Perceptions of Secondary School Special Education Teachers of Their Preparation for Coteaching

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Perceptions of Secondary School Special Education Teachers of Their Preparation for Coteaching

A Dissertation by

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Submitted in partial fulfillment of the requirements for the degree of Doctor of Education in Organizational Leadership

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ABSTRACT

Perceptions of Secondary School Special Education Teachers of Their Preparation for Coteaching

by Vicki Zands

Purpose: The purpose of this qualitative multicase study was to describe and explain how secondary school special education teachers perceived that their special education teacher education programs prepared them to work as part of a coteaching team and how secondary special educators described the benefits and challenges of working as part of a coteaching team and sought secondary special education teachers’ recommendations for how teacher education programs could better prepare candidates to serve as members of a coteaching team.

Methodology: A qualitative multicase study was used. The researcher conducted semistructured, in-depth interviews with 12 secondary-level special education teachers who were coteaching at the time of the study.

Findings: Examination of qualitative led to 4 key findings. (a) Co-teaching benefits students, general education and special education teachers, and the school community; (b) implementation of coteaching requires substantial investment and significant work on the beliefs and skill sets of general education teachers; (c) schools and districts need to restructure and reprioritize their processes to achieve the true benefits of coteaching, including investing in building leadership capacity and allocating resources; and (d) university teacher education programs that do not have an extensive focus on coteaching in spite of their stated coteaching goals fail to develop coteachers.
Conclusions: (a) There are significant benefits to students, special education teachers, and general education teachers when coteaching is implemented with fidelity; (b) more needs to be done to educate general education teachers about the benefits of coteaching to both the students and the teachers involved; (c) schools and districts are not allocating the necessary resources to achieve the true benefits of coteaching; and (d) university teacher education programs are not providing preservice special education teachers with the necessary skills to be effective coteachers.

Recommendations: Further research is recommended about how coteaching benefits students and teachers by examining an exemplary school or districts. Further research is needed regarding how exemplary university programs prepare both special education and general education teachers to work as coteachers.
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CHAPTER I: INTRODUCTION

According to a study conducted by the National Center for Educational Statistics (2018), the national high school graduation rate in the United States for all students was 84.6% for the school year 2016-2017. For students with disabilities, that rate dropped to 67.1%. That same year, high school graduation rates in California were 82.7% and 65.0% respectively. An additional factor affecting California high school graduation rates is the move by districts to align graduation requirements with the University of California and California State University systems’ A-G coursework. As of 2017, 12 school districts in California, including the three largest (Los Angeles, San Francisco, and San Diego), had implemented A-G coursework as the default requirement for graduation (Leal, 2015). The more rigorous requirements will create an even greater barrier for students with disabilities to attain a high school diploma in California.

There are several laws that govern educational access for students with disabilities. Two such laws are No Child Left Behind (NCLB) and the Individuals with Disabilities Education Act (IDEA). NCLB mandates that teachers of academic core subjects be credentialed in the subject area they teach while IDEA requires that “students be served within the context of the age-appropriate general education curriculum as the first phase of their individualized education program (IEP)” (Hourcade & Bauwens, 2001, p. 242). As a result, approximately 76% of students with disabilities are educated in the regular classroom for some part of the school day (Worell, 2008), including 61% of the students who spend the majority of their day (80%+) in the general education setting (King-Sears, Brawand, Jenkins, & Preston-Smith, 2014). In an attempt to comply with federal laws regarding the education of students with disabilities, schools have
implemented the inclusion of special education students in the mainstream general education classroom at an increasing rate (Idol, 2006).

Although definitions of inclusive practices vary broadly, inclusion can be described in the following way: “Inclusion entails concerns with context and curriculum . . . one in which the child is educated with his or her typically developing peers and with supports and skill training provided as needed to facilitate participation with peers and with the curriculum” (Black & Simon, 2014, p. 155). However, many teachers struggle with the delivery of general education curriculum and instruction to diverse groups of students. This becomes even more evident when the diverse group includes students with disabilities (Strieker, Gillis, & Zong, 2013). To combat this reality, educational scholars have recommended coteaching as a viable option for students with disabilities wishing to get a high school diploma (Hourcade & Bauwens, 2001). Presently, classroom teachers often lack the skills necessary to collaborate, much less to coteach, and thus “preservice teachers need systematic preparation in order to understand the theory and practice of coteaching” (Strieker et al., 2013, p. 160). Several of these programs, from mainstreaming to coteaching, exist at the elementary level; however, they are scarcer at the middle and high school level (Fullerton, Ruben, McBride, & Bert, 2011).

A recent survey of preservice teachers showed that teacher preparation programs are not adequately preparing them to be collaborators when working with other teachers and/or students in an inclusive educational environment (Harvey, Yssel, Bauserman, & Merbler, 2010). The same survey noted that although general education and special education preservice teachers felt they were equally exposed to coursework about inclusion, there was a statistically significant difference in exposure to coursework on
Coteaching. The study concluded that in order to support inclusive practices, preservice teacher education programs must “provide opportunities for special education and general education teachers to work collaboratively on preservice training activities and opportunities, and design structured, comprehensive training programs for teaching majors” (Harvey et al., 2010, p. 32) that include coteaching experiences. Coteaching, a concept originally introduced by Dr. Lynne Cook and Dr. Marylin Friend in 1993 as a chapter in a guide for teachers wishing to learn how to teach students with disabilities, continues to be studied by several researchers and has become the preferred choice when looking at inclusive practices (Black & Simon, 2014; Solis, Vaughn, Swanson, & McCulley, 2012; Young, 2008).

**Background**

This issue of equity in education is not a new one. *Brown v. Board of Education of Topeka* (1954) brought into question the constitutionality of segregating students based on race. That decision led to a study that raised questions regarding its application to the segregation of students with disabilities, ultimately leading to P.L. 94-142, which mandated that students with disabilities receive a free and appropriate public education, also known as FAPE (Shamberger & Friend, 2013). Since that time, other mandates have arisen that require a more thorough look at the education of students with disabilities. The combination of the IDEA of 2004 and the NCLB Act of 2001 required that all students receive their education from highly qualified content area teachers in the least restrictive environment (Harvey et al., 2010; Hourcade & Bauwens, 2001; Pugach & Peck, 2016; Solis et al., 2012). As of 2014, more than 60% of students with disabilities were included in the general education classroom at least 80% of their day (King-Sears et
al., 2014), making it explicitly clear that the preferred way to meet the requirements of all the applicable education mandates is through inclusion (Chitiyo, 2017; Solis et al., 2012).

**History of Special Education**

The educational rights of students with disabilities were first addressed in 1954 with the landmark case of *Brown v. Board of Education*. Although the case was a civil case and was brought about because of segregation of Black and Hispanic students from their White peers, it also opened the door to addressing equitable access for students with disabilities to be educated with their general education peers (Obiakor, 2011), especially given that a disproportionate number of students identified as special needs were also members of these two segregated populations. Since then, there have been several federal landmark laws that govern educational access for students with disabilities. In 1975, the federal government passed Public Law 94-142 whose purpose was to guarantee a free and appropriate education to students with disabilities as well as to protect their rights and those of their parents. Subsequently, two other laws affecting the public education of children in the United States were enacted, namely NCLB and IDEA. NCLB mandates that teachers of academic core subjects be credentialed in the subject area they teach while IDEA requires that “students be served within the context of the age-appropriate general education curriculum as the first phase of their individualized education program (IEP)” (Hourcade & Bauwens, 2001, p. 242). As a result, approximately 76% of students with disabilities are educated in the regular classroom for some part of the school day (Worell, 2008), including 61% who spend the majority of their day (80%+) in the general education setting (King-Sears et al., 2014). In an attempt to comply with federal laws regarding the education of students with disabilities, schools
have implemented the inclusion of special education students in the mainstream general education classroom (Idol, 2006).

**Inclusion**

There are many definitions of inclusive practices, almost all of which call for “students with disabilities to be educated in general education classrooms with their same age peers” (Black & Simon, 2014, p. 155). This definition is quite broad and leaves room for interpretation at the district and school level. According to an article published in the journal of *American Secondary Education*, there is a large variability in the way inclusive practices are implemented between and within schools, districts, and states (Worell, 2008). For example, one school may have all special needs students included in the general education classroom for the entire day regardless of the severity of their disability, while in another school, students with mild-to-moderate disabilities may only be included in general education classes for a portion of the day (Worell, 2008). In addition to the variance in time spent in the general education classroom, the level of supports provided to students with special needs in those classrooms is quite broad. Regardless of the model used, “Successful inclusive schools emit a feeling that the school is a community working toward common goals” (Carpenter & Dyal, 2007, p. 346).

The value placed on inclusion of students with disabilities is not limited to the United States. In 1993, the United Nations adopted the Standard Rules on the Equalization of Opportunities for Person with Disabilities with the goal of achieving “fully integrated education in all UN countries” (Hakala & Leivo, 2017, p. 287). Based on this declaration, as well as others such as the Salamanca Declaration in 1994, schools were to become places where students with disabilities were educated in regular
classrooms instead of separate settings (Hakala & Leivo, 2017). As in the United States, there is some ambiguity in what the term *inclusion* means. Merely placing students in a general education classroom without support for their disability is considered by some to be inclusion while other countries are much more deliberate in their definition. The Finnish study found that “a relative consensus on the values behind inclusive teaching (i.e., equity and participation) exists on an international level but there has been variation in how these values should be put into practice in everyday school work” (Hakala & Leivo, 2017, p. 288). One practice being increasingly put into place is collaborative teaching.

**Collaborative Teaching/Coteaching**

Collaborative teaching, or coteaching, is defined as “the collaboration between general and special education teachers for all the teaching responsibilities of students assigned to a classroom” (Keefe, Moore, & Duff, 2004, p. 36). The purpose of coteaching, according to Cook and Friend (1996), is to increase instructional options for students while simultaneously providing support for students and teachers and decreasing the stigma attached to the label of special needs. This collaboration can take many forms with varying degrees of responsibility assigned to each teacher up to and including teaching lessons, grading papers, and classroom management. Unfortunately, often what is labeled coteaching is not truly coteaching but instead a model wherein the special educator takes on the role of a glorified classroom assistant (Hourcade & Bauwens, 2001). The models described in the next section are considered true models of coteaching by experts in the field.
Types of Coteaching

There are five generally accepted models of coteaching, all of which include coteachers “jointly planning and conducting instruction in a coordinated fashion to ensure success of all students” (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010, p. 11). The five models are as follow:

1. *One teach, one assist.* This model, also known as “teaching on purpose” (Vaughn, Schumm, & Arguelles, 1997, p. 5) involves one teacher leading a lesson for the whole group of students while the second teacher circulates around the room and checks in with students to make sure they understand the key concepts and provides in-the-moment feedback and prompts. The supporting teacher keeps notes on students who may need follow-up lessons. In this model, the general educator and special educator take turns assuming the roles of lead teacher and roaming teacher (Vaughn et al., 1997).

2. *Parallel teaching.* This model lowers the teacher-to-student ratio by half. Also called two groups, same content, students in this model are divided into two heterogenous groups and taught the same content. The advantage of this model is to allow students more opportunity to interact one-on-one with the teacher, to interact with each other, and to allow for more questions. The disadvantage is the duplication of efforts and the loss of instructional time.

3. *Flexible grouping.* Also referred to as two groups, different content, students are divided into two groups based on their understanding of a specific topic or concept (Vaughn et al., 1997) and not on their designation as special education or general education. In this model, one teacher reteaches while the other gives an alternative
lesson. The teachers in this scenario alternate between the groups to which they provide instruction, allowing both teachers an opportunity to work with the full range of ability levels.

4. **Station teaching.** Students in this model are divided into smaller groups, typically three. The groups may be heterogeneous or based on skill level and/or need. The groups then rotate through “centers” or work on specific assignments based on need. Teachers in this type of coteaching model can serve one of several roles, including monitoring student progress, providing minilessons to small groups of students who rotate through, or working with one group of students the entire period while the other teacher monitors the rest of the class.

5. **Team teaching.** This is perhaps the most difficult model to implement. Coteaching in this way involves both teachers taking responsibility for teaching a whole class of students by sharing the lesson responsibilities. For example, one teacher may lead the lesson with the other teacher interjecting when appropriate to provide extra examples or extensions of the key ideas. When using this strategy, teachers need to consider several factors. These include the teachers’ learning style preferences, how teachers will communicate during the lesson to signal the need for a break or that it is time to move on, and when it may be time to give students a “brain break” (Murawski & Dieker, 2004, p. 56).

Although each example involves varying levels of direct instruction by each teacher, there exist several requisite commonalities with each. All of the approaches are “part of a coordinated effort to implement multiple types of coteaching and grouping procedures that can and should be implemented” (Vaughn et al., 1997, p. 9).
Additionally, coteaching is not limited to what happens in the classroom. In order for two teachers to be successful coteachers, they must share responsibility for all aspects of instruction. Both teachers will share the responsibility of planning the lessons and delivering instruction. Likewise, both the general education and special education teachers are accountable for evaluation and assessment of student learning as well as classroom management (Carpenter & Dyal, 2007). This accountability will “result in a transformation of curricula and instruction consistent with research-based best practices” (Hourcade & Bauwens, 2001, p. 244). Despite the advantages of coteaching, the strategy has not been widely implemented.

**Barriers to Coteaching**

Several studies have identified barriers to the implementation of coteaching and suggested practices to reduce these barriers (Nishimura, 2014; Shamberger & Friend, 2013). Foremost are teacher attitudes toward coteaching, lack of ongoing professional development, and lack of preservice teacher training. In addition, in order for coteaching to be successful, site and district administration must support the process through offering opportunities for ongoing professional development and developing master schedules that allow coteachers the needed time to collaborate.

**Teachers’ Attitudes**

A study on inclusion conducted by Worell in 2008 noted that “when administrators, teachers, guidance counselors, parents and related service personnel have negative perspectives about inclusive education at a particular school, those who teach in inclusive classrooms find it very difficult to achieve a high level of success” (p. 44). This finding was not limited to inclusion in the United States. The *European Journal of*
Special Needs Education identified teachers’ attitudes as a primary factor in the success of inclusive classroom environments. In classrooms where teachers have negative attitudes toward students with disabilities, the process of coteaching is hindered (Bešić, Paleczek, Krammer, & Gasteiger-Klicpera, 2017).

Lack of Professional Development

In December of 2011, Maryland’s State Department of Education, Division of Special Education/Early Intervention Services developed a coteaching framework to address the quality implementation of coteaching as a service model. Noting that the lack of adequate training and professional development contributed to a lack of outcomes for children and youth with disabilities, the framework put heavy emphasis in this area (Nishimura, 2014). Additionally, Nishimura (2014) noted that creating inclusive environments for students “poses a specific challenge to the existing faculty who earned their teaching credentials in the days of segregated educational environments of special education and general education” (p. 21). Although more and more opportunities for professional development are being offered, the majority are one-time trainings thus not allowing coteachers to participate in a cycle of inquiry including planning, delivering the instruction, assessing its effectiveness, and tweaking the lesson. In order for coteaching to be effective, it is imperative that all teachers involved receive both initial and ongoing professional education in the area of collaboration (Hourcade & Bauwens, 2001).

Administrative Barriers

Administrative barriers can contribute to a lack of successful implementation of coteaching. It is imperative that administration, both school and district, believe in the value of coteaching and have some understanding of its complexities. Likewise,
administration must provide a variety of opportunities for those involved in coteaching to learn and practice new skills without fear of negative evaluations (Cook & Friend, 1996). Additionally, administration has the responsibility of prioritizing collaboration time, in the form of common preparation periods, when developing a school’s master schedule. Without dedicated time for collaboration, coteaching is destined to fail (Friend et al., 2010).

**Lack of Preservice Training**

Although coteaching has been labelled a “promising school-based practice [and has become a] widely implemented instructional model” (Chitiyo, 2017, p. 58), there is a noticeable lack of information provided to preservice teachers. Less than half (44%) of participants in a 2017 study “learned about coteaching through university training” (Chitiyo, 2017, p. 62) with an even smaller number doing any coteaching during that time. At Metropolitan State College of Denver, not only are the classes for preservice general education and special education teachers physically separated, but also the course work is equally separate. The special education department does not offer courses in education foundations or multicultural education. Likewise, the general education department does not offer classes on professionalism, classroom management, or behavior support (Young, 2011). An important skill necessary for successful coteaching is the existence of a quality working relationship between the general education and special education teacher. However, “separate cultures of professional practice, each operating within the affordances and constraints of its own conceptual and material tools, also function as processes of induction into the profession” (Pugach & Peck, 2016, p. 3) thereby compounding the tensions between the two disciplines.
Recently, there have been examples of promising practices, particularly in preservice teacher education, that aim to eradicate the disconnect between general education and special education teachers. One such example is the Levinsky College of Education in Tel Aviv, Israel. Graduates who participated in an integrative preservice teacher education program were interviewed regarding how the program affected their ability to work with students with special needs. All of the participants felt that “the special education courses contributed to their theoretical knowledge [and that what was learned] about special education at the college gave them better tools than those of a teacher who knows nothing about special education” (Shani & Hebel, 2016, p. 7).

In England, teacher education programs have moved to a three-track system. Nash and Norwich (2010) noted that “one of the key issues in promoting inclusive developments has been the initial training and education of teachers to work in more inclusive school systems” (p. 1471). Although there currently exists a track where students are in specialist classes or schools, most European countries have moved away from this type of schooling. In England, preservice special educators not only receive training together with general education preservice teachers but also receive additional training in order to work with students with disabilities (Nash & Norwich, 2010).

In the United States, several universities are attempting to make inclusion not only a part of the pedagogy but also a part of preservice teacher education program instruction. One program at a northern California university specifically focuses on inclusive practices. This may be “a place where teacher education has more power to socialize recruits [and] be a case in point of how teachers can learn new concepts in a credential program and incorporate those into their schools” (Young, 2008, p. 491).
Although this is a promising practice, it is not enough. More preservice teacher education programs must take on similar models as those in Israel and England if coteaching is to be effectively implemented in the United States. A comprehensive study of the skills necessary for teachers to be successful in a coteaching environment and how effectively these skills are being taught in preservice teacher education courses will help universities better understand how to serve students with disabilities in the United States (Benner & Judge, 2000). Investigating teacher preparation coursework and providing opportunities for both general education and special education teachers to have more field experiences in a coteaching setting will provide better educational outcomes for students with disabilities. Given the sparse amount of research in this area, more is needed. This research study has the potential to add knowledge on how to better maximize the potential of coteaching by examining closely the preservice preparation for both general and special education teachers serving in these complex roles.

**Statement of the Research Problem**

Inclusive practices are necessary in order to give access to the general education curriculum to all students, thus redefining the roles of both the general education and special education teacher in educating students with disabilities (Black & Simon, 2014; Carpenter & Dyal, 2007; Harvey et al., 2010; Strieker et al., 2013). In addition, there must be a drastic change in the delivery model used in inclusive classrooms in order to make the curriculum accessible to all students (Strieker et al., 2013). Collaborative teaching, or coteaching, has been proposed as a solution for teachers struggling with inclusion and has quickly evolved as the preferred method used at all levels of PK-12 education to ensure that students are receiving both rigorous and grade-level content
instruction delivered in a way that allows for access for students with diverse learning needs (Black & Simon, 2014; Friend et al., 2010; Hourcade & Bauwens, 2001; King-Sears et al., 2014; Shamberger & Friend, 2013).

Unfortunately, little attention has been given to preparing teachers to collaborate with other teachers. Various studies have shown that preservice teacher education programs are not preparing general education or special education teacher candidates to work in mainstreamed, collaborative classrooms (Harvey et al., 2010; King-Sears et al., 2014; Pugach & Peck, 2016; Shamberger & Friend, 2013; Strieker et al., 2013; Vaughn et al., 1997). A survey of teachers participating in a coteaching classroom revealed that 62% said that they lacked the skills necessary to coteach (Chitiyo, 2017). A similar study conducted by Harvey et al. (2010) showed that 70% of beginning coteachers were not offered courses on coteaching through their teacher education program. Those who have received some training on coteaching through their teacher education programs expressed that the training was inadequate, not long enough, and not focused on the skills necessary to coteach (Harvey et al., 2010; Strieker et al., 2013).

In order to ensure that students are receiving the best quality education in the least restrictive environment, there must be a greater focus on preparing teachers for the complexities of coteaching. According to Friend et al. (2010), “A critical need exists for the key stakeholders involved in coteaching to be better prepared for its implementation” (p. 19). It is imperative that teacher education programs prepare preservice teachers for the challenges of dealing with students with diverse needs within the general education classroom.
Although there have been numerous studies conducted on the inclusion of students with disabilities in the general education classroom (Bešić et al., 2017; Black & Simon, 2014; Hakala & Leivo, 2017; Idol, 2006; Nishimura, 2014; Pugach & Peck, 2016; Robinson, 2017; Sanagi, 2016; Strieker et al., 2013; Worell, 2008), fewer have been done on coteaching specifically (Cook & Friend, 1995; Keefe et al., 2004; Murawski & Dieker, 2004; Vaughn et al., 1997). There are many iterations and definitions of coteaching and studies regarding the success of coteaching at various levels (Keefe & Moore, 2004; Strieker et al., 2013; Vaughn et al., 1997). However, there have been few studies regarding preservice teacher preparation for coteaching. A study out of Ball State University found that preservice teachers, both general and special education, were not given adequate preparation to be successful coteachers (Harvey et al., 2010). One study investigated the perceptions of preservice special education and general education teachers of the skills necessary to coteach and the degree to which their teacher preparation program prepared them to effectively coteach (Shamberger, 2010). This study focused on only one teacher education program in one state. Shamberger (2010) asserted that further research could include multiple teacher education programs from within a state in order to determine whether teachers are being adequately prepared to coteach in that state. This study focused on how early career secondary special education teachers who graduated from a California state university teacher education program perceived their level of preparation to coteach.

**Purpose Statement**

The purpose of this qualitative multicase study was to describe and explain how secondary school special education teachers perceived that their special education teacher
education programs prepared them to work as part of a coteaching team. A secondary purpose was to describe how secondary special educators described the benefits and challenges of working as part of a coteaching team. Lastly, this study sought to describe secondary school special education teachers’ recommendations for how teacher education programs could better prepare candidates to serve as members of a coteaching team.

**Research Questions**

1. How do secondary school special education teachers describe how their teacher education program prepared them to work as part of a coteaching team?

2. What are the perceptions of secondary school special education teachers of the benefits of working as a member of a coteaching team?

3. What are the perceptions of secondary school special education teachers about the challenges of working as a member of a coteaching team?

4. What recommendations do secondary school special education teachers have for their teacher education programs to further prepare candidates to serve as effective coteachers?

**Significance of the Problem**

As early as the 1980s, the trend in schools was to encourage teacher collaboration. This collaboration took many forms, including peer coaching and interdisciplinary curriculum development. In the early 1990s, Lynne Cook and Marilyn Friend took the basic concepts of collaboration and applied them to the realm of inclusive education for students with special needs, shortening the title to coteaching. The service delivery model designed by Cook and Friend (1993) has become the foundation for the development of coteaching programs within the United States and abroad (Hourcade &
The idea of coteaching as an instructional strategy has become the preferred approach to ensure that students with special needs are being educated in the least restrictive environment (LRE) by highly qualified content teachers according to NCLB while still receiving the rights afforded to them by the IDEA (Friend et al., 2010; Idol, 2006; Sanagi, 2016).

According to the California Department of Education website, in the year 2017-2018, special education services were provided to 774,665 students between the ages of 0-22. Of those students, 297,468 were labeled as having a specific learning disability. Students with learning disabilities are the ones most likely to be educated in an inclusive environment. There has been much research regarding the use of coteaching as the preferred form of inclusion at the elementary level while less research has focused on coteaching at the middle and high school levels (Fullerton et al., 2011; Murawski & Dieker, 2004; Simmons & Magiera, 2007). Thus, it is of utmost importance that educators entering the field be prepared for coteaching as a normal part of their preservice teacher education experience.

A Boolean search using the phrases “California,” “teacher education programs,” and “coteaching” revealed zero results. A search of the California State University (CSU) system’s website indicated that in the past 5 years it has graduated 8,543 teachers credentialed in special education across 22 campuses. A deeper look into the programs offered at those 22 CSUs found that all credentialed candidates, both general education and special education, were required to take one 3-unit course on inclusion. Only three programs mentioned coteaching. The program offered at CSU Los Angeles partners preservice teachers with mentor teachers in which they are introduced to the concept of
coteaching. The program at Sonoma State requires students to take coursework in collaboration. The third program with a focus on coteaching is at CSU San Marcos. The significance of this is that more PK-12 teachers receive their teaching credential from a CSU than all other California institutions combined, yet the question remains: are they graduating prepared to take on the role of coteacher?

Research on the topic of preparing teachers to coteach is limited in size and scope. Several studies focused on exposing preservice teachers to coteaching and reporting their reflections to the instructor as part of their coursework. Most studies focused on elementary level preservice teacher candidates with very few focusing on secondary education. Additionally, no studies on coteacher preparation in California were found (Brinkmann & Twiford, 2012; Hamilton-Jones & Vail, 2014; Strieker et al., 2013). This study adds to the body of literature because it identifies the skills needed for teachers to effectively coteach in the secondary school environment. In addition, the results will help to inform institutions of higher education of the skills needed thereby allowing future teacher education programs to build in coursework on coteaching that will have a direct positive affect on the students they will serve. Also, the results of this study will help districts to identify the skills needed by special and general educators in order to successfully implement coteaching. Likewise, providers of professional development to districts and teachers wishing to implement coteaching will benefit from the results of this research study.

**Definitions**

The concept of collaboration is complex and often misunderstood. In addition, several terms are often used interchangeably such as collaborative teaching, coteaching,
inclusion, and inclusive practices. For purposes of clarity and understanding, the following definitions for terms relevant to the study are used. Both the theoretical and operational definitions are provided.

**Collaboration**

Theoretical. Collaboration is a style of interaction whereby two or more people work cooperatively together toward a shared goal (Cook & Friend, 1993).

Operational. Collaboration is defined as two secondary school teachers, one general education and one special education, who work together to plan and assess student learning outcomes for both general education and special education students.

**Inclusion**

Theoretical. When a student with a disability receives instruction in the general education classroom with all the supports required per their IEP in order to provide equitable access to grade-level curriculum (Murawski & Spencer, 2011).

Operational. Inclusion in this study refers to a secondary school special education student being enrolled in a grade-level general education course and being held to the same academic standards.

**Mainstreaming**

Theoretical. Typically involved placing a student in the general education classroom without all the supports required by their IEP (Murawski & Spencer, 2011).

Operational. Placing a student in a grade-level general education classroom for the purpose of gaining social interactions with same age peers without a focus on academic standards.
Collaborative Teaching (Coteaching)

Theoretical. Friend, Reising and Cook (1993) defined coteaching as two or more professionals who jointly deliver substantive instruction to diverse or blended groups of students in a single space.

Operational. Coteaching is when two or more adults coplan, coinstruct, and coassess a group of students (Murawski & Spencer, 2011). For purposes of this study, the two adults comprised one general education teacher and one special education teacher. The group of students comprised a mix of general education and special education students being given access to grade-level curriculum.

Delimitations

Delimitations narrow the scope of available participants for the study. This study was delimited to 12 secondary-level special education teachers who received their credentials between the years 2013 and 2018 from three California state university teacher education programs and were coteaching at the secondary level at the time of this study.

Organization of the Study

This study comprises five chapters including a list of references and necessary artifacts in the appendix. Chapter I was the introduction and gave an overview of the history of special education in the United States and early ideas about inclusion and collaborative teaching (coteaching). Also addressed were barriers to coteaching. Additionally, Chapter I introduced the problem statement, purpose, research questions, delimitations, and definitions of the study. Chapter II expands the review of the current literature related to special education, inclusion, coteaching, and barriers to coteaching,
including literature regarding professional development for coteachers and preservice teacher education. Chapter III describes the research design, methodology, population, sample, and limitations to the study. Chapter IV reports on the analysis of the collected data and a discussion of the findings. Finally, Chapter V synthesizes the collected data, summarizes the study, and draws conclusions and implications for future research.
CHAPTER II: REVIEW OF THE LITERATURE

The two educational laws in the United States that currently govern special education are No Child Left Behind (NCLB) and the Individuals with Disabilities Education Act (IDEA). NCLB mandates that teachers of academic core subjects be credentialed in the subject area they teach while IDEA requires that “students be served within the context of the age-appropriate general education curriculum as the first phase of their individualized education program (IEP)” (Hourcade & Bauwens, 2001, p. 242). The combination of these two laws has made inclusion the primary service model for students with disabilities. As far back as 2008, almost 76% of students with specific learning disabilities were included in the general education classroom for some part of the school day (Worell, 2008). According to the National Center for Educational Statistics (2018), by 2015 that number had risen to 94.5%. In light of this statistic, the need for inclusion, and more specifically successful collaboration, and exploration of coteaching between general education and special education teachers are areas of research in need of further exploration. Specifically, what skill sets, coursework, and experiences are needed in preservice training to help teachers become successful in a secondary school cotaught classroom?

This literature review examines the history of special education in the United States within the context of education and civil law. It then describes the evolution of inclusion through seminal studies conducted by Cook and Friend (1993, 1995, 1996) and several seminal studies conducted by Murawski. Furthermore, literature on the current use of collaboration and coteaching as a means of inclusive education is reviewed. Next, the literature review explores the barriers preventing the successful implementation of
coteaching at the secondary level. Finally, this literature review focuses on previous studies of special education teachers’ perceptions of their preservice training in preparing them to collaborate and/or coteach, including promising practices in the United States and abroad.

**History of Special Education**

The educational rights of students with disabilities were first addressed in 1954 with the landmark case of *Brown v. Board of Education*. Although the Brown case was intended to address the racial segregation that existed in public schools at the time, “it opened the door for parents and educators to argue for equal accessibility to schooling for students with disabilities” (Obiakor, 2011, p. 11). In the early 1960s, President John F. Kennedy took an interest in the education and inclusion of students with disabilities, most likely because his sister Rosemary was born with a cognitive disability. Rosemary was not allowed to attend public school, and eventually, her disability was treated with a frontal lobotomy. Driven by his personal interest, he formed the Division of Handicapped Children and Youth in the Office of Education, “placing attention on the problem of educating students with disabilities” (Murawski & Spencer, 2011, p. 3). In 1975, President Ford enacted the Education for All Handicapped Children Act, also known as PL 94-142, which expanded the educational rights of children with disabilities and required that those rights be protected by federal law.

**Public Law 94-142 and IDEA**

PL 94-142 forced school districts to take a harder look at the way that students with disabilities were being educated. Additionally, PL 94-142 identified 11 types of handicapping conditions protected by the law. In 1990, autism and traumatic brain injury
were added to that list, and the name of the law was changed to the Individual with Disabilities Act (IDA) and reauthorized as the IDEA in 1997. IDEA is the terminology still used today. Another key contribution of PL 94-142 were the six cornerstones that guide the identification and education of students with disabilities to this day. Murawski and Spencer’s (2011) six cornerstone principles are nondiscriminatory evaluation, free and appropriate public education, procedural due process, parent participation, individualized education program (IEP), and least restrictive environment (LRE):

1. **Nondiscriminatory evaluation.** The major contribution of this principle was to mitigate the overidentification of minority students and students from diverse cultural backgrounds for placement in special education. The standard IQ test that was being used at the time was biased, and this section of the law mandated that “testing for special education be free from bias” (Murawski & Spencer, 2011, p. 5).

2. **Free and appropriate public education.** More commonly known as FAPE, this section of the law guaranteed that students would not only receive a public education but an education that was appropriate to their individual needs.

3. **Procedural due process.** This part of the law gave parents the right to appeal decisions made by school officials regarding their child’s education to a court of law.

4. **Parent participation.** Schools are not allowed to make decisions about a child’s educational program without participation and consent of the child’s parents.

5. **Individualized education program (IEP).** This is an important element of PL 94-142. This section of law not only requires that students with disabilities receive an educational plan that is specific to their educational needs, it also mandates that the decision about what is appropriate is made by a team and not one individual. In
addition, the plan must outline goals and objectives for the student and timelines for
the student to achieve those goals and objectives. The IEP must take into
considerations the student’s current academic, social, and behavioral levels as well as
identify the amount of time that the student will spend in the general education
classroom.

6. Least restrictive environment (LRE). The most important aspect of PL 94-142 to this
study is LRE. LRE requires that students be educated in the least restrictive
environment, or an environment as close to the typical classroom as possible. To the
greatest extent possible, students with disabilities must be educated with their typical
grade-level peers and provided with accommodations and modifications as needed for
them to be successful. This part of the law also requires districts to provide a
continuum of services for students with disabilities.

As promising as PL 94-142 and IDEA were, decades after their implementation,
the number of students being included in the general education classroom had barely
increased. However, more recent studies show that the number of students included at
least 80% of their school day in the general education classroom is steadily rising. In the
year 2000, the number of students with disabilities spending most of their day in general
education classes was 47%. This number rose to 63% in the fall of 2017 (National
Center for Education Statistics, n.d.). The practice of including students with disabilities
in the general education classroom, known as inclusion, was minimally effective.
Between the time of its implementation and 1990, there was an increase of only 1.2% in
the number of students being served in the general education classroom while the number
of students still being served in a separate setting only decreased by less than 2% (Shamberger, 2010).

**NCLB and Every Student Succeeds Act**

According to the U.S. Department of Education (2002) website, NCLB, also known as Public Law 107-110, was enacted to ensure “all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments” (p. 115 STAT 1439). In order to accomplish this task, the government provided a very detailed plan. The first part of the plan included that academic assessments, accountability systems, teacher preparation and training, and curriculum and instructional materials be aligned with state academic standards. Secondly, a focus was placed on meeting the education needs of low-achieving students, specifically those from high-poverty schools and students with limited English proficiency. The plan also sought to close the achievement gap between minority and nonminority students and between low socioeconomic students and more advantaged students. Furthermore, the plan addressed school funding and allowed flexibility for local education agencies in making decisions regarding how funds are distributed. An emphasis was placed on high-quality teaching and the provision of professional learning opportunities for educators in an effort to produce effective school reform. However, the part of the plan most relevant to this research is holding schools, local educational agencies, and States accountable for improving the academic achievement of all students, and identifying and turning around low-performing schools that have failed to provide a high-quality education to their
students, while providing alternatives to students in such schools to enable the students to receive a high-quality education. (U.S. Department of Education, 2002, p. 115 STAT 1446)

The key word here is *all* and how this law changed the course of how students with disabilities are educated in the United States today.

In 2015, President Barak Obama signed the Every Student Succeeds Act (ESSA) into law. ESSA was meant to expand on the improvements made in education after the implementation of NCLB. ESSA, however, was not a reauthorization of NCLB. It was a reauthorization of the Elementary and Secondary Education Act (ESEA) signed into law by President Lyndon Johnson in 1965. President Johnson thought that education should be the number one priority of the U.S. government:

ESSA offered new grants to districts serving low-income students, federal grants for textbooks and library books, funding for special education centers, and scholarships for low-income college students. Additionally, the law provided federal grants to state educational agencies to improve the quality of elementary and secondary education. (U.S. Department of Education, 2015, “History of ESEA, para. 2)

When NCLB was due to be renewed, the Obama administration instead proposed ESSA. This was due in part to the fact that the strict requirements outlined in NCLB were too prescriptive and unworkable for districts, schools, and educators. Although the ultimate goals of NCLB and ESSA are the same, ESSA gives more flexibility to districts regarding funding as well as how each state chooses to measure students’ achievement. One key difference is the fact that NCLB relied solely on standardized testing as a
measure of students’ achievement whereas ESSA takes into consideration not only test scores but also graduation rates, access to college preparatory coursework, progress of English learners in reaching proficiency, and chronic absenteeism, among other factors (U.S. Department of Education, 2015).

NCLB and ESSA and the IDEA combined have greatly affected the way students with disabilities are educated today. NCLB and ESSA mandates that teachers of academic core subjects be credentialed in the subject area they teach, while IDEA requires that “students be served within the context of the age-appropriate general education curriculum as the first phase of their individualized education program (IEP)” (Hourcade & Bauwens, 2001, p. 242). As a result, approximately 76% of students with disabilities are educated in the regular classroom for some part of the school day (Worell, 2008), including 61% who spend the majority of their day (80%+) in the general education setting (King-Sears et al., 2014). In an attempt to comply with federal laws regarding the education of students with disabilities, schools have implemented the inclusion of special education students in the mainstream general education classroom (Idol, 2006).

**Inclusion**

Although definitions of inclusive practices vary broadly, inclusion is generally understood to be the inclusion of students with special academic and/or behavioral needs in the general education classroom for the entire school day ((Black & Simon, 2014; Carpenter & Dyal, 2007; Hakala & Leivo, 2017; Idol, 2006; Solis et al., 2012). More specifically, inclusive instruction “entails concerns with context and curriculum [and is] one in which the child is educated with his or her typically developing peers and with
supports and skill training provided as needed to facilitate participation with peers and with the curriculum” (Black & Simon, 2014, p. 155). Conversely, students with disabilities who spend only a portion of their day in the general education classroom are considered to be mainstreamed (Idol, 2006). It is widely believed that inclusion is the best way to expose students with disabilities to grade-level general education curricula and allows students to engage and learn with their general education peers (Friend et al., 2010; Idol, 2006; Murawski & Hughes, 2009; Solis et al., 2012; Vaughn et al., 1997). This definition is quite broad and leaves room for interpretation at the district and school level. Special education students may leave the general education classroom periodically to receive supplementary services such as speech therapy or individualized instruction from a special education teacher. According to an article published in the journal of American Secondary Education, “The way inclusive practices are implemented at the secondary level varies substantially from school to school, district to district, and state to state” (Worell, 2008, p. 43). For example, one school may have all students included in the general education classroom for the entire day regardless of the severity of their disability, while in another school, students with mild-to-moderate disabilities may only be included in general education classes for a portion of the day (Worell, 2008). Regardless of the model used, “Inclusive schools emit a feeling that the school is a community working toward common goals” (Carpenter & Dyal, 2007, p. 346).

Inclusion is not a new concept. In 1955, following the landmark Brown v. Board of Education case, the first study examining whether students with disabilities were receiving an equitable education was carried out. The following decade saw a series of studies to determine the effectiveness of educating students with disabilities in separate
schools and whether it achieved the desired student achievement outcomes (Shamberger, 2010). In 1968, Dunn, Nitzman, Pochanart, and Bransky published a report for the George Peabody College of Teaching, expressing their concern that the exclusion of students with disabilities from the general education environment would have a negative impact on the disabled student as well as his abled peers. At about the same time, The Council for Exceptional Children and the National Association for Retarded Citizens (later named the National Association for Retarded Children, or Arc) began a push to bring the experience of children with disabilities to light. This movement further supported the idea that the educational system of the United States needed to change (Murawski & Spencer, 2011). As of 1975, it was estimated that nearly 2,000,000 students with disabilities were excluded from American public schools and an additional 3,000,000 were admitted to school but were not provided with an educational program that met their unique needs. Public Law 94-142 changed that. PL 94-142 was discussed at length previously in this review of the literature. In 1993, Cook and Friend first published their answer to inclusion in the American school system—collaboration between general education and special education teachers in order to better serve all students.

The value placed on inclusion of students with disabilities is not limited to the United States. In 1993, the United Nations adopted the Standard Rules on the Equalization of Opportunities for Person with Disabilities with the goal of achieving “fully integrated education in all UN countries” (Hakala & Leivo, 2017, p. 287). Based on this declaration as well as others such as the Salamanca Declaration in 1994, schools were to become places where students with disabilities were educated in regular
classrooms instead of separate settings (Hakala & Leivo, 2017). In 2006, The United Nations Convention on the Rights of the Child further established rules for countries regarding the education of adults and children with disabilities. The convention, agreed to by a majority of countries, stated that people with disabilities have the rights to

- not be excluded from the general education system or from free and compulsory primary and secondary education on the basis of disability [and]
- access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live (Berryman, Ford, Nevin, & SooHoo, 2015, pp. 44-45).

As in the United States, there is some ambiguity in what the term inclusion means. The Finnish study found that “a relative consensus on the values behind inclusive teaching (i.e., equity and participation) exists on an international level but there has been variation in how these values should be put into practice in everyday school work” (Hakala & Leivo, 2017, p. 288). Additionally, countries have had to balance the desire to provide students with an adequate education to allow for success in a global economy with the need to be inclusive and provide for an equitable education for students with disabilities (Berryman et al., 2015). The focus of the literature reviewed for this study is on collaborative teaching (coteaching) as the best form of inclusion to meet the goals outlined in IDEA for students with disabilities: equality of opportunity, full participation, independent living, and economic self-sufficiency (Black & Simon, 2014).

**Collaboration**

Collaboration in education can take many forms. Collaboration can occur between teachers in a grade level or subject area within a school or district, across grade
levels (called vertical teaming), across content areas (called interdisciplinary teaming), and between general education and special education teachers. Collaboration is necessary to keep teachers learning and is of vital importance in educating diverse populations of students (Schneider, 2007). When implemented in this way, collaboration can be referred to as sharing information among experts who “communicate openly, demonstrate mutual respect for one another, and work together toward the common goal of a child’s education program” (Al-Natour, Amr, Al-Zboon, & Alkhamra, 2015, p. 65).

One form of collaboration used in the education of students with disabilities is consultation. The consulting teacher model is “a form of indirect special education service delivery in which a special education teacher serves as a consultant to a classroom teacher” (Idol, 2006, p. 78). Consultation in special education can take one of two forms. Direct consultation involves standards-based instruction given directly to individual or small groups of students by a credentialed special education teacher based on consultation with the general education teacher. This specially designed instruction is meant to complement and not replace instruction in the general education classroom (DeMartino & Specht, 2018). Indirect consultation involves the special education teacher assisting the general education teacher in modifying the curriculum or learning environment to ensure that the content is accessible to students with disabilities (DeMartino & Specht, 2018). Hourcade and Bauwens (2001) expressed concern for the way that special education was being delivered. They posited that based on the increased diversity of schools and the implementation of more stringent federal requirements, an updated instructional model was needed. Other researchers agreed that traditional models for delivering special education services to students with disabilities are ineffective
Coteaching is one model that has shown promise in improving student achievement for students with disabilities in the general education environment.

**Coteaching**

As previously noted, collaboration refers to how professionals work together. Collaboration can take place in many realms such as business, social services, and medicine. Business associates can collaborate on projects, social service agencies may collaborate on ways to address social issues in society, and doctors may collaborate on how best to diagnose and treat a patient. Even in education, collaboration can take place in a variety of situations such as vertical teaming, interdisciplinary teams, student study teams, 504 meetings, IEPs, and also in designing educational experiences for students with disabilities. Many people believe that the “co” in coteaching stands for “collaborative” (Friend, Smolak, Patrucco-Nanchen, Poulin-Dubois, & Zesiger, 2019, p. 11); however, collaboration is only one aspect of true coteaching. Hourcade and Bauwens (2001) stressed the importance of direct collaboration between teachers as opposed to indirect collaboration. Indirect collaboration occurs when a general educator receives support from a special educator but is expected to go back into the classroom and implement the plan on his or her own. Direct collaboration refers to when “two educators work together in the general education classroom. The best and most promising example is . . . cooperative teaching” (Hourcade & Bauwens, 2001, p. 243).

A survey of state education agencies conducted in 2009 found that although there was agreement that coteaching was a viable solution to the problem of successful academic achievement of students with special needs, there was disagreement on what
the term coteaching means (Beninghof, 2012). Although there are similarities in the
definitions, there are slight differences that allow for variation in the implementation of
the coteaching model:

- **Virginia**: Coteaching means a service delivery option with two or more
  professionals sharing responsibility for a group of students for some or all of
  the school day in order to combine their expertise to meet student needs.

- **Iowa**: Coteaching is defined as two teachers physically present in a
  heterogeneous classroom with joint and equal responsibility for classroom
  instruction.

- **Oklahoma**: Coteaching implies a partnership in the classroom of a teacher with
general education credentials and a special education and/or content
credentials. The partnership creates a qualitatively different classroom than
one with only a single teacher. A change instructional intensity is also often
noted in the descriptions of this type of classroom that is operated by two
teachers and meets the instructional needs of all students in the classroom.

- **New York**: Integrated coteaching services means the provision of specially
designed instruction and academic instruction provided to a group of students
with disabilities and nondisabled students. (Beninghof, 2012, p. 8)

For this study, coteaching is defined as “the collaboration between general and
special education teachers for all the teaching responsibilities of students assigned to a
classroom” (Keefe et al., 2004, p. 36). This collaboration can take on many forms with
varying degrees of responsibility assigned to each teacher. Unfortunately, often what is
labeled coteaching is not truly collaborative teaching, but instead, “The special educator
waits until the general educator assigns a task and then assists targeted or labeled students in completing the task” (Hourcade & Bauwens, 2001, p. 244), and they are “treated as educational assistants rather than teachers” (Keefe et al., 2004, p. 37). The models described here are considered effective models of coteaching by experts in the field (Cook & Friend, 1995; Murawski & Dieker, 2004).

**Types of Coteaching**

The theoretical framework of this study is based on the work of seminal authors Cook and Friend (1993). Cook and Friend defined collaboration this way: “Interpersonal collaboration is a style of direct interaction between at least two co-equal parties voluntarily engaged in shared decision making as they work toward a common goal” (p. 422). This definition is further refined to include the following characteristics: collaboration must be voluntary; teachers cannot be forced to collaborate; collaboration is based on parity such that the contributions of each teacher are seen as being of equal importance; and there must be a shared goal for the collaboration, and each teacher must share the responsibility for making key decisions. In addition, both teachers must have equal accountability for the outcomes of the collaboration (Cook & Friend, 1993). Friend et al. (2010) simplified the definition:

Co-teaching may be defined as the partnering of a general education teacher and a special education teacher or another specialist for the purpose of jointly delivering instruction to a diverse group of students, including those with disabilities or other special needs, in a general education setting and in a way that flexibly and deliberately meets their learning needs. (p. 11)
There are five generally accepted models of coteaching, all of which include coteachers “jointly planning and conducting instruction in a coordinated fashion to ensure success of all students” (Friend et al., 2010, p. 12). The five models are as follows:

1. **Teaching on purpose (aka one teach, one observe/assist)**. In this model, one teacher leads a lesson for the whole group of students while the second teacher roams the room and checks in with students to make sure they are understanding the key concepts. The roaming teacher keeps notes on students who may need follow-up lessons. In this model, “The general education teacher does not always assume the lead role, nor does the special education teacher solely serve the role of teaching on purpose” (Vaughn et al., 1997, p. 5). In some earlier models, this model was divided into two separate models called one teach, one observe and one teach, one assist (Cook & Friend, 1996).

2. **Two groups, same content (aka parallel teaching)**. Students in this model are divided into two heterogenous groups and taught the same content. The advantage of this model is that it allows students more opportunity to interact one-on-one with the teacher, to interact with each other, and to allow for more questions.

3. **Two groups, different content (aka alternative teaching)**. Often referred to as flexible grouping, students are divided into two groups based on their “skill level on the designated topic” (Vaughn et al., 1997, pp. 5–6) and not on their designation as special education or general education. In this model, one teacher reteaches while the other gives an alternative lesson. The teachers in this scenario alternate between groups to whom they provide instruction, allowing both teachers an opportunity to work with the full range of ability levels.
4. *Multiple groups (aka station teaching).* Students in this model are divided into smaller groups. The groups may be heterogeneous or based on skill level and/or need. The groups then either rotate through “centers” or work on specific assignments based on need. Teachers in this type of coteaching model can serve one of several roles including monitoring student progress, providing minilessons to small groups of students who rotate through, or work with one group of students the entire period while the other teacher monitors the rest of the class.

5. *One group (aka team teaching).* This is perhaps the most difficult model to implement. Coteaching in this way involves both teachers taking responsibility for teaching a whole class of students by sharing the lesson responsibilities. For example, one teacher may lead the lesson with the other teacher interjecting when appropriate to provide extra examples or extensions of the key ideas. When using this strategy, teachers need several factors. These include the teachers’ learning style preferences, how teachers will communicate during the lesson to signal the need for a break or that it is time to move on, and when it may be time to give students a “brain break” (Murawski & Dieker, 2004, p. 56).

Although each example involves varying levels of direct instruction by each teacher, several requisite commonalities exist with each. All approaches are “part of a coordinated effort to implement multiple types of coteaching and grouping procedures that can and should be implemented” (Vaughn et al., 1997, p. 9). Additionally, coteaching is not limited to what happens in the classroom. In order for two teachers to be successful coteachers, they must share “responsibility and accountability of planning, delivering instruction, classroom management, and evaluating students” (Carpenter &
Dyal, 2007, p. 347). Collaboration of this kind “should result in a transformation of curricula and instruction consistent with research-based best practices” (Hourcade & Bauwens, 2001, p. 244).

Coteaching has been shown to have promising outcomes for both the general education and special education students who experience it (Hourcade & Bauwens, 2001). Improvements have been shown in the areas of academics, behavior, social skills, and teacher satisfaction. Academically, students in cotaught settings experience a greater focus on cognitive strategies and study skills (Cook & Friend, 1993). Additionally, these students are exposed to more hands-on instruction, differentiated instructional groupings, and flexible assessments. Students receive more individualized attention, resulting in more on-task behavior and reduced incidents of negative behaviors. Social skills were enhanced for students with disabilities because coteaching reduces the amount of time a student is pulled out of the general education classroom, thus increasing the amount of time for peer-to-peer interactions (Idol, 2006). Also, it has been found that “teachers who participate in a coteaching relationship feel less isolated, and generally have more fun teaching” (Murawski & Spencer, 2011, p. 103).

**Barriers to Coteaching**

Coteaching has been found to be the most promising practice for increasing academic achievement for students with disabilities and has been widely implemented at schools across the United States (Shamberger & Friend, 2013). It has also had a positive effect on the development of peer relationships for both students with special needs and their grade-level general education peers (Chitiyo, 2017). Despite these benefits, coteaching has been difficult to successfully implement because of several barriers that
exist. Barriers explored in this review were teacher’s attitudes, administrative barriers, lack of professional development, and the failure of teacher preparation to adequately prepare preservice teachers to serve as coteachers, particularly in the secondary school classroom.

**Teachers’ Attitudes**

Many studies have been conducted on how teacher beliefs and attitudes affect the success of collaboration and coteaching (Fuchs, 2010; Keefe et al., 2004; Shamberger & Friend, 2013; Solis et al., 2012; Worell, 2008). A study on inclusion conducted by Worell in 2008 noted that “when administrators, teachers, guidance counselors, parents and related service personnel have negative perspectives about inclusive education at a particular school, those who teach in inclusive classrooms find it very difficult to achieve a high level of success” (p. 44). There are many factors that lead to negative attitudes toward inclusive education. Among these are lack of communication, stereotypical beliefs, preconceived notions about students with disabilities, and teachers’ perceptions about their own capacity to teach students with disabilities (Black & Simon, 2014; Shamberger & Friend, 2013). This finding was not limited to inclusion in the United States. The *European Journal of Special Needs Education* identified teachers’ attitudes as a primary factor in the success of inclusive classroom environments. In classrooms where teachers have negative attitudes toward students with disabilities, the process of coteaching is hindered (Bešić et al., 2017).

**Administrative Barriers**

Administrative barriers manifest themselves in two distinct ways. First are the barriers attributed to the school or district administration’s lack of understanding of, or
lack of belief in coteaching. School leaders must have a clear vision of where they are trying to go. It is imperative that the vision be both communicated to the staff and supported by the actions of the administration. This is not to say that administration should compel staff to fall in line with the vision. Instead, “Principals and other administrations must foster staff development activities with both regular and special educators” (Worell, 2008, p. 48) that will encourage staff to willingly participate in coteaching. It is not expected that school administrators be expert coteachers; however, they should understand the demands of coteaching and be willing to make exceptions for those teachers who take on this monumental task. This may include relieving teachers of extra duty assignments in order to provide time for more planning and collaboration. In a study by Fuchs (2010), one teacher stated, “More time, less kids” (p. 32). In addition to providing time, administrators must make providing coteachers adequate training a priority. Professional development should be job embedded and ongoing. Just as students do, teachers need multiple opportunities to implement new strategies and to reflect on their successes. Coteachers should also be given the opportunity to attend a variety of coteaching workshops and training in order to enhance their knowledge about inclusion and coteaching and, when possible, administrators should attend with them. Cook and Friend (1996) noted that “committing resources to enhancing the preparation of coteaching partners, participating with them in training activities, and scheduling additional planning time for coteachers are valued signs of administrative support” (p. 19).

Secondly, administrative support can be defined as providing the logistics and scheduling necessary to enhance and support the coteaching relationship (Shamberger &
Friend, 2013). It is often difficult, if not impossible, for teachers to find time to collaborate during the school day. One strategy that has been used is the “roaming sub” to cover classes for teachers so that they have time to coplan. This is a good solution but can be quite expensive. Another more difficult but much more effective technique is to develop the master schedule such that both teachers share a common planning period (Beninghof, 2012). The special education teacher and the general education teacher should have the ability to “plan lessons on a weekly, or daily basis” (Worell, 2008, p. 48). Coteachers may need to meet several times a week to effectively plan for all aspects of the lesson. Some of the important issues that need to be addressed during this time include what standard the lesson is addressing, how comfortable each teacher is with the content, which of the five coteaching approaches would be the best, what role each teacher will assume during each part of the lesson, and what additional accommodations need to be developed for individual students (Murawski & Spencer, 2011). Thus, the support of the administration in scheduling time for collaboration is an important aspect of an effective coteaching program.

**Lack of Professional Development**

Several studies have concluded that ongoing professional development is a vital component of a successful coteaching experience for educators (Black & Simon, 2014; Chitiyo, 2017; King-Sears et al., 2014; Shamberger & Friend, 2013; Solis et al., 2012). Professional development in the areas of collaboration, accommodating and adapting instruction, assignments, and assessments as well as instructional strategies are necessary to meet the needs of students with special needs (Fuchs, 2010; Shamberger & Friend, 2013). In addition, teachers need professional development on approaches to coteaching
and the intricacies of sharing a classroom and the responsibility of instruction with another credentialed teacher (Beninghof, 2012). In December 2011, Maryland’s State Department of Education, Division of Special Education/Early Intervention Services developed a coteaching framework to address the quality implementation of coteaching as a service model. Noting that lack of adequate training and professional development contributed to a lack of outcomes for children and youth with disabilities, the framework put heavy emphasis in this area (Nishimura, 2014). Although more and more opportunities for professional development are being offered, the majority are one-time trainings. In order for coteaching to be effective, it is imperative that all teachers involved receive both initial and ongoing professional education in the area of collaboration (Hourcade & Bauwens, 2001). Additionally, Nishimura (2014) noted that creating inclusive environments for students “poses a specific challenge to the existing faculty who earned their teaching credentials in the days of segregated educational environment of special education and general education” (p. 21).

**Lack of Preservice Training**

It is increasingly obvious that teacher education programs need to change. Several researchers have noted that lack of preservice preparation of teachers is one, if not the biggest, barrier to implementing effective coteaching. Although coteaching has been labelled a promising school-based practice and has become a widely implemented instructional model there is a noticeable lack of information provided to preservice teachers. Less than half (44%) of participants in a 2017 study “learned about coteaching through university training” (Chitiyo, 2017, p. 62). At Metropolitan State College of Denver, not only are the classes for preservice general education and special education
teachers physically separated but also the course work is equally separate. The special education department does not offer courses in education foundations or multicultural education. Likewise, the general education department does not offer classes on professionalism, classroom management, or behavior support (Young, 2011). An important skill necessary for successful coteaching is the existence of a quality working relationship between the general education and special education teachers. However, “separate cultures of professional practice, each operating within the affordances and constraints of its own conceptual and material tools, also function as processes of induction into the profession” (Pugach & Peck, 2016, p. 6) thereby compounding the tensions between the two disciplines.

As national education policy has evolved, especially regarding the IDEA reauthorization of 2004, collaboration has become the emphasis of professional teaching standards throughout the United States. Teacher education programs, however, have been faulted for not adequately training preservice teachers to collaborate (Hamilton-Jones & Vail, 2014). Most programs only require one course in special education for general education teacher credential students and no content area courses for special education teacher credential students (Fuchs, 2010; Strieker et al., 2013). Although programs exist that advertise integrating general education and special education content, “The basic structure requiring teacher candidates to learn material in a specific time period with systematic assessment procedures with the intent of increasing declarative knowledge, procedural knowledge, or both is part of most, if not all teacher education programs” (Vernon-Dotson, Floyd, Dukes, & Darling, 2013, p. 35). This method of teacher education is in direct conflict with the emphasis being placed on collaboration in
In 2018 there were 11,038 special education credentials awarded in California (California Commission on Teacher Credentialing, 2020). If, as previously noted, only 44% of special education teachers who were awarded these credentials learned about coteaching through their teacher education programs, then only 4,856 will have been introduced to the concept of coteaching during their preservice preparation. This number is even less for general education credential candidates.

**Promising Practices**

Recently, there have been many examples of promising practices, particularly in preservice teacher education that aims to eradicate the disconnect between general education and special education teachers. One such example is the Levinsky College of Education in Tel Aviv, Israel. Graduates who participated in an integrative preservice teacher education program were interviewed regarding how the program affected their ability to work with students with special needs. All of the participants felt that “the special education courses contributed to their theoretical knowledge [and that what was learned] about special education at the college gave them better tools than those of a teacher who knows nothing about special education” (Shani & Hebel, 2016, p. 7).

In England, current teacher education programs have moved to a three-track system, noting that “one of the key issues in promoting inclusive developments has been the initial training and education of teachers to work in more inclusive school systems” (Nash & Norwich, 2010, p. 1471). Although there currently exists a track where students are in specialist classes or schools, most European countries have moved away from this type of schooling. In England, “Training of special education teachers is not separate
from generic training, but additional to it for some teachers working with specific

In the United States, several universities are attempting to make inclusion not
only a part of the pedagogy but also a part of preservice teacher education program
instruction. One program at a northern California university specifically focuses on
inclusive practices. This may be “a place where teacher education has more power to
socialize recruits [and] be a case in point of how teachers can learn new concepts in a
credential program and incorporate those into their schools” (Young, 2008, p. 904).
Although this is a promising practice, it is not enough. More preservice teacher
education programs must take on similar models as those in Israel and England if
coteaching is to be effectively implemented in the United States. A comprehensive study
of the skills necessary for teachers to be successful in a coteaching environment and how
effectively these skills are being taught in preservice teacher education courses will help
universities better understand how to serve students with disabilities in the United States.
Investigating teacher preparation coursework and providing opportunities for both
general education and special education teachers to have more field experiences in a
collaborative setting is essential to providing better educational outcomes for students
with disabilities. This research study has the potential to add knowledge on how to better
maximize the implementation of coteaching by examining closely the preservice
preparation for both general and special education teachers serving in these complex
roles.
Teacher Training Effectiveness

Joyce and Showers (1983) proposed that in order for teachers to learn and transfer new skills, they must engage in several different components of training. The components are awareness, concepts and organized knowledge, principles and skills, and application and problem-solving. Each component in and of itself can have an impact on teacher efficacy. Awareness begins with the introduction of theory. This component alone shows little effect on skill transfer. Modeling or demonstration increases awareness and knowledge of new skills but rarely results in the necessary levels of transfer to affect student achievement. Skills can improve with the addition of practice under controlled conditions. This component allows teachers to practice what they have learned with peers and to get feedback. This is an efficient way for teachers to acquire new skills and the ability to transfer these skills to the classroom. Finally, including structured feedback with practice ultimately results in the highest level of transfer of new skills. Only after structured feedback is used “can we expect impact of the education of children” (Joyce & Showers, 1980, p. 380)

Research Gap

There is a lack of research regarding the preparation that teachers receive in their preservice teacher education programs to be effective coteachers. Additionally, research is lacking in how to pair coteachers and what supports coteaching pairs need in order to successfully implement any or all of the five coteaching models. In fact, there is a gap in the research identifying which of the five models is most effective in improving the academic achievement of students with disabilities as well as other interventions in addition to coteaching that students may need.
Summary

Since the 1950s, regulations surrounding the education of students with disabilities have been evolving. *Brown v. Board of Education* opened the door for students with disabilities to receive an equitable education alongside their general education peers. As government policy has morphed over the years, students with disabilities have gained greater and greater rights. The implementation of NCLB, and more recently the ESSA, combined with the IDEA has manifested a new wave of reform in schools. More and more schools are choosing to pursue coteaching as a means to address the educational needs of students with disabilities. As noble as this pursuit is, it has been stalled by various barriers to program success. Teacher attitudes have contributed to a lack of effective implementation as have the attitudes and competing responsibilities of school administrators. Even when school staff have the right attitude, there is often a lack of professional development opportunities for teachers. Even the newest teachers are not prepared. They are entering the workforce without the requisite skills for collaboration. There have been some promising practices in the United States, Europe, and Asia; however, they are not widespread enough. This study attempts to identify the perceived skill set for coteaching of new secondary special education teachers as well as identify recommendations for future practice at the university level.
CHAPTER III: METHODOLOGY

Overview

Chapter III presents the selected research design and research methods used to best support the purpose and research questions of the study. The chapter begins with a review of the purpose statement and research questions. Next, the rationale for selecting a qualitative design and an explanation is given as to why it is the most appropriate research method for addressing the perceptions of early career special education coteachers about how their teacher preparation program prepared them to be coteachers in the secondary school setting. Following the research design, this chapter addresses the population, sample, research instruments, methods for collecting and analyzing data, and the limitations of the study.

Purpose Statement

The purpose of this qualitative multicase study was to describe and explain how secondary school special education teachers perceived that their special education teacher education programs prepared them to work as part of a coteaching team. A secondary purpose was to describe how secondary special educators described the benefits and challenges of working as part of a coteaching team. Lastly, this study sought to describe secondary school special education teachers’ recommendations for how teacher education programs could better prepare candidates to serve as members of a coteaching team.

Research Questions

1. How do secondary school special education teachers describe and explain how their teacher education program prepared them to work as part of a coteaching team?
2. What are the perceptions of secondary school special education teachers of the benefits of working as a member of a coteaching team?

3. What are the perceptions of secondary school special education teachers of the challenges of working as a member of a coteaching team?

4. What recommendations do secondary school special education teachers have for their teacher education programs to further prepare candidates to serve as effective coteachers?

**Research Design**

The researcher explored three research design approaches: quantitative, qualitative, and mixed methods. As described by McMillan and Schumacher (2010), quantitative research designs “are focused on objectively measuring and describing phenomena” (p. 21). Creswell and Creswell (2018) stated that “quantitative approaches focus on carefully measuring (or experimentally manipulating) a parsimonious set of variables to answer theory-guided research questions and hypotheses” (p. 147). Although this method is appropriate for assessing the relationship between certain events, it does not seek to describe and/or explain why the phenomena occur and, therefore, would not address the research questions. For this reason, the researcher rejected the use of a quantitative research design. Mixed methods research design incorporates both quantitative and qualitative approaches. As explained, the researcher rejected the use of a quantitative research method for the reasons outlined; hence, a mixed methods design was also rejected.

Qualitative research design is used to explore and understand the meaning that individuals or groups share about a social or human problem or issue (Creswell &
According to McMillan and Schumacher (2010), “Qualitative research designs focus on the lived experience of study participants and enable the researcher to establish patterns or themes by collecting data from participants in a natural setting” (p. 320). To discover themes in secondary special education coteachers lived experiences and perceptions, qualitative research design was deemed to be most appropriate. The researcher considered several qualitative research design methodologies including ethnographic, phenomenological, and case study. Ethnography focuses on the culture of a group of people and would not address the research questions effectively because they do not refer to culture but to perception. Phenomenology studies the lived experiences of people; however, this type of study design would not allow the researcher to gather recommendations (Patton, 2015). Case study focuses on a specific case or cases studied within a real-life context or setting. According to Creswell and Poth (2018), “A multiple case study is one in which the researcher selects to study multiple cases where the procedure is replicated in order to make the results generalizable” (p. 99). The researcher chose a qualitative multiple-case study design.

A qualitative multiple-case study design was used to describe and explain how early career special education teachers perceived the effectiveness of their teacher education program to prepare them to be secondary school special education coteachers, what they perceived the benefits and challenges of being a coteacher are, and to make recommendations to inform their teacher education programs on how to further prepare students to be effective. Creswell and Poth (2018) explained the benefits of the case study research design is that “it examines the cases under study in the context of real-life” (p. 96). In this case, the researcher was interested in interviewing multiple students from...
several colleges in the context of training they received in their preservice education program.

A qualitative multiple-case study design was chosen because it allowed the researcher the opportunity to collect in-depth data regarding the lived experiences of secondary school special education coteachers. Patton (2015) asserted that “multi-case studies using purposeful sampling allow the researcher to understand a phenomenon and use the findings to inform practice and potentially change programs and policies” (p. 295). In this study, the focus was on understanding the perceptions of secondary school special education teachers regarding how their teacher preparation program prepared them to be coteachers, including benefits and challenges, and what recommendations, if any, they would make to improve teacher education programs in preparing teachers to be effective coteachers.

**Population**

According to McMillan and Schumacher (2010), population is defined as a group of cases, that consist of a specific set of criteria and to which we intend to generalize the results of the research. The population for this study was drawn from teachers who earned their credential from a California state university (CSU). According to the California Commission on Teacher Credentialing (2020) website, the CSU system graduates more credentialed teachers than all other universities in the state combined. The California Commission on Teacher Credentialing notes that 48.9% of all teaching credentials awarded in the 2017-2018 fiscal year were to students from one of the 23 California state universities that offer teacher credentials. Between the years 2013 and 2018, 57,388 teaching credentials were issued to graduates from a California institute of
higher learning, 32,451 of whom were graduates of a CSU. Of those, 22,174 earned a single-subject teaching credential. There were 12,560 teachers who earned a single-subject teaching credential from a CSU. Of the 11,038 credentials issued in California during that period, 8,543 teachers earned special education credentials from a CSU.

**Target Population**

McMillan and Schumacher (2010) defined a target population as “the total group to which results are generalizable” (p. 129). McMillan and Schumacher further stated that “based on the researcher’s knowledge of the population, a decision is made about which subjects should be chosen to provide the best information to address the purpose of the research” (p. 138). Purposeful sampling was used to select the target population for this study because it allowed the researcher to focus on information-rich cases in order to gain an in-depth understanding of the issues that are important to the purpose of the study (Patton, 2015). The researcher employed the strategy of purposeful reputational case sampling to identify all the cases that met the criteria.

The following criteria were used to select the target population:

1. Teachers possessed a special education credential awarded by a California State University (CSU) teacher education program.

2. Teachers must have received their credential between the years 2013 and 2018 from a CSU teacher education program that includes collaboration as part of the program expectations.

3. Participants were recommended by a CSU teacher education program program manager.

4. Participants were coteaching at the secondary level at the time of the study.
The researcher reviewed all CSU programs to determine those programs that best exemplified the target criteria. The researcher reviewed CSU teacher education program websites and contacted program administrators who were knowledgeable about coteaching practices. Because not all CSU teacher education programs offer special education credentials, the researcher identified those schools that did. The researcher found that 19 of the 23 CSU campuses offering teacher education programs offered special education credentials. A deeper examination of the programs revealed that of 19 programs, only eight require students to take courses in collaboration. Because this research study was focused on coteaching, the researcher sought out programs that specifically mentioned coteaching as a course or outcome of the program. Thus, the target population was narrowed down to three schools: CSU Los Angeles, Sonoma State University, and CSU San Marcos. Each of these schools specifically mentioned coteaching and collaboration as a topic of study within the teacher education program. Additionally, the schools are situated in distinct geographical areas of California, allowing the researcher to get a broad perspective. These three schools graduated 1,153 students with special education credentials.

The researcher reached out to two experts in the field of coteaching by e-mail communication in August 2019. The two experts reviewed the researcher’s target population selections to determine whether, in fact, the programs selected met the target criteria. Both experts were college professors with extensive experience in the field of special education. Dr. Wendy Murawski served as the Executive Director and Eisner Endowed Chair of the Center for Teaching and Learning at CSU, Northridge. In addition, Dr. Murawski had written nine books on best practices in education and
coteaching and was the CEO and founder of 2 Teach, a provider of professional development to districts wishing to implement coteaching. Dr. Cynthia Thrasher Shamberger served as chair and associate professor of special education in the department of middle grades, secondary, and special subjects at Fayetteville State University. The focus of Dr. Shamberger’s research when pursuing her Ph.D. was inclusive education, specifically the topic of coteaching. The researcher subsequently received approval from both experts.

**Sample**

According to McMillan and Schumacher (2010), “A sample is a group of participants who provide data for the study of interest” (p. 129). It is intended that the sample population have characteristics of the target population such that the results of the study can be generalized to the target population. The researcher contacted program managers from the three CSU campuses that met the target population criteria by e-mail. The researcher explained the purpose and importance of the study and how their school was chosen for inclusion in the study. The researcher requested a referral list of six to eight students based on the target criteria from each program manager. The researcher provided the program managers a letter describing the study to share with the selected students prior to contact by the researcher. The researcher then contacted those teachers referred and identified four teachers from each of the three CSU programs, based on criterion sampling, to be part of the study. The remaining respondents were placed on a waiting list. Ultimately, a sample size of 12 secondary special education teachers who were currently coteaching and had graduated from one of the three named programs was determined. The researcher used this referral process to gain access to information-rich
cases, or “cases from which one can learn a great deal about the focus of inquiry, and which therefore are worthy of study” (Patton, 2015, p. 308). The selection of 12 cases is acceptable according to Stake (2006) who stated that “two or three cases are too few to show a connection between programs and their situations, while 15 or 30 cases provide more uniqueness of information than the researcher can synthesize” (as cited in Patton, 2015, p. 312). The process for selecting the study participants is demonstrated in

![Figure 1. Process for selecting participants.](image)

**Instrumentation**

**Instrument**

Patton (2015) pointed out that a case study analyzes a case by collecting data from multiple sources of information that are rich in context. Furthermore, he stated that a
researcher chooses the appropriate instruments to gather data to address the research questions. Patton (2015) and Bloomberg and Volpe (2008) emphasized that there are three primary instruments used to collect data in qualitative research: interviews, observations, and document review. Yin and Lu (2014) pointed out that while a survey may reveal some information about a particular group and its lived experiences, the in-depth interviews would better explain the individuals lived experiences under study.

Additionally, it was not feasible for the researcher to make direct observations; therefore, the researcher used semistructured interviews and document review in order to gather more in-depth information that addressed the research questions. Interviews were the primary data collection method used because this allowed the researcher to gather rich information regarding how secondary special education coteachers perceived their ability to coteach and how they perceived their teacher preparation program helped prepare them to be secondary special education coteachers. Also, the interview format allowed the subjects to identify the benefits and challenges of coteaching as well as recommendations for further preparation of future secondary school special education coteachers.

For this study, the researcher chose to use semistructured interview questions. Semistructured questions do not have choices from which the respondent selects an answer. According to McMillan and Schumacher (2010), “It is an open-ended question but is very specific in its intent” (p. 206). Patton (2015) added that “this method ensures that all respondents are asked the same questions and thus reduces bias” (p. 438). The interview questions were given to participants in advance using an interview guide in order to provide a context for the interview to give the participant time to reflect on the
interview questions, thus allowing the interview time to be used more efficiently. Included in the guide were six questions regarding the participants’ experiences about coteaching, their perception of the effectiveness of their teacher education program in preparing them to coteach as well as the benefits and challenges of coteaching and an opportunity to make recommendations to their teacher education programs about how to further prepare secondary school special education teachers to be effective coteachers.

The researcher conducted extensive research regarding coteaching and selected Cook and Friend’s (1993) model of coteaching to develop the research questions. The interview questions were developed based on Shamberger and Friend’s (2013) survey instrument, the Teacher Education Program and Co-Teaching Survey (TEPACTS). The researcher looked at the survey and selected interview questions that would most effectively address the research questions. The researcher sent the interview questions to Dr. Shamberger to confirm that the questions accurately represented a synthesis of her and Friend’s survey instrument. The six questions were asked sequentially and in teacher-friendly language. After each question, the researcher employed “probing questions to clarify responses and gather more in-depth information and stories from the respondent” (Patton, 2015, p. 428). Several types of probing questions were used, including clarification probes to ensure that “any failure to understand was the fault of the interviewer and not the participant” (Patton, 2015, p. 466) and elaboration probes consisting of who, what, where, when, and how questions in order to gather more information from the respondent.
**Participant Interview Guide**

An interview guide was developed and provided to participants in advance of the face-to-face interviews. The guide contained an introduction to the purpose of the research study and a copy of the survey questions and definitions of key terms. The first question in the guide was focused on the demographics of the interviewees and intended to create a comfortable relationship between the researcher and the participants. The next six questions were developed using TEPACTS as a framework. The first three questions addressed the participants’ perception of their coteaching experience and addressed their perception of how well their teacher education program prepared them to be coteachers. The next two questions addressed how the participants perceived the benefits and challenges of being a coteacher. The final question addressed any recommendations the participants had for their teacher education program in order to further the development of coteachers. The structured interview approach and supplied definitions were used to reduce variation between participants’ understanding of the questions. Also, by providing the items in advance, the researcher was able to use her time more efficiently.

Each interview session began with the researcher introducing the purpose of the study and asking the participant whether any clarification of the included documents was needed. Next, the researcher reviewed all the IRB documentation with the participant, including the Participant’s Bill of Rights, the participant consent form, and a confidentiality agreement. This method was selected because as noted by McMillan and Schumacher (2010), the researcher must seek direct interaction with “the setting, participants, and documents they are studying” (p. 322) in order to get an in-depth understanding of the data.
Document Collection and Analysis

Patton (2015) identified various possible sources of documentation and artifacts that could be used to identify teacher education programs that met the established criteria. Prior to the interviews, it was necessary for the researcher to gather archival data. The researcher spent time researching the various teacher education programs offered through the CSU system, primarily information from the CSU websites. Next, the researcher identified those programs that mentioned the concept of coteaching in their course information sheets. Following this analysis, the researcher identified the program leaders of each of the three programs selected and asked for information about the special education credential program, specifically how long there had been a focus on coteaching. More importantly, the researcher looked at mission and vision documents and program implementation documents. The researcher determined that three CSU programs met the target population criteria, and relevant documents from these programs were used to validate the data derived from interviews.

Researcher as an Instrument

The researcher was the primary instrument for collecting data in this study when she interviewed four secondary school special education coteachers from each of the three selected teacher education programs. In addition, she was solely responsible for collecting documentation and artifacts for each of the programs and reaching out to the program leaders. The researcher reviewed the websites of each of the 23 CSUs and identified 19 programs that offered special education credentials. She then examined the program descriptions for the 19 programs and found only eight that mentioned collaboration. Finally, she reviewed the courses offered in the eight programs and
selected three programs that required students to take courses in collaboration and coteaching as part of the requirements for the special education credential. The researcher was the only one responsible for reaching out to the CSU credential program managers and for selecting the study participants. In addition, the researcher was the primary instrument because the researcher developed and implemented the interview questions and was responsible for collecting and reviewing the documentation used for triangulation.

Additionally, the researcher’s prior experience with coteaching was instrumental in deciding which probing questions would be the most useful and gather the richest data. Merriam and Tisdell (2016) suggested that “because the goal of the research was to gain a better understanding of the research questions, data collection would be enriched when the researcher asked the appropriate probing questions” (pp. 16–17). However, the researcher exercised caution to ensure that no unintended interview bias occurred; hence, the researcher was careful to be aware of her own bias and conscientious not to influence the participants’ responses (McMillan & Schumacher, 2010). The researcher was in the process of implementing coteaching at her school site and, therefore, had to be keenly aware of the possibility of her bias. To mitigate this, the researcher looked for feedback from the field test to determine any possible biases she portrayed. The researcher’s proximity to the data and subjective judgements about the data created challenges in regard to the reliability and validity of the research (Patton, 2015). For this reason, Patton (2015) emphasized the imperative of mindfulness during the interview process. Mindfulness, Patton (2015) stated, “Creates the opening to empathy, and is intrinsically
nonjudgmental” (p. 60). Through mindfulness, the researcher sought to attain the desired state of empathic neutrality when conducting this research.

**Validity**

The researcher used best-practice techniques for qualitative studies as explained by McMillan and Schumacher (2010). This included an extensive review of the existing literature, the use of participant data analysis, triangulation of participant data with the literature reviewed, triangulation of the interview questions with documents reviewed from various sources, recording exact wording of interview responses using a digital recording device, asking probing questions to clarify and elaborate on participant responses, and reviewing responses with interview participants to get agreement on the interpretation of the responses.

First, the researcher conducted an extensive review of the literature regarding the emergence of inclusive educational practices, the elements of collaborative models of teaching, and the current trends in special education teacher preparation. Next, the researcher selected Cook and Friend’s (1995) six approaches to coteaching as a model of best practice in coteaching because of its longevity and use by many researchers. The researcher then selected Shamberger and Friend’s (2013) TEPACTS as a model for developing the six interview questions.

Following the selection of the survey model, the researcher enlisted two experts with expertise in coteaching and teacher education programs to validate the identification of the target population and the selection of the interview questions. Both experts possessed doctoral degrees and were familiar with Friend and Cook’s (2009) six approaches to coteaching as a model. The experts were provided with the purpose,
research questions, and interview questions as well as description of the selected target population. The target population was selected by the researcher reviewing the websites for each of the 23 CSUs and narrowed down to three programs that would provide the most information-rich cases. Once the experts had validated the target population and interview questions, the researcher contacted the special education credential program managers and requested their assistance in identifying information-rich cases for the study.

Also, the researcher developed semistructured interview questions based on the TEPACTS developed by Shamberger and Friend (2013). By using the TEPACTS, a proven quantitative survey, to design the research questions, the study addressed the issue of face validity. By having participants respond in their own words, “The responses gave credibility to the study, rather than giving the perception of a study steeped in researcher bias and predictability” (Patton, 2015, p. 26). Additionally, Rinke and Valli (2010) defined validity as “the degree to which your instrument truly measures what it purports to measure” (as cited in Patton, 2015, p. 151). By using semistructured interview questions, the researcher was able to ensure that the study maintained its face validity and could withstand scrutiny.

An added measure was used to confirm that all six interview questions would provide in-depth relevant data to address the research questions. This was done by cross-referencing each of the six interview questions with the four research questions to ensure that each research question was adequately addressed and that unnecessary questions, those that did not address any of the research questions, were eliminated (Appendix A).
After cross-referencing the interview questions, the researcher again had the two experts validate the interview questions and the interview protocol.

An interview guide was provided to all study participants in advance as an added measure of validity. By having consistent interview questions, the researcher could ensure that the answers could be compared for themes. The interview guide provided the respondents with the questions that would be explored during the course of the interview, “thus ensuring that the same basic line of inquiry would be followed during each of the interviews” (Patton, 2015, p. 439). Participants were also provided, as part of the interview guide, the purpose of the research study and definitions of key terms, further ensuring that all participants had a similar understanding of coteaching prior to being interviewed.

Prior to interviewing the research participants, field-testing was conducted by the researcher to analyze the effectiveness of the research questions in attaining the desired information. Field-testing was done by interviewing current secondary school coteachers who were not part of the studies sample population. Two other people served as observers to critique the researcher’s interview protocol and demeanor. Results from the field tests were used to revise interview questions and the interview guide as necessary.

The researcher used best practice in conducting face-to-face interviews for the study. The task for the qualitative researcher is to provide a framework within which people can respond in a way that represents accurately and thoroughly their points of view about the world, or that part of the world that they are describing. McMillan and Schumacher (2010) defined qualitative research validity as “the degree to which the participants and the researcher agree to the interpretation of the interview responses”
McMillan and Schumacher further stated, “Thus, the researcher and participants agree on the description or composition of events and especially on the meaning of these events” (p. 330). Hence, it is understood that both the participant and the interviewer must be certain of and in agreement with what they heard and saw. The researcher asked probing questions throughout the interviews to clarify and elaborate on participant responses. Patton (2015) emphasized the importance of the researcher to the validity and reliability of the study stating, “The quality of qualitative data depends greatly on the training, skill, sensitivity, and integrity of the researcher” (p. 15).

Member checking was used to further the validity of the study. Member checking occurred when the researcher provided participants with an interpretation of the interview responses and the final results of the study. Member checking served to verify the accuracy and validity of the study. Notes were taken by the researcher during the interviews in addition to audio recordings of the responses, giving an added level of accuracy to the interpretation. Responses were read back to the participants to verify a common understanding of the responses. After the conclusion of the interviews, the notes were transcribed and provided to the interviewees, and the interviewees were given the opportunity to confirm the accuracy of the transcription with regard to content and intent.

The researcher used best practice in collecting and analyzing the data to further strengthen the validity of the interview protocol. The data collected were compared, contrasted, and triangulated across the 12 participant interviews. The themes identified were subsequently compared to the literature reviewed in Chapter II of this study. According to McMillan and Schumacher (2010), triangulation is defined as “cross
validation among data sources, data collection strategies, time periods, and theoretical schemes . . . to see whether the same pattern keeps recurring” (p. 379). However, according to Patton (2015), although triangulation of data sources in a qualitative study may not lead to a unique, consistent picture, it may explain why differences appear.

**Reliability**

According to Creswell and Creswell (2018), “Reliability refers to whether scoring of items on an instrument are consistent, stable over time, and whether the test was administered and scored consistently” (p. 250). Creswell and Creswell further clarified that “in qualitative research, reliability means that, regardless of researcher or project, the approach is consistent” (p. 199). Bloomberg and Volpe (2016) described qualitative reliability as “two researchers studying the same phenomenon and coming up with the same observations and conclusions” (p. 162). The authors emphasized that trustworthiness and analysis of the data relies on evidence that the descriptions represent the reality of the situation and the persons studied. Furthermore, McMillan and Schumacher (2010) similarly defined reliability as “the consistency of measurement – the extent to which the results are similar over different forms of the same instrument or occasions of data collection” (p. 179).

To achieve higher reliability in this study, the researcher utilized an interview guide for the semistructured interview questions based on the TEPACTS. The interview guide helped to support consistency during the data collection phase. Prior to the interview, as an additional measure to ensure reliability, the researcher conducted a field test on the interview questions and protocol with current secondary school special education coteachers who were not part of the study. Their feedback was used to modify
and improve the interview questions as well as the researcher’s protocols for conducting the interviews. Additional reliability was provided through triangulation of the data and the employ of other doctoral candidates to provide intercoder reliability.

Multiple techniques were used by the researcher to increase the trustworthiness and, hence, the reliability of the study. In this study, the data were gathered through document review and interviews. The researcher used multiple techniques to increase the trustworthiness of the study in the area of reliability. First, the researcher used semistructured questions based on Cook and Friend’s (1995) six approaches to coteaching and the TEPACTS. By using this structured interview process, each participant was enabled to respond to the same initial questions. The participant responses could then be compared for agreements and disagreements during the analysis phase with no variance because of different questions being asked to different participants. In addition to detailed note-taking by the researcher, the following techniques were also used: (a) interviews were audio taped and subsequently transcribed; (b) interview data were stored in several places, all of which were password protected; (c) transcripts were checked by reviewing the transcript with the respondents to make sure there were no obvious mistakes in transcribing the responses; (d) code definitions were constantly reviewed to make sure they were not changing over time; and (e) all recording were archived after transcription and later destroyed upon conclusion of the study.

**Intercoder Reliability**

Creswell & Poth (2018) used the term *intcoder agreement* to describe a process by which multiple coders analyze transcript data to ensure its reliability. Intercoder agreement is when researchers use peer examination to check the plausibility of date
interpretations as results begin to emerge (Creswell, 2014). Creswell (2014) used the term “intercoder agreement” (p. 203) to describe the process of cross-checking data codes using multiple researchers. Intercoder agreement is achieved when two or more data analysts agree on the themes and codes in the data being analyzed. In this study, the researcher secured an external coder with a doctoral degree, experience in social science research, and familiarity with NVivo qualitative coding software to examine the data gleaned from the interviews and artifact collection. The external coder reviewed 10% of the data collected with an expected agreement of 80%. A 0.80 level of reliability was set prior to coding (Lombard, Snyder-Duch, & Bracken, 2002). The researcher used the NVivo software to extrapolate initial themes from the data. Through recursive analysis, the researcher refined the themes until a list of codes was determined. Once the codes were determined, the researcher initiated a training session with the external coder. A preliminary list of codes was agreed upon, the external coder analyzed the data independently from the researcher, and intercoder agreement was assessed. In this case, a threshold of 0.80 level of reliability was set prior to coding. Code definitions are refined to “further differentiate code definitions until the threshold of reliability is met” (Creswell & Creswell, 2018, p. 202).

**Field-Testing**

As noted by Creswell and Creswell (2018), field-testing establishes “content validity of scores on an instrument to provide an initial evaluation of the internal consistency of the items to improve questions, format and instructions” (p. 154). The researcher performed field-testing by interviewing four secondary school special education coteachers in the district where she worked at the time of this study. The
interviews were conducted with an observer present who had some knowledge of coteaching and who held a position of authority in the district. After the field-test interviews, the observer provided feedback on the process, verbal language and body language used by the researcher, and the interview questions asked. Based on input from the persons interviewed and written and verbal feedback from the observer, modifications were made to the interview questions. In addition, the observer helped the researcher identify any interview traits displayed that could lead to bias during the interviews. The interviews were timed to assess whether the interview could be conducted in an hour and to analyze whether equal time was given to each subsection of the interviews, particularly Research Question 2 and 3. The feedback from the participants and the observer was used to inform the researcher about using interview techniques that maximize the depth of information gathered during the interviews and lead to consistent and trustworthy results.

**Triangulation**

Triangulation refers to the use of various types of data. Patton (2015) identified four specific types of triangulation:

- data triangulation—the use of a variety data sources in a study; investigator triangulation—the use of several different researchers or evaluators; theory triangulation—the use of multiple perspectives to interpret a single set of data; and methodological triangulation—the use of multiple methods to study a single problem or program. (p. 316)

The researcher used data triangulation in this study by interviewing 12 secondary school special education coteachers, across several school sites, originating from three university
teacher education programs. Additional data were provided by archival documents. To a lesser extent, the researcher used theory triangulations through utilizing other researchers to provide intercoder reliability.

**Data Collection**

This qualitative multicase research study employed the use of semistructured interviews as the main method of data collection. Patten (2014) asserted that “the semistructured interview is the most popular measure used for collecting data in qualitative research” (p. 163). This method is used “when it is important to limit the amount of variation in the questions posed to interviewees and requires the careful wording of the interview questions before the interview takes place” (Patton, 2015, pp. 439–440). As a way to deepen the depth of the responses, a predetermined set of clarifying and elaborative probing questions were used.

Prior to collecting any data, all necessary measures were taken to ensure the safety and confidentiality of the participants and institutions. The researcher completed comprehensive training on how to conduct research on human participants (Appendix B), obtained approval from the Brandman University Institutional Review Board (Appendix C), and provided the participants with information regarding the use of data and the guarantee of confidentiality. These processes were put in place to protect human subjects in research, to confirm compliance with federal regulations, and to make sure that ethical considerations were attended to (McMillan & Schumacher, 2010). After approval, the interview subjects were formally invited to participate in the study by e-mail. Attached to the e-mail were a formal letter of invitation, a Participant’s Bill of Rights, and an informed consent document. The e-mail also included background
information about the researcher, contact information, an overview of the study, and an estimate of the time commitment required. Participants were explained the voluntary nature of the interviews and were asked to consent to being audio recorded. Participants were also offered the option of reviewing the interview transcripts. All study participants signed the informed consent prior to participation. All data collected through this study were stored on a password-protected computer, as well as a locked cabinet, to which only this researcher had access. Participants’ identities were kept confidential, and pseudonyms were used throughout the study in order to conceal the identities of the participants. Regardless of the institution of attendance, all programs were referred to generically as “the teacher education program.” All audio files were destroyed after transcription and review by the study participants.

**Qualitative Data Collection**

Qualitative data collection began with a review of the CSU teacher education program websites to determine which schools offered a special education credential. Once this was determined, the researcher looked deeper into the mission, vision, and course of study for each of the programs. The researcher determined that three CSU programs placed an emphasis on coteaching and therefore were selected for inclusion in the research study. Also, qualitative data collection involved in-depth interviews with 12 secondary school special education coteachers who graduated from one of three selected CSU teacher education programs between 2014 and 2018 and who were currently coteaching in a general education classroom. Interviews were conducted to obtain detailed information about the study participants’ description of their experience coteaching and their perception of how their teacher education program prepared them to
be coteachers. In addition, study participants were asked to provide recommendations to their teacher education programs to further prepare future secondary school special education teachers to be coteachers.

Interviews took place in a location familiar to the study participants. Each interview lasted approximately 1 hour. A participant interview guide (Appendix D) was provided electronically to each participant prior to the interview to ensure validity and reliability of the study and to ensure comprehension of the semistructured open-ended questions that were asked. Two separate devices were used to record the interview responses. Interview responses were transcribed and checked for accuracy with the interviewee prior to coding the data. Any additional feedback provided by the participant was included in the final analysis of the data. Table 1 provides an outline of how the data were collected.

Data Analysis

Data analysis began once the first interview was completed. Patton (2015) asserted that the challenge of qualitative data analysis is making meaning of large amounts of data. The volume of raw information must be “reduced, significant information must be sifted from insignificant information, patterns identified, and a framework developed for communicating what the data revealed” (Patton, 2015, p. 521). In describing 12 tips to ensure a strong foundation for qualitative analysis, the first step stated the importance of “collecting and analyzing the data simultaneously” (Patton, 2015, p. 523). As more interviews were completed, the researcher continued to note emergent patterns and possible themes for coding. In order to fully analyze the data, recording of interview responses were transcribed and then shared with the participant to
Table 1

*Steps for Data Collection*

<table>
<thead>
<tr>
<th>Steps for data collection</th>
<th>Detailed checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Review CSU teacher education program websites</td>
<td>• Obtain permission from Brandman University IRB</td>
</tr>
<tr>
<td>• Review teacher education programs’ mission and vision</td>
<td>• Obtain permission from school districts of employment for study participants</td>
</tr>
<tr>
<td>• Review teacher education programs’ course requirements</td>
<td>• Verify that participants meet the study criteria</td>
</tr>
<tr>
<td>Contact program leaders and/or deans from selected teacher education programs to identify possible secondary school special education coteachers to participate in the study</td>
<td>Sent an e-mail to the possible study participants to inform them of the study purpose and criteria and request their participation</td>
</tr>
<tr>
<td>Sent an e-mail to the possible study participants to inform them of the study purpose and criteria and request their participation</td>
<td>Obtain permission from Brandman University IRB</td>
</tr>
<tr>
<td>Select individuals for participation in the study</td>
<td>Obtain permission from school districts of employment for study participants</td>
</tr>
<tr>
<td>Select individuals for participation in the study</td>
<td>Verify that participants meet the study criteria</td>
</tr>
<tr>
<td>Send participants the Participant Bill of Rights, informed consent form, and interview guide prior to date of interview</td>
<td>Schedule time for face-to-face interviews</td>
</tr>
<tr>
<td>Send participants the Participant Bill of Rights, informed consent form, and interview guide prior to date of interview</td>
<td>Determine location of face-to-face interviews</td>
</tr>
<tr>
<td>Meet with participants face-to-face and review the Participant Bill of Rights, informed consent form and interview guide</td>
<td>Answer any questions posed by participants</td>
</tr>
<tr>
<td>Meet with participants face-to-face and review the Participant Bill of Rights, informed consent form and interview guide</td>
<td>Answer any questions regarding the documents</td>
</tr>
<tr>
<td>Conduct the face-to-face interview</td>
<td>Collect the signed forms</td>
</tr>
<tr>
<td>Conduct the face-to-face interview</td>
<td></td>
</tr>
<tr>
<td>Transcribe recorded interviews and handwritten notes</td>
<td></td>
</tr>
<tr>
<td>Transcribe recorded interviews and handwritten notes</td>
<td>Provide participant with transcribed notes and verify accuracy</td>
</tr>
<tr>
<td>Thank interviewees for their participation</td>
<td>Send handwritten thank you note</td>
</tr>
</tbody>
</table>
ensure accuracy. The next step was to code the themes. McMillan and Schumacher (2010) defined a code as a “meaningful name or phrase” (p. 371). After coding, possible themes were identified. This was the first level of induction in qualitative analysis because the researcher had to use inferential reasoning to interpret meaning from data segments (McMillan & Schumacher, 2010).

In this study, the researcher used NVivo, a qualitative data analysis software, to arrange the data segments and determine themes. A frequency table was used to arrange the NVivo codes—the statements of participants—by thematic category. Once the themes were solidified and the data were quantified, two external coders were trained and conducted separate, independent coding of the data. The researcher presented the themes with the highest response as findings for the study. Themes were verified using Miles and Huberman’s (1994) recommendation that the “consistency of the coding be in agreement at least 80% of the time for good qualitative reliability” (as cited in Creswell & Creswell, 2018, p. 202). Once the themes were identified, they were reviewed by the researcher, compiled into a master list, and aligned with the research questions, which sought to identify secondary school special education coteachers’ perceptions regarding coteaching and their teacher education program’s ability to prepare them to be coteachers.

**Limitations**

According to Roberts (2010), “Limitations are particular features of your study that you know may negatively affect the results or your ability to generalize” (p. 162). Limitations are factors that the research generally has no control over. In this study, the following limitations were noted:
1. There could have been sample bias because participants were volunteers.

2. There could have been researcher bias because the researcher was the key instrument of measurement in developing and administering the interview questions.

3. There could have been limitations to the truthfulness of participant responses.

4. There was the inability to generalize the finding to the larger population because only a small sample size of 12 teachers from three teacher education programs were chosen. Also, participants had to meet specific criteria to be included in the study.

5. There were limitations on time and distance because participants’ work schedules and geographic location limited the available meeting times

6. There was the researcher’s limited experience in conducting a qualitative multicase study (McMillan & Schumacher, 2010). This was addressed through the provision of expert oversight by committee members who ensured proper procedures for qualitative approaches were followed

7. Because this researcher held a position as a principal in a district that was currently implementing coteaching at the secondary level, it is important to note that no teachers employed in that district were involved in the research except for field-test purposes.

Summary

In Chapter III, the purpose and research questions pertaining to the study were investigated using a qualitative multicase study design. As discussed in this chapter, the multicase study research method was aligned to the purpose of the study and answered the research questions using individual interviews with secondary school special education coteachers. This chapter also detailed the population, target population, sample population and size, and the techniques utilized in selecting study participants.
Additionally, this chapter included a detailed description of the qualitative instrument used. The process for data collection and analysis was addressed as were the limitations of the study.
CHAPTER IV: RESEARCH, DATA COLLECTION, AND FINDINGS

Chapter IV outlines the process for the current study, including the data collection and findings. The purpose statement and research questions are reviewed, followed by a discussion on the population, sample, and demographics for the current study. Presenting the data findings is the predominant focus of this chapter—specifically, qualitative data regarding the preservice preparation of secondary-level special education coteachers, the perceived benefits and challenges of coteaching, and recommendations that current secondary special education coteachers have for improving the preservice preparation of future coteachers.

Purpose Statement

The purpose of this qualitative multicase study was to describe and explain how secondary school special education teachers perceived that their special education teacher education programs prepared them to work as part of a coteaching team. A secondary purpose was to describe how secondary special educators described the benefits and challenges of working as part of a coteaching team. Lastly, this study sought to describe secondary school special education teachers’ recommendations for how teacher education programs could better prepare candidates to serve as members of a coteaching team.

Research Questions

1. How do secondary school special education teachers describe how their teacher education program prepared them to work as part of a coteaching team?

2. What are the perceptions of secondary school special education teachers of the benefits of working as a member of a coteaching team?
3. What are the perceptions of secondary school special education teachers about the challenges of working as a member of a coteaching team?

4. What recommendations do secondary school special education teachers have for their teacher education programs to further prepare candidates to serve as effective coteachers?

**Research Methods and Data Collection Procedures**

A qualitative multicase study was used to describe the preservice preparation of current secondary-level special education coteachers, what they perceive to be the benefits and challenges of coteaching, and any recommendations they have for their teacher education programs to further prepare candidates to serve as effective coteachers. The researcher conducted in-depth interviews with 12 secondary level coteachers who were identified by recommendations from program managers of the various schools of education selected as part of the study. The interviews were conducted in the location most convenient to the teacher and were recorded with permission of the teacher.

**Population**

A population, according to McMillan and Schumacher (2010), “is a group of elements or cases, whether individuals, objects, or events, that conform to specific criteria” (p. 129). In research, it is important to note the study population as it will be used to generalize the finding of the study. For this study, the intended population to which the study findings were applied were secondary-level special education coteachers. According to the California Commission on Teacher Credentialing (2019) report on services credentials issued in California, there were 11,038 special education credentials awarded in the State of California between 2013 and 2018.
Target Population

McMillan and Schumacher (2010) defined a target population as the “total group to which results are generalizable” (p. 129). McMillan and Schumacher further stated that, “based on the researcher’s knowledge of the population, a decision is made about which subjects should be chosen to provide the best information to address the purpose of the research” (p. 138). As such, a smaller number of participants was selected to be sampled, and these participants were those to whom the results were generalized. For the purpose of this study, the following criteria were established to identify the target population:

1. Teachers possessed a special education credential awarded by a California State University (CSU) teacher education program.
2. Teachers must have received their credential between the years 2013 and 2018 from a CSU Teacher Education Program that includes collaboration as part of the program expectations.
3. Participants were recommended by a CSU teacher education program program manager
4. Participants were coteaching at the secondary level at the time of the study.

Sample

According to McMillan and Schumacher (2010), “A sample is a group of participants who provide data for the study of interest” (p. 129). It was intended that the sample population would have characteristics of the target population such that the results of the study could be generalized to the target population. The researcher contacted program managers from four CSU campuses who met the target population criteria by e-
mail. One program was unable to provide a list of participants; therefore, the study was
narrowed to three CSU campuses. The three CSU Teacher Education Programs sampled
were Sonoma State University, CSU Los Angeles, and CSU San Marcos. There were
1,153 special education credentials awarded by the three schools between 2013 and 2018.
Sixteen potential study participants were recommended by the program managers. Each
recommended teacher was contacted by e-mail and invited to participate in the study. Of
those recommended, 12 agreed to participate. Each teacher was contacted by e-mail to
request an interview.

Demographic Data

The study included 12 participants who met eligibility criteria to participate.
Specific demographic information was collected to describe individuals, including
gender, university from which their credential was received, years since receiving their special
education credential, and years of coteaching experience. Table 2 represents demographic
data that describe each participant, identified with numbers from 1 to 12.

Table 2

<table>
<thead>
<tr>
<th>Participant number</th>
<th>Gender</th>
<th>University</th>
<th>Year of credentialing</th>
<th>Years coteaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>Female</td>
<td>CSULA</td>
<td>2016</td>
<td>3</td>
</tr>
<tr>
<td>Participant 2</td>
<td>Male</td>
<td>CSUSM</td>
<td>2017</td>
<td>2</td>
</tr>
<tr>
<td>Participant 3</td>
<td>Female</td>
<td>CSULA</td>
<td>2015</td>
<td>5</td>
</tr>
<tr>
<td>Participant 4</td>
<td>Male</td>
<td>CSULA</td>
<td>2016</td>
<td>3</td>
</tr>
<tr>
<td>Participant 5</td>
<td>Female</td>
<td>CSUSM</td>
<td>2017</td>
<td>3</td>
</tr>
<tr>
<td>Participant 6</td>
<td>Female</td>
<td>CSUSM</td>
<td>2016</td>
<td>3</td>
</tr>
<tr>
<td>Participant 7</td>
<td>Female</td>
<td>CSULA</td>
<td>2016</td>
<td>4</td>
</tr>
<tr>
<td>Participant 8</td>
<td>Female</td>
<td>SSU</td>
<td>2016</td>
<td>1</td>
</tr>
<tr>
<td>Participant 9</td>
<td>Female</td>
<td>SSU</td>
<td>2018</td>
<td>1</td>
</tr>
<tr>
<td>Participant 10</td>
<td>Female</td>
<td>SSU</td>
<td>2017</td>
<td>2</td>
</tr>
<tr>
<td>Participant 11</td>
<td>Female</td>
<td>SSU</td>
<td>2013</td>
<td>5</td>
</tr>
<tr>
<td>Participant 12</td>
<td>Male</td>
<td>SSU</td>
<td>2018</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. CSULA = California State University, Los Angeles, CSUSM = California State University,
San Marcos, SSU = Sonoma State University
**Intercoder Reliability**

Intercoder reliability measures were employed for this study to ensure reliable data and to reduce errors. According to Creswell and Poth (2018), increased reliability of the data and decreased potential for bias can result from having two or more coders code the same data to ensure that there is agreement on where the data are coded. Consequently, 20% of the current study’s qualitative data were shared and coded by two other expert researchers. The intercoder reliability was above 82%, which indicates that agreement between coders was evident. In order to have “good qualitative reliability” at least 80% agreement is needed, according to Creswell and Poth (2018, p. 202). The intercoder reliability for this study was found to be acceptable and the qualitative results can be considered valid.

**Presentation and Analysis of Data**

The researcher collected and analyzed data from 12 participants to address how their teacher education program prepared them to serve as coteachers. Data were collected and analyzed to identify the perceived benefits and challenges of coteaching, and to solicit recommendations on how teacher education programs can further prepare future coteachers. The researcher used semistructured interviews with open-ended questions guided by Cook and Friend’s (1993) five models of coteaching as a theoretical framework.

Qualitative data from in-depth interviews and artifacts addressed the research questions. The primary qualitative data were collected through face-to-face interviews with 12 secondary-level coteachers as well as from artifacts collected from the identified universities’ teacher education program websites. The researcher spent 12 hours in
interviews and an equal amount of time examining the artifacts. Joyce and Showers’s (1980) adult learning theory was a framework for presenting the data. In their framework, adult learning is divided by levels of efficacy. The lowest level is awareness, which includes the introduction of theory through class lecture or reading. This level rarely leads to implementation of the new idea. The next level is modeling or demonstration, which, like awareness, has little chance of resulting in implementation. Practice under controlled conditions with unstructured peer feedback leads to greater implementation in the classroom. Lastly, practice with structured feedback, often from a coach or mentor, has the greatest chance of effective implementation in the classroom environment.

Data Analysis for Research Question 1

Research Question 1 was stated in the following way: “How do secondary school special education teachers describe the ways in which their teacher education program prepared them to work as part of a coteaching team?” The following section displays the qualitative data that were coded into themes from the 12 interviews with coteachers. The data presented were collected from three of six interview questions:

IQ 1: Please describe the types of coteaching, based on the list I showed you earlier, that you were exposed to in your teacher education program.

IQ 2: Tell me about the way in which your teacher education program prepared you to work as part of a coteaching team.

IQ 3: Tell me about your experiences of being part of a coteaching team.

The following subsections outline the responses to Research Question 1. Table 3 shows the theme and frequency counts.
Table 3

Summary Analysis of Data for Research Question 1: Theme, Participants, Sources, and Frequency—Highest to Lowest Frequency

<table>
<thead>
<tr>
<th>Themes</th>
<th>P</th>
<th>I</th>
<th>A</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Theoretical exposure through books, lecture, and observations</td>
<td>9</td>
<td>31</td>
<td>3</td>
<td>34</td>
</tr>
<tr>
<td>2. Practice within special education coursework</td>
<td>7</td>
<td>25</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>3. No or minimal exposure to coteaching models</td>
<td>6</td>
<td>21</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>4. Coaching from a mentor teacher on coteaching during student teaching</td>
<td>5</td>
<td>14</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

*Note.* P = participants, I = interviews, A = artifacts.

In summary, nine of the 12 participants were exposed to at least one of the five models of coteaching and six of the 12 participants were exposed to all five models of coteaching through textbooks, class lecture, and observations of the coteaching models in use. Seven participants practiced using the five coteaching models during their teacher education courses. Six of the 12 participants felt they had minimal to no exposure to the five models of coteaching during their teacher education program. Five participants were exposed to coteaching during their student teaching experience. The most frequent experience for these coteachers was gaining theoretical exposure through textbooks, class lectures, and observations with 34 frequencies. An analysis of the qualitative data for the themes in answering the first research question regarding preservice preparation to coteach is outlined in the following section.

**Theme 1: Theoretical exposure through books, lectures, and observations.**

The first research question asked the ways in which the participants felt their teacher preparation program prepared them to serve as part of a coteaching team. To answer this
research question, participants were asked to describe the models of coteaching they were exposed to during their teacher education program, the way in which their teacher education program prepared them to work as part of a coteaching team, and their experiences of being part of a coteaching team. Analysis of the data collected resulted in the emergence of the most frequent theme for this research question—theoretical exposure through books, lecture, and observation—with a frequency of 34. Nine of the 12 coteachers stated that they were exposed to at least one of the five models of coteaching during a class or classes. Six of the 12 participants did not initially recall being exposed to any of the models of coteaching, but three participants remembered being exposed later on in the interview process. The word “observations” in this theme refers to both observation through videos of the models being used and observations of other teachers using the five models of coteaching. This theme was evidenced from 12 face-to-face interviews with a frequency of 34 (Table 4).

Table 4

<table>
<thead>
<tr>
<th>Theme</th>
<th>P</th>
<th>I</th>
<th>A</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Theoretical exposure through books, lecture, and observations</td>
<td>9</td>
<td>31</td>
<td>3</td>
<td>34</td>
</tr>
</tbody>
</table>

Note. P = participants, I = interviews, A = artifacts.

Nine of the 12 participants remembered being exposed to the five models of coteaching during one or more of their teacher education courses. A recurring sentiment of seven of the 12 participants was echoed in a comment by Participant 6, “So they really taught us about . . . it was like at the core and mission of ‘you will be co-teaching this is
the best way to support your kiddos. So let’s get you ready for it.” In other words, it appeared to be an expectation of the program that credential graduates would be coteaching in some form after graduation. Participant 6 further noted that her teacher education program prepared teachers by using a textbook and exposing students to video clips demonstrating the use of the five models of coteaching. In addition, the teacher education program used research to support why coteaching is the best way to educate students in the least restrictive environment.

Participant 1, in discussing her experience in the teacher education program, stated, “It’s very common because, in terms of my program at [my school], we focus heavily on coteaching, especially because we’re trying to move more towards a more inclusive environment for our students.” She went on to say that throughout her theory classes, students were exposed to coteaching models regularly, culminating with a course that required coteaching as part of a learning center experience.

Participant 2 was exposed to the five models of coteaching through class lectures. However, Participant 2 was also exposed to the five models of coteaching through the manner in which the class was taught. He stated,

We received a lot of kind of instruction on it and then even experienced it to some great degree, because some of our classes were taught by multiple instructors at the same time, and so I think did a pretty good job of demonstrating different styles of it, but oftentimes I guess that was more of a team teaching approach.

Participant 5 had a similar experience to Participant 6. Participant 5 mentioned that when visiting school sites, she was able to see various models of coteaching. She noted that it was emphasized in her teacher education program that coteaching “was the
best model to support students with special needs.” Participant 5 echoed the sentiments of Participants 2 and 6, that a focus was placed on coteaching in various courses through the use of a textbook and videos of teachers engaged in coteaching.

Two of the participants, Participant 9 and Participant 10, expressed that they were exposed to the five models of coteaching but do not have a good recollection of how it was taught. Participant 10 stated, “I’m sure it was mentioned, the idea of coteaching, but I don’t explicitly remember it being something that was heavily discussed.” Similarly, Participant 9 said, “If they covered it, it would’ve been so brief that it was eclipsed by everything else.” Interestingly, Participants 9 and 10 attended the same teacher education program.

Artifacts gathered from each of the three universities where participants attended showed that each school placed an emphasis on coteaching practices through their mission, vision, and course requirements. Core requirements from School 1 showed that students must complete EDSP 4040, Collaboration, Co-Teaching, and Consultation for Effective Education and Transition Planning. School 2 required students to take EDMX 571, Clinical Practice: General Education Setting. School 3 stated that it prepares special educators who are “skilled in practices and dispositions necessary for effective collaboration with regular educators and interdisciplinary team members” and “committed to inclusive educational practices.”

Theme 2: Practice within special education coursework. Further analysis of the data collected resulted in the emergence of a second theme under Research Question 1: Practice within special education coursework. In other words, special education teacher education program students were given the opportunity to practice using the
five models of coteaching as part of the coursework and requirements of the program. For example, one teacher mentioned that during her teacher education classes they would take turns weaving in and out of coteaching roles at the front of the class. Practice could include developing cotaught lessons, demonstrating a cotaught lesson for the class and receiving feedback, and authentic coteaching through participation in the learning center model used by one of the teacher education programs. This theme was apparent in seven face-to-face interviews that produced 25 responses (Table 5).

Table 5

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<thead>
<tr>
<th>Theme</th>
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<th>A</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Practice within special education coursework</td>
<td>7</td>
<td>25</td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

Note. P = participants, I = interviews, A = artifacts.

During the 12 face-to-face interviews, participants were asked to share how their teacher education program prepared them to work as part of a coteaching team (Research Question 1). Participants were asked to describe the models of coteaching they were exposed to during their teacher education program, how well their teacher education program prepared them to work as part of a coteaching team, and their experiences working as part of a coteaching team. Although the continuum was broad, seven participants referred to getting practice using the five models of coteaching during their teacher education program coursework. Several participants mentioned that they were able to role play the different models of coteaching in from of their classmates.

Six of the 12 participants mentioned being paired up with another teacher to plan and implement lessons using a variety of coteaching models. Participant 4 explained,
We got partnered up with a different partner and we were getting the flexibility to do any of the coaching models that you’ve actually put out here. So, I was exposed to One Teach, One Assist. I was exposed to Parallel Teaching, Flexible Grouping, Station Teaching and Team Teaching. From my experience, I’ve done everything except for Parallel Teaching.

He went on to share that the experience prepared him to be flexible and adaptable to what was going on in the classroom at any given moment.

Participant 1 emphasized the value of working with another teacher during her teacher education program. She and her partner were required to select a topic based on the Common Core State Standards to focus on throughout the whole semester. They would plan lessons together and then be observed implementing the lessons and receive feedback from program instructors. Participant 1 noted that she really appreciated the opportunity to have a mentor in the program to guide her, provide feedback, and hold her accountable for using the models of coteaching that she was learning. Likewise, Participant 2 found it beneficial to be observed implementing a cotaught lesson and then be able to reassess it afterwards and discuss it and see how it could be more effectively implemented.

Participants 1, 3, 4, and 7, who attended the same teacher preparation program, all found that participating in the learning center made a big difference in how they were prepared to serve as coteachers. The learning center model required students to be paired up with another student and to coteach a group of students on Saturdays for an entire semester. Participant 7 stated, “Then being able to reassess it afterwards and discuss it and kind of see how to more effectively implemented,” while Participant 3 said
it like this: “When I was doing the learning center, I feel the hands-on experience and teaching Saturdays with two other colleagues or classmates, I felt this applied more.”

All participants who expressed that they were exposed to hands-on practice during their teacher education program agreed that it was extremely valuable in preparing them to work as part of a coteaching team. Participant 6 described the experience as a way to put herself in the position of a teacher working in a classroom by changing her lens. She said the following thought would go through her mind when lesson planning, “Okay, so when you’re with your partner, try and do this as a coteacher. How would you approach this as a co-teacher?” She attributes her preparedness to be a coteacher to this experience.

Theme 3: Not exposed or minimally exposed to the five models of coteaching.

Further analysis of the data collected resulted in the emergence of a third theme under the first research question: Exposure to coteaching during student teaching. In six of the 12 face-to-face interviews, participants referenced that they received no exposure to the five models of coteaching during their teacher education program. Of those six, three later recalled receiving minimal exposure to the models of coteaching during their teacher education program. Participants readily discussed that they felt that their teacher education program did not adequately expose them to the five models of coteaching. Instead some felt that their program was more geared toward collaborating, not coteaching (see Table 6). Participant 8 expressed it this way,

There was one class that I think I took that I had to do and now it may not even been the whole class because I’m just, I’m remembering like there was a few lessons where we did on, it was like how to work with parents and it was kind of
teaching us how to communicate and give lesson plans to parents and how we could work with them, all of those situations. But that’s I think maybe the courses that the teaching program actually got to coteaching preparation.

Table 6

*Theme, Participants, Sources, and Frequency—Not Exposed or Minimally Exposed*

<table>
<thead>
<tr>
<th>Theme</th>
<th>P</th>
<th>I</th>
<th>A</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Not exposed or minimally exposed</td>
<td>6</td>
<td>21</td>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

*Note. P = participants, I = interviews, A = artifacts.*

All six of the participants who responded to this theme expressed that although coteaching may have been mentioned during a particular course, it was not a focus of any of the required courses. Four of the 12 participants responded with a very quick “no” in some form. When asked specifically which of the five coteaching models he was exposed to during his teacher education program, Participant 12 said, “Honestly, it’s none.” Later he clarified by saying that it did not mean the models were not introduced, but that he did not remember them. Participants 2, 8, 9, 10, and 11 echoed Participant 12’s response by initially saying “no” to being exposed to the models of coteaching but later in the interview remembering being exposed briefly to the concept. Participant 10 said the following:

There was one class that I think I took that I had to do and now it may not even been the whole class because I’m just, I’m remembering like there was a few lessons where we did on, it was like how to work with parents and it was kind of teaching us how to communicate and give lesson plans to parents and how we
could work with them, all of those situations. But that’s I think maybe the
courses that the teaching program actually got to coteaching preparation.
Participant 2 felt similarly stating, “I’m sure it was mentioned, the idea of coteaching, but
I don’t explicitly remember it being something that was heavily discussed.” Participant 8
also agreed that “there wasn’t a lot of coteaching talked about in those classes.”
In describing how well each was prepared to work as part of a coteaching team,
five of the 12 people interviewed felt extremely unprepared. Participant 9 said, “My
teacher program did not prepare me to teach as a coteacher at all.” Mimicking that
sentiment, Participant 8 stated, “I did not come away from that class with going like, ‘Oh
co-teaching!’” It is important to note that five of the six participants who felt they were
not exposed to the five models of coteaching received their credentials from the same
program.

**Theme 4: Coaching from a mentor teacher on coteaching during student
teaching.** Additional analysis of the data collected resulted in the emergence of a fourth
theme under the first research question: The importance of coaching by a master teacher
for coteaching during student teaching. In five of the 12 face-to-face interviews,
participants referenced that they were able to coteach with their master teachers during
their student teaching assignment. Participants readily discussed the impact of having an
experienced teacher to learn from and to teach with. While most indicated that they were
exposed mostly to one teach, one assist and team teaching, one noted also experiencing
flexible grouping as a student teacher. A total of 14 responses were derived from five of
the 12 face-to-face interviews (Table 7).
The four participants exposed to a coteaching mentor during their time as student teachers represented all three different teacher education programs. Eight participants either did not participate in student teaching or coteaching was not part of their student teaching experience. Participants expressed that working with a mentor teacher allowed them to ease into coteaching. Participant 8 described it in this way:

It definitely was like a lot of one teach, one assist going on, but I feel like the more comfortable I became in the classroom with the kids it became a little closer to kind of bouncing between the one teach and team teaching.

She went on further saying, “I kind of had a firsthand experience with kind of a coteaching situation because my master teacher was awesome.” Participant 1 felt similarly stating, “They placed us with the coteacher, and that really allowed us to be able to work with others and to really learn from others. I really learned a lot from her, only because of her experience.” Participant 5 summed it up this way: “You’re never alone as a student teacher, so just always being with usually your master teacher or someone, you’re doing coteaching.”

All five of the 12 participants who were exposed to coteaching during student teaching believed that the predominant models that were used were one teach, one assist

Table 7

<table>
<thead>
<tr>
<th>Theme</th>
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<th>Total</th>
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<tbody>
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<td>4. Coaching from a mentor teacher on coteaching during student teaching</td>
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<td>14</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

Note. P = participants, I = interviews, A = artifacts.
and team teaching. Only Participant 2 stated that he was exposed to a variety of coteaching models during his student teaching:

One Teach, One Assist, I was exposed to that one. I saw it in some settings, or it was utilized with myself and the master teacher. . . . For flexible grouping, I experienced this one largely in my student teaching, . . . then station teaching, I experienced this, especially in my student teaching . . . it was at the high school level, and so in those ones, it was that my master teacher and I would . . . or actually I worked with multiple teachers, but we would plan together, and then we would actually oftentimes implement our instruction in the team-teaching style.

**Data Analysis for Research Question 2**

Research Question 2 was stated in the following way: “What are the perceptions of secondary school special education teachers of the benefits of working as a member of a coteaching team?” The data for this question were gathered using the following interview questions:

IQ 3: Tell me about your experiences of being part of a coteaching team.

IQ 4: Describe the benefits you have experienced working as part of a coteaching team.

The data were analyzed and sorted into four themes based on the responses from 12 current secondary special education coteachers (Table 8).

In summary, 11 of the 12 participants found that a benefit of working as part of a coteaching team was an improvement in student behavior and academic achievement with a frequency of 50. Eleven of the 12 participants discovered that a benefit of working as part of a coteaching team was that it improved the expertise and skill set of the both teachers. This was mentioned with a frequency of 23. Eight of the 12
Table 8

Summary Analysis of Data for Research Question 2: Theme, Participants, Sources, and Frequency—Highest to Lowest Frequency: Challenges

<table>
<thead>
<tr>
<th>Theme</th>
<th>P</th>
<th>I</th>
<th>A</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Improves student behavior and academic achievement</td>
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<td>50</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>6. Improves the expertise and skills of both teachers</td>
<td>11</td>
<td>23</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>7. Increased inclusivity of special education students</td>
<td>8</td>
<td>16</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8. Increases special education teacher’s content knowledge</td>
<td>7</td>
<td>13</td>
<td>0</td>
<td>13</td>
</tr>
</tbody>
</table>

Note. P = participants, I = interviews, A = artifacts.

Participants realized that increased inclusivity of special education students was a benefit of coteaching. Seven of the 12 participants found that a benefit of working as part of a coteaching team was an increase in their own content area knowledge. As mentioned above, this information regarding the benefits of working as part of a coteaching team was gathered from the third and fourth interview questions. An analysis of the qualitative data for the themes in answering the second research question regarding the perceived benefits of working as part of a coteaching team is outlined in the following section.

**Theme 5: Improves student behavior and academic achievement.** In a further analysis of the data of Interview Questions 3 and 4, the most frequent responses were coded to the theme, Improves student behavior and academic achievement. This theme was noted in 11 sources, all 11 were from face-to-face interviews with a total response count of 50 (Table 9).
Eleven of the 12 participants discussed improved student behavior and achievement as a benefit of coteaching. Participants often referred to behavior and academic achievement as going hand in hand. This is demonstrated by the following comments, “Well, these kids aren’t experiencing that, which is great”; “So, what does the research say? When you put disabled kids with nondisabled kids and they usually kind of step up”; and “We have a good routine down and we find it to be very successful in terms of improving grades, behaviors.”

Eleven of the 12 participants specifically called out improved academic achievement for students with disabilities in a cotaught class. Participants attributed the improvement to several factors including exposing students to different teaching strategies, exposing special education students to grade-level curriculum, and having two teachers in the room. Six of the participants noted that exposing students to different teaching strategies was a factor in increased student achievement. Participant 10 stated, “I think for a special ed kid and gen ed kids, to have the different strategies that I bring to the curriculum is super beneficial.” Participant 4 said,

They see it from two different people, so I would say to math, not one style works. So, one that maybe the gen ed teacher will be teaching it one way and if I bring out some different strategy it kind of works and sometimes just the way I

Table 9

<table>
<thead>
<tr>
<th>Theme, Participants, Sources, and Frequency: Improves Student Behavior and Academic Achievement</th>
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<tbody>
<tr>
<td>Theme</td>
</tr>
<tr>
<td>5. Improves student behavior and academic achievement</td>
</tr>
</tbody>
</table>

*Note. P = participants, I = interviews, A = artifacts.*

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They see it from two different people, so I would say to math, not one style works. So, one that maybe the gen ed teacher will be teaching it one way and if I bring out some different strategy it kind of works and sometimes just the way I
say it, word for word might be differently than what the gen ed teacher. So, the benefits are very good.

Also, as Participant 7 explained, “I jump in and quickly break down what the teacher is trying to say and whether that’s instructions or through lecture explanation.” Participant 1, in discussing the benefits of coteaching for both students with special needs and general education students, stated,

I would see a lot of students who struggled with the content, who required support strategies, and I would work with maybe two or three of the students. Two or three of my students and I would see two or three add onto my group, which was great.

Of the 12 participants interviewed, six noted that coteaching was a factor in improved academic achievement because special education students were exposed to grade-level curriculum. Participant 9 noticed that “it gives them an opportunity to rise higher than they may have in another setting” when talking about academic achievement. Participant 11 expressed,

It’s a richer curriculum then a pullout RSP where they, it’s just basic skills. Whereas they’re learning new skills and they have to learn their basic skills, to be able to do the algebra as well. . . . I think again for the students, that they’re learning grade-level curriculum and they may have, I do math in particular, and so they have a chance that they’re ready for high school.

When discussing how being in a cotaught class benefits her students, Participant 8 said, “I have seen specific groupings of students or pairings of students that were working
great together and they’re making progress and it’s not just one kid copying after often the other.”

Five participants stated that having two credentialed teachers in the classroom was a factor in increasing student achievement. A reason given by several of the participants was that more students are able to get attention when they need assistance. Participant 9 said, “The students get more attention, all of them. They all get more support and attention.” This was echoed by Participant 6 who mentioned that “we can pull them into groups of kids. So you might need another refresher on introduction. You’re not quite getting this language, let’s target that.” She also noted, “So I feel like we can target more kids and really work with their individual strengths and weaknesses in working with them there.” Participant 7 responded,

And then, I think the benefit of having additional support is when you’re in a class of 35-plus students in high school, it can get very challenging for the teacher to find time even go and support everyone’s needs [and followed that, stating], I think they’re able to receive that one-on-one attention when the teacher can’t get to them.

Emphasizing that having two teachers benefits all students in the class, Participant 7 stated, “I have so many other just general education students who are begging and trying to get my attention, more so even sometimes than our students receiving special education services.”

**Theme 6: Improves the expertise and skill set of both teachers.** Further analysis of the data of Interview Questions 3 and 4 showed the second most frequent responses for benefits were coded to the theme, Improves the expertise and skill set of
both teachers. This theme was noted in 11 face-to-face interviews with a response count of 23 (Table 10).

Table 10

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<thead>
<tr>
<th>Theme</th>
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<th>Total</th>
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</thead>
<tbody>
<tr>
<td>6. Improves the expertise and skill set of both teachers</td>
<td>11</td>
<td>23</td>
<td></td>
<td>23</td>
</tr>
</tbody>
</table>

Note. P = participants, I = interviews, A = artifacts.

Eleven of the 12 participants discussed improved expertise and skill sets as a benefit to coteaching. Participant 2 put it most simply, saying, “I think just having the exposure to another teacher in the classroom has informed my own teaching.” Participant 3 described it this way:

The benefit is that I do think they’re the content experts. They did go to school for the specific subject, whether it’s English, History, [or] Math. And I do feel what I do bring into the table is my expertise and different methods and different ways that I can support students, maybe strategies, maybe different resources that I can provide for students.

Participants 5 and 7 described how coteaching specifically helped them to improve their expertise and skill set as teachers, ideas that were echoed by Participants 8 and 12. Participant 5 stated,

I’m with two different seventh-grade math teachers, seeing their different styles of teaching, their different management styles, it just helps add to my skillset. Oh, that was a really good way. So that’s been helpful to me as a teacher to develop.
Similarly, Participant 7 noted, “I’ve just been very fortunate to have been able to coteach my first year, with this is an awesome teacher who has taught me a lot of strategies and scaffolding.” Participants 8 and 12 both mentioned how coteaching has enabled them to develop different ways of delivering content than they were used to.

Five of the 12 participants interviewed mentioned that they believed that the general education teacher also gained improved expertise and skill sets as a result of the coteaching partnership. Many found that the general education teacher gained knowledge about scaffolding and teaching strategies that they may not have seen before. Participant 3 expressed that the general education teacher may be the expert in content, but she, as a special educator, could provide “expertise and different methods and different ways that I can support students, maybe strategies, maybe different resources that I can provide for students.” Participant 11 saw that the general education teacher benefited by learning how to use strategies that best addressed student needs. For example, she stated,

I think for the coteachers is, they learn the understanding of how to deal with all these kids with different needs, and how to use all the modalities, and lots of visuals, and slower pace and enunciation, and a lot of academic vocabulary that these kids need to know.

**Theme 7: Increases the inclusivity of special education students.** In a further analysis of the data from Interview Questions 3 and 4, the third most frequent responses were coded to improving the inclusivity of special education students. This theme was noted in eight sources, which were from face-to-face interviews, with a frequency of 16 (Table 11).
Eight of the 12 participants mentioned that cotaught classes increase the inclusivity of special education students on campus. Participant 2 was concerned that students with disabilities were being immersed in the general education environment rather than being segregated. He discussed how the inclusivity reached beyond the students and to the staff as well: “I feel like that has kind of enhanced our role and made us feel more inclusive as well, not just the students, which is great.” He also pointed out that the whole school climate has changed since the introduction of coteaching.

Participant 9 similarly noted a difference for students with IEPs and how they relate to their general education peers. She said, “It’s more fluid. And I’m seeing, at least with the seventh graders with IEPs, there’s more of a . . . I don’t know. More interaction. I just see less segregation, a little bit.” She noted, “It helps with this integration of students who otherwise would’ve been more segregated.”

Another benefit of coteaching mentioned by the participants was a decrease in stigma associated with being in special education. Participant 12 stated that although he and his coteaching partner know who the students with IEPs are, “if you walk in, you have no idea and that’s awesome.” Stigma associated with having special needs is also reduced by keeping students in general education classrooms because, as Participant 7 pointed out, “I’m sure it happens at all grade levels, but in high school they’re just very
aware of what pulling out looks like and we don’t want to identify” students who have IEPs. Participant 1 noted that parents are also in favor of the move toward coteaching because “they want their kids to be more “normal.” Participant 11 also agreed that students with special needs should be exposed to the general education environment so that they are prepared “for the real world and how things work.”

**Theme 8: Improves content area knowledge of the special education teacher.**

In the analysis of the data for Interview Questions 3 and 4, the fourth most frequent responses were coded to improving the content area knowledge of the special education teacher. This theme was noted in seven sources from face-to-face interviews, with a frequency of 13 (Table 12).

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<thead>
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<th>Theme</th>
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<tr>
<td>8. Improves content area knowledge of the special education teacher</td>
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<td>13</td>
<td>0</td>
<td>13</td>
</tr>
</tbody>
</table>

*Note. P = participants, I = interviews, A = artifacts.*

During the 12 face-to-face interviews, participants were asked to share what they perceived to be the benefits of coteaching. Although there were many benefits identified for students and for the coteaching partners as a team, the increased capacity of the special education teacher was mentioned by seven of the participants. Several participants expressed that they were able to gain more confidence in the content areas in which they cotaught thus allowing them to be better contributors to the team. Even for Participant 2, who holds a single subject English credential, coteaching has benefitted
him. He stated, “Even though I have my single subject in English and I majored in English for my undergrad, I still . . . I guess there are some things that I’m just not as comfortable or confident with.” This idea was echoed by Participant 4 who often used the one teach, one assist model when coteaching in higher level math classes.

Four of the 12 teachers interviewed mentioned that learning and becoming more comfortable with the content had made them better coteachers. Participant 5 stated that, although it has taken her some time, she has become “comfortable enough with the curriculum to be able to be a better coteacher.” Participant 2 noted that working with a “very intelligent coteacher” has increased his understanding of the subject matter. Participants 6 and 11 also stated that it was really helpful to understand the curriculum well enough to step in and help the students.

**Data Analysis for Research Question 3**

Research Question 3 was stated in the following way: “What are the perceptions of secondary school special education teachers of the challenges of working as a member of a coteaching team?” The data for this question were gathered using Interview Questions 3 and 5 of six:

IQ 3: Tell me about your experiences of being part of a coteaching team.

IQ 5: Describe the challenges you have experienced working as part of a coteaching team.

The data were analyzed and sorted into four themes based on the responses from 12 secondary special education coteachers (Table 13).
In summary, 11 of the 12 participants mentioned time for collaboration on curriculum and roles and responsibilities as a challenge to working as part of a coteaching team. Ten of the 12 participants noted that differences in personality or educational philosophy was a challenge with 36 frequencies, the highest for responses to the research question. Ten participants stated that the general education teacher’s attitude and lack of knowledge about special education was a challenge to working as part of a coteaching team. Seven of the 12 participants said that time and space for other responsibilities was a challenge. As mentioned above, this information regarding the perceived challenges of working as part of a coteaching team was gathered from Interview Questions 3 and 5. An analysis of the qualitative data for the themes in answering the third research question regarding the perceived challenges of working as part of a coteaching team are outlined in the following section.

**Theme 9: Time for collaboration on curriculum, roles and responsibilities.**

Further analysis of the data for Interview Questions 3 and 5 in regard to the perceived
challenges of working as part of a coteaching team revealed that 11 participants noted a lack of time for collaboration on curriculum, roles, and responsibilities as a challenge. The frequency of responses coded to time for collaboration on curriculum, roles, and responsibilities was 26. This theme was noted in 11 of the 12 face-to-face interviews (Table 14).

Table 14

<table>
<thead>
<tr>
<th>Theme</th>
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<tbody>
<tr>
<td>9. Time for collaboration on curriculum, roles and responsibilities</td>
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<td>26</td>
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</table>

Note. P = participants, I = interviews, A = artifacts.

Eleven participants discussed that finding time to collaborate with the general education teacher was a challenge, especially for special education coteachers who were working with more than one general education teacher. They expressed that this time is a necessary factor in building a successful coteaching team. Several participants noted that lack of time for collaboration had a negative effect on their work as coteachers. When asked to elaborate on the challenge presented by the lack of collaboration, Participant 8 stated, “Maybe even having some kind of agreement between the teachers of responsibilities or something like that kind of thing because it’s really frustrating when you make assumptions and then things change and you’re like, well wait.” Participant 2 echoed that saying, “But me just feeling like I am not contributing as much because I want to and stuff like that, and then just wanting to contribute more.”
Participant 9 felt strongly that the lack of time to plan curriculum, roles, and responsibilities was a challenge. She had the highest frequency for this theme, mentioning it eight times. She stated, “I think it’s my responsibility to modify and accommodate and adapt a curriculum. And I feel like that’s what my role is; to be most fair.” She went on to express her frustration:

And I need a curriculum for planning, for me, for participating in the way that I think is fair and in my appropriate role. I need a . . . I mean, I need a curriculum . . . [and] “And if I get the information for the coming week, what we’re doing on a Sunday, I don’t want to have to either really fast do it on Monday morning, or do work on Sunday if I don’t want to.

Six of the 12 participants answered, when asked about the challenges of coteaching, with some variation of “lack of planning time.” Participant 10 said, “One of the challenges I see is, that could be, is the collab prep time.” This is especially true for special education teachers who coteach with several general education teachers. Participant 4 shared that although he does share common planning time with the general education teachers, “that’s also a challenge having a plan with so many teachers and keep[ing] everything organized.”

**Theme 10: Differences in personality or educational philosophy.** In an analysis of the data from Interview Questions 3 and 5, the second highest number of participants’ responses were coded to differences in personality or educational philosophy. This theme was noted in 10 of the 12 face-to-face interviews with a frequency of 36 (Table 15).
Table 15

*Theme, Source, and Frequency—Differences in Personality or Educational Philosophy*

<table>
<thead>
<tr>
<th>Theme</th>
<th>P</th>
<th>I</th>
<th>A</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Differences in personality or educational philosophy</td>
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<td>36</td>
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</tr>
</tbody>
</table>

*Note. P = participants, I = interviews, A = artifacts.*

Ten of the 12 participants mentioned that a difference in personality or educational philosophy of the two teachers created a challenge to working as part of a coteaching team. Participants 3, 4, 5, 6, 7, 9, and 12 each mentioned that personality was a big factor in the success of a coteaching team. Participants 1, 3, 4, 6, 8, 9, and 11 mentioned that a difference in educational philosophy created a challenge to working as part of a coteaching team.

Seven participants mentioned the importance of teachers’ personality. Participant 6 mentioned, “So I think the number one challenge is personality.” This same sentiment was echoed by Participant 9, who stated, “Well, the challenges are you have two people with two very different personalities.” Several participants noted that they have witnessed coteaching teams fail due to personality clashes. Participant 12 said simply, “So that’s when it’s not going to work unless you get lucky and the two people just happened to coexist nicely.”

In addition to personality, participants mentioned that a misalignment of education philosophy was a challenge when working as part of a coteaching team. Educational philosophy was further split between general educational philosophy and the general education teachers’ educational philosophy about students with special needs. While three participants noted that the general education teachers’ philosophy in general
was a challenge, six participants noted that the challenge was the general education
teachers’ philosophy about educating students with special needs.

Participants 1, 4, and 9 mentioned that their philosophy of education was not in
alignment with the philosophy of the general education teacher. The misalignments were
in the areas of pacing, content, and routines. Participant 4 noted that the general
education teacher was unwilling to review for students, stating, “One of our old teachers
did not see the benefit on laying the foundations of just the simple multiplication table
and the automaticity that you need into having it, so did not see the benefit in doing
reteaching.” Participant 1 echoed that: “I think that a lot of times teachers are afraid to
switch their routine, to try new things.” Participant 9 found that a difference in her view
of how the content should be taught was at odds with that of her general education
coteacher. Participant 9 remarked that she felt it better to make sure students understand
the content before moving whereas her coteacher preferred breadth over depth and
“hitting as many standards as we can.” Participant 1 struggled when trying to make a
change in how the curriculum was taught. Her coteacher objected. Participant 1
explained it this way:

So for example, for a lot of years our students have been reading a modified
Romeo and Juliet book, and I really enjoyed reading the no-fear Shakespeare
edition because it has the ability to differentiate, because it has Shakespearean
language on one side and modern text on one side. So that really allows you to
differentiate for your advanced learners, your English learners. You can do so
much with it. So I switched to that text, and I think that was hard for a lot of
people to accept.
Six participants noted that differences in educational philosophy were centered on how to educate students with disabilities. Participants 1, 3, 4, 6, 8, and 11 mentioned that the general education teacher either had different expectations for the students with special needs or was not willing to make the accommodations necessary to support students in the class. This was a particular challenge for Participant 8 who said,

I felt like that there is a gen ed way of doing things and it’s hard to kind of adjust to it as a special education teacher because I feel like the way that we’re taught in our teaching program is like, well you adjust to what the kid needs, not the other way around.

This was echoed by Participant 3 who stated, “Maybe the teacher thinking that they weren’t being as productive in class, maybe blaming it on the fact that maybe they’re being lazy about it, as opposed to maybe they’re learning at a slower pace.” Participant 6 noted that general education teachers often have an us and them attitude, creating a challenging working relationship. She stated,

They view, they viewed as here’s the gen ed kids with special ed kids in it and all like they’re our kids versus your kids, my kids. And so trying to have that shift of everybody is a gen ed student.

**Theme 11: General education teacher’s attitude and lack of knowledge about special education.** In further analysis of the data of Interview Questions 3 and 5, the third most frequent responses were coded to general education teacher’s attitude and knowledge about special education. This theme was noted in 10 face-to-face interviews with a frequency of 25 (Table 16).
Ten of the 12 participants mentioned the general education teacher’s attitude and lack of knowledge about special education as a challenge to working as part of a coteaching team. Participant 5 offered an example of how this is a challenge,

So it’s something that they have to adapt to and maybe learn about the different disabilities. So I can see how that could be a drawback, because some of them might be open to it, some of them might not be open to it. It just depends.

Several participants noted that there is a difference between teachers who want to coteach but do not know how and teachers who do not want to coteach, and therefore treat the special educator as an aid, rather than a true coteacher.

Four of 12 participants noted that even though the general education teacher was willing, they lacked an understanding of students with disabilities. For example, Participant 3 noted that teachers who do not understand students with disabilities may think they are lazy as demonstrated by her comment, “Maybe misunderstanding the fact that because of this disability, this is what’s going on, this is the type of work that they’re producing.” Participant 4 gave an example of a time when he thought the general education teacher did not understand students with disabilities. He described the situation this way: “I can’t work with this person because he’s moving too fast. And
especially for my students and my caseload and students with learning disabilities, they’re just being left behind.” Participants 7 and 9 provided similar accounts.

Additionally, several participants felt that, even if the general education teacher was willing to coteach, he or she was not sure how to do it. Participants 1 and 7 shared their experiences with coteaching. Participant 7 noted that the newness of coteaching played a factor: “I would say the working with general education teachers where these models might be on the fairly newer side because they might have gotten their credential a while back.” Participant 1 echoed the sentiment, explaining that general education teachers may not understand the role of the special education teacher. She stated, “I always was looked at as the support, which what a lot of gen ed teachers see, special education teachers as the support, the one who, the one that has the knowledge with the strategies.” Further, Participant 1 shared,

A lot of gen ed teachers may not feel like they have the experience to support our students or they, I’ve had instances where I get a phone call to my students acting out, my students having a hard time. “Can you come support him? Can you come get him?”

Five of the 12 participants interviewed mentioned that one challenge they faced is the lack of desire on the part of the general education teacher to participate in coteaching. Participants 3, 5, 6, 10, and 11 agreed that finding willing general education teachers was a challenge.

**Theme 12: Time and space for other responsibilities.** In further analyses of the data of Interview Questions 3 and 5, the fourth most frequent responses were coded to
time and space for other responsibilities. This theme was noted in seven of the 12 face-to-face interviews with a frequency of 17 (Table 17).

Table 17

<table>
<thead>
<tr>
<th>Theme</th>
<th>P</th>
<th>I</th>
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<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Time and space for other responsibilities</td>
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<td>17</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

*Note. P = participants, I = interviews, A = artifacts.*

Seven of the 12 participants mentioned the amount of other responsibilities they have in addition to coteaching that made being part of a coteaching team a challenge. They referenced writing IEPs, testing students, holding meetings, and teaching other classes as some of the other responsibilities they attended to.

Four participants mentioned having to attend IEP meetings as a challenge. Participants 2, 4, 10, and 11 all noted that there had been times that scheduled meetings got in the way of either collaboration time or actual class time. However, all noted that this did not occur often and was only a slight challenge. Participant 10 stated, “I think this school year I’ve maybe missed maybe one class because of an IEP. In other years it has been more than that, so it just depends.”

Three of the 12 participants stated that writing IEPs created a challenge for their work as coteachers. In reference to IEP writing, Participant 9 stated, “I really can’t get behind on that stuff, because there are dates and deadlines and stuff involved. And that, I would say, has been my biggest challenge.”

Three of the 12 participants were teaching other classes in addition to coteaching, magnifying the challenges. Participant 5 explained the complexity of her schedule:
There were years when I was split between different grade levels and coteachers, so I had eighth-grade curriculum, seventh-grade curriculum, then my own SPED class and that just limits the amount that I can collaborate with my coteacher because we’ve got three different lesson plans and a caseload.

This sentiment was echoed by Participants 8 and 9, who also teach other classes aside from their cotaught classes. Participant 8 summed up the challenges with these words:

I feel like special ed teachers can and will get burnt out. So there just needs to be maybe a little bit more consideration into that whole other job that we have to do and what that means in terms of our ability to how much time we actually have to devote to coteaching. It’s not that we don’t want to, but it’s that we can’t ignore the other part of the job.

Four of the 12 participants noted that a challenge to working as part of a coteaching team was the general education teacher’s unwillingness to share the space and responsibilities of teaching. Participant 10 mentioned that working in another teacher’s classroom was a challenge and said, “I really have to make sure that I am seen as an equal in the classroom, because while I’m an equal in everything else with creating instruction and grading and time that I put in, it is her classroom.” She also noted that she believed that she would never be viewed as an equal due to the fact that she was a visitor in the classroom.

**Data Analysis for Research Question 4**

Research Question 4 was stated in the following way: “What recommendations do secondary school special education teachers have for their teacher education program to
further prepare candidates to serve as effective co-teachers?” The data for this question were gathered using Interview Question 6 of six.

IQ 6: What recommendations do you have for your teacher education program in order to better prepare secondary special education teachers to work as part of a co-teaching team?

The data were analyzed and sorted into four themes based on the responses from 12 current secondary special education coteachers (Table 18).

Table 18

Summary Analysis of Data for Research Question 4: Theme, Participants, Sources, and Frequency—Highest to Lowest Frequency: Strategies

<table>
<thead>
<tr>
<th>Theme</th>
<th>P</th>
<th>I</th>
<th>A</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Expose preservice special education teachers to authentic coteaching experiences</td>
<td>10</td>
<td>31</td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>14. Expose preservice special education teachers to all grade levels K-12</td>
<td>8</td>
<td>14</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>15. Expose preservice special education teachers to the theory behind and models of coteaching</td>
<td>7</td>
<td>11</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>16. Have preservice general education teachers learn alongside preservice special education teachers</td>
<td>4</td>
<td>13</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

*Note. P = participants, I = interviews, A = artifacts.*

In summary, 10 of the 12 participants mentioned exposing preservice special education teachers to authentic coteaching experiences as a recommendation for further preparing secondary special education teachers to coteach with 31 frequencies. Eight of the 12 participants noted that exposing preservice special education teachers to all grade levels, K-12 was a recommendation with 14 frequencies. Seven participants stated that a
recommendation to further prepare special education teachers to coteach would be to expose them to the theory behind and models of coteaching during their teacher education program. Four of the 12 participants stated having general education preservice teachers learn alongside preservice special education teachers as a recommendation. As mentioned above, this information regarding the perceived challenges of working as part of a coteaching team was gathered from Interview Question 6. An analysis of the qualitative data for the themes in answering the fourth research question regarding the recommendations that secondary special education coteachers have for their teacher education programs to further prepare candidates to serve as effective coteachers are outlined in the following section.

**Theme 13: Expose preservice special education teachers to authentic coteaching experiences.** In analysis of the data of Interview Question 6, the most frequent responses were coded to exposing preservice special education teachers to authentic coteaching experiences. This theme was noted in 10 of the 12 face-to-face interviews with a frequency of 31 (Table 19).

Table 19

<table>
<thead>
<tr>
<th>Theme</th>
<th>P</th>
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<th>Total</th>
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<tbody>
<tr>
<td>13. Expose preservice special education teachers to authentic coteaching experiences</td>
<td>10</td>
<td>31</td>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>

*Note. P = participants, I = interviews, A = artifacts.*

Ten of the 12 participants mentioned that exposing preservice special education teachers to authentic coteaching experiences would help further prepare candidates to be
coteachers. They referenced observing coteaching through classroom observations and videos, doing demonstration lessons in their teacher preparation classes, and being required to coteach during their student teaching as recommendations.

Seven participants mentioned having to “do coteaching” as a recommendation. Participants 3, 4, 5, 6, 7, and 11 all suggested that preservice teachers be required to coteach during their student teaching time. Participant 8 emphasized how her student teaching experience was a benefit versus some of her colleagues who were not able to student teach:

If teachers were allowed to actually, I don’t know, work with a master teacher because I feel like my student teaching more than anything is what helped prepare me the most for what it would be like to be coteaching and having two teachers in the room.

Participant 6 had a similar experience, which she found to be most beneficial in preparing her to be a coteacher. She stated, “Student teaching, here we go. Yes, we had to call something different cause it you cotaught, you weren’t a master teacher and a student teacher, you were coteachers together. Just one actually got paid.” Participant 3 echoed that sentiments:

So I feel you can read about it. You can watch these videos about it, but it’s all until you’re actually doing it or you’re actually in the classroom seeing how it’s done that you’re . . . I feel that that’s how I would learn the best.

Participants 2, 8, and 12 believed that classroom role playing would also be a benefit to preservice special education teachers. Participant 12 had these recommendations for his teacher education program: “Maybe writing a lesson plan
together and then presenting a lesson to the class using one of these five methods,” and “I would pair two people together maybe once a week. ‘All right, it’s your turn,’ and work on all five of these at some time.” Participant 2 agreed with Participant 12 stating, I feel like delivering or being observed in a lesson, implementing a cotaugeth model would be, I think, really effective, and especially then being able to reassess it afterwards and discuss it and kind of see how to more effectively implemented would be beneficial.

Four of the 12 participants interviewed recommended seeing firsthand demonstrations of the five models of coteaching, whether by instructors in the class, videos, or observations of secondary school classrooms. Participant 10 stated it simply, “So I feel like that would be really helpful to see examples, what does that look like?” Participant 11 suggested having coteachers film themselves so that preservice teachers could “show it in the class and there could be questions and answers and stuff.” Participant 3 shared a similar suggestion for observing authentic coteaching in action: “Maybe doing more observations and when students are going through teacher education programs, maybe shadowing the coteaching methods.” Participant 2 recommended that the teacher education instructor do more to teach students about the models of coteaching. One suggestion he had was,

Well I was thinking even just how even in some of our classes, how we have multiple teachers in there and even if they were just delivering the instruction of what we were learning about, but in that style might be interesting.

Theme 14: Expose preservice special education teachers to all grade levels K-12. In further analyses of the data of Interview Question 6, the second most frequent
responses were coded to exposing preservice special education teachers to all grade levels K-12. This theme was noted in eight of the 12 face-to-face interviews with a frequency of 14 (Table 20).

Table 20

*Theme, Participants, Sources, and Frequency—Expose Preservice Special Education Teachers to All Grade Levels K-12*

<table>
<thead>
<tr>
<th>Theme</th>
<th>P</th>
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<td>14. Expose preservice special education teachers to all grade levels K-12</td>
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<td>14</td>
<td>14</td>
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</table>

*Note. P = participants, I = interviews, A = artifacts.*

Eight of the 12 participants mentioned that exposing preservice special education teachers to all grade levels K-12 would help further prepare candidates to be coteachers. They mentioned that special education teaching students are exposed to a wide range of information but are not taught the intricacies of applying what they learn to the different grade levels. Participant 6 summed up her recommendation by saying,

So because it’s the K-12, well, because I’d have the experience at both secondary and elementary. I think it’s important that you have both the experience, that you really, how student teaching practice in elementary as a coteacher, seeing what that looks like because that is a very different model because with elementary.

She further stated,

So I think it would be really important for a credential program to give you both experiences. Here’s what an elementary setting would be like how you’ve practiced out there with somebody in real practice and then move on to secondary so that you just know the differences in the classes.
Participant 5 shared her experience as a teacher education student by saying, “I just didn’t see a lot of examples of coteaching at the secondary level because my whole first year was getting my multiple subject and I think schools are getting better at it.” She noted,

I think a lot of teacher programs, I don’t know if it’s the districts around, get a lot of student teaching for special ed students at the elementary level, and I don’t know that many people who had experiences at the middle school or high school level.

These sentiments were echoed by Participants 1, 2, 4, 7, 8, and 11.

**Theme 15: Expose preservice special education teachers to the theory behind and models of coteaching.** In further analyses of the data for Interview Question 6, the third most frequent responses were coded to exposing preservice special education teachers to the theory behind and models of coteaching. This theme was noted in seven of the 12 face-to-face interviews with a frequency of 11 (Table 21).

<table>
<thead>
<tr>
<th>Theme</th>
<th>P</th>
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<th>A</th>
<th>Total</th>
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<tbody>
<tr>
<td>15. Expose preservice special education teachers to the theory behind and models of coteaching</td>
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<td>11</td>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

*Note. P = participants, I = interviews, A = artifacts.*

Seven of the 12 participants mentioned that being exposed to the theory behind coteaching and the different coteaching models would be a recommendation they have for their teacher education program. Participants 2, 3, 6, 9, and 10 all believed that a
greater emphasis needed to be placed on exposing preservice special education teachers to the models of coteaching. Participant 10 put it quite simply: “I think that it would be important to go through all the different models of coteaching.” In addition, Participants 6, 9, and 11 thought that more time needed to be spent on the theory behind coteaching. Participant 9 stated, as a recommendation, “Teaching it and all the benefits, that this is a thing happening in schools and to be prepared for it.” When talking about the ability to promote coteaching with administrators who may not be informed, Participant 6 felt that learning about the theory behind her helped her to make her case. She said, “So I felt like once I had a really good understanding of why coteaching and had data to support it, then administrators are like, well of course.” Participants 9 and 12 believed that learning about the theory and models of coteaching was so important that, according to Participant 12 there should be “a semester long class on coteaching.” Participant 9 echoed this: “More information in general, like have to read an entire book about it, I suppose. Have a whole textbook dedicated to it that you’d have to read, be responsible for reading.”

**Theme 16: Have preservice general education teachers learn alongside preservice special education teachers.** In further analyses of the data for Interview Question 6, the fourth most frequent responses were coded to have preservice general education teacher learn alongside preservice special education teachers. This theme was noted in four of the 12 face-to-face interviews with a frequency of 13 (Table 22).

Although only four of 12 participants mentioned having preservice general education teachers learn alongside preservice special education teachers as a recommendation they would have for their teacher education program, those who did mentioned it several times each, as demonstrated by the frequency of 13 associated with
the interviews. Participants 1, 7, 9, and 10 were passionate when explaining the reasons behind their suggestion.

Table 22

<table>
<thead>
<tr>
<th>Theme</th>
<th>P</th>
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<th>A</th>
<th>Total</th>
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<tbody>
<tr>
<td>16. Have preservice general education teachers learn alongside preservice special education teachers</td>
<td>4</td>
<td>13</td>
<td></td>
<td>11</td>
</tr>
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</table>

*Note.* P = participants, I = interviews, A = artifacts.

Participant 1 believed that there was a disconnect between the special education teachers and the general education teachers. She explained,

> I think, I’m not sure the preparation that our gen ed teachers go through, and I believe they only go through like an intro special education class, which is very minimal, and it’s really difficult to understand our population with not having that knowledge. So I think that’s where there’s a disconnect.

She had the following solution:

> We talked about possibly, in the gen ed programs, providing, or not only just having our gen ed teachers taking introduction to special education, but maybe having them do, having them maybe exposed to more and having them exposed to possibly coteaching.

Participant 7, a teacher who felt most prepared to coteach by her teacher education program, expressed her concern:

> I think the biggest thing that stands out for me is, well, specific for our credentialing program at [my school], is maybe incorporating general education
students or credentialing students into that learning center program because I
don't know what kind of exposure our gen education credentialing students get to
coteaching or if they’re exposed to the models, if they practice coteaching. So, I
think that’s the biggest one that stands out to me.

She also felt, that in order for coteaching to be successful, general education teachers
should learn about it as well. She stated,

But I think even just the littlest thing of more so the general education
credentialing students getting that exposure because we’re getting that exposure,
but if we’re the only ones getting it, then we have to go and teach the general
education teacher.

Likewise, Participant 9 recommended having general education and special
education preservice teachers take at least some classes together. For example, she said,

Maybe you devote four class meetings to it per semester, or something to where
there’s, in your teacher program, some collaboration where you can exchange
ideas and perspectives, and, “I think this, and I think this,” and then that way, the
general ed people who will be general ed teachers who are also jazzed about
coteaching would also have sort of this knowledge of what’s going on.

She further suggested,

And maybe even having some type of collaboration between the departments, the
people in classes; people who are pursuing a general education credential and a
special education credential having times when these two groups, however they
would organize it, whether they meet as individuals or meet as a class and have a
session together.
Participant 10, believing that general education teachers can be resistant to coteaching, recommended this to her teacher education program: “I think it needs to be not only in a special education program that they’re teaching coteaching, but also in a general education program. Gen ed teachers are being taught how to co-teach as well.”

Summary

This chapter has provided a detailed review of the purpose statement, research questions, and methodology, including the data collection process, population, and sample. A comprehensive presentation and analysis of the findings developed from the data, which included 12 interview participants with supporting evidence from artifact review. This study was designed to explore how secondary special education coteachers described how their teacher education program prepared them to work as part of a coteaching team, the perceived benefits and challenges of working as part of a coteaching team, and to seek recommendations for their teacher education programs to further prepare candidates to serve as effective coteachers.

Sixteen themes emerged from the data regarding coteachers’ preservice preparation, perceived benefits and challenges, and recommendations (Table 23).

Chapter V presents a final summary of the research study, including major findings, unexpected findings, and conclusions as a result of the study. The findings and conclusions are followed by implications for action, recommendations for further research, and concluding remarks and reflections.
Table 23

*Research Questions, Themes, Participants, Frequency*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Theme</th>
<th>Participants</th>
<th>Freq.</th>
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<tr>
<td>Research Question 1</td>
<td>1. Theoretical exposure through books, lecture, and observations</td>
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<td></td>
<td>2. Practice within special education coursework</td>
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<td>25</td>
</tr>
<tr>
<td></td>
<td>3. No or minimal exposure to coteaching models</td>
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<td>21</td>
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<td>4. Coaching from a mentor teacher on coteaching during student teaching</td>
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<td>14</td>
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<td>Research Question 2</td>
<td>5. Improves student behavior and academic achievement</td>
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<td>50</td>
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<td></td>
<td>6. Improves the expertise and skills of both teachers</td>
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<td>23</td>
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<td></td>
<td>7. Increased inclusivity of special education students</td>
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<td>16</td>
</tr>
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<td></td>
<td>8. Increases special education teacher’s content knowledge</td>
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<td>13</td>
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<td>Research Question 3</td>
<td>9. Time for collaboration on curriculum, roles and responsibilities</td>
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<td>26</td>
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<td>10. Differences in personality or educational philosophy</td>
<td>10</td>
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<td>11. General education teacher’s attitude and lack of knowledge about special education</td>
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<td>25</td>
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<td></td>
<td>12. Time and space for other responsibilities</td>
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<td>Research Question 4</td>
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<td>14</td>
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<td>15. Expose preservice special education teachers to the theory behind and models of coteaching</td>
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<td>11</td>
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<td>16. Have preservice general education teachers learn alongside preservice special education teachers</td>
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CHAPTER V: FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Findings, conclusions, and recommendations are presented in the final chapter of this research study. The key findings and the unexpected findings are reported, followed by the conclusions drawn from those findings. A discussion regarding the implications for action outlines strategies that can be used by teacher education programs to further prepare candidates to serve as effective coteachers. Additionally, there are recommendations for future research that may add to the breadth and/or depth of knowledge surrounding the topic of preparing secondary special educators to work as coteachers. This final chapter concludes with the researcher’s final reflections and remarks.

Methodology Review

A qualitative multicase study was used to describe and explain how secondary school special education teachers perceived their teacher education programs prepared them to work as part of a coteaching team, the perceived benefits and challenges of coteaching, and recommendations that current coteachers have for their teacher education program to further prepare candidates to be effective coteachers. The methodology was designed in order to answer these research questions:

1. How do secondary school special education teacher describe and explain the ways in which their teacher education program prepared them to work as part of a coteaching team?

2. What are the perceptions of secondary school special education teacher of the benefits of working as a member of a coteaching team?
3. What are the perceptions of secondary school special education teachers of the challenges of working as a member of a coteaching team?

4. What recommendations do secondary school special education teachers have for their teacher education programs to further prepare candidates to serve as effective coteachers?

A qualitative multicase study research design was used to describe and explain how early career special education teachers perceived the effectiveness of their teacher education program to prepare them to be secondary school special education coteachers, what they perceived the benefits and challenges of being a coteacher are, and to make recommendation to inform their teacher education programs on how to further prepare students to be effective coteachers. The researcher conducted in-depth interviews with 12 current secondary special education coteachers. The 12 qualitative interviews were conducted in the location most convenient to the leader and were recorded with permission. The data obtained for the study were stored securely by the researcher.

The population for the current study was superintendents leading for social justice and racial equity. A database of current secondary school special education coteachers does not exist, so purposeful and reputational sampling was used to select participants for the study from recommendations made by the special education teacher credentialing program managers from three California State Universities identified as having a focus on collaboration and/or coteaching. The three universities were California State University, Los Angeles, California State University, San Marcos, and Sonoma State University. A total of 16 participants were recommended. Four of the identified participants were not available to participate in the study.
Key Findings

In order to establish the key findings for the current study on how teacher education programs can further prepare candidates to be effective coteachers, the qualitative data were compiled and analyzed into themes. The qualitative data consisted of data from 12 face-to-face, in-depth interviews with artifact review evidence support from various universities. Within the qualitative data, the researcher established that the data having 11 or more occurrences with at least four of the 12 participants in the collected responses were considered a theme. The described preparedness of the participants, the perceived benefits and challenges of coteaching, and recommendations were all considered when identifying key findings. Current early career secondary school special education coteachers described and explained the following:

Key Finding 1

*There are substantial inconsistencies between teacher education programs with regard to the amount of time spent on and the use of, multilayer instructional practices in teaching about coteaching.*

While all participants attended programs purporting to focus on coteaching, only teachers who attended one of the three universities had in-depth and extensive multilayer training programs that included exposure to the theory behind coteaching, observations of coteaching, and/or clinical practice of coteaching. Participants referred to receiving instruction regarding the five models of coteaching through textbooks, lectures, and observations validated by a frequency of 31 in Theme 1. Nine of the 12 participants believed that they were exposed to the theory behind the five models of coteaching in the classroom. Participant 6 stated, “So they really taught us about . . . it was like at the core
and mission of ‘you will be co-teaching this is the best way to support your kiddos. So let’s get you ready for it.’” Although she thought that she got a good theoretical foundation, she did not feel adequately prepared to implement coteaching when she graduated.

However, several participants, all of whom attended the same university program, felt much better prepared. In addition to believing he received a good theoretical base in the classroom, Participant 4 thought that participating in the program’s learning center was essential to his preparation. He stated,

We got partnered up with a different partner and we were getting the flexibility to do any of the coaching models that you’ve actually put out here. So, I was exposed to One Teach, One Assist, I was exposed to Parallel Teaching, Flexible Grouping, Station Teaching and Team Teaching. From my experience, I’ve done everything except for Parallel Teaching.

Participant 3 noted, “When I was doing the learning center, I feel the hands-on experience and teaching Saturdays with two other colleagues or classmates, I felt this applied more.”

Interviews with five participants revealed that they felt much less prepared for working as coteachers upon leaving their teacher education program. All five responded that although they may have been exposed to the models of coteaching, it was not emphasized by the program. Participant 9 remembered, “You know? It would’ve been a brief mention. So brief that it got lost and if they covered it, it would’ve been so brief that it was eclipsed by everything else.” None of the five participants were exposed to any observations or modeling of coteaching during their credential program. Thus, this
study found that participants attending the school who spent more time focusing on
coteaching and used adult learning theory left with a greater ability to coteach than their
peers from the other two schools.

**Key Finding 2**

*Coteaching benefits students, general education and special education teachers, and the school community*

Eleven of the 12 participants noted an improvement in student behavior and
achievement as a benefit of coteaching. These were evidenced mostly in Theme 5, with a
frequency of 50, and Theme 7, with a frequency of 16. As the research notes, it is
necessary to balance providing students with an adequate education and the need to be
inclusive in order to provide students with special needs an equitable education
(Berryman et al., 2015). In order to influence student learning outcomes, students must
be supported academically and feel a sense of belonging. Coteaching supports the
achievement of both general education and special education students. Participant 9
noted, “The students get more attention, all of them. They all get more support and
attention.” Participant 1 agreed, stating,

I would see a lot of students who struggled with the content, who required support
strategies, and I would work with maybe two or three of the students. Two or
three of my students and I would see two or three [gen ed] add onto my group,
which was great.

Behavior also improves for students with special needs. One participant noted
that peer pressure and a desire to not stand out prompts students to engage in more age-
appropriate behaviors. Participant 1 said, “Not all the time, but because the classes are
bigger, and they see their peers, and they don’t want to stand out in front of the football player, they don’t want to stand out in front of the cheerleader, they don’t.” Another factor adding to the improvements seen in students’ behavior is due to inclusivity. Participant 9 noticed an increase in student engagement in her cotaught math class:

I feel it is perhaps good for the students in the middle school social experience kind of situation. I have seen specific groupings of students or pairings of students that were working great together and they’re making progress and it’s not just one kid copying after often the other.

As evidenced in the data for Themes 6 and 8, secondary-level special education coteachers believed that they were able to increase their content area knowledge through working as part of a coteaching team. Many felt that they lacked the content area expertise that the single subject credentialed general education teacher possessed. Participant 11, who coteaches in a middle school math class, said, “For me, the benefit has been really learning the difficult CPM math curriculum and understanding the inside and out.” Even special education teachers who did possess a single subject credential thought that they gained content area knowledge as a coteacher. Participant 2 noted, “Even though I have my single subject in English and I majored in English for my undergrad, I still . . . I guess there are some things that I’m just not as comfortable or confident with, and so even getting that exposure.”

Although the general education teacher has the content area knowledge, the special education teachers believed strongly that they were able to contribute expertise in the area of instructional strategies. Participant 3 stated, “I do feel what I do bring into the table is my expertise and different methods and different ways that I can support students,
maybe strategies, maybe different resources that I can provide for students.” Participant 7 thought that her major contribution to the cotaught class was her ability to accommodate the needs of special education students in the general education classroom; she said, “And then, so just implementation of the strategies on my part with accommodations is where I really come in as a coteacher.”

Eight of the 12 participants interviewed noted that coteaching increased the inclusivity of special education students across the school site. Participants 2 and 9 pointed out that students with IEPs were interacting more with their general education peers rather than being segregated. In addition, Participant 2 mentioned that the feeling of inclusivity reached beyond just students but allowed for more integration of staff as well.

**Key Finding 3**

*When entering into coteaching at the secondary level, special education teachers found that the general education teachers did not understand special education or coteaching.*

Overall, the participants felt that, no matter how dedicated they were to coteaching themselves, the general education teachers were not. Ten of the 12 participants mentioned that a difference in personality and education philosophy created a challenge to coteaching. In addition, 10 of the 12 participants noted that the general education teacher did not have enough knowledge about special education in general and coteaching specifically. These were evidenced by Themes 10, 11, and 16. Research has shown the importance of educating general education teachers about students with disabilities, “A general educator cannot be expected to be successful at teaching in an
inclusive classroom without a solid foundation of knowledge” about disabilities, accommodations and the laws that govern special education (Worell, 2008, p. 45). Participant 3 expressed how difficult things can be when the general education teacher is not onboard with the coteaching model:

So it’s something that they have to adapt to and maybe learn about the different disabilities. So I can see how that could be a drawback, because some of them might be open to it, some of them might not be open to it. It just depends.

**Key Finding 4**

*Schools and districts were found not to have the processes in place to achieve the benefits of coteaching, including investing in building leadership capacity and allocating resources.*

All 12 participants mentioned a lack of time to collaborate as a challenge. Eleven of the 12 participants noted that lack of time to plan instruction and assign individual roles and responsibilities was a challenge. Seven of the 12 participants expressed that they felt that there was not enough time to plan for coteaching and fulfill their other responsibilities as special education case managers. These were evidenced mostly in Themes 9 and 11. Participant 2 lamented the fact that although he wanted to have a bigger role in planning for instruction, he was unable. He described himself as “feeling like I’m being preoccupied with these other responsibilities that I have, and so worrying that I’m not doing my part.” For Participant 11, her “other” responsibilities became so overwhelming that she had to pull back on the time she devoted to her cotaught class. She stated, “I was doing all this grading at home and I had no life, because I had all my own IEPs, and my meetings, and my e-mails, and this and that and so I stopped doing it.”
Research suggests that both general education and special education teachers feel that they do not have enough time to plan, teach, and assess their students, even in the most ideal circumstances. According to Carpenter and Dyal (2007), “It is imperative that the co-teaching team have time for planning lessons and differentiation strategies to meet the needs of all students” (p. 349). Additionally, the special education teacher needs time to manage his or her caseload, write IEPs, facilitate meetings, and often plan for other courses he or she teaches in addition to the cotaught classes. Only two participants, Participants 2 and 6, mentioned that they shared a common prep period with their general education coteaching partner. Research shows that in order for coteaching to be successful, teachers must have adequate time to plan and collaborate on lessons, devise common academic and behavior expectations, and to reflect on successes and areas of improvement. According to Murawski and Dieker (2004),

Planning time is an important part of any teacher’s schedule and is even more important for coteachers. During planning time teachers can identify the standards to be taught, the instructional strategies that will be most effective for delivering the content, and the way to appropriately differentiate the material for all learners. (p. 55)

**Key Finding 5**

*Participants recommended that preservice teacher preparation programs be redesigned to allow sufficient time and multiple opportunities for students to practice coteaching.*

Based on responses from 10 of the 12 participants, giving candidates more exposure to hands-on experiences was a key recommendation as evidenced by Themes
13, 14, 15, and 16. Although participants mentioned the importance of learning about the five models of coteaching in theory through textbooks and lecture, the majority felt that nothing prepared them for working as part of a coteaching team as much as actually doing it. Participant 3 said,

So I feel you can read about it. You can watch these videos about it, but it’s all until you’re actually doing it or you’re actually in the classroom seeing how it’s done that you’re . . . I feel that that’s how I would learn the best.

Participant 12 expressed that no matter how much a program tries to prepare a candidate, it is not enough. Participant 6 added that it is important for preservice teachers to be exposed to coteaching at both the elementary and secondary level. Participant 5 stated,

I think a lot of teacher programs, I don’t know if it’s the districts around, get a lot of student teaching for special ed students at the elementary level, and I don’t know that many people who had experiences at the middle school or high school level.

Even teachers who felt most prepared after graduating from their teacher education programs noted that it was important to expose candidates to coteaching with a general education teacher during their student teaching experience. Although teachers at this university get hands-on experience doing coteaching with another special education teacher candidate, the reality is that they will need to work with a general education teacher once they graduate. Participant 1 noted,

I think that’s why we come into, we have challenges when we come to work together. Because oftentimes, gen ed teachers go into their programs and become
gen ed teachers, and special education teachers go into a program to become special education teachers.

**Unexpected Findings**

Through analyzing the qualitative data, one unexpected finding emerged from the study. While interviewing the study participants, the researcher noted that there were vast differences in the amount and type of preparation that preservice teachers received about coteaching. Although coteaching was identified as best practice for educating students with special needs over 25 years ago (Cook & Friend, 1993), several participants stated that they received little to no exposure to coteaching during their teacher education program. Participants in the study received their credentials from one of three California State University (CSU) Teacher Education Programs with a stated focus on collaboration and coteaching, it was obvious to the researcher that the amount of exposure to the theory and practice of coteaching varied based on the university the participant attended.

**Conclusions**

The key findings resulted in four conclusions based on the responses of early career special education coteachers regarding their preservice preparation for coteaching, the benefits and challenges of coteaching, and their suggestions about how to further prepare preservice special education teachers to work as part of a coteaching team. The literature on coteaching and adult learning theory supports the conclusions.

**Conclusion 1**

*Preservice special education teachers are not receiving equivalent training on coteaching based on the institution they attend.*
There was great variability in the perceptions of the participants interviewed as to how much exposure they received to coteaching during their teacher education program. Six of the 12 participants in the study expressed having little to no exposure to coteaching during their time in the program. Two participants remembered receiving some instruction on the five models of coteaching but felt unprepared to implement them upon graduation. Only four participants, all from the same university program, thought that they were adequately prepared to coteach upon exiting the teacher education program.

**Conclusion 2**

*When teachers coteach with fidelity there are significant benefits to students, special education teachers, and general education teachers.*

The data show that coteaching benefits students both academically and behaviorally. Eleven of the 12 participants noted an improvement in academic achievement and behavior for students who participated in a cotaught classroom. This is in line with the research. A study conducted in Australia showed that coteaching “benefits students’ social and academic skills” (Bešić et al., 2017, p. 340). In addition, a study conducted by Murawski and Swanson (2001) showed that, although the data were limited, “coteaching had a positive impact on student achievement in mathematics and language arts and a reduction in the number of behavior referrals received by students” (p. 265).

Participants in this study felt that working as part of a coteaching team improved the skill set and academic knowledge of both the general education and special education teacher. In the secondary classroom, the general education teacher has the content expertise that the special education teacher may not have. However, special education
teachers receive a great deal of training on how to differentiate the curriculum as well as teaching strategies for a variety of learning styles. Eleven of the 12 participants noted that they felt coteaching improved the skill set of teachers in both the areas of content knowledge and instructional strategies. A study of coteaching at the middle grades showed that coteaching provided opportunities for teachers to both “self-reflect and assess what strategies worked and what did not work” and providing “better preparation of content” (Hurd & Weilbacher, 2018, pp. 10-11).

**Conclusion 3**

*Coteaching will not work as designed when general education and special education teachers do not have significant training with regard to shared common beliefs and educational practice about special education.*

Although some research shows that the attitude of general education teachers can have a negative impact on coteaching (Hakala & Leivo, 2017; Shamberger & Friend, 2013), other studies show that it is the general education teachers’ lack of knowledge about special education and the strategies needed to teach special education students that prevents general education teachers from embracing the concept of coteaching (Solis et al., 2012; Worell, 2008).

**Conclusion 4**

*Schools and districts do not allocate the necessary resources to achieve the benefits of coteaching.*

In order to effectively implement coteaching, structures, such as time for planning instruction, must be present. The time commitment required to effectively support coteaching as well as the time special education teachers need to attend to their other
responsibilities is a barrier to the effective implementation of coteaching at the secondary level. Eleven of the 12 participants mentioned time for collaboration and lesson planning as a challenge. Additionally, seven of the 12 participants felt that they did not have adequate time to fulfill their other responsibilities such as testing students, writing IEPs, and holding IEP meetings. The literature overwhelming supports this claim. Numerous studies have identified lack of time as the main reason that coteaching fails (Black & Simon, 2014; Fuchs, 2010; Shamberger & Friend, 2013; Worell, 2008). It is up to school leaders to put in the proper supports, such as common prep periods, paid release days, and other structures to support coteaching.

Conclusion 5

*University teacher education programs must allocate substantially more program time for students to understand the models of coteaching and have opportunities to practice coteaching with feedback.*

Ten of the 12 participants in the study would recommend that their teacher education programs provide more authentic coteaching experiences for teacher candidates; therefore, it can be concluded that there is a lack of hands-on coteaching experiences in special education teacher education programs. Joyce and Showers (1983) proposed that the most effective teacher training should include four components. Those four components are awareness, concepts and organized knowledge, application and principals and skills, and application and problem-solving. The last one, application and problem-solving, can only be accomplished through hands-on experiences. Joyce and Showers stated, “Only after this fourth level has been reached can we expect impact on the education of children” (p. 380). It is imperative that all secondary-level special
education teacher candidates receive instruction on and practice with coteaching in order to best educate students with special needs in the general education environment. One research study emphasized the importance of a systematic approach to educating secondary-level special education teachers for coteaching. The study describes an approach consisting of four components: an interactive seminar on collaboration and coteaching; required readings and reflections about coteaching; field-based observations of cotaught secondary classrooms; and debriefing and sharing sessions (Strieker et al., 2013, p. 165).

Implications for Action

Implication for Action 1: There Must be Consistency Across Special Education Teacher Preparation Programs Regardless of the University

It is alarming that the ability of a special education teacher to coteach is dependent upon which university he or she attended. This study showed that participants from one university were much more prepared than those from the other two universities. In order to remedy this, the following must occur:

- Standards for coteacher education must be put into place by the state commission on teacher credentialing to ensure that all students are getting equivalent exposure.
- University teacher education programs must calibrate their programs in order to reduce the disparity between programs.
- University teacher education programs must adopt adult learning theory when designing courses for the teacher education program.
Implication for Action 2: Coteaching Must Be Implemented With Fidelity at the Secondary School Level

Based on the literature and the qualitative data reported in this research study, when coteaching is implemented with fidelity, there is a significant benefit to students and special education and general education teachers. In order to achieve this benefit the following must occur:

- Coteaching teams must be comprised of two teachers who are compatible and have complimentary teaching styles.
- Members of a new coteaching team should attend training for coteaching together prior to the beginning of the school year regardless of previous coteaching experience.
- Both members of the coteaching team must share equally in the duties of planning, teaching, grading, and discipline.
- Ideally the class should be comprised of one third special education students. The cotaught class composition should be no lower than one fourth special education students and should not be greater than one half special education students.
- Students in the class must be mixed heterogeneously as to not segregate the special education students from the general education students.

Implication for Action 3: General Education Teachers Must Receive Adequate Training About Special Education and Coteaching

Based on the literature and qualitative data reported in this study, general education teachers lack knowledge about special education students and how to educate students with IEPs in their classrooms. It is important that prior to beginning a coteaching relationship, general education teachers receive adequate training on the
theory behind coteaching as well as learn about different disabilities and the federal
guidelines on educating students with disabilities. This should be a requirement for all
general education teachers who may have students with IEPs in their classroom, whether
they are coteaching or not, and should be done through district-sponsored professional
development.

• At the beginning of each school year, all general education teachers who may have
  students with IEPs in their classroom must attend a training delivered by school or
district staff on the elements of an IEP and the general education teachers’
  responsibility in implementing the IEP.

• All staff at a school site must receive in-service training on the theory of coteaching
  and how it is being implemented at the school site. This should be done when a
  person joins the school staff and be facilitated by school administration.

• As new laws are introduced regarding educating students with disabilities, an
  overview of the new law should be included as part of a general staff meeting.

**Implications for Action 4: Districts and Schools Must Provide the Structures and
Resources to Achieve the True Benefits of Coteaching**

Based on the literature and qualitative data reported in this research study, schools
and districts are not providing adequate structures or resources for the successful
implementation of coteaching. In order for coteaching to be successful and for students
and teachers to realize the true benefits of coteaching, the school must provide coteachers
with the structures and resources needed. At the site level, the following must be in
place:
• Both members of the coteaching team must have the opportunity to receive training and time to work together prior to beginning the coteacher relationship.

• The master schedule must be designed in a way to allow for common planning time within the school day so that teachers are not unduly stressed with having to coordinate schedules outside of school hours to design lessons and develop instructional strategies to meet the needs of all students.

• Schools need to provide release time for coteachers to receive additional training throughout the school year. This will help to develop the relationship between the two teachers thus providing more cohesive cotaught experiences for students.

• Every effort should be made by school administration to stay within the recommended ratio of 2:1 general education to special education students in a class.

• School leaders must try to keep coteacher teams intact from year to year.

At the district level, the following must occur:

• The school board must adopt policies that support coteaching as the preferred model for inclusion of students with special needs.

• District staff need to be trained on the benefits to students of coteaching.

• Funds must be allocated to school sites to support the additional staff needed to implement coteaching with fidelity, and contract language must address the different responsibilities required for special education coteachers.

**Implications for Action 5: University Teacher Education Programs Need to Be Redesigned to Better Prepare Teacher Candidates to Coteach**

Based on the literature and qualitative data reported in this research study, university teacher education programs are not adequately preparing special education or
general education teachers to work as coteachers. Although some universities are exposing special education students to the models of coteaching in theory, fewer are allowing preservice teachers to get hands-on experiences with coteaching. It is recommended that special education teacher education programs

• place a greater emphasis on collaboration and coteaching by embedding at least one unit on coteaching within each teacher education course.

• expose all preservice teachers to the five models of coteaching through lecture, modeling, and practice.

• require special education preservice teachers be required to coteach with a general education teacher as part of their student teaching, thus allowing preservice teachers an opportunity to experience coteaching when the stakes are lower.

Although not all general education teachers will become coteachers, all general education teachers will have students with special needs in their class at some point. General education teacher education programs, especially at the secondary level must

• place a greater emphasis on collaboration and coteaching as part of their general education credential program.

• emphasize how new skills learned during the general education teacher education program can be applied to special education students.

• require teachers to observe in a special education classroom and attend an IEP meeting as part of their preservice training.

Recommendations for Future Research

The current study added findings and conclusions to the literature regarding the preparation of secondary-level special education teachers to work as part of a coteaching
team. While the current study only includes special education coteachers who graduated from one of three selected CSU Teacher Education Programs, it has the potential to invite future research into how well teachers are being prepared to serve as coteachers. Based on data from the current study, the following are recommended for future research:

1. This study used a multicase study design to gather information from secondary-level special education teachers from a variety of universities. A future qualitative study could focus on a single case study of an exemplary university teacher education program.

2. The focus of this study was on the preparation of special education teachers to work as coteachers. A future qualitative multicase study could focus on the preparation of general education teachers to work as part of a coteaching team.

3. This study focused on coteaching as a method for educating students with special needs in the general education environment. Future research could focus on coteaching as a method for educating students with other needs such as English language learners using a qualitative multicase study design.

4. The focus of this study was on university preparation of special education teachers for coteaching. A future qualitative single or multicase study of exemplary university teacher education programs that prepare students to coteach would add to literature on preservice teacher preparation for coteaching.

5. This study focused on the preparation of secondary-level coteachers; however, more research is needed on the implementation of coteaching. Future research on schools or districts demonstrating exemplary secondary-level coteaching practice(s) through a
single or multicase study would significantly add to the literature on the topic of coteaching.

**Concluding Remarks and Reflections**

This research study focused on an area of education that has always been a passion. Although I was never a special education teacher, I have always been interested in best serving students with special needs. My first exposure to coteaching was in the San Diego Unified School District where I was both a teacher and an administrator. During that time, coteaching was implemented at the high school level to support students with IEPs in completing the requirements to receive a high school diploma. Upon moving into elementary-level administration, I realized that the systems in place did not support but in fact subverted the ability of students to achieve a high school diploma. With much pushback from both general education and special education teachers, I implemented a push-in/coteaching model rather than the self-contained model used at the time. Unfortunately, I was only there for a short time and was not able to see the change through.

When I moved to Sonoma County to work as a secondary-level administrator, I was again faced with the reality that students with special needs were not receiving the support needed to be successful in the general education environment. Fortunately, the district for which I work has decided to implement coteaching at the middle school level and gradually increase implementation through high school. While I am pleased with this development, I soon realized that there were many barriers to its success. Some of the most obvious barriers were the general education teachers’ resistance to coteaching and the school administrators’ lack of understanding about coteaching. But what most
surprised me was the special education teachers’ lack of preparedness and understanding of coteaching. Since my exposure to coteaching began in 2006, it was shocking to see that it was still a new concept in this district. This prompted my desire to learn more about how special education teachers are being prepared to coteach.

I am truly grateful to Brandman University for giving me the tools and opportunity to pursue this research. I am also grateful for the guidance provided by my cohort mentor and the support I received from my cohort sisters. But mostly, I am grateful for the teachers who were willing to be interviewed for this research study. Their candidness and honesty in answering my research questions allowed me to get an understanding of current practices both at the university level and the site level. It is my hope that my research will lead to better education for teachers and district staff in the area of effective coteaching. Coteaching is the best practice in exposing students with disabilities to grade-level curriculum, and it is the right thing to do for our students. I look forward to delving deeper into supporting students with special needs in my future research endeavors.
REFERENCES


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### Purpose Statement

The purpose of this qualitative multi-case study was to describe and explain how secondary school special education teachers perceived that their education programs prepared them to work as part of a co-teaching team.

A secondary purpose was to describe how secondary special educators described the benefits and challenges of working as part of a co-teaching team.

Lastly, this study sought to describe secondary school special education teachers’ recommendations for how teacher education programs could better prepare candidates to serve as members of a co-teaching team.

### Research Questions

1. How do secondary school special educator teachers describe and explain the ways in which their teacher education program prepared them to work as part of a co-teaching team?

2. What are the perceptions of secondary school special education teachers of the benefits of working as a member of a co-teaching team?

3. What are the perceptions of secondary school special education teachers about the challenges of working as a member of a co-teaching team?

4. What recommendations do secondary school special education teachers have for their teacher education programs to further prepare candidates to serve as effective co-teachers?

### Interview Questions

1. Please describe the types of co-teaching you were exposed to (show them your models) in your teacher education program.

2. Tell me about the way in which your teacher education program prepared you to work as part of a co-teaching team.

3. Tell me about your experiences of being part of a co-teaching team.

4. Describe the benefits you have experienced working as part of a co-teaching team.

5. Describe the challenges you have faced as work as part of a co-teaching team.

6. What recommendations do you have for your teacher education program in order to better prepare secondary special education teachers to work as part of a co-teaching team?
APPENDIX B

Certificate of Completion

This is to certify that:

Vicki Zands

Has completed the following CITI Program course:

Human Subjects Research
Social-Behavioral-Educational Researchers
1 - Basic

Under requirements set by:

Brandman University

Verify at www.citiprogram.org/verify?w13c78bf/d-c754-475c-a476-0d8b1a857b17-33995626
Dear Vicki Zands,

Congratulations, your IRB application to conduct research has been approved by the Brandman University Institutional Review Board. This approval grants permission for you to proceed with data collection for your research. Please keep this email for your records, as it will need to be included in your research appendix.

If any issues should arise that are pertinent to your IRB approval, please contact the IRB immediately at BUIRB@brandman.edu. If you need to modify your BUIRB application for any reason, please fill out the "Application Modification Form" before proceeding with your research. The Modification form can be found at the following link: https://irb.brandman.edu/Applications/Modification.pdf.

Best wishes for a successful completion of your study.

Thank you,

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APPENDIX D

Participant Interview Guide

My name is Vicki Zands and I am a doctoral candidate at Brandman University in the area of Organizational Leadership. I am conducting research to determine how secondary school special education teachers perceived that their education programs prepared them to work as part of a co-teaching team. I am also seeking to understand how secondary special educators described the benefits and challenges of working as part of a co-teaching team. Lastly, I would like to know what your recommendations, if any, are for how teacher education programs could better prepare candidates to serve as members of a co-teaching team.

I am conducting approximately 12 interviews with teachers like yourself. The information you provide, along with historical and archival data, hopefully will provide a clear picture of how well secondary special education teachers are being prepared to work as co-teachers, the benefits and challenges of co-teaching, and gather some recommendations for how universities can better prepare candidates to work as co-teachers.

I would like to remind you that any information that is obtained in connection to this study will remain confidential. All of the data will be reported without reference to any individual(s) or any institution(s). After I record and transcribe the data, I will send it to you via electronic mail so that you can check to make sure that I have accurately captured your thoughts and ideas.

I would like to share with you the five models of co-teaching that may or may not pertain to your work:
A. **One Teach, One Assist:** This model, also known as “teaching on purpose” involves one teacher leading a lesson for the whole group of students while the second teacher circulates around the room and check-in with students to make sure they understand the key concepts and provide in the moment feedback and prompts. The supporting teacher keeps notes on students who may need follow-up lessons.

B. **Parallel Teaching:** This model lowers the teacher to student ratio by half. Also called, Two Groups, Same Content, students in this model are divided into two heterogenous groups and taught the same content.

C. **Flexible Grouping:** Also referred to as Two Groups, Different Content, students are divided into two groups based on their understanding of a specific topic or concept and not on their designation as special education or general education. In this model, one teacher reteaches while the other gives an alternative lesson. The teachers in this scenario alternate between the group to which they provide instruction, allowing both teachers and opportunity to work with the full range of ability levels.

D. **Station Teaching:** Students in this model are divided into smaller groups, typically three. The groups may be heterogeneous or based on skill level and/or need. The groups then rotate through “centers” or work on specific assignments based on need. Teachers in this type of co-teaching model can serve one of several roles including: monitoring student progress, providing mini lessons to small groups of students who rotate through, or work with one group of students the entire period while the other teacher monitors the rest of the class.
E. Team Teaching: This is perhaps the most difficult model to implement. Co-teaching in this way involves both teachers taking responsibility for teaching a whole class of students by sharing the lesson responsibilities. For example, one teacher may lead the lesson with the other teacher interjecting when appropriate to provide extra examples or extensions of the key ideas.

Do you have any questions regarding the five approaches to co-teaching as they are described above?

I will now begin the interview by asking you several questions that may be followed by clarifying questions as needed.

General Questions and Demographic Questions

1. Gender

2. How many years have you served as a secondary special education teacher?

3. How many years have you served as part of a co-teaching team?

4. From which university did you receive your secondary special education teaching credential?

Interview Questions:

1. Please describe the types of co-teaching, based on the list I showed you earlier, that you were exposed to in your teacher education program.

   Prompts: To what extent? How often? When?

2. Tell me about the way in which your teacher education program prepared you to work as part of a co-teaching team.

   Prompts: Tell me more about that. How did they do that? When?

3. Tell me about your experiences of being part of a co-teaching team.
Prompts: What happened? What was your role? How was that decision made?

4. Describe the benefits you have experienced working as part of a co-teaching team.
   Prompts: How did that happen? What made it a benefit?

5. Describe the challenges you have experienced working as part of a co-teaching team.
   Prompts: How did that happen? What made it a challenge?

6. What recommendations do you have for your teacher education program in order to better prepare secondary special education teachers to work as part of a co-teaching team?
   Prompts: Can you be more specific? Can you elaborate on what you mean by…?

Thank you again for agreeing to participate in this study. Please reach out to me if you have any questions or concerns at vzands@mail.brandman.edu or 619-890-0119. I look forward to seeing you during our scheduled meeting time.

Vicki Zands