Elliott's study admitted that more training was needed. Mr. T. Green disclosed he will be employed as a principal this upcoming school year. He believes his training and experience will be a great benefit to his new position. One of the four principals has taught in a coteaching setting and reported the experience to be very valuable in understanding the processes of coteaching.

A key complaint by the participants was the lack of training their evaluators have. This study's findings indicated that principals often do not have training in coteaching. Principals do the evaluation of coteachers. The findings in this study agree with those found in Kamens, Susko, and Elliott (2013). Their research revealed that there are inconsistencies in the training and knowledge administrators have regarding coteaching. This information was a critical finding in the current study as it is difficult to evaluate or improve something you have never done or have not done in several years. This may indicate that principals may need to acquire training, as well as attain quality coaches or teachers trained in this process. Kamens, Susko, and Elliot (2013); Murawski and

Bernhardt (2016), and as early as Praisner (2003) and Wilson (2005) all agreed of the importance of the training administrators should receive on coteaching.

Theme 2: Advice for new coteachers. At the end of each interview, I asked the participant if there were any suggestions for teachers who may be considering becoming a coteacher or who were asked to be a coteacher. Several participants provided suggestions for new coteachers. Ms. D. Orange's suggestion was to spend time together before the school year starts. She also suggested sharing information, asking questions, and talk about how things might be handled in the classroom. Ms. P. Pink added a similar suggestion to talk with each other. Learn about each other's teaching style, strengths, and weaknesses. Ms. T. Teal also suggested to ask questions and to have the conversations needed for pre-planning and understanding. Ms. T. Brown included that it is important to share what bothers you, not only before you start the school year, but talk about those things during the school year. Ms. D. White wanted to encourage all teachers to do it. She also said, "make a list of non-negotiables, the teachers need to discuss who will do what and how they will plan." Ms. P. Purple added to discuss roles and recommended to be courteous to each other and not to be afraid that you will step on toes, get in their space or their turf. She would encourage new coteachers to keep dialog open to prevent "Turf Wars". Mr. T. Green suggested developing a relationship with the other teacher; hang out at lunch break. He also suggested making sure you both understand each other's expectations for the team. Mr. T. Green also believed it was important to listen to the teachers who are already coteaching.

Discrepant Cases

All the participants provided information about the training they received for coteaching. Eight participants received their training from professional development sessions, workshops, or professional presentation provided outside of the school district. The other 4 participants attended instructional meetings or seminars. During the interview phase only one participant appeared to be in disagreement with the other participants.

One of the participants who attended an instructional meeting for coteaching was not in agreement with the "whole idea" of coteaching, but did admit, if coteaching was addressed appropriately and teachers were trained properly, it would be much more beneficial as to its cost. All but one participant agreed that administrators should have some kind of training for coteaching. The participant that disagreed was a participant who attended an instructional meeting for coteacher training.

Evidence of Trustworthiness

Four validation strategies of the eight strategies revealed by Creswell (2013) addressed in issues of trustworthiness, four validation strategies were employed in this study. Clarifying of the researcher bias, rich thick descriptions, triangulation, and member checking were utilized to ensure the reliability and accuracy of this study. Sources of data for this study included participant interviews and handout materials to search for regularities in the data.

To clarify any researcher bias I utilized bracketing. Bracketing is the process a researcher utilizes to control personal preconceived ideas and to understand the participants' point of view through their own experiences (Johnson & Christensen, 2004).

As a person with extensive experience in special education, I hold a strong desire to improve instructional processes for students with special educational needs. I am aware of the possible bias that may exist, and I took steps to bracket my perspectives and control personal biases that could distort the interpretation of data gathered in the study by identifying any assumptions about coteaching training during the collection and analyzing of data.

Member checking was used to validate the accuracy of the findings (Creswell, 2012). The participants were invited to go over a emailed copy of the draft of the interpretations regarding analysis, reductions, and findings. This allowed the participants to check the accuracy and credibility of the overall findings and to make suggestions for any changes that may be needed to present a more accurate description of their contribution to the study. No changes were made to present a different account of the findings.

Patton (2002) describes triangulation as comparing the data from different sources of information to increase the validity of a study. In the triangulation process the data which has been gathered during interviews with the participants are compared to determine the areas of agreement as well as any discrepant information. In the case of this study; interviews from three different levels of professionals; principals, special education directors, and general education teachers comparing their comments about their understanding of coteaching and experiences of coteaching with documentation from presentation handouts. The triangulation helped to ensure the findings were accurate because it is drawn from multiple sources.

A final procedure to be used for validation in this study is rich, thick description. The descriptions and details of the study will allow the reader to transfer information to other settings. Rich, thick description was used in this study to provide strong specific details that could be transferable. Creswell (2009) expressed that the value of the qualitative study exists in the detailed description and themes developed at a particular site. Although the data gathered in a case study are specific to the study, the details of this study are provided in a rich, thick description, which could provide support for another study or starting point for a larger study.

Summary

In Chapter 4, I described the findings from this qualitative research study of how teachers are prepared for coteaching. The research question and subquestions were also presented. The setting for the study was described and how the data from the study were collected, organized, and analyzed. I interviewed 12 participants to voice their understandings, experiences, and perceptions of the training they received to prepare them to engage in coteaching as a teacher, special education director, or principal. The demographics of the participants were also listed. The evidence of trustworthiness was provided through the use of bracketing to control personal preconceived ideas, member checking to validate the accuracy of the findings, and triangulation of data from different sources. As a final procedure, I provided a rich, thick description of details. The results were organized by a sub question followed by a category then themes. There were 5 categories; (a) training/instruction of coteaching, (b) coteaching experiences, (c) components of coteaching, (d) improve quality of coteaching, and (e) overall impression

of coteaching training. Within the 5 categories, eleven themes emerged. Suggestions and quotes from the participants were listed. Discrepant cases in this study were discussed at the end of this chapter.

Chapter 5 concludes this study with an interpretation of the findings. The chapter is organized using the research questions to guide the findings into categories and themes. Limitations of the study are presented with recommendations for further research. Recommendations by the participants are also presented as well as recommendations for future studies. The conclusion of the study is presented addressing how the three subquestions were answered.

Chapter 5: Findings, Recommendations, and Summary

Coteaching has been part of education since the 1960s. But teacher education programs have not kept up with the training for teachers on coteaching (Friend, 2014; Murawski, 2010). Although the No Child Left Behind Act is no longer in effect, it was a driving force for the reauthorization of Individuals with Disabilities Education Improvement Act of 2004 that dictated school districts to provide equal opportunity to students with special educational needs (Friend, et al., 2010). More recently, the Every Student Succeeds Act (2015) and Common Core State Standards Initiative (CCSSI, 2014) have pushed schools by requiring more rigor and accountability for success for all students. With this increasing emphasis on meeting the needs of students with special educational and behavioral needs as well as cultural diverse students, school districts have selected coteaching to provide access for students with special educational needs to the general education curriculum in the inclusive setting as well as access to highly qualified teachers (Individuals with Disabilities Education Act, 1975).

The purpose of this study was to gain understanding of the preparation teachers receive for coteaching and to help identify what changes, if any, might be needed to improve the training practices of teachers through the State Department of Elementary and Secondary Education or other coteaching training seminars and presentations. The data from this study were collected using specifically designed interview protocols for special education directors, general education teachers and principals of four local school districts. Open ended questions relevant to the position held by each participant were developed for each protocol. The answers provided by the participants were analyzed

utilizing Hatch's topological analysis to reveal themes that addressed the questions of this study.

Key findings of this study included the following: Participants reported a lack of training in coteaching prior to being assigned a coteaching position, participants reported that a college course in coteaching was not offered during their teacher education training, participants did not recall attending any class during their collegiate experience that employed instructors as coteachers, any training received during professional development should continue with follow-up and review on a regular basis, and teacher evaluators did not have training on how to evaluate coteachers. A brief summary and interpretation of the findings, limitations to the study, recommendations for action and further study, and implications for social change was provided in this chapter.

Interpretation of Findings

The purpose of this study was to examine the preparation teachers received for coteaching by asking the question "What changes can be made to improve coteaching training?" Five categories emerged from the data that were collected: (a) training/instruction of coteaching, (b) coteacher training obstacles, (c) components of coteaching, (d) improve quality of coteaching, and (e) overall impression of coteaching training. Eleven themes emerged from the five categories and will be discussed later in this chapter. A detailed discussion is presented regarding the themes though the lens of the conceptual framework and the literature review.

The conceptual framework was based on communities of practice, which describes people working toward a similar interest (Wenger, 2000). Although the

participants in this study expressed the desire to work together as partners and were vocal about the need to know how to make coteaching work, communities of practice was not demonstrated. Following a plan that would engage teachers and administrators in a community of practice might provide more direction for improvement in the area of coteaching. Several local school districts have engaged in professional learning communities to assist in providing updates, reviews, or training in different areas of education. The professional learning communities are based on the same concept as Lave and Wenger's communities of practice. The data of this study indicated that the local professional learning communities are not delivering the message of how the communities should work, specifically on the subject of coteacher training.

Subquestion 1

How did training sessions prepare teachers for coteaching?

Training/Instruction of coteaching. The findings of this study confirmed those found in other studies such as Brinkmann and Twiford (2012) that specific training for coteaching is not occurring during coursework in the teacher education programs or during the practicum for student teaching. The findings of this study also confirmed that teacher candidates are not receiving the opportunities for experience and training in coteaching (Hamilton-Jones & Vail, 2013; McHatton & Daniel, 2008). The data from this current study generated a consistent finding among the participants revealing a lack of coteaching education. Of the 12 participants, three recalled receiving only introductive information on coteaching that was presented during their teacher education classes at the college or university level. All of the participants in this study are of the same opinion:

Colleges and universities need to provide more training in coteaching. Previous research has also supported a need for the development or improvement of curricula for coteaching at the college and university level (Cramer et al., 2010).

Theme 1: College and university professors as coteachers. The 12 participants in this study reported that they did not attend a cotaught class during their college years. But previous research has shown that faculty modeling of coteaching was a valued contribution to the increase in knowledge of coteaching (Gladstone-Brown, 2018; Ricci & Fingon, 2017; Smith & Winn, 2017; Stang & Lyons, 2008). Participants of this current study agreed with these findings, as one participant made it clear that "It would be great if we had teachers in colleges who used different models of coteaching." The replies from the participants of this study echoed the previous studies on the need for university and college instructors to model coteaching.

As a result of numerous studies on various aspects of coteaching, Bacharach and Washut-Heck developed a coteaching training pilot program which included instructors as coteachers. This pilot program was presented to colleges and universities across the country and was supported by state departments of education throughout the United States (T. W. Heck, personal communication, February 21, 2017). Although the state in which this study was conducted was included as one of the states developing a coteaching training pilot program throughout the state's colleges and universities, the State Department of Elementary and Secondary Education decided not to require coteacher training as part of the teacher education program but encouraged local school districts to participate in coteaching training through the state's department of education (G.

Hairston, personal communication February 21, 2017). These actions by the state may have impeded the opportunity to advance the findings of various researchers providing instruction on how coteaching should be done.

A neighboring state of Kentucky is one of only a few states that adopted coteacher training through the teacher education program in colleges and universities throughout Kentucky (Kinne, Ryan, & Faulkner, 2016). Research shows that Kentucky continues to require training in coteaching, utilizing instructors as coteachers to model what coteaching looks like, whereas it is difficult to find a college or university in the state in which this study was conducted that provides a training program in coteaching. Many of the pilot programs designed to provide coteaching training in local colleges and universities no longer exist.

Theme 2: Lack of meaningful professional development. Professional development presentations are used to keep teachers current in different areas of education, and teachers who were not provided the opportunity of instruction in coteaching during their college coursework can receive training through professional development (Pugach & Winn, 2011). Although participants in this study attended presentations on coteaching, most of the participants were dissatisfied with the outcomes. The report of introductory levels of information on coteaching revealed that the training was not efficient or effective. Research is needed to identify the content and experiences teachers are receiving during professional development programs on coteaching (Brinkmann & Twiford, 2012). The results of this current study revealed the lack of understanding of skills needed to be successful in coteaching.

The participants also expressed the desire for more advanced in-service training in coteaching (see also Conderman, Johnston-Rodriquez, Hartman, & Walker, 2012).

Coteachers must feel adequately trained to successfully share teaching responsibilities

(Bean & Lillerstein, 2012; Nichols & Sheffield, 2014). But according to this current study, professional development programs on coteaching are not always providing enough information or activities for teachers entering in a coteaching position.

Additionally, it was evident in this study that there was a breakdown in the professional learning communities within each school district. Unlike the professional development programs mentioned in previous studies (see Walsh, 2012), the participants in this study were not facilitated by intensified coteacher training using coaching strategies to develop coteaching skills. The participants confirmed that the training sessions on coteaching need to be ongoing and comprehensive to provide opportunities for improvement.

The participants also discussed their concerns regarding the lack of interactive activities in the training sessions. It is important to have each member's participation in a community of practice; the involvement of each member of the community contributes to another teacher's growth in practical knowledge, confidence in teaching, and self-awareness (Saccomano, 2013). This was not the case in the current study. There was a disconnect in the learning communities of the coteacher training sessions. Participants wanted to see more interaction in the presentations and more hands-on activities.

Subquestion 2

What opportunities were provided within the training sessions to prepare teachers for coteaching?

Removing obstacles for coteacher training. Most responses from the participants were in the negative regarding opportunities in training for coteaching. Participants identified three opportunities during their training sessions: learning to plan lessons, listening, and taking notes. They revealed many challenges in coteaching that were experienced because of the lack of adequate training. One of the challenges discussed by participants in this study included not enough time to plan together, and more training is needed before and during coteaching (see also Conderman et al., 2012). The participants expressed disappointment in how coteaching has been presented at the college and university level as well as how it has been supported in public school systems. The themes were developed from the problems that the participants described as coteachers, possibly from the ineffective training the teachers received for coteaching. Participants noted concerns regarding coteachers' assignments, teacher personality conflicts, differences with teaching styles, and lack of common planning time. The themes that follow present the finding of the participants' observations and experiences while working as coteachers or supervisors.

Theme 1: Coteacher assignments. Teachers have often been assigned to coteaching without proper staff development in coteaching (Nichols et al., 2010). The participants' perceptions of their coteaching training can add to the results of previous studies (Nichols et al., 2010; Shady, Luther, & Richmam, 2013). Most participants

expressed that they did not have adequate training in coteaching. Two participants claimed they did not know they were going to be working as a coteacher. Even if the teacher could pick their coteaching partner, these participants did not know what they needed to know about selecting a coteaching partner.

Theme 2: Personalities conflicts. Participants in this study identified with previous findings that a struggle for power can exist between coteachers and that a coteacher can feel threatened by the other's abilities and knowledge (Ferguson & Wilson, 2013). Participants also confirmed findings that the content teacher often assumes the role of the lead teacher (Mason-Williams, 2015; McHatton & Parker, 2013). This arrangement exhibits poor team work and threatens the student achievement and is contrary to the communities of practice. Further, teacher personalities affect the relationship with the coteaching team (Simpson, Thurston, & James, 2014), and the personalities of the teachers who will be a coteaching team should be taken into consideration so they can successfully work together (Petrick, 2015). One participant recommended that when selecting new teachers for coteaching it is important to keep in mind how their personalities will match up. Principals play an important role in the selection of setting up coteaching teams. Not only should they be aware of personality differences but also the different teaching styles of the teachers who will be teaming as coteachers (Kamens et al., 2013). Principals could utilize surveys and coding programs to match up coteaching teams, as suggested by participants of this study.

Theme 3: Teaching styles conflicts. One of the participants recalled her first year as a coteacher as being like the *Clash of the Titans*. Bacharach's et al. (2008) list of key

elements of coteaching is significant when determining how the mechanics of the classroom will work. Evidence of these elements surfaced throughout the discussions with the participants of this study. Confirming the research of Bacharach et al., the participants recommended that both teachers need to want to work together, share the responsibilities, know the curriculum, and talk about who is going to do what in the classroom before the beginning of the school year, developing a community of practice among the coteachers and sharing suggestions and recommendations to make coteaching successful.

Theme 4: Lack of common planning time. One of the most critical elements of coteaching is co-planning (Fenty & McDuffle-Landrum, 2011; Strogilos, Stephanidis, & Tragoulia, 2016). Participants in this current study believe common planning time is necessary, not only for lesson development, but regularly scheduled meetings are needed to discuss individual students' needs, accommodations, and to plan instructional strategies (see also Lindeman & Magiera, 2014). The participants knew co-planning was not always possible if the special education teacher works with more than one general education teacher (see also Nichols, Dowdy, & Nichols, 2010).

Several of the participants also explained that they are not required to make lesson plans. One participant acknowledged that she was no good at preplanning, she knows what she wants to teach, and it is all in her head. This significant finding is in opposition to the community of practice and findings of Guise et al. (2016), which showed the significance of collaboration and reflection to the success of coteaching. Other researchers have indicated that without co-planning there will be no coteaching (Heck &

Bacharach, 2015). The data from this current study revealed an area that needs to be addressed through proper training and ongoing support from administrators.

Establishing effective components of coteaching. Components of coteaching are often defined in many ways depending on the researchers' point of view. Friend and Cook (2007) defined components of coteaching as a description of the personal and physical make up of the classroom. Gately and Gately (2001) were focused on more specific details such as logistics, knowledge, and approaches. Brinkmann and Twiford (2012) were concerned about missing components of coteaching and believed there were more components to consider in coteaching.

The data in the current study revealed that a common language has not been developed in coteaching. The use of a common language utilized in a community of practice would assist with defining what components of coteaching are and how they can be applied in each school district. A common language will develop from the dialogue among the learning community (Lave, 1997). If the learning communities of the school districts utilized in this study would meet on a regular basis, a common language may be able to evolve but has not occurred yet.

Theme 1: Skills needed for successful coteaching. There are skill sets that may be essential in order to retain a successful coteaching program (Brinkmann & Twiford, 2012). The data of this current study indicated that the participants could list skills sets, but their answers did not establish that the participants understood or could apply any of the skills during coteaching. Also noted were skills not mentioned by the participants that

were found in research of other studies. These skills were conflict resolution, behavior management skills, and data collection.

Although all skills are important in coteaching, conflict resolution, behavior management skills, and data collection are areas that require attention and should be addressed for success in any classroom. Data collection is important to establish best practices and develop specific instruction for students. Learning and utilizing behavior management skills are helpful in assisting students with negative behaviors that may interfere with their learning or other students learning. Conflict resolution will not only assist teachers with student behavior problems, it is also helpful in communication with other teachers and administration.

This research revealed a need to continue training in coteaching to help coteachers' identify skill sets of coteaching and to increase and expand the coteachers' knowledge of the skills to help make coteaching successful. Participants in this study added to these skills that are believed to be necessary to make coteaching successful. The list of skills developed in this research also adds to the research of Magiera and Simmons (2005) and Bacharach et al. (2008).

Theme 2: Best practices in coteaching. Data from this study were combined into a list that participants believed were necessary for best practices in coteaching. These findings support and add to the recommendations for best practices in studies such as Badiali and Titus (2010); Chanmugam and Gerlach (2013); and Nierengarten (2013). Although the participants were able to add to a list of best practices, it did not make it

clear that the participants understood or knew how to apply or utilize any of the practices that they suggested.

Subquestion 3

What techniques were utilized within training sessions to prepare teachers for coteaching?

Improving coteacher training through a variety of techniques. Participants provided a few techniques used during training sessions for coteacher training.

Traditional teaching techniques were suggested such as the leader explaining a topic, brainstorming, and the attendees taking notes. Some handouts were provided to allow the attendees to follow along or review later. Power point presentations were also utilized during the coteacher training.

The improvement of the quality of education has been an on-going process.

Improvement in the effectiveness of coteaching should be evident in the quality of performance. Thousand, Nevin, and Villa (2008) recommended that coteachers have a common conceptual framework, language, and skills set. By developing a community of practice, which is known as a professional learning community in local schools districts, teachers can share ideas, discuss problems and recommend possible solutions.

Participants reported a lack of effective training during workshops presentations, which was limited to introductory information. They further expressed a lack of opportunities for continued advanced training. This study indicated that coteaching often does not work because of the inadequacies in training and implementation. After participants voiced a

number of problems connected with coteaching, the participants were able to make suggestions for possible solutions to these problems.

Theme 1: Suggestions to improve coteaching. Areas of concern that require improvement were indicated earlier by Magiera and Simmons (2005); Brinkmann and Twiford (2012). Participants of this study expressed their frustration in all areas of their coteaching education but were willing to make suggestions to improve training in coteaching. These suggestions can be found in chapter four under theme two.

A positive indication for the future of coteaching came with the participants' willingness to provide suggestions to make improvements in coteacher training and ultimately the improvement of coteaching. The participants of this study provided possible solutions to many of the issues that plague the success of coteaching. Many of these suggestions are being utilized by some of the local school districts where the participants are employed. The enthusiasm demonstrated by the participants to share ideas to help improve the whole concept of coteaching was revealed in the willingness of the participants to make suggestions and recommendations to improve coteacher training and coteaching. It may be possible that coteaching will continue to improve within the southwest area of the State if the teachers are willing to move forward with the ideas for training and implementations that the participants have suggested. The suggestions provided by the participants in Chapter 4 of this study can add to the literature of coteacher instruction and training.

Subquestion 4

What are the perceptions of principals, teachers, and special education directors on the preparation teachers receive for coteaching?

Overall impression of coteaching training. The participants of this study expressed the importance of coteacher training for both general educators and special education teachers, but expanded the training to include administrators. This research adds to studies such as Conderman, Johnston-Rodriguez, Hartman, and Walker (2012); Gladstone-Brown (2018); Smith and Winn (2017); Ricci and Fingon (2017). This research also confirms that both general educators and special education teachers must feel adequately trained in coteaching to successfully share teaching responsibilities (Bean & Lillenstein, 2012; Nichols & Sheffield, 2014).

The community of practice was not evident in most of the data produced in the current study. The consensus of the participants of this study expressed the desire to work together and to become a team, striving to make all students successful through coteaching corroborates the conclusions of Iyer and Reese (2013). The participants confirmed the findings of Iyer and Reese, making suggestions to improve coteacher training to include the possibility of role playing with the use of scenarios during the coteacher training, provide experience in problem solving, and opportunities to develop positive attitudes.

Verifying the findings of Cramer et al., (2010), many of the participants of this study indicated that there would be more effective coteaching partnerships with building relationship skills and instructional collaboration if both special education and general

education teacher candidates train together in coteaching, reinforcing the idea of a community of practice. This also supports the original concept of a community of practice first utilized in a teacher education program (Wenger, 2000).

Throughout many of the interviews, the frustration of how coteaching has been addressed was apparent, but in the end of each interview the participants expressed a positive attitude about the purpose and possibilities for coteaching. Although the participants expressed negative experiences and the desire for improvement in the training process for coteachers, the participants chose to continue to coteach. All participants agreed that coteaching is a beneficial program for all students.

Theme 1: Lack of support from administration for coteaching. Participants' comments confirmed research found on the importance of the support of the administration. Significantly, the findings confirmed those of Kamens, Susko, and Elliott (2013), who found that administrative support is necessary for best practices in coteaching to occur. The lack of administrative support is a chief concern in coteaching (Brendle, Lock, Plazza, 2017). Without the support of the local administrators, other issues arise that interfere with the success of coteacher training and ultimately the coteaching program, creating a breakdown in the community of practice. These issues have been addressed by the participant of this study adding to the literature of coteaching.

The study by Pratt, Imbody, Wolf, and Patterson (2017) exposed the need for this support from the administrators. The participants of the current study believed administration should look at the teaching schedule and provide coteachers the opportunities to coteach together throughout the day, scheduling classes with the same

teachers can help the teachers to pick up where the other left off. The participants also voiced that time should be scheduled for teachers to observe a successful coteaching team in a planning session or presenting a lesson, which would allow the observing teacher to get a better understanding of how coteaching works and to observe how effective coteaching partners work together.

Theme 2: Advice for new coteachers. Several of the participants were willing to provide suggestions to teachers who are considering coteaching or who have already been assigned to a coteaching position. One participant recommended that both teachers spend time together before the school years starts. Possibly set up a planning meeting to discuss how the class will be organized and what responsibilities each teacher will take. Other suggestions for a new coteacher were; to learn about each other's strengths and weaknesses, ask questions, share what bothers you, and discuss your teaching styles. It was also recommended in order to develop a working relationship to keep dialog open and share ideas. These suggestions add to and confirm research recommending the improvement of coteacher training and ultimately coteaching.

Limitations of the Study

This qualitative study included certain limitations. The participants of this study were employed by four school districts, which limited this study to a small geographic area. The study included 12 participants and; therefore, limited the amount of data that were collected and may not be a representation of a larger population. An unexpected limitation was with the lack of workshop syllabi, handout materials and classroom lesson plans, creating the inability to examine these documents. The principals and teachers

could not provide any handout materials from workshops attended by these participants.

Two of the four special education directors provided several papers that were included in their school districts workshop or handouts from presentations attended by their teachers.

These handout materials included pages with the definition of coteaching and a list of six approaches to coteaching and other suggestions that pertained to strategies and motivational information.

Implications for Social Change

There has been limited research completed on how teachers are prepared to coteach. This study adds to the body of knowledge on a coteacher's lack of readiness for coteaching and the need to provide more training before a teacher is expected to perform in a coteacher position and for coteachers to continue reviewing how to coteach successfully. The findings of this study have practical implications that can be advanced in the training of teachers prior to employment as a coteacher.

Participants in this study voiced disappointment in the lack of coaching, demonstrations, practice of coteaching during their college years, and the lack of similar opportunities provided during professional development, workshops or seminars. These participants also described possible solutions to problems they have experienced during coteaching. These suggestions align with the foundation of communities of practice, which supported this study as the conceptual framework.

The basic concept of communities of practice is for the members to generate and share ideas, develop tools, learn content, and learn the vocabulary through situated learning (Lave &Wenger, 1991). All participants agreed that coteaching training should

continue. Providing well planned, detailed, and specific professional development workshops with presentation reviews on a regular basis can help improve the performance of coteachers.

This study found the participants expressed the same frustrations as those discussed for decades. The participants in this study provided possible solutions to many of the issues that exist in coteaching. Several participants were eager to make suggestions for improving how to prepare teachers for coteaching. Some of the suggestions included utilizing the interview protocols of Murawski (2003); Coteaching and Collaborative Preparation Survey and Sharing Hopes, Attitudes, Responsibilities, and Expectations Survey before the school year begins. Another recommendation was organizing a series of professional development workshops during the summer months so coteaching partners can meet and work together prior to the start of the school year.

The results of this study indicated a need for increased opportunities for both administrators and teachers to gain more knowledge and skills regarding coteaching that would be ongoing and comprehensive. An echoed recommendation to making a positive change in coteaching training would be to gain the support of the administration. The study by Pratt, Imbody, Wolf, and Patterson (2017) exposed the need for this support from the administrators.

Brown, Collins, and Duguid (1989) supported authentic activity and recognized that learning should surround the student in the natural environment of the learning experience. These authors also proposed that situated learning be used as a model as instruction for classroom practice in teacher training. Lave defended the idea that

learning is situational and occurs within the learning activity within the situation and culture (Lave &Wenger, 1991). Herrington and Oliver (1995) agreed with the idea of Lave and Wenger's community of practice to utilize the situated learning environment in education. This environment would provide the coaching and scaffolding to the student teachers and potential coteachers the opportunity to access the expert and observe the task as it is modeled within the community (Herrington & Oliver, 1995).

Recommendations for Action

The results of this study indicated a need to increase the knowledge and skills of coteachers. The following recommendations are made for consideration for school district administrators and the local state teacher education programs. More coteacher training should be included in all teacher education programs. More time should be allocated for coteacher training in college course work, possibly developing a class that provides practice, modeling, role playing, and observation of coteaching. Kinne, Ryan, and Faulkner's (2016) research focused on the first year of state mandated coteaching training for teacher candidates in Kentucky. They recommended that the teacher education program create lesson plan forms and rubrics to guide teacher candidates to help clarify expectations of cooperating teachers and university supervisors during training sessions of how specific coteaching strategies should be documented. Kinne, Ryan, and Faulkner also recommended that coteaching be introduced early in the teacher candidates' preparation program and that the use of coteaching strategies are well-established and become part of the teacher education training and coursework. These

researchers also recommended that the university supervisors of the coteaching training program are knowledgeable and supportive of implementing the coteaching training.

District administrators should provide time prior to the beginning of the school year, during the pre-school meetings, for coteachers to engage in planning of how the classes will work and teaming of coteachers. Follow up time throughout the year, possibly every quarter, a training/refresher meeting should be scheduled. Friend (2008) identified several challenges in implementing coteaching. Among these challenges she listed; ensuring administrative support. Gladstone-Brown (2018); Smith and Winn (2017); Ricci and Fingon (2017); and Walsh's (2012) studies maintained the importance of administrative support for professional development to include implementing practices that would guarantee administrators' support for the effectiveness of the coteaching process and for the coteacher evaluation process. It is important for the administration to provide time for training and for planning. Heck and Bacharach's (2015) support of coplanning was made evident by stating that if you are not co-planning, you will not be coteaching.

Administrators who will be hiring coteachers should take in consideration the new teachers' strengths and abilities in the subject matter they will be working (Gladstone-Brown, 2018; Kamens, Susko, & Elliott, 2013; Smith & Winn, 2017; Ricci & Fingon, 2017). Potential teachers should be informed that they will be teaching in a cotaught classroom before the position is offered to the teacher. Murawski and Dieker (2013) not only support this idea but also provided a plan on determining who should participate in coteaching.

Administrators who will be evaluating coteachers should have some training in what coteaching should look like and know what to expect from a coteacher (Gladstone-Brown, 2018; Kamens, Susko, & Elliott, 2013; Murawski & Dieker, 2013; Smith &Winn, 2017; Ricci & Fingon, 2017).

Recommendations for Further Study

Based on the findings of this study, recommendations for future research to include developing a study similar to this current study, but on a larger scale. Also, to expand the study to include several states or to examine more school districts located throughout a specific state. Conducting a study to locate all states that require coteaching training during teacher preparation. Investigate the success of the coteaching program within the school districts throughout these states. Developing a study concerning how common planning time is set up and implemented. Look for school districts that provided time for staff to plan for coteaching before the school year starts and during the school year. Finally, conducting research on administrator's training in coteaching. Focus on training for evaluating coteachers, selecting teachers for coteaching, teaming up of teachers for coteaching, and providing general support to a coteaching program.

Conclusion

The purpose of this study was to gain understanding of the preparation teachers receive for coteaching and to help identify what changes, if any, might be needed to improve the training practices of teachers offered by the State Department of Elementary and Secondary Education or professional development sessions that are provided for

training in coteaching. The main question: "What changes can be made to improve coteaching training and four sub questions were used to guide the data collection":

- How did training sessions prepare teachers for coteaching?
- What opportunities were provided within the training sessions to prepare teachers for coteaching?
- What techniques were utilized within the training sessions to prepare teachers for coteaching?
- What were the perceptions of principals, teachers, and special education directors on the preparation teachers receive for coteaching?

The participants of this study, teachers, special education directors and principals credited professional development workshops and seminars for providing the limited training they received in coteaching. They also clarified that the workshops and seminars did not provide enough information to prepare them as coteachers. Several participants expressed that the workshops were too basic and only functioned as an introduction to coteaching with definitions and research facts on the success of coteaching. The participants agreed that follow up sessions should be part of ongoing training that would provide more opportunities to practice the different types of coteaching and to observe how coteaching is supposed to be done.

The State Department of Elementary and Secondary Education provide workshops and seminars on coteaching throughout the state. Having attended such workshops on various subjects, I know that these workshops are at a cost to the local school districts. The speaker's travel expensive are charged to the local school district or

costs such as rooms and meals for each teacher attending a workshop in another part of the state are added expenses to the local school district's limited budgets. Many of the participants commented about the quality of the workshops and found them to be lacking in opportunities to expand more of their understanding of coteaching.

The different types of techniques utilized in the workshops were described by participants as very limited with lectures, power point presentations, note taking and some handouts of basic information. Participants did not recall more creative type of techniques often used in the classroom such as role playing, modeling, or collaboration type activities. The participants of this study made several suggestions to make their learning experiences more worthwhile and constructive. These suggestions are listed in Chapter 4.

The participants were in agreement that more training is necessary for all teachers who are assigned coteaching positions. They also agreed that coteaching is beneficial to all students if done right. Varying in specifics about how it should be accomplished, the participants agreed that administrators who will be evaluating coteaching should have an understanding of what coteaching should look like. Participants were in agreement that training should be ongoing as long as teachers are involved in coteaching.

Brinkmann and Twiford (2012) recommended continued research to identify the types of content and experiences preservice teachers are receiving and what professional development is providing to teachers. Identifying and understanding the skill sets needed to successfully implement coteaching can be addressed in teacher education programs, and for veteran teachers, professional development programs can provide training beyond

an introductory level. More effort is needed from teacher education programs, local school districts and state organized professional development planners to provide continual advancement of training in coteaching beyond the basics.

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Appendix A: Handout Materials Examination Grid

Record the type of the coteaching approach and components.

Record the activity that is utilized to present the information of the coteaching approach and components. Examples of activities: Reading assignment, writing assignment, acting out scenarios, student presentation, teacher lecture, power point presentation.

Make notes or comments as needed. For handouts.

Approaches	Date	Activity	Notes
One teach, one			
observe			
Station teaching			
Parallel teaching			
Alternative			
teaching			
Teaming			
teaching			
One teach, one			
assist			
Problem solving			
Conflict			
resolution skills			
Collaboration			
training			
Classroom			
management			
Professional			
responsibility			
Classroom			
environment			
Lesson planning			
Differentiation			
instruction			
Other			

Appendix B: Interview Protocol for Principals

Pseudonym name:	Date:
The participant will be reminded that the information will	l be confidential and in no way
will their comments and participation effect their evaluati	on or certification and
participants can stop at any time for a break or to withdra	w completely from the study
without any negative effects. The questions will be group	ed according to training,
professional development, coteaching experience, segrega	ated teacher education
programs, components of coteaching preparation, coteach	ning preparation to improve
quality performance.	

Training

- 1. Describe the part of coteaching training that appeared to have been most helpful to the teachers.
- 2. What changes would you make to improve the training for teachers, special education directors, and principals? (address each group separately)
- 3. Describe the type of instruction that would enhance coteacher training.

Coteaching experience

- 1. Describe your experience, if any, as a coteacher.
- 2. Have you utilized coteaching at your school? If so, what classes? How did coteaching work in the class?
- 3. In your opinion, what is the purpose of coteachers?

Segregated teacher education programs

1. Describe the positive or negative aspects of training teachers in coteaching after they are already working in the classroom.

Components of coteaching preparation

- 1. During coteaching, have you observed a clear rationale about who is working with whom and for what purpose? How was this determination made?
- 2. Which of the coteaching approaches have you observed used most often?
 Why do you think this approach was used more?
- 3. Were any coteaching approaches rarely used?
 If so, why do you think this approach was used less?
- 4. How often do the coteachers meet to plan lessons?
- 5. Describe your role in the coteaching setting?
- 6. In your opinion, what is the difference between coteaching, collaboration, and inclusion?
- 7. In your opinion, what are some of the skills of coteaching that are necessary for a successful coteaching program?

Coteaching preparation to improve quality performance

- 1. Describe your understanding of best practices in coteaching.
- 2. What were the most significant challenges you have observed in coteaching?
- 3. What changes would you suggest to make improvements in the preparation for the coteaching?

General questions about the coteaching experience

1. Describe your overall impression of coteaching.

- 2. Describe your impression of the coteaching training you received.
- 3. Excluding the coteaching training, did you attend other classes that may have helped prepare you for coteaching or monitoring coteaching? If so, describe your experiences

Appendix C: Interview Protocol for Special Education Directors

Pseudonym name:	Date:
The participant will be reminded that the information wi	ll be confidential and in no way
will their comments and participation effect their evaluation	tion or certification and
participants can stop at any time for a break or to withdra	aw completely from the study
without any negative effects. The questions will be group	ped according to training,
professional development, coteaching experience, segreg	gated teacher education
programs, components of coteaching preparation, coteac	hing preparation to improve
quality performance.	

Training

- 1. Describe the part of coteaching training that appeared to have been most helpful to the teachers.
- 2. What suggestions would you make to improve the training for teachers, special education directors, and principals? (address each group separately)
- 3. Describe the type of instruction that would enhance coteacher training.

Coteaching experience

- 1. Have you utilized coteaching at your school? If so, what classes? How did coteaching work in the class?
- 2. In your opinion, what is the purpose of coteachers?

Segregated teacher education programs

Describe the positive or negative aspects of training teachers in coteaching after they
are already working in the classroom.

Components of coteaching preparation

- 1. During coteaching, have you observed a clear rationale about who is working with whom and for what purpose? How was this determination made?
- Which of the coteaching approaches have you observed used most often?
 Why do you think this approach was used more?
- 3. Were any coteaching approaches rarely used?
 If so, why do you think this approach was used less?
- 4. How often do the coteachers meet to plan lessons?
- 5. Describe your role in the coteaching setting?
- 6. In your opinion, what is the difference between coteaching, collaboration, and inclusion?
- 7. In your opinion, what are some of the skills of coteaching that are necessary for a successful coteaching program?

Coteaching preparation to improve quality performance

- 1. Describe your understanding of best practices in coteaching.
- 2. What were the most significant challenges you have observed in coteaching?
- 3. What changes would you suggest to make improvements in the preparation for coteaching?

General questions about the coteaching experience

- 1. Describe your overall impression of coteaching.
- 2. Describe your impression of the coteaching training you received.

3. Excluding the coteaching training, did you attend other classes that may have helped prepare you for coteaching or monitoring coteaching? If so, describe your experiences.

Appendix D: Interview Protocol for Teachers

Pseudonym name:	Date:
The participant will be reminded that the informat	ion will be confidential and in no way
will their comments and participation effect their e	evaluation or certification and
participants can stop at any time for a break or to	withdraw completely from the study
without any negative effects. The questions will be	e grouped according to training,
professional development, coteaching experience,	segregated teacher education
programs, components of coteaching preparation,	coteaching preparation to improve
quality performance.	

Training

- 1. What suggestions would you make to improve the coteaching program?
- 2. Describe the type of instruction that would enhance the teachers' abilities to work in a coteaching setting?

Coteaching experience

- 1. Have you worked with another teacher to utilize coteaching? If so, what classes?
 How did coteaching work in the class?
- 2. In your opinion, what is the purpose of coteachers?

Segregated teacher education programs

Describe the positive or negative aspects of training teachers in coteaching after they
are already working in the classroom.

Components of coteaching preparation

- 1. During coteaching, was there a clear determination about who is working with whom and for what purpose? How was this determination made?
- 2. Which of the coteaching approaches did you and the other coteacher use most often? Why do you think this approach was used more?
- 3. Were any coteaching approaches rarely used?
 If so, why do you think this approach was used less?
- 4. How often did you and the other coteacher meet to plan lessons?
- 5. Describe your role in the coteaching setting?
- 6. In your opinion, what is the difference between coteaching, collaboration, and inclusion?
- 7. In your opinion, what are some of the skills of coteaching that are necessary for a successful coteaching program?

Coteaching preparation to improve quality performance

- 1. Describe your understanding of best practices in coteaching.
- 2. In what way did you contribute to student instruction while coteaching?
- 3. What were the most significant challenges for you in the coteaching?
- 4. What changes would you suggest to make improvements in the preparation for the coteaching?

General questions about the coteaching experience

- 1. Describe your overall impression of coteaching.
- 2. Describe your impression of the coteaching training you received.

- 3. What advice would you give to another teacher who is going to work in a coteaching setting?
- 4. What benefits did you gain from coteaching training that prepared you to move into cotaught classroom?

Appendix E: Summary Sheet

School	Position	Name		
What changes can be made to professional development programs in Missouri? How do pd workshops prepare teachers for coteaching? What opportunities are provided within the pd workshops? What techniques are utilized within the pd workshops?				
	Training/In	struction of Coteaching		
What part of coteaching training was most helpful?				
What changes would you make to improve training?				
What is your impression of the training you received?				
	Cotea	ching Experience		
Background in teaching				
Years at present school.				
Years in teaching				
Did you feel you contributed to student learning? In what way?				
Teachers Education Programs				

Positive comments

Negative comments	
	Components of Coteaching
How was the lead in	, , , , , , , , , , , , , , , , , , ,
the class	
determined?	
determined?	
Approach used most	
Approach used least	
How often met for	
planning?	
What is your role in	
coteaching?	
cotcacining:	
What is the	
difference between:	
Coteaching	
Collaboration	
Inclusion	
What are some skills	
that are needed for	
success in	
coteaching	
Improvement of Quality Performance	
Describe best	
practices	

What are some of	
the most significant	
challenges?	
chancinges:	
	General Questions
Overall impression	General Questions
of training you	
received	
0 11 '	
Overall impression	
of Coteaching	
Did you attend any	
other classes that	
may have help	
prepare for	
coteaching	
What advice would	
you give to another	
who is planning to	
be a coteacher?	
be a coleacher:	
Oth	er Suggestions for Improvement of Coteaching
Oth	Suggestions for Improvement of Coteaching