## THE LIVED EXPERIENCES OF CO-TEACHERS WHO CO-TAUGHT VIRTUALLY DURING COVID-19: A QUALITATIVE HERMENEUTIC PHENOMENOLOGICAL STUDY

by

Carmean Matthews

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy in Education: Special Education

Liberty University

2023

# THE LIVED EXPERIENCES OF CO-TEACHERS WHO CO-TAUGHT VIRTUALLY DURING COVID-19: A QUALITATIVE HERMENEUTIC PHENOMENOLOGICAL STUDY

by Carmean Matthews

A Dissertation Presented in Partial Fulfillment Of the Requirements for the Degree Doctor of Philosophy in Education: Special Education

Liberty University, Lynchburg, VA

2023

APPROVED BY:

Alisha Castaneda, Ed. D., Committee Chair

Pat Ferrin, Ed. D., Committee Member

#### ABSTRACT

The purpose of this hermeneutic phenomenological study was to describe and understand the experiences of co-teaching all-online through the perspectives of general education and special education co-teachers at the middle school level during the COVID-19 pandemic. This study followed Bandura's social cognitive theory with emphasis on self-efficacy and reciprocal determinism as it explains how people think, feel, motivate themselves, and behave. The study answered the following overarching research question: How do co-teachers perceive their ability to implement all-online learning during the COVID-19 pandemic? The school setting for this study is in Sunny County Public Schools (pseudonym) which is a suburban public school district in East Georgia. The researcher used individual interviews, focus groups, and journal prompts to triangulate the data. A cross-case and thematic analysis organized the findings of the co-teachers' descriptions into themes for an analysis of each perspective during the pandemic. Three themes emerged from the data that include building relationships, collaborating effectively, and adapting to the virtual environment. The study provides valuable insights into the opportunities and recommendations for improving virtual co-teaching practices, with implications for school districts and co-teachers. Future research is recommended to further explore the impact of virtual co-teaching on teacher self-efficacy, collaboration, and student achievement.

*Keywords*: Co-teaching, COVID-19, Barriers to co-teaching, Emergency remote learning, benefits of co-teaching

## **Copyright Page**

© 2023, Carmean Matthews

#### Dedication

I dedicate this dissertation to everyone who has helped me in any way to reach my goal. To my Lord and Savior, whom all good things flow, I dedicate this dissertation to you. To my husband thank you for supporting me through 15 years of secondary education. To my children, thank you for allowing me the time to complete my homework. You all are my backbone, and I could not have done this without your on-going support and love. To my mother, thank you for always pushing me towards greatness and believing that I can and will do all things through Christ. To my mother-in-law, thank you for encouraging me to become a teacher and always lending a helping hand. To other family members (my brother, father, cousins, aunts, grandparents, and uncles) thank you for your encouraging words. To my friends, babysitters, co-workers, and classmates thank you for the motivational conversations, your assistance with my children, and being present to listen to me.

### Acknowledgments

I would like to acknowledge all my professors who have given me feedback, advise, and have taught me how to be a scholar. Additionally, I would like to acknowledge my committee, thank you for accepting me, working with me, and challenging me to do the best work possible. Lastly, thank you Liberty University for providing a Christian based platform for me to study the word of God.

## **Table of Contents**

ABSTRACT
Copyright Page4
Dedication
Acknowledgments
List of Tables10
List of Abbreviations11
CHAPTER ONE: INTRODUCTION
Overview12
Background12
Historical Context
Theoretical Context14
Social Context16
Problem Statement
Purpose Statement
Significance of the Study
Research Questions
Definitions
Summary
CHAPTER TWO: LITERATURE REVIEW
Overview
Theoretical Framework
Related Literature

Summary	
CHAPTER THREE: METHODS	
Overview	57
Research Design	
Research Questions	
Setting and Participants	60
Setting	60
Participants	62
Researcher Positionality	64
Interpretive Framework	64
Procedures	70
Data Collection Plan	
Individual Interviews (Data Collection Approach #1)	74
Journal Prompts (e.g., Data Collection Approach #2)	
Focus Groups (e.g., Data Collection Approach #3)	
Data Synthesis	
Trustworthiness	
Credibility	
Transferability	
Dependability	
Confirmability	
Ethical Considerations	
Summary	

CHAPTER FOUR: FINDINGS	
Overview	
CHAPTER FIVE: CONCLUSION	
References	117
Appendix A	161
IRB Approval	161
Appendix B	
RCPS Approval Letter	
Appendix C	164
Principal's Permission Request	
Appendix D	165
Informed Consent	165
Appendix E	
Participant Recruitment Email	
Appendix F	169
Interview Questions	169
Appendix G	170
Focus Group Questions	170
Appendix H	
Journal Prompts	171

### **List of Abbreviations**

Individuals with Disabilities Education Act (IDEA)

Free and Appropriate Public Education (FAPE)

Least Restrictive Environment (LRE)

Emergency Remote Learning (ERL)

Students with Disabilities (SWD)

Students with Special Education Needs (SEN)

Education for All Handicapped Children Act (EHA)

Individualized Education Plan (IEP)

No Child Left Behind Act (NCLD)

#### **CHAPTER ONE: INTRODUCTION**

#### Overview

The World Health Organization (WHO, 2022) declared COVID-19 a global pandemic forcing teachers and students to adapt to remote-online classes. Many school districts switched to remote-online learning immediately, and teachers had to quickly re-design the curriculum and instruction that administrators initially designed for face-to-face teaching (Cucinotta & Vanelli, 2020). This hermeneutic phenomenological study describes the lived experiences of middle school special education and general education co-teachers from suburban East Georgia while co-teaching virtual classes during the COVID-19 pandemic in the 2020-2021 academic year. Through this study, the teachers described their experiences with co-teaching together in a completely online teaching format. This chapter introduces the research and discusses the history of inclusive education and how it led to co-teaching as a popular service delivery model. The following sections address the background, problem, and purpose statement, the significance of the study, research questions, definitions, and a chapter summary.

#### Background

Students with disabilities have traditionally faced exclusion and mistreatment by educational systems (Yell et al., 2020a). During the COVID-19 pandemic, American K-12 public schools followed a standard instructional approach that was not tailored to individual needs to educate students with and without disabilities (Adkins & Guerreiro, 2018). Therefore, the background section reviews the research problem's historical, theoretical, and social context. The historical context section briefly discusses inclusive education and the emergence of co-teaching. The theoretical contexts section describes pivotal studies and theories that are the basis for this study. Additionally, the social context section addresses the social aspects related to the study.

#### **Historical Context**

Historically, stakeholders separated students with disabilities into separate classrooms categorized by disability (Williamson et al., 2020). Educational leaders often institutionalized these students, isolated them from their peers, and provided instruction in self-contained classrooms consisting only of other students with disabilities (Coviello & DeMatthews, 2021). In 1954, the U.S. Supreme Court case Brown vs. Board of Education sparked a new debate to make education equal for Black people and all students regardless of race, gender, or disability (Yell & Bateman, 2019). Other monumental court cases (e.g., Mills vs. Board of Education of District of Columbia and PARC vs. Commonwealth of Pennsylvania) followed the Brown decision (Yell, 2022). Together, these cases set a precedent for the ruling that every student deserves a free and appropriate public education (FAPE) and the foundation for the Education for All Handicapped Children Act (EHA) (Colker, 2020; Williamson et al., 2020).

EHA (1975) mandated public schools in each state to provide students with disabilities equal access to education in the least restrictive environment (LRE) (Ennis et al., 2017). In 1990, it was reauthorized and named the Individuals with Disabilities Education Act (IDEA) (Yell & Bateman, 2019). Around 1994, representatives from 92 governments met in Spain to influence change worldwide, with two of the most influential documents for inclusive education, the Salamanca Statement, and the Framework for Action on Special Needs Education (Joyce et al., 2020). Beyond these measures, the initiative to include all students receiving a FAPE continues to advance.

In response to legislation, evidence reveals that schools adopted inclusive practices to accommodate special-needs students in general education classrooms (Cook et al., 2021; McKenna & Brigham, 2021; Ricci et al., 2019). The laws legislators passed after the 1970s to

protect students with special needs and disabilities led to co-teaching practices (DeMartino & Specht, 2018; McKenna & Brigham, 2021). Co-teaching has become a widely practiced model for schools in the United States (Chitiyo & Brinda, 2018; Pancsofar & Petroff, 2013). Co-teaching emerged as a response to the reauthorization of the Individuals with Disabilities Education Act of 2004 (IDEA) and the No Child Left Behind Act of 2001 (NCLB) (Alsarawi, 2020). These acts called for high-quality teaching and the inclusion of students with disabilities (SWD). Thus, school officials have adopted co-teaching practices to improve equality for students with disabilities.

A co-taught classroom includes a special and general educator who blends their expertise to share roles and responsibilities and implement differentiated instructional methods for students with and without disabilities (Strogilos et al., 2020). Co-teaching includes using the six co-teaching models: alternative teaching, one-teach-one-assist, one-teach-one-observe, parallel teaching, station teaching, and team teaching (Friend et al., 2010; King-Sears & Jenkins, 2020; Sinclair et al., 2018). Researchers have emphasized that the best outcomes for students in a cotaught class occur when co-teachers develop parity; in this scenario, students and staff view the co-teachers as equals who share roles and responsibilities (Hedin & Conderman, 2019). Coplanning, co-instructing, and co-assessing are the foundations for effective co-teacher collaborations (Rodriguez et al., 2021). Ineffective co-teaching causes challenges (Alnasser, 2021; Chitiyo, 2017; Scruggs & Mastropieri, 2017). Thus, co-teaching is a collaborative effort that affects all parties involved (Gbènakpon, 2018).

#### **Theoretical Context**

This qualitative study followed Bandura's (1977a, 1986) social cognitive theory (SCT) to understand middle school general and special education teachers' virtual co-teaching experiences during the 2020-2021 academic year. Bandura introduced the SCT to explain the interrelationships between human behavior, motivation, and action. This theory also assumes that environmental factors (e.g., culture), personal attributes, and behavior influence how individuals accomplish goals (Beauchamp et al., 2019; Pressley, 2021). This dissertation used SCT as a framework for researching teachers' self-efficacy in academic spaces, particularly regarding middle school co-teachers' virtual instructional experiences while teaching during the COVID-19 pandemic in the 2020-2021 school year.

#### **Co-teaching and Theories**

Researchers use a variety of theories to frame their studies on co-teaching. One approach complementing SCT is Vygotsky's (1962) social development theory (SDT). Various researchers use the zone of proximal development, a concept from SDT, to discuss how co-teaching allows for differentiation and highlights the importance of the social environment for learning (Murawski & Spencer, 2011; Murphy et al., 2015). Teachers' self-efficacy is another prominent theory used by researchers to explore the practice of co-teaching at the K-12 level. Studies have found a connection between teachers' self-efficacy and co-teacher effectiveness (Hawkman et al., 2019; Wilson et al., 2020).

#### Virtual Co-teaching and Theories

After a thorough search for evidence of theory in co-teaching in the virtual K-12 environment, only a few articles explicitly related to general education teachers and collegiate education surfaced. Pressley (2021) applied the SCT framework in the study to explain how selfefficacy shapes the way elementary teachers perceived their instructional ability during the COVID-19 pandemic. Burks (2004), Scribner-MacLean and Miller (2011), and Wilson and VanBerschot (2014) all spoke regarding co-teaching online college courses. The authors of these articles did not specify a theoretical framework for their studies; however, Burks' (2004) purpose was to examine the professors' perception of their first-year experience. Rather than focusing on theory, Wilson and VanBerschot (2014) state that they use a practice-centered approach to instructional design to tell a complete story and fill in the gaps more than a typical theory-based research study. Scribner-MacLean and Miller (2011) discussed different strategies other researchers have identified for successfully co-teaching online college students.

#### **Social Context**

Collaboration is critical for developing practices that effectively combat challenges in educational contexts (Duran et al., 2021). Co-teaching is a direct collaborative model (Murawski & Dieker, 2008), defined as two teachers who share the responsibility of instructing all students within an inclusive classroom by co-planning and co-assessing (Colson et al., 2021; Friend & Cook, 2017). Recently, co-teaching has become the most used and effective instructional model worldwide (Pancsofar & Petroff, 2016). However, despite the increasing practice and evidence of the benefits, co-teachers report challenges (Duran et al., 2021). In addition, research has repeatedly shown a lack of knowledge by teachers and schools in implementing co-teaching practices (Alnasser, 2021; Casserly & Padden, 2018).

#### **Professional Development**

Co-teachers have reported feeling underprepared to co-teach due to inadequate preservice training (Kim & Pratt, 2021; Rexroat-Frazier & Chamberlin, 2019) and in-service professional development (Pancsofar & Petroff, 2016; Rexroat-Frazier & Chamberlin, 2019). Researchers found that general education teacher preparation programs emphasize content proficiency more than special education preparation (Colson et al., 2021). In contrast, special education preservice teachers receive training in co-teaching practices; however, the training centers more on

exceptionality categories and behavior management than collaboration with a general education teacher (Kim & Pratt, 2021). Once in service, co-teachers should receive professional development; however, researchers are finding that teachers are required to implement coteaching prematurely before receiving the training (Pancsofar & Petroff, 2013; Shoulders & Krei, 2016). Teachers with more training opportunities experience a cheerful outlook towards coteaching and feel more confident implementing it than teachers without co-teaching training (Guise et al., 2017; Pancsofar & Petroff, 2013).

#### Impact of Co-teachers' Attitudes on Students

Teachers' attitudes toward inclusive practices impact their instructional delivery (Rexroat-Frazier & Chamberlin, 2019). Studies found that how teachers view co-teaching will significantly impact their classroom management (Rexroat-Frazier & Chamberlin, 2019). Teachers who do not consider themselves equipped to teach in an inclusive learning environment will negatively affect students' learning processes (Connor & Cavendish, 2020). However, when co-teachers have a positive outlook on co-teaching, the academic and social outcomes for students with disabilities improve (Alnasser, 2021). Additionally, approaching co-teaching with a positive attitude substantially impacts students' level of engagement (Strogilos & Avramidis, 2016).

#### **Those Who Benefit**

Researchers have shown co-teaching as a beneficial instructional model for inclusive education (Alnasser, 2021; Duran et al., 2021; Pancsofar & Petroff, 2016). One way co-teaching benefits students is by exposure to different teaching perspectives. In addition, there are benefits to online co-teaching (Hulbert & McBride, 2004; Letterman & Dugan, 2004). Researchers have found that virtual co-teaching allows co-teachers to discuss course content with each other

(Hulbert & McBride, 2004; Letterman & Dugan, 2004). Thus, this study adds to the literature by describing co-teachers' experiences that were not familiar with virtual co-teaching during the pandemic. As a result, school districts in Georgia may understand what co-teaching looks like virtually and how middle school co-teachers in Eastern Georgia implement the inclusive practices of co-teaching.

#### **Problem Statement**

The problem is that general and special education co-teachers' experiences teaching in a virtual environment during the COVID-19 pandemic throughout the 2020-2021 academic year are underrepresented in the field (Alnasser, 2021; Casserly & Padden, 2018; Yu, 2019). In addition, researchers have identified that many educators do not understand transitioning from traditional face-to-face courses to all-online (Dyment & Downing, 2020). For instance, k-12 teachers had trouble adapting lesson plans that kept students interested; these teachers requested help planning activities for virtual learning and reported feeling that students were not receiving the full support (Cardullo et al., 2021; Crawford et al., 2021). Similarly, teachers of students with disabilities (SWD) reported having a lack of understanding of how to use various online tools and create personalized synchronous and asynchronous activities to support the academic goals of SWD (An et al., 2021; Cardullo et al., 2021; Parmigiani et al., 2021). Researchers have studied k-12 teachers' experiences teaching virtually through the pandemic. However, there lacks an emphasis on how teachers worked collaboratively in one virtual classroom during this timeframe.

After extensive research, studies on the experiences of implementing co-teaching practices virtually during the COVID-19 pandemic are small. For example, one study examined the co-teaching experience of two librarians who team-taught all-online classes and reported

enjoying sharing the workload and collaborating with a partner (Hulbert & McBride, 2004). However, the researchers did not conduct this study during the pandemic. The Covid-19 pandemic forced schoolteachers to implement co-teaching online without preparation or training (Chizhik & Brandon, 2020; Gillis & Krull, 2020; Waltman & McGinniss, 2020). Therefore, this study fills the gap in the research by reporting this new element of virtual co-teaching during the COVID-19 pandemic to understand the co-teachers' experiences in working together and any new barriers or best practices for co-teaching that may have resulted from these experiences.

#### **Purpose Statement**

The purpose of this qualitative hermeneutic phenomenological study was to describe and understand the lived experiences of middle school co-teachers who co-taught virtually in Eastern Georgia during the COVID-19 pandemic throughout the 2020-2021 academic year. Virtual coteaching is defined as two instructors, a general education teacher and a special education teacher, delivering instruction jointly using six different models (King-Sears & Jenkins, 2020; Pancsofar & Petroff, 2016; Sinclair et al., 2018).

#### Significance of the Study

The details surrounding the significance of the study describe how it contributes to the body of knowledge in education, specifically around co-teaching. First, the theoretical subsection briefly illustrates the social cognitive theory (SCT) and two components: self-efficacy and the model of triadic reciprocal causation. Next, the empirical section describes the qualitative hermeneutic phenomenological approach this study will take to describe co-teachers' experiences. Lastly, the practical area articulates the knowledge gained from this study and its significance to stakeholders in Eastern Georgia.

#### **Theoretical Significance**

This study focused on two tenants of Bandura's (1986) social cognitive theory (SCT), self-efficacy theory and the triadic reciprocal causation system. Self-efficacy is an individual's belief in their capability to perform a task well (Bandura, 1986; Zimmerman, 1983). Individuals with high self-efficacy view challenging tasks as obstacles to conquer (Bandura, 1997). In an educational context, an individual with low self-efficacy toward instruction lacks the confidence to help struggling learners and resists using varying teaching strategies to instruct all learners. Self-efficacy beliefs significantly contribute to the system of triadic reciprocal causation (Schunk & DiBenedetto, 2020). The triadic reciprocal causation model states that an individual's cognition, behavior patterns, and environmental events all operate as interacting determinants which influence one another bidirectionally (Bandura, 1978). This study's interacting components are the co-teacher's self-efficacy, the virtual teaching environment during a worldwide pandemic, and teaching practices.

#### **Empirical Significance**

This study employed qualitative methods to describe the lived experiences of middle school co-teachers during the COVID-19 pandemic. A hermeneutic phenomenological approach was used to interpret the co-teachers' experiences. Qualitative methods recognize the subjective experiential life of co-teachers and describe their experiences in depth (Patton, 2002). A hermeneutic phenomenology method was preferred for this study because it focuses on the essence of the teachers' lived experiences and my interpretation as an experienced co-teacher (Crowther et al., 2017). The study interpreted co-teachers' perceptions of their experiences co-teaching middle school students in a virtual classroom setting.

#### **Practical Significance**

This research study focused on teacher experiences co-teaching middle school students in North Central Georgia with and without disabilities in virtual classroom settings during the COVID-19 pandemic in the U.S. This hermeneutic phenomenology study may add to the small body of literature highlighting the need for more research on how co-teachers use inclusive practices virtually. Although implementing co-teaching procedures seems evident, teachers still misunderstand it in the face-to-face setting, let alone a virtual learning environment (Cruz & Geist, 2019). Understanding co-teachers' experiences in this new teaching environment may help address preparation for professional development for virtual co-teaching practices and ensure the successful inclusion of students with disabilities in virtual general education classrooms. The research findings may reinforce best practices, highlight the need for virtual co-teaching training programs, and illuminate new ways to support inclusive education.

#### **Research Questions**

Quality research questions (R.Q.s) are the backbone of a research analysis (Moustakas, 1994; van Manen, 1990). Ratan et al. (2019) recognized appropriate R.Q.s as feasible, interesting, novel, ethical, relevant, manageable, appropriate, potentially valuable, publishable, and systematic. Therefore, this qualitative study featured one central research question (R.Q.) and three sub-questions (S.Q.s). The R.Q. and S.Q.s yielded data to construct rich and detailed descriptions of middle school co-teachers' lived experiences working in distance learning classrooms throughout the 2020-2021 school year. Furthermore, information produced from R.Q. and S.Q.s could fill multiple gaps in middle school educators' co-teaching and virtual instructional experiences.

#### **Central Research Question**

What were the lived experiences of middle school co-teachers who co-taught virtually during the 2020-2021 school year?

#### **Sub Question One**

What were middle school general and special educators' experiences co-teaching in a virtual classroom during the 2020-2021 school year?

#### **Sub Question Two**

What were middle school co-teachers' experiences transitioning to virtual learning amidst the COVID-19 pandemic?

#### **Sub Question Three**

How was middle school co-teachers' self-efficacy influenced during the sudden change to virtual learning during the COVID-19 pandemic in the 2020-2021 academic year?

#### Definitions

- 1. *All-Online Learning* Schools offering an all-remote option or teachers assigned to run a class fully online (Serravallo, 2020).
- Co-teachers General education and special education teachers who collaborate to coinstruct and co-assess all students in an inclusive classroom using research-based inclusive practices (Pancsofar & Petroff, 2016).
- Co-teaching An instructional strategy that requires a general education teacher and special education teacher to deliver lessons together using six different delivery models:
  1) parallel teaching, 2) station teaching, 3) team teaching, 4) alternative teaching, 5) one-teach, one-assist, and 6) one-teach, one-observe (Pancsofar & Petroff, 2016).
- 4. *Free Appropriate Public Education (FAPE) Special education and related services* provided to K-12 students with disabilities at the expense of the public education system,

which meet the standards of the state educational agency, and conforms to the implementation of the individualized education plan (Yell & Bateman, 2019).

- 5. *Hybrid Models* Schools adhering to one of the following models: students attend classes in person half day and online half day five days a week; students participate in in-person courses a couple of days each week and study at home the other days, or some students attend classes online (via live streaming with video cameras) and others are physically present in the classroom, and the teacher manages both groups of students simultaneously (Serravallo, 2020).
- Inclusion The ongoing process of increasing all children's presence, participation, and achievements in public schools and identifying and removing barriers (Qvortrup & Qvortrup, 2018).
- 7. *Individualized Education Plan (IEP)* A technical document for an individual with special needs that outlines the supports, accommodations, and modifications given to the student in the least restrictive environment (LRE) (Joyce et al., 2020).
- 8. *Individuals with Disabilities Education Act (IDEA/IDEIA)* A mandate that encompasses procedural regulations and requires schools to identify students with disabilities (SWD) and create individualized education plans (IEPs) for them (Joyce et al., 2020).
- Intermittent Periods of Online Learning are all in-person but need to shift to online instruction when suspected or confirmed cases of COVID-19 popup and the class needs to go into quarantine (Serravallo, 2020).
- 10. *Least Restrictive Environment (LRE)* An environment where students with disabilities integrate with non-disabled students to the maximum extent possible. They may only go

to specialized or restricted settings when accommodations, modifications, supplementary aids, and supports are ineffective in the general education class (Brown et al., 2019).

- 11. *No Child Left Behind (NCLB)* A 2001 legislation aimed to close the achievement gap for students of different ethnicities, socioeconomic statuses, and disabilities by allowing the states more freedom over funding, support programs, and school choice options related to low-achieving schools (Brown et al., 2019).
- 12. *Online Learning* The use of technology to develop materials for virtual instructional delivery (Adedoyin & Soykan, 2020).
- 13. *Pandemic Teaching* Teaching amid a crisis such as the COVID-19 pandemic, which does not refer to teaching that occurs in a distance learning or homeschooling program that parents have selected for their child to attend (Fisher et al., 2021).
- 14. Teacher Self-efficacy The teacher's belief in their ability to organize and execute the necessary actions and skills to accomplish a specific teaching task (Knoblauch & Woolfolk Hoy, 2008).
- 15. *The Education for All Handicapped Children Act (EHA)* A law from Congress that provides federal funding to public schools that comply with the mandates to provide free and appropriate education to students with disabilities (Yell & Bateman, 2019).

#### Summary

This qualitative study described the lived experiences of co-teachers who co-taught virtually throughout the COVID-19 pandemic. Researchers have already identified that teachers feel underprepared to implement co-teaching practices in the classroom (Alnasser, 2021; Casserly & Padden, 2018; Yu, 2019). Therefore, it was essential to explore the lived experiences of co-teachers during the COVID-19 pandemic and the sudden switch to online learning

environments as it influences the experiences of middle school co-teachers. Suppose co-teachers were already facing challenges, such as a lack of knowledge of special education law and research-based inclusion practices (Shin et al., 2016). In that case, these changes may continue exacerbating those struggles, and new challenges may surface. Additionally, a crucial factor in this study was understanding middle school co-teachers' perceptions of their success and barriers to co-teaching implementation. This study adds to the existing research and bring awareness to the current issues middle school co-teachers in east Georgia are experiencing.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### Overview

A systematic review of the literature was conducted to explore the essence of the lived experiences of general and special education teachers who co-taught middle school students in virtual classrooms during the 2020-21 academic year due to the COVID-19 pandemic. This chapter presents a review of the current literature related to the topic of study. In the first section, two components of social cognitive theory are addressed, including reciprocal determinism and self-efficacy, followed by a synthesis of recent literature regarding the development of inclusive education, co-teaching as a service delivery model, and co-teaching in a middle school environment. Additionally, literature on the background of COVID-19 and the role the pandemic played in the experiences of co-teachers will be examined. Lastly, a gap in the literature is identified, presenting a valid need for the study.

#### **Theoretical Framework**

A teacher's working environment is complex and continuously changing. Teachers are responsible for navigating through this environment regardless of clear and identifiable success criteria. Teachers must rely on their capabilities to effectively influence their environment and regulate their behavior to succeed in their work setting. Tendencies associated with actively controlling the environment, the teachers' self-efficacy, and their actions would be beneficial to developing acceptable teaching practices (Converse et al., 2012). Therefore, the study's framework focused on Albert Bandura's (1986) social cognitive theory, emphasizing the triadic reciprocal causation model to describe the co-teacher's experiences through the interconnectedness of virtual environment, inclusive teaching practices, and self-efficacy.

#### **Historical Context**

Social cognitive theory (SCT) was born out of social learning theory, which emphasizes how individuals learn behavior through observing, modeling, and imitating other individuals' behaviors, attitudes, and emotional reactions (Bandura, 1977a). Once Bandura realized the theory did not account for how people develop various behaviors such as thoughts and feelings, he decided to modify the theory and developed a new name, social cognitive theory; (SCT), to help distinguish this updated version from its predecessor (Bandura, 1986). The new modification is a psychological perspective on human functioning that highlights the critical role of the social environment on an individual's motivation, learning, and self-regulation (Schunk & DiBenedetto, 2020). People's advanced cognitive and social capacities enable them to exercise a measure of control over their lives. In return, they are producers of their environment, not just products of it. Although the SCT is a term coined by Bandura, researchers, including Zimmerman (1983), Schunk (1989), Usher and Pajares (2008), have helped to develop, test, and expand the theory in significant ways. This study centered on Bandura's perspective using two components of SCT: triadic reciprocal determinism and self-efficacy.

#### **Triadic Reciprocal Determinism**

Social cognitive theorists view behavior as an influence of interactions between people's thoughts and their social context or environment. Thus, triadic reciprocal determinism says an individual's cognition, behavioral patterns, and environmental events all operate as interacting determinants that influence one another bidirectionally (Bandura, 1978). Therefore, the triadic components of causation are interlocking determinants of each other and consist of behavior, cognition, and social context (Bandura, 1986). Behavior is the individual's actions or decisions; cognition is their internal competencies such as self-efficacy; and environment relates to external

or situational factors (Schunk & DiBenedetto, 2020). For example, an individual's efficacy and outcome expectations affect how they behave, and the environmental effects created by their actions, in turn, alter their expectations (Bandura, 1978).

The researcher sought out co-teachers whose teaching environment abruptly changed due to the COVID-19 pandemic and described their experiences of implementing inclusive practices in the new virtual setting. The model of reciprocal determinism posits that the environment can influence an individual's thoughts and actions (Bandura, 1978), and the researcher described those influences on the participants through their accounts of their experiences. These experiences generated by the co-teachers' inclusive teaching practices also partly determine their self-efficacy and affect their subsequent behavior. The framework of triadic reciprocal determinism can shed light on behaviors based on co-teachers' working conditions and personal attributes. It could also provide context for understanding co-teachers' instructional practices (Hivner et al., 2019), how they implemented lessons in virtual classrooms, and how those adjustments impacted co-teachers' lived experiences.

#### **Self-Efficacy**

Self-efficacy beliefs significantly contribute to the quality of human functioning and are an essential internal factor in the triadic reciprocal determinism relationship (Schunk & DiBenedetto, 2020). Thus, beliefs regarding self-efficacy are products of the triadic reciprocal causation model, which describes how an individual's behavior, environment, and personal characteristics constantly interact (Bandura, 1977b, 1986). The effective use and execution of behavioral, social, and cognitive subskills strongly relate to an individual's beliefs of personal efficacy in executing these skills (Bandura, 1986; Bandura & Wood, 1989). Bandura (1986, 1997) further explored the influential role of personal efficacy under the term 'self-efficacy'. Self-efficacy is individuals' beliefs in their capabilities to produce desired results by their actions (Bandura, 1986).

Additionally, self-efficacy is an internal cognitive process that influences individuals' beliefs about their ability to perform well under adverse circumstances. (Bandura, 1986; Zimmerman, 1983). Thus, self-efficacy beliefs focus on the judgments individuals have of themselves regarding what they can do with the skills they possess (Bandura, 1986). Perceived beliefs of self-efficacy affect how well they will use their capacities (Bandura & Wood, 1989). Therefore, people's perceived self-efficacy is not general but relates to specific situations (Maddux & Volkmann, 2010). For instance, teachers can judge themselves as competent in a specific inclusive instructional strategy and less competent when implementing it in an online environment. Perceived self-efficacy is not a part of an individual's personality but a temporary and easy-to-influence characteristic that is strictly situational and task-related (Maddux & Volkmann, 2010).

#### Major Principles

The SCT conceptualizes perceived self-efficacy as individuals' self-referent judgments through cognitive processing of various sources of efficacy information (Bandura, 1986; Bandura, 2001; Schunk & DiBenedetto, 2020). People develop self-efficacy beliefs by integrating information from four sources: mastery experience, vicarious experience, verbal persuasion, and physiological states (Bandura, 1977a, 1986, 1995, 1997; Maddux & Volkmann, 2010; Schunk & Usher, 2019). For instance, when teachers believe they can control the learning environment, they have the motivation to exercise their efficacy fully, which enhances the likelihood of success (Bandura & Wood, 1989). Experiences of success, in turn, provide behavioral validation of personal efficacy and environmental controllability (Bandura & Wood, 1989). In contrast, when teachers approach circumstances as uncontrollable, they are likely to exercise their efficacy abortively, producing failure experiences (Bandura & Wood, 1989). The following sub-sections describe individuals' informational sources to appraise their self-efficacy (Schunk & DiBenedetto, 2020).

**Mastery Experiences.** In line with the SCT, it is essential to consider the role of previous behavior on an individual's self-efficacy. Mastery experience relates to the individual experiencing victory in previous challenging task performance (Bandura, 1997.) The self-efficacy theory implies that feelings of self-efficacy emerge from experiences of success or failure that arise through attempts to master actual tasks (Bandura, 1977b; Williams & Williams, 2010). Mastery experiences are the most reliable source of self-efficacy because they indicate ability and are especially powerful when a person accomplishes a task they view as demanding (Bandura, 1977a, 1997; Gale et al., 2021). When people succeed, self-efficacy is usually more substantial for that behavior; likewise, exposure to failure diminishes self-efficacy (Maddux & Volkmann, 2010). However, when people develop a strong self-efficacy, one failure will not have much influence.

Researchers have shown that mastery experiences are essential to teachers' self-efficacy (Tschannen-Moran & McMaster, 2009; Tschannen-Moran & Woolfolk Hoy, 2001). In an academic setting, perceptions of successful past performances lead to increased self-efficacy beliefs, whereas perceptions of failure lead to a decrease in self-efficacy beliefs (Bandura, 1997b; Gale et al., 2021; Morris et al., 2017; Thomas et al., 2020). Thus, mastery experiences are vital for a teachers' self-efficacy, given that they motivate an educator to reflect on previous situations to accomplish goals (Gale et al., 2021; Morris et al., 2017). For example, if co-teachers in inclusive classrooms experience difficulties managing technology, they may believe they cannot assist students on an online platform (Corry & Stella, 2018). Additionally, the past successes and failures the co-teachers have experienced in a face-to-face environment can affect their self-efficacy in a virtual situation (Corry & Stella, 2018).

**Vicarious Experiences.** People appraise their self-efficacy based on vicarious experiences or their observations of others (Gale et al., 2021; Maddux & Volkmann, 2010). Observers use these experiences to form expectancies about their behavior and consequences (Maddux & Volkmann, 2010). Observing others' success can raise the observers' self-efficacy, whereas observing failures can lower it. There is a higher effect when the model is a significant other or someone of high regard (Schunk & DiBenedetto, 2020). For instance, vicarious learning encounters develop when a teacher mirrors the instructional practices of a seasoned educator in a similar situation (Bandura, 1986; Ford et al., 2017). Evidence from researchers demonstrates that vicarious influence allows an observer to pinpoint when a teacher struggles with instructional practices (Morris et al., 2017; Pfitzner-Eden, 2016).

In a co-teaching setting, vicarious learning can occur through the co-teacher's use of the one-teach, one-observe, or the one-teach one-assist co-teaching models. In one-teach, one-observes, and one-teach, one-assist co-teaching models, one teacher assumes the lead teaching role while the other actively supports instruction (Ansari Ricci et al., 2021; Cook & Friend, 1995). Each teacher can learn from one another by assuming the role of the observer who watches the model teacher's actions and behaviors (Gebauer et al., 2020). Successful learning experiences happen based on the assumed similarities in capabilities and knowledge of both the observer and model (Gebauer et al., 2020). Observing co-teacher's self-efficacy can increase by recognizing that they can copy the model co-teacher's delivery of instruction (Bandura, 1994; Schunk & Pajares, 2002). The model teacher's lesson or course of action is recognized, retained,

reinforced, and repeated by the observing teacher through mental processing, leading to the actual performance of the previously observed action (Bandura & Jeffrey, 1973).

**Verbal Persuasion.** Feedback influences self-efficacy beliefs, which impacts performance (Williams & Williams, 2010). Persuasive verbal input from other people, such as the statement "You can do it!", affects self-efficacy (Maddux & Volkmann, 2010). However, the power to influence an individual's self-efficacy depends on the expertness of the evaluator and their trustworthiness and attractiveness to the individual (Maddux & Volkmann, 2010). Additionally, verbal persuasion can be effective when constructive criticism is considered credible and sincere (Bandura, 1986; Gale et al., 2021).

In an academic setting, positive critiques reduce teachers' stress (Menon & Sadler, 2018). When teachers are not yet skilled at making accurate self-appraisals, they will often depend on others to provide evaluative feedback and judgments about their performance (Usher & Pajares, 2008). Social persuasions may be limited in creating enduring increases in teacher self-efficacy. Researchers believe that negative social persuasion is more substantial than positive and can quickly undermine an individual's self-efficacy (Bandura, 1997; Usher & Pajares, 2008). Nonetheless, influential mentors should encourage teachers to measure success in terms of personal growth rather than triumph over others.

**Physical and Emotional State.** Researchers found that some teachers rely on emotions and physiological arousal when assessing whether they can complete a task (Gale et al., 2021; Menon & Sadler, 2018; Morris et al., 2017). Physiological and emotional states serve as essential sources of information for self-efficacy development (Bandura, 1997b). Specifically, for teachers, a positive affective evaluation of the work environment may be interpreted as an indicator of personal competence that partly informs teachers' self-efficacy beliefs (Granziera & Perera, 2019; Tschannen-Moran et al., 1998). When people associate poor performance or perceived failure with unpleasant physiological arousal and success with pleasant emotions, their self-efficacy is impacted in negative and positive ways (Maddux & Volkmann, 2010). Emotional states such as anxiety can cause individuals to doubt their performance capabilities (Maddux & Volkmann, 2010). In contrast, a feeling of calmness could create confidence in an individual's abilities to perform successfully (Maddux & Volkmann, 2010).

#### Teacher Self-efficacy

Teaching efficacy emerged mainly from self-efficacy, a construct derived from Bandura's SCT (Corry & Stella, 2018; Ogah, 2006). According to the SCT, self-efficacy refers to beliefs about an individual's capability to execute actions required to attain valued goals in specific domains (Granziera & Perera, 2019; Perera & John, 2020). In teaching, efficacy refers to teachers' self-referent judgments about their capability to accomplish teaching-related tasks required to achieve academic goals (Granziera & Perera, 2019). Teacher self-efficacy is a teachers' belief relating to confidence in their perceived ability to provide academic instruction and bring about positive educational outcomes in the students they teach (Bandura, 1986, 1997; Ogah, 2006; Tschannen-Moran et al., 1998). The literature holds that teacher efficacy comprises three dimensions: self-efficacy for classroom management, instructional strategies, and student engagement (Granziera & Perera, 2019; Tschannen-Moran & Woolfolk Hoy, 2001).

In a traditional academic setting where students are face-to-face, student achievement correlates with teacher self-efficacy (Goddard et al., 2000; Tschannen-Moran et al., 1998). Researchers suggest there are differences in the face-to-face classroom context and the virtual classroom context that are profound enough to warrant study on the comparisons of the qualities and characteristics of the teaching/learning experience (Corry & Stella, 2018). In addition to context, environment, and task specificity are also significant components of teacher selfefficacy (Bandura, 1997b; Pajares, 1992; Tschannen-Moran & Woolfolk Hoy, 2001). The evidence discusses teachers' self-efficacy, and in the context of an inclusive environment, a teacher who collaborates with another in the same classroom is a co-teacher (Colson et al., 2021; Friend & Cook, 2017). Therefore, there is justification for examining the experiences of coteachers' self-efficacy in virtual teaching.

#### Social Cognitive Theory and Co-teacher Experiences during the COVID Pandemic

This qualitative inquiry explored middle school co-teachers' virtual instruction experiences during the 2020-2021 academic year. Many educators reported the pandemic's stressful work conditions and abrupt changes (Baker et al., 2021; Kaden, 2020). Participants in one study reported feeling they could not balance work-life and home life during the pandemic (An et al., 2021). In an additional study, teachers reported online teaching as impossible to implement due to a pervasive lack of resources (Baker et al., 2021). Teachers experienced challenges such as a lack of familiarity with online teaching formats and rapidly changing approaches required by their administrators for contacting students and families, documenting their work, and attending meetings (Baker et al., 2021). Core components (such as reciprocal determinism and self-efficacy) of Bandura's (1986) SCT helped inform the dynamics of coteachers' virtual teaching experiences based on their work environments, personal attributes, attitudes, and behaviors (Bourne et al., 2021). As a result, SCT and these core components addressed here serve as an appropriate theoretical framework that guided this study.

#### **Related Literature**

The Education for All Handicapped Children Act of 1975, now known as IDEA introduced in 2001, mandated that students with disabilities ages 3-21 receive a free and appropriate education (FAPE) in public schools. The National Center for Education Statistics ([NCES], 2022) indicated that over 7 million students received special education services under IDEA during the 2020-2021 school year. Among those students served, 66% spent 80% or more of their time in inclusive general education classes with non-disabled peers (NCES, 2022). The inclusion classroom setting includes general and special education teachers who co-teach to give full access to the general education curriculum (Scruggs & Mastropieri, 2017). The following sections review the current literature on inclusion, the inclusive practice of co-teaching, and the role the COVID-19 pandemic played in the experiences of co-teachers.

#### **Inclusive Education**

In recognizing the importance of addressing the learning needs of all students, the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA) reaffirmed teaching students with disabilities in their least restrictive environment (Rodriguez et al., 2021). The least restrictive environment includes teaching students with disabilities in the general education classroom to the maximum extent possible (Amor et al., 2019; Rodriguez et al., 2021). Inclusive education supports the right of all students with disabilities to have access to the same curriculum as their general education peers (Amor et al., 2019; Rodriguez et al., 2021). Most classrooms in the United States education system follow the inclusion model of instruction and learning (Garwood, 2018). With an increase in the number of students with disabilities accessing the content in inclusive settings, teachers must collaborate with their special education colleagues (Amor et al., 2019; DeMatthews et al., 2020).

#### History of School Inclusion in the United States

The United States government has created laws since the 1950s to ensure special education students have equal access to free public education (Cornett & Knackstedt, 2020; Smith & Larwin, 2021). Increased support for students with physical and learning disabilities began when parents and advocates of children with special needs and disabilities protested, allowing this population to go to school with non-disabled students (Francisco et al., 2020; Frey, 2019). Conversely, *Brown v. Board of Education, Pennsylvania Association of Retarded Citizens (PARC)* v. *the Commonwealth of Pennsylvania*, and *Mills v. the District of Columbia* changed societal attitudes about the special needs and disabilities population. *Brown* was the forerunner of school inclusion policies because the U.S. Supreme Court deemed the 'separate but equal' clause illegal (Cornett & Knackstedt, 2020; Kirby, 2017). This landmark decision also set the tone for court rulings and federal laws prohibiting discriminatory practices against minorities, including those with special needs and disabilities (Ault et al., 2018; Yell, 2022).

Before the *Brown* (1954) decision, public schools typically excluded children with special needs and disabilities (Cornett & Knackstedt, 2020). The *Brown* ruling forced schools to offer all students equal access to free quality education (Cramer et al., 2018). *Brown* also established legal grounds for parents and advocates to fight for equal rights for special needs and disabled students (Bricker et al., 2018; Frey, 2019; Hornbeck, 2017). Although the U.S. Supreme Court abolished segregation in public schools with the *Brown* ruling, supporters fought tirelessly for 20 years until the federal government imposed discriminatory legislation protecting children with special needs and disabilities (Cornett & Knackstedt, 2020; Kirby, 2017). Advocates also referenced the *Brown* decision in lawsuits against school districts and state laws excluding students with disabilities (Frey, 2019; Yell, 2022).
*PARC* was a foundational case for students with disabilities. For example, justices in the PARC (1971) case upheld the *Brown* verdict by ruling against Pennsylvania legislation preventing the special needs and disabilities population from participating in public school activities. Families responsible for the *PARC* suit claimed the commonwealth of Pennsylvania violated the federal rights of special needs and disabilities students by neglecting to give this population a free quality education (Kirby, 2017; Smith & Larwin, 2021). One year after the PARC ruling, the Mills (1972) decision led to governmental mandates requiring the District of Columbia's board of education to allow children with special needs and disabilities equal rights in public schools. The PARC and Mills verdicts led to federal laws prohibiting discriminatory acts against special needs and disabled students (Bricker et al., 2018; Francisco et al., 2020).

**Elementary and Secondary Education Act of 1965.** The Elementary and Secondary Education Act (ESEA) (1965) depicts one of the first legislative policies to intervene in public education. Researchers credited a joint effort by the Johnson administration and Congress for introducing ESEA as a means for minorities and other traditionally marginalized populations to achieve the American Dream (Casalaspi, 2017; Young, 2018). Bishop (2015) implied that ESEA primarily emphasized improving the quality of K-12 teachers' instructional practices and school district accountability. Additionally, Young et al. (2017) stated that ESEA did what states and local governments could not do to ensure a quality education for underserved groups. ESEA allocated federal funds to public K-12 schools and low-income families so that special education students obtained proper schooling (Bishop, 2015; Darrow, 2016). Congress did not fully fund ESEA leading to an abundance of issues (Hiese, 2017; Young, 2018).

**Education for All Handicapped Children Act of 1975.** The first law established for students with disabilities was the Education for All Handicapped Children Act (EAHCA) of

1975 (Ennis et al., 2017; Frey, 2019). EAHCA charged schools with teaching special education students with their peers in general education courses (Kirby, 2017; Prince et al., 2018). To receive federal funds, EAHCA mandated all public schools to offer students with disabilities equal access to quality education (Ennis et al., 2017; Miller et al., 2019). EAHCA also mandated schools to provide students a free and appropriate public education (FAPE) in the least restrictive environment (LRE) (Frey, 2019). As a result, LRE and FAPE account for placing children with special needs and disabilities in appropriate academic environments (Kirby, 2017). EAHCA also mandated all public schools to include special education students in general education classes (Francisco et al., 2020; Prince et al., 2018). In 1990, the U.S. Congress reauthorized EAHCA as the Individuals with Disabilities Education Act (IDEA) to counter the negative stigma of educating special education students (Kirby, 2017; Turnage, 2020).

Individuals with Disabilities Education Act of 1990. Congress signed IDEA into law in 1990 to accommodate individuals with special needs and disabilities in public education (Chamberlain & Witmer, 2017; Ennis et al., 2017). IDEA is the "bill of rights" for special education (Connolly & Wasserman, 2021, p. 52). Following the EAHCA (1975) legislation, IDEA forces public school districts to grant FAPE and LRE for children with special needs and disabilities (Kauffman et al., 2018; Turnage, 2020). IDEA also requires public schools to address the needs of special education students by creating an Individualized Educational Plan (IEP) before placing them in an LRE (Bateman, 2017; Kauffman et al., 2018). Based on the original concept of IDEA, the *Board of Education of the Hendrick Hudson Central School District v. Rowley* (1982; *Rowley*) court decision led the U.S. Supreme Court to determine the level(s) of FAPE public school districts' need for special education students. **Rowley.** Rowley (1982) refers to one of the first special education court cases heard by the U.S. Supreme Court (Prince et al., 2018). The Rowley case questioned whether a local school district should be liable for providing an interpreter for a disabled child under the IDEA law (Turnbull et al., 2018; Yell, 2019). The Rowley verdict led to educational policies mandating schools to create IEPs targeting the special education student population's academic, cognitive, and social progression despite a student's circumstances (Yell & Bateman, 2017). More importantly, Supreme Court Justices decided that IDEA does not identify educational standards for special needs and disabilities students outside of a FAPE (Cowin, 2018; Henry & Johnson, 2018). The Court, therefore, created a two-part assessment to evaluate the requirement of FAPE under federal law (Yell & Bateman, 2017; Zirkel, 2020).

Known as the Rowley standard, Part I requires a court official or hearing officer to decide whether school districts fulfilled obligations consistent with IDEA's guidelines (Turnage, 2020; Zirkel, 2020). Part II assesses whether public schools effectively constructed a student's IEP (Cowin, 2018; Yell et al., 2020b). A successful IEP features a collaborative effort from multidisciplinary professionals appointed by administrators to ensure schools meet IDEA's standards (Prince et al., 2018; Yell, 2022). IDEA mandated schools and parents to tailor FAPE according to the unique needs of students with an IEP (Yell & Bateman, 2017). However, the IDEA law only requires public school districts to offer "some" educational benefits to special education students without specifying which resources to offer (Cowin, 2018; Turnage, 2020).

**Improving America's Schools Act of 1994.** Improving America's Schools Act (IASA) (1994) represented the first legislation to replace ESEA (Hiese, 2017; Schuh et al., 2018). IASA aimed to improve school district accountability, implement state assessments, and present more rigorous academic guidelines for teachers and students (Brown et al., 2019; Hiese, 2017). IASA

also reformed the Title I program, representing the most significant federal program designated for low-achieving students in low-income districts (Margolis et al., 2016; Thurlow & Kopriva, 2015). The Title I program allowed each state to execute "less challenging" academic standards for students from low socioeconomic families (Margolis et al., 2016). Research suggested that IASA also improved standards making it easier to identify schools' failing students (Brown et al., 2019; Schuh et al., 2018). However, IASA created problems because the government implemented it without researching the law's potential impact (Greer, 2018).

No Child Left Behind Act of 2001. Congress attempted to correct IASA's concerns with the No Child Left Behind Act (NCLB) (2001). NCLB held schools accountable for reporting student performance and school improvement targets annually (Hiese, 2017). Before NCLB, educational facilities did not report the academic performances of special education students in general education classrooms (Brown et al., 2019; Greer, 2018). NCLB also expected public school districts to hire highly qualified teachers for every classroom (Dennis, 2017; Fuller et al., 2017). Furthermore, NCLB mandated each state to develop a Title I evaluation system (Hiese, 2017; Stern, 2016).

NCLB (2001) permitted corrective action recommendations from the U.S. Department of Education when schools did not meet Adequate Yearly Progress (AYP) standards for three consecutive years (Fuller et al., 2017; Greer, 2018). However, each state used different assessments under NCLB to define academic proficiency, leading to annual wide-ranging performance results (Jacob, 2017). The law's over-reliance on standardized testing decreased autonomy for each state, and universal academic goals posed concerns for district leaders, school administrators, teachers, and parents (Darrow, 2016; Hiese, 2017). NCLB led to "heavy-handed" policies designed to impose strict requirements holding states accountable for providing equal educational opportunities for all students (Duff & Wohlstetter, 2019). Every Student Succeeds Act (ESSA, 2015) overhauled NCLB by returning power to states and local school districts (Duff & Wohlstetter, 2019; Young et al., 2017).

**Every Student Succeeds Act of 2015.** The U.S. Congress replaced NCLB (2001) with the Every Student Succeeds Act (ESSA, 2015) (Brown et al., 2019). ESSA is a flexible framework designed to ensure K-12 public schools meet federal educational standards (Team, 2021). ESSA grants state flexibility in educational planning for students, but each state must submit the plan to the U.S. Department of Education before approval (Kaul & Davis, 2018). ESSA also challenged public school districts to hire effective teachers and leaders (Fuller et al., 2017; Green & Bettini, 2020) and demanded rigorous instruction based on shared educational standards (Kaul & Davis, 2018; Laughter, 2018). Additionally, ESSA ensures special education students receive testing accommodations (Young et al., 2017).

NCLB is "deeply flawed" since it did not provide an equitable education for special education students (Horsford et al., 2017). ESSA originated to correct mistakes from NCLB by establishing measures to hold schools accountable for all students' performance (Kaul & Davis, 2018; Team, 2021). Understanding inclusiveness in an academic setting could improve the way schools create programming designed to support school inclusion (Prince et al., 2018). Based on ESSA's rules, districts must ensure schools foster an inclusive and safe learning environment for all students (Young et al., 2017). Providing an inclusive academic space supports the development of students with and without disabilities (Francisco et al., 2020; Kirby, 2017; Team, 2021).

**Endrew v. Douglas County School System.** In the case of *Endrew* (2017), what qualifies as FAPE for one student may differ from what qualifies as FAPE for another student

(Prince et al., 2018). In 2017, the U.S Supreme Court ruled against the Endrew family, deciding that the Douglas County School District provided the boy a FAPE through his Individualized Education Plan (IEP) (Yell & Bateman, 2017). After attending public school from preschool until fourth grade, Endrew's parents became concerned with his academic growth in the public school, so they enrolled him in a private school. At the private school, he made the most progress; however, his parents decided to enroll him back into public school in his fifth year of school. Through an IEP meeting, the parents noticed that Andrew's IEP team did not update his IEP with new goals and objectives. The failure to implement behavioral programming and new goals prompted them to register him back at the previous private school (Yell & Bateman, 2019).

The parent's request for a due process hearing, which allowed for private school tuition reimbursement, reached the U.S Supreme Court in 2017 (Prince et al., 2018). At this hearing, the Chief Justice ruled that "A substantive standard not focused on student progress would do little to remedy the pervasive and tragic academic stagnation that prompted Congress to act... The IDEA demands more" (Yell & Bateman, 2017, p.11). This court case clarified the second part of the Rowley test by making it clear that educational benefit means academic and functional progress (Yell & Katsiyannis, 2019). The *Endrew* and *Rowley* decisions specified different benefits that IDEA afforded to special education students (Prince et al.,

2018). *Endrew* modernized the language of IDEA to reflect students with disabilities' progress based on a reasonably calculated IEP appropriate for the child's state (Turnbull et al., 2018; Yell & Bateman, 2017).

## **Inclusive Teaching Practices**

Including students with special needs in mainstream courses requires an inclusive education system and teaching methods. Due to the diverse educational needs of students in an

inclusive classroom, teachers must use a variety of teaching practices (Paseka & Schwab, 2020). Inclusive teaching practices that personalize instruction are a standard reference to differentiation (Magableh & Abdullah, 2021; Paseka & Schwab, 2020). Differentiated instruction involves modifications to the content to satisfy learners' individual learning needs (Magableh & Abdullah, 2021; Paseka & Schwab, 2020). Teachers can differentiate the content by providing materials on students reading levels, differentiate the product by scaffolding, and differentiate the process using co-teaching models (Magableh & Abdullah, 2021).

#### Inclusive Learning Environments

Today, children with special needs benefit from policies that protect and support them in any academic environment (Hornby, 2021; Kirby, 2017). Special education is an instructional space–including a classroom, medical facility, or a person's home authorized to support the academic needs of individuals with disabilities (IDEA, 1990, 2001). School inclusion represents much more than placing children in general education courses (Hebbeler & Spiker, 2016). Inclusive learning environments give all students, including those with special needs and disabilities, an opportunity to grow academically and socially (Prince et al., 2018). School inclusion helps special education students gain a sense of belonging in a school environment (Tracy-Bronson, 2020).

Many parents prefer that their children with special needs and disabilities learn in a special education classroom rather than the general education (Kirby, 2017). However, special education students and their peers without disabilities benefit from learning environments co-taught by highly trained professionals in the general education classroom (Kirby, 2017; Weiss & Glaser, 2021). The goal of academia is to create an inclusive space to support, nurture, and encourage all students to excel academically and socially (Battaglia & Brooks, 2019; Pettit,

2017; Wexler et al., 2021). Therefore, many K-12 school districts adopted co-teaching to support special education students in one or more general education courses (Chitiyo, 2017; Scruggs & Mastropieri, 2017; Shin et al., 2016). Information addressed subsequently explains the co-teaching and instructional models used in a co-teacher's role.

#### **Co-Teaching Instructional Practices**

Collaborative co-teaching has become a popular instructional model used to educate and support the inclusion of special education students in mainstream courses in the post-Endrew (2017) era (Cook et al., 2017; Cook & McDuffie-Landrum, 2020; McKenna & Brigham, 2021; Weiss & Glaser, 2021). Co-teaching involves general education and special education teachers co-instructing in an academic environment containing students with and without disabilities (Colson et al., 2021; Friend & Cook, 2017). Co-teaching is an instructional model that schools implement to meet academic standards, provide LRE, and ensure all students obtain the best education from highly qualified teachers (Pratt et al., 2017). Additionally, co-teaching includes a joint effort from trained professionals specialized in improving student learning outcomes (Heisler & Thousand, 2021). General and special education co-teachers must recognize applicable co-teaching practices to develop special education students' academically and socially (Cook et al., 2017; Weiss & Glaser, 2021). Varying co-teaching practices identify unique duties for both general and special educators (Heisler & Thousand, 2021; Sinclair et al., 2018). Therefore, co-teachers need to be cognizant of assorted models to provide a quality education no matter the student's developmental needs.

#### **Common Co-Teaching Models**

Ideally, co-teachers work in sync when delivering lessons in any classroom (King-Sears & Jenkins, 2020; Weiss & Glaser, 2021; Wexler et al., 2018). Each co-teacher must understand

what will occur throughout the school day (Pratt et al., 2017). Effective co-teachers agree upon instructional models before presenting material to students (Cook et al., 2017). Both co-teachers must also recognize appropriate times to modify content based on students' developmental requirements (Cook et al., 2017; Pratt et al., 2017). Evidence suggests that implementing different co-teaching models supports school inclusion and strengthens IEPs for special needs students (Cook & McDuffie-Landrum, 2020; King-Sears & Jenkins, 2020). Standard co-teaching models include alternative teaching, one-teach-one-assist, one-teach-one-observe, parallel teaching, station teaching, and team teaching (King-Sears & Jenkins, 2020; Sinclair et al., 2018).

Alternative Teaching. Alternative teaching requires one co-teacher to present lessons to most students in the classroom while the other co-teacher works with a smaller group (Chizhik & Brandon, 2020; Sinclair et al., 2018). Alternative teaching works when co-teachers identify learners who might need extra attention on specific skills (Shi et al., 2018). Alternative teaching also allows co-teachers to create or modify content for a small group rather than the entire class (Sinclair et al., 2018). A potential disadvantage with the alternative teaching model may arise if students in the larger group stigmatize individuals assigned to the smaller group (Chizhik & Brandon, 2020). Some co-teachers divide classes based on students' development and skillset to mitigate the challenge of stigmatization (Cook et al., 2021).

**One-Teach-One-Assist.** One-teach-one-assist is the most utilized co-teaching model (Chandler-Olcott, 2017; King-Sears & Jenkins, 2020). One-teach-one-assist permits one co-teacher to lead instruction and the other to circulate the classroom to assist students struggling with the material (Shi et al., 2018; Wexler et al., 2021). Even though this method keeps students focused, it does not support the second teacher in establishing a role in the classroom (Chizhik & Brandon, 2020). Using the one-teach-one-assist method too much could also lead students to

view the second co-teacher as an assistant instead of a co-instructor (Pratt et al., 2017; Weiss & Glaser, 2021). Nonetheless, evidence has shown that the one-teach-one-assist technique is effective when one co-teacher presents lessons to the class while the second co-teacher provides immediate assistance and feedback to learners when necessary (McGlynn & Kelly, 2019; Shi et al., 2018).

**One-Teach-One-Observe.** The one-teach-one-observe model requires one co-teacher to present the lesson while the other co-teacher observes the class (King-Sears & Jenkins, 2020; Shi et al., 2018). The second co-teacher acts as the observer, screening behavior, engaging students, and grading work while the other co-teacher delivers the lesson (Semon et al., 2020). The one-teach-one-observe method works best when co-teachers regularly switch roles to bring different perspectives to the learning environment (Chandler-Olcott, 2017). If rotation of roles does not happen, the co-teacher who primarily assists does not get to contribute to the overall instruction (Weiss & Glaser, 2021). This model should be used often like the one-teach-one-assist method but only for a short period (Friend & Cook, 2017).

**Parallel Teaching.** Parallel teaching involves separating students into two groups led by each co-teacher (McGlynn & Kelly, 2019; Semon et al., 2020). The parallel teaching technique reduces class size effectively and affords all learners more time to process information before asking questions amidst instruction (Sinclair et al., 2018). Advantages of parallel teaching include allowing co-teachers to deliver lessons simultaneously and students engaging in small groups led by each co-teacher (Chizhik & Brandon, 2020; Semon et al., 2020). The disadvantages of this model can stem from unwarranted distractions due to increased levels of noise generated from each group (Shi et al., 2018). Despite this model's ability to increase

student engagement, parallel teaching does not necessarily include differentiated instructional methods (Sinclair et al., 2018).

Station Teaching. Researchers recommend that co-teachers create engaging lessons that actively increase participation (Johnson & King-Sears, 2020), and stations are often considered an effective way to do that. Station teaching allows co-teachers to set up and monitor different learning stations (McGlynn & Kelly, 2019). The station teaching method usually consists of one station led by each co-teacher and a third independent station (King-Sears & Jenkins, 2020). Station teaching also grants co-teachers opportunities to rotate groups around the classroom so that all students can learn and apply course content (King-Sears & Jenkins, 2020; McGlynn & Kelly, 2019). Additionally, scholars agreed that station teaching also supports differentiated instruction anonymously based on students' academic needs (Lyon et al., 2021; Wexler et al., 2021). Some concerns about the station teaching approach include its ability to generate noise, and it requires sufficient planning (Shi et al., 2018).

**Team Teaching.** Team teaching is widely considered one of the most influential models of co-teaching (McGlynn & Kelly, 2019). Unlike other models, team teaching involves a collaborative effort between co-teachers (Chizhik & Brandon, 2020; Shi et al., 2018). Team teaching also requires co-teachers to share an equal amount of time leading instruction with the entire class (King-Sears & Jenkins, 2020; McGlynn & Kelly, 2019). This model showcases coteachers endeavors to provide quality instruction based on their preferred teaching style (Wexler et al., 2021). However, team teaching does not always present opportunities for differentiation across learners' development (Sinclair et al., 2018). Team teaching is most successful when both co-teachers feel confident in their ability to lecture all students simultaneously (Cook & McDuffie-Landrum, 2020). Each co-teaching model allows general and special educators to assess the learning environment before delivering lessons effectively (Sinclair et al., 2018; Wexler et al., 2021). Most co-teachers follow the one-teach-one-assist co-teaching model, often with the general educator leading instruction while the special educator assists learners (Weiss & Glaser, 2021). Specific co-teaching models play an integral role in how co-teachers deliver lessons, work with small groups, and divide lessons (Wexler et al., 2018; Wexler et al., 2021). General and special educators also benefit by identifying practical ways to collaborate (Scruggs & Mastropieri, 2017). Understanding the pros and cons of co-teaching could also support co-teachers in delivering quality instruction (Cook et al., 2021; Shelton et al., 2021; Wexler, 2021).

## **Benefits of Co-Teaching**

Studies report that co-teaching benefits all students regardless of the individual's circumstances (Mofield, 2020; Pratt et al., 2017). A co-taught class allows all learners to obtain extra support when necessary (Cook et al., 2021; King-Sears & Jenkins, 2020; McGlynn & Kelly, 2019). Co-teaching decreases the student-to-teacher ratio, allows learners to receive additional assistance and feedback, and promotes differentiated teaching practices (Kokko et al., 2021; Wexler et al., 2021). Additionally, students with disabilities benefit because co-teaching involves modifying instruction and lesson plans to accommodate IEPs (Heisler & Thousand, 2021; Ricci et al., 2019). Co-teaching presents an advantage because the special educator enhances the learning environment when the general educator cannot modify instruction to meet the needs of students with disabilities (Cook & McDuffie-Landrum, 2020; Murawski & Hughes, 2021).

# **Challenges of Co-Teaching**

Co-teaching is challenging (Lyon et al., 2021), and despite having the ability to promote inclusive practices, it remains misunderstood (Wexler et al., 2018). Reports show that special educators and general educators feel underprepared to implement co-teaching-based practices and state they need more specialized ongoing training (Brendle et al., 2017; Shin et al., 2016; Strogilos et al., 2020). Other co-teachers have reported insufficient knowledge in implementing inclusive practices (Alnasser, 2021; Casserly & Padden, 2018), thus, creating other challenges such as lack of shared planning time and collaboration, confused teaching roles, insufficient content knowledge, lack of knowledge of co-teaching models, and incomprehension of differentiation strategies (Alnasser, 2021; Casserly & Padden, 2018; Joyce et al., 2020).

**Co-Planning.** Evidence supports the idea of general and special educators co-planning lessons before presenting information to the class (Pratt et al., 2017; Shin et al., 2016). However, it can be significantly challenging for one teacher to manage a classroom alone while preparing instructions for students with and without disabilities (Casserly & Padden, 2018). Co-planning requires co-teachers to know the content, instructional strategies, and practical considerations to design effective lesson plans (Chitiyo & Brinda, 2018; Pratt et al., 2017). Co-teachers need time to plan and modify lessons for a general education course with special education students (Shin et al., 2016). Without proper co-planning, co-teachers might overuse the one-teach-one-assist or one-teach-one-observe models and have difficulty creating a shared vision for classroom instruction and behavior management plans (Weiss et al., 2021; Wexler, 2021). Effective co-teaching relationships require sufficient coordination, planning, and commitment to supporting student development (Heisler & Thousand, 2021; Pratt et al., 2017).

**Co-Teaching Roles.** Identifying and understanding teacher roles when co-teaching is the top challenge reported by co-teachers (King-Sears et al., 2021; Shin et al., 2016; Weiss et al.,

2021). Researchers tend to observe special education instructors in a supporter's position rather than a leading role in general education classrooms (Colson et al., 2021; King-Sears & Jenkins, 2020; Scruggs & Mastropieri, 2017). When the general education teacher takes over the classroom, the special education teacher follows a more passive role as an observer or an assistant (King-Sears et al., 2021; Kokko et al., 2021). Thus, the co-teachers use the one-teach, one-assist, or one-teach, one-observe model, which causes less parity between the co-teachers (King-Sears et al., 2021). Additionally, this kind of role confusion in a co-taught classroom creates an unstable environment that has the potential to negatively impact students' academic achievement (Pratt et al., 2017; Wexler et al., 2018).

Insufficient Knowledge. Co-teachers are reporting difficulties addressing the needs of students with severe disabilities (Bonati, 2018; McKenna & Brigham, 2021). General education teachers are noticing they lack sufficient training and knowledge to educate students with disabilities by themselves (Murawski & Hughes, 2021). Additionally, general and special educators feel underprepared to implement co-teaching-based practices, and many need additional training (Brendle et al., 2017). In similar studies, educators report insufficient knowledge on implementing co-teaching models, differentiation strategies, and special education laws (Chizhik & Brandon, 2020; Johnson & King-Sears, 2020). Researchers found that inexperienced co-teachers report the same challenges due to a lack of knowledge about co-teaching and low teaching self-efficacy (Pettit, 2017). In response to this lack of knowledge, this study seeked to understand the lived experiences of middle school general and special educators who co-taught online during the COVID-19 pandemic between March 2020 and June 2021. *Co-Teaching in Middle Schools* 

Middle school is a pivotal developmental period for 12-to-14-year-old students (Caldarella et al., 2021; Satterlee Vizenor & Matuska, 2018; Sinclair et al., 2018). Students at this grade level often feel vulnerable to circumstances such as appearance and disabilities (Stiefel et al., 2018; Wills et al., 2019). Transitioning to the middle school level presents instructional changes that some students did not experience in elementary school (Jackson et al., 2017; Wexler et al., 2018). For instance, many school-aged children in grades K-5 attend a class with one instructor (Sinclair et al., 2021; Wexler et al., 2021). However, in an inclusive middle school environment, students with and without disabilities participate in at least one general education course led by co-teachers (Shelton et al., 2021; Wexler, 2021).

The studies on co-teaching in middle schools discuss teachers' perceptions and observations made by researchers. In one case, researchers observed 16 middle school co-teaching pairs in English and Language Arts classrooms to understand the roles of general educators as the content expert and special educators as those assisting instruction (Wexler et al., 2018). Based on the study's qualitative data, the researchers observed middle school co-teachers following the one-teach-one-assist and one-teach-one-observe models more than any other instructional methods (Wexler et al., 2018). In another study, middle school co-teachers were observed following differentiated instructional practices to make it easier for students with and without disabilities to succeed in class (Battaglia & Brooks, 2019). Studying middle school general and special education co-teachers' experiences could produce additional knowledge to build the academic body of literature surrounding this group (Wexler et al., 2018; Wills et al., 2019). Because research related to this group appears scarce, future research on co-teaching at the middle school level is essential (Swanson & Wexler, 2017).

### **COVID-19 Pandemic**

In early 2020, WHO assessed the severity and spread of the deadly Corona Virus (COVID-19) and pronounced COVID-19 a world pandemic (Adedoyin & Soykan, 2020). The virus's rapid spread significantly impacted the world, causing global physical closures of businesses, sports activities, and school buildings (Modi et al., 2020). COVID-19 is a respiratory illness that targets the lungs, making breathing hard. This study focused on general and special educators who co-taught middle school students remotely during the COVID-19 pandemic between March 2020 and June 2021. Furthermore, the primary goal is to examine middle school educators' experiences with co-teaching virtual classes throughout a global crisis.

#### **COVID-19's Impact on American Public Education**

Educational facilities across the globe have adjusted instructional practices to deliver lessons online since March of 2020 (Carpenter & Dunn, 2020; Choate et al., 2021; Squire, 2021). Almost 73% of American schools implemented COVID-19 emergency plans involving online instruction via learning management systems such as Google Classroom (Harris et al., 2020). However, many K-12 teachers had difficulty transitioning to virtual instruction (Baker et al., 2021; Patrick et al., 2021; Tremmel et al., 2020). Some instructors lacked the vital competencies and resources needed to lecture students online effectively (Hodges et al., 2020). Additionally, teachers reported working longer hours, experiencing blurred work-home boundaries, and feeling overworked (Kidd & Murray, 2020). Although many public education institutes experienced challenges, some educators created innovative lesson plans for students to receive meaningful instruction (Kaden & Martin, 2020). Given that COVID-19 remains active today, general, and special educators must be aware of the complex nature of virtual co-teaching practices if another emergency occurs (Chizhik & Brandon, 2020; Shields et al., 2021). **COVID-19 and Co-Teaching.** COVID-19 forced inclusive schools to provide coinstruction to students remotely (Chizhik & Brandon, 2020). Co-teachers abruptly switched from co-teaching students with and without disabilities in brick-and-mortar classrooms to co-teaching asynchronously and synchronously (Gillis & Krull, 2020; Waltman & McGinniss, 2020). The synchronous format required students and co-teachers to engage in live lectures via modern technological software such as Blackboard Collaborative, Microsoft Teams, or Zoom (Littlefield, 2018; Potts, 2019). Compared to synchronous classes, asynchronous courses involve teachers preparing learning materials and resources ahead of time and require learners to work independently without immediate feedback from instructors (Etchells et al., 2021; Littlefield, 2018; Parks et al., 2016).

**Creating Effective Virtual Co-Teaching Methods in Middle Schools.** Effective virtual co-teaching requires both general and special educators to be actively involved in classroom instruction (Cook & McDuffie-Landrum, 2020; DeMartino & Specht, 2018). Successful virtual co-teaching teams imitate practices from face-to-face collaborative efforts intended to boost student learning outcomes (Bouck et al., 2020; Potts, 2019). Thus, general, and special educators should apply traditional co-teaching instructional methods in virtual or hybrid classrooms (Reddy et al., 2021). However, some researchers believe that the one-teach-one-observe method works best in a virtual classroom, which is not highly recommended for face-to-face instruction (Chizhik & Brandon, 2020). Nonetheless, the one-teach-one-observe model permits the co-teaching pair to choose which instructor will lead virtual lessons online while the other teacher monitors students (Cook & McDuffie-Landrum, 2020; King-Sears & Jenkins, 2020).

For a more effective virtual lesson, research suggests that co-teaching teams should have more time to plan lessons and discuss who will lead instruction (Pratt et al., 2017).

Administrators can allocate more planning to co-teachers by rearranging the master schedule to allow the co-teaching team shared preparation time (Heisler & Thousand, 2021). Additionally, co-teachers can maximize planning time via online video conferencing tools such as Microsoft Teams or Zoom and learning management systems like Google Classroom (Heisler & Thousand, 2021).

Middle School Co-Teachers' Virtual Experiences. Approximately 3,500 U.S. schools switched to online instruction abruptly before the 2019-2020 academic year ended (Harris et al., 2020). Ample evidence shows that K-12 co-teachers faced dilemmas with distance learning instruction after COVID-19 emerged (Buschelman, 2020; Chizhik & Brandon, 2020; O'Brien et al., 2021; Parkes et al., 2021; Shields et al., 2021; Weinberg et al., 2020; Weiss & Rodgers, 2020). Schoolteachers faced unexpected dilemmas in transferring content meant for face-to-face instruction into engaging virtual lessons (Buschelman, 2020). Countless middle school educators also reported challenges with connecting remotely because many households did not have computers or internet (Carpenter & Dunn, 2020; Squire, 2021; Trust & Whalen, 2021). Nevertheless, few scholars have discussed some aspects of co-teaching at the middle school level during the pandemic (Shelton et al., 2021; Wexler, 2021; Wexler et al., 2021). To date, none have concentrated on the lived experiences of middle school general and special educators who co-taught exclusively in a remote classroom between March 2020 and June 2021. Today, classroom teachers must remain abreast of technology for online instruction (Dogan et al., 2021; Murphy et al., 2020). Thus, it is critical to address the limited literature on this population.

Brief Research on Middle School Co-Teachers' Virtual Experiences. Despite an abundance of studies exploring school closures (Choate et al., 2021; Dhawan, 2020; Gillis & Krull, 2020), minimal information exists about general and special educators' virtual experiences

co-teaching middle school students. Currently, no study focuses exclusively on general and special educators who co-taught middle school students virtually during an emergency or the COVID-19 pandemic. Which identifies a significant gap in the literature related to co-teaching instructional practices and middle school co-teachers lived experience with virtual instruction. Understanding the experiences of middle school co-teaching pairs could help strengthen school districts' efforts to provide all students a FAPE in the LRE (Connolly & Wasserman Kirby, 2021; McKenna & Brigham, 2021). Additional research on co-teaching is recommended to understand how to optimize general and special education co-teaching roles in the classroom (Strogilos & King-Sears, 2019). Studying middle school co-teachers would be significant in advancing the knowledge and research of this specific group (Brawand & King-Sears, 2017). Results of this study may also be helpful in the planning process and implementation of future training, primarily in virtual instruction, for middle school co-teachers.

#### Summary

The study's theoretical framework focused on Bandura's (1986) SCT, emphasizing the triadic reciprocal causation model to describe the co-teacher's experiences through the interconnectedness of the virtual environment, inclusive teaching practices, and self-efficacy. The SCT highlights the critical role of the social environment in an individual's motivation, learning, and self-regulation (Schunk & DiBenedetto, 2020). It also described how people are producers of their environment, not just products of it (Bandura, 1986). Thus, one of the components of the SCT, reciprocal determinism, says an individual's cognition, behavioral patterns, and environmental events all operate as interacting determinants that influence one another bidirectionally (Bandura, 1978). This study included co-teachers whose teaching environment abruptly changed due to the COVID-19 pandemic and described their experiences

of implementing inclusive practices in the new virtual setting. The model of reciprocal determinism posits that the environment can influence an individual's thoughts and actions (Bandura, 1978), and this study described those influences on the participants through their accounts of their experiences. These experiences generated by the co-teachers' inclusive teaching practices also partly determined their self-efficacy and affected their subsequent behavior.

Public schools in the U.S. use inclusion to satisfy the LRE for students with disabilities (Joyce et al., 2020). The LRE is an inclusive classroom that combines students with special needs and non-disabled students in the same learning environment (Brown et al., 2019). Inclusive classrooms include two teachers, a general content teacher and a special education teacher, who co-teach all students using inclusive practices. Co-teaching is a vital component of inclusive education (Cook & McDuffie-Landrum, 2020; King-Sears & Jenkins, 2020). Considering the pandemic's impact, schools have placed demands on general and special educators who co-teach middle school courses (Chizhik & Brandon, 2020; Cook et al., 2021; Wexler, 2021). The COVID-19 crisis changed how schools deliver instruction to students (Carpenter & Dunn, 2020), and there is a clear need to examine the lived experiences of co-teaching pairs who taught middle school students virtually during the COVID-19 crisis (Connolly & Wasserman Kirby, 2021; McKenna & Brigham, 2021). Therefore, this study described the lived experiences shared by middle school co-teachers who virtually co-taught through the COVID-19 pandemic during the academic year of 2020-21.

## **CHAPTER THREE: METHODS**

#### **Overview**

This study described the essence of the lived experiences of middle school co-teachers who co-taught in a virtual learning environment due to the COVID-19 pandemic during the 2020-2021 academic year (AY21). Chapter three highlights the methodology used for this research investigation. The first section describes the qualitative research design of hermeneutic phenomenology (Bynum & Varpio, 2018). Next are the research questions that guided the central research inquiry. Information disclosed afterward explains the research setting, participants, researcher positionality, and procedures used in the study. Before the chapter's summary, the data collection plan identifies the three data sources, data synthesis, and trustworthiness.

#### **Research Design**

This research analysis followed the hermeneutic phenomenology qualitative method. Qualitative scholars often bring meaning to phenomena by studying human perceptions or lived experiences (Astroth & Chung, 2018; Merriam & Grenier, 2019). Unlike quantitative research, qualitative studies typically feature "how" and "why" research questions created to understand a social problem or event (Biddix, 2018; Jackson, 2018). Qualitative research designs also depend exclusively on words rather than statistics (Hilton et al., 2019; Morgan, 2019). This study examined general and special educators' lived experiences while co-teaching middle school students remotely during the COVID-19 outbreak.

## **Qualitative Research**

A qualitative design allows for a profound description of middle school events during the pandemic and co-teachers' experiences (Hamilton & Finley, 2019). More importantly, a

qualitative design permits deeper textual data, which may not be as straightforward or specific as a quantitative report (Castleberry et al., 2016; Lester et al., 2020). The qualitative method also supports a researcher's interpretative response to an event like co-teaching during a global crisis based on participants' accounts of the phenomenon (Jackson, 2018; Kross & Giust, 2019). This method of research generated richer descriptions of the unique experiences each co-teacher endured during the pandemic teaching than statistical data could offer.

### Phenomenology

Of all the qualitative designs, phenomenology depicts the most appropriate method to address the problem and research questions that guided this inquiry. Scholars recognize phenomenology as a qualitative approach that aims to understand the essence of a phenomenon or its overall meaning (Creswell & Poth, 2018; Merriam & Grenier, 2019). Phenomenology is a qualitative method that explores a social phenomenon based on participants' lived experiences (Moustakas, 1994). Phenomenologists explore lived experiences by reflecting on past events or circumstances (Adams & van Manen, 2017; van Manen, 2016). Additionally, phenomenological methods are rooted deeply in philosophical, human science, and humanities traditions (Adams & van Manen, 2017). This qualitative study followed phenomenology because this method comprehensively explains middle school co-teachers' experiences during the height of the COVID-19 pandemic. A phenomenological design develops rich, thick descriptive, or interpretative statements that illustrate human experiences (Moustakas, 1994; van Manen, 2017).

# Hermeneutic Phenomenology

Hermeneutic phenomenology provides insight into how individuals describe living in the world (Farrell, 2020; Neubauer et al., 2019). Hermeneutic phenomenological studies are not necessarily completely free of biases; the findings originate from participants' interpretations

(Neubauer et al., 2019). Hermeneutic phenomenology produces data that explains what shaped participants' behaviors during an event (Bynum & Varpio, 2018). In hermeneutic phenomenology, the researcher also integrates his or her interpretation of the research based on his or her experiences. More importantly, researchers must read and scrutinize the data until they understand the social phenomenon before bringing an interpretive meaning (Crowther et al., 2017; van Manen, 1990). This study described virtual co-teaching through the participants' accounts of their lived experiences and the researcher's interpretation of the meaning of those lived experiences (van Manen, 1990).

Phenomenology encourages a hermeneutic circle where researchers write, rewrite, and revisit data until a descriptive interpretation of human experience emerges (van Manen, 1990, 2016). Scholars must be cognizant of how previous knowledge and experiences could inevitably shape the study's outcome (Thompson, 2018). Hermeneutic phenomenology supports my interpretative translation of the data and embraces reflective language, incorporating my prior teaching experience and knowledge about co-teaching roles (van Manen, 1990). In this study, I interviewed general and special educator participants. Each teacher shared details about co-teaching middle school students during a pandemic in a virtual classroom environment.

#### **Research Questions**

#### **Central Research Question**

What were lived experiences of middle school co-teachers who co-taught virtually during the 2020-2021 school year?

#### **Sub Question One**

What were middle school general and special educators' experiences co-teaching in a virtual classroom during the 2020-2021 school year?

## **Sub Question Two**

What were middle school co-teachers' experiences transitioning to virtual learning amidst the COVID-19 pandemic?

# **Sub Question Three**

How was middle school co-teachers' self-efficacy influenced during the sudden change to virtual learning during the COVID-19 pandemic in the 2020-2021 academic year?

### **Setting and Participants**

Qualitative scholars conduct research in natural settings to explore and understand the meaning of a social problem (Busetto et al., 2020; van Manen, 1982). In qualitative research, academicians seek to provide a deeper understanding of human experiences rather than merely answering questions or recording what occurred in an environment (Biddix, 2018; Creswell & Creswell, 2018). Individuals conducting qualitative research tend to focus on learning more about diverse cultures and exposing what experiences mean to individuals within a cultural group (Gerber et al., 2017; Gill & Baillie, 2018). The data generated in this study produced insightful details about general and special educators' experiences co-teaching middle school classes amidst a global pandemic. These middle school co-teachers work for the Sunny County School District (SCSD) and taught during the 2020-2021 academic school year.

#### Setting

Located east of a metropolitan city in central Georgia, SCSD educates roughly 16,500 rural students in 11 elementary schools, four middle schools, and three high schools (National Education Center for Statistics, (NCES), 2021). Sunny County employs over 2330 full-time teachers and other support staff throughout the district (NCES, 2021). The SCSD system also operates 14 specialty and choice programs, four non-traditional schools (including a STEM and

Career Academy), and one virtual campus targeting 6th through 12th graders. Researchers show the SCSD system outperformed other districts in Georgia by 31% throughout the AY19 school year (Governor's Office of Student Achievement, n.d.). More than 45% of SCSD K-5 students surpassed other elementary children across Georgia academically (Governor's Office of Student Achievement, n. d.). SCSD middle (68%) and high school students (21%) also outscored their peers throughout the state (Governor's Office of Student Achievement, n. d.). Although most SCSD schools perform well academically, this hermeneutic phenomenological study focused exclusively on the four middle schools in the system.

The first middle school, College Middle, hired 85 teachers to educate 346 sixth graders, 394 seventh graders, and 367 eighth graders in AY2020 (SCSD, 2021). Each grade is appointed two co-teaching pairs, one general educator and one special educator per pair, to facilitate core classes filled with approximately 25 students. The ratio for the co-taught courses is typically 22 students to one co-teaching duo. Demographically, African Americans (68.8%) represent most of College Middle's student body and 30.4% Hispanics/Latinos. At least 50% of the students enrolled at College Middle live in poverty-stricken homes.

Like College Middle, minority students account for nearly all of Easter Middle's student population. Easter Middle School charged 74 teachers to provide instruction for 1,047 middle school students in AY2020 (SCSD, 2021). This school also chose two co-teaching pairs to coinstruct classes for each grade level. However, Easter Middle's students-to-co-teacher ratio was higher (25 to 1) than College Middle (22 to 1).

Date Middle School operates as the third middle school in the SCSD system. This site employed 67 full-time instructors to teach 1,055 students in grades six through eight (SCSD, 2021). Compared to College Middle's 50% and Easter Middle's 75% students, more than 80% of Date Middle's learners reside in low socio-economic households. Date Middle's administrators also appoint two co-teaching teams to co-teach general education courses on each grade level. The ratio between students and co-teacher at Date Middle (28 to 1) was more significant than in the first two SCSD middle schools.

Of all sites, Mason Branch Middle served fewer students (N = 799) in AY2020. More than 83% of them lived in residences that lack access to economic and social resources. Although Mason Branch's students-to-co-teacher team ratio (25 to 1) resembles Easter Middle's figures, this establishment performed worse in math and reading scores than other middle schools throughout the system (Governor's Office of Student Achievement, n. d.).

Middle school administrators across the United States often charge general and special educators to co-instruct children with and without disabilities (Rodgers & Weiss, 2019; Wexler, 2021). Academic researchers encouraged middle school co-teachers to share the same mentality regarding delivering lessons to students responsibly since evidence suggests co-teaching focuses on practical classroom practices (Shelton et al., 2021; Wexler et al., 2021). This focused solely on co-teaching pairs at SCSD middle schools since little is known about this population, and it is needed because the literature does not adequately describe middle school teachers' co-teaching experiences, mainly when working in a virtual environment during a worldwide pandemic.

## **Participants**

General and special educators who co-taught SCSD middle school students online during the 2020-2021 academic year represented the target population for this qualitative research inquiry. Knechel (2019) defined the population as an entire culture and the sample as a fraction of the group. The primary goal when selecting participants is to choose individuals who exhibit or identify with characteristics connected to the general population under investigation (Ames et al., 2019; Rahi, 2017). More importantly, Capili (2021) proposed developing recruitment protocols for identifying the sample population in research analysis. Techniques used to recruit potential participants must align with the overall logic of the study (Campbell et al., 2020; Gill, 2020). Scholars use probability or nonprobability sampling techniques to recruit participants to locate a few people for the study instead of analyzing everyone associated with the phenomenon (Guest et al., 2017; Link, 2018).

During a qualitative analysis, scholars use nonprobability sampling techniques to select participants who understand the phenomenon under study (Berndt, 2020; Gill, 2020). Qualitative research investigations also feature small and convenient samples because these designs aim to identify unknown information about human experiences (Ames et al., 2019; Hamilton & Finley, 2019; Lu & Franklin, 2018). Some qualitative researchers also use purposive sampling to identify participants based on specific characteristics to answer research questions (Campbell et al., 2020). The purposive sampling method works best once researchers find it difficult to recruit individuals who meet the study's criteria and can be ready to provide data (Campbell et al., 2020; Lu & Franklin, 2018). Furthermore, purposive sampling is cost-efficient and less timeconsuming than other recruitment methods (Ames et al., 2019; Gill, 2020).

#### **Participant Selection**

I used the purposive sampling method to recruit middle school co-teachers because it allowed me to choose educators who can provide insightful details about co-teaching virtually. Researchers following purposive sampling techniques usually select participants knowledgeable about a phenomenon like co-teachers' virtual instruction experiences (Gill, 2020; Lu & Franklin, 2018). I recruited six general and six special educators who co-taught 6th-8th grade virtually during the 2020-2021 school year. Participants met these requirements (a) worked with SCSD between August 2020 and June 2021, (b) identified as a general or special education middle school teacher, (c) co-instructed one or more courses remotely in AY21, and (d) was willing to share relevant experiences related to co-teaching online middle school courses during a global pandemic. Both novice and seasoned co-teachers partook in the study because they met the study's participant criteria.

## **Researcher Positionality**

In qualitative research, scholars must acknowledge biases, subjectivities, and positional beliefs to prevent these elements from interfering with the study's outcome (Dean, 2017; Mason-Bish, 2019). The positionality section typically explains how the researcher and research setting influence qualitative results (Jafar, 2018; Mason-Bish, 2019). Positionality also addresses the researcher's multiple overlapping identities (Bourke, 2020). Failure to identify the researcher clearly could lead readers to lose sight of the study's meaning (Jafar, 2018). Details next reveal my rationale for examining SCSD general and special education co-teachers' experiences teaching middle school students remotely during the 2020-2021 academic year.

### **Interpretive Framework**

The interpretative framework for this study was social constructivism. Social constructivists acquire knowledge by dissecting content to understand multiple realities about a phenomenon (Creswell & Poth, 2018; Egbert & Sanden, 2018). They also attribute learning to interactions within the environment (Warin et al., 2011). Furthermore, social constructivists believe that learning occurs when people begin to reconstruct cognitive processes garnered by self-discovery (Ahlin, 2017; Moustakas, 1994; van Manen, 1990). The social constructivist research paradigm also requires academic scholars to reflect on various philosophical assumptions. Social constructivism aligns with the study due to its collaborative nature and

focuses on the interconnections between the co-teachers' and their social environment (Ernest, 1995).

## **Philosophical Assumptions**

Hermeneutic phenomenological inquiries call for scholars to reveal philosophical assumptions about interpreting human experiences (Neubauer et al., 2019; van Manen, 2016). Philosophical assumptions also guide a study's research problem and questions (Creswell & Poth, 2018). Furthermore, philosophical assumptions influence the researcher's role and the rationale for selecting participants in a qualitative inquiry (Campbell et al., 2020). The goal is to mitigate assumptions by clarifying the researcher's worldviews and the methods implemented throughout the research process (Creswell & Poth, 2018). As a novice hermeneutic phenomenological investigator, the ontological, epistemological, and axiological assumption sections explain my philosophical assumptions.

#### **Ontological Assumption**

Ontology concerns reality and the nature of being (Nasution, 2018). My worldview consists of both realism and nominalism. I believe that humans share similar experiences shaping their reality, but they interpret events differently based on their perception of the situation. I also consider reality, at least in part, a construct of an observer's mind. In contrast, I also think that reality exists separately from individuals' interpretations of lived experiences. God is the creator of all things, and his words are the actual reality. He is all-knowing, and humans cannot begin to understand reality's true meaning. It would be remiss not to mention that I am conducting this qualitative investigation having gone through similar experiences as the middle school co-teacher participants. However, my ontological assumptions required me to look at the multiple

realities of my participants as I worked to describe their lived experiences (Kivunja & Kuyini, 2017).

## **Epistemological Assumption**

Epistemological assumptions in the study addressed what counts as knowledge (Creswell & Poth, 2018). Epistemologically, the hermeneutic phenomenology qualitative design considers the researcher an observer of the world and not bias-free (Neubauer et al., 2019). I spent as much time as possible with the co-teacher participants and gained more insight into their lived virtual instruction experiences. More importantly, the study's outcome relied on my interpretation of the story's co-teachers shared during the interviews and focus groups. My goal was to understand (1) what it means to be a co-teacher from a middle school instructor's perspective and (2) how these educators persevered through online teaching and instruction in a public health crisis.

## **Axiological** Assumption

In qualitative research, scholars discuss axiological assumptions by acknowledging any biases or values guiding the investigation (Creswell & Creswell, 2018; Kelly et al., 2018). My axiological assumptions stem from my experience working as a middle school special education and general education co-teacher. Although participants and I work for the same school district, I cannot assume these individuals share my values about co-teaching. I think co-teaching is invaluable in inclusive classrooms. However, ineffective co-teaching teams pose monumental challenges for both instructors and students. Co-teaching aims to assist students who need individualized instruction with grasping instructional content. In my career, I have witnessed co-teachers (i.e., both general educators and special educators) interrupting each other during a lecture on several occasions. I also observed successful co-teaching pairs who alternated leading

classes and assisting students. Thus, I believe that it is a disservice to students when co-teachers do not follow or understand effective co-teaching practices.

The data generated in this investigation may not reflect all SCSD co-teachers' experiences with instructing online courses. Like other qualitative studies, readers must decide if the stories shared in this phenomenological inquiry apply to other co-teachers or a different context (Levitt, 2021; Lincoln & Guba, 1985). Scholars conducting phenomenological analysis tend to prioritize pinpointing similarities in a phenomenon rather than generalizing results (Miller et al., 2018; van Manen, 1990). My ultimate objective of this study consisted of constructing rich, thick, and interpretative descriptions of middle school co-teachers' stories in response to the research questions.

## **Researcher's Role**

Qualitative scholars serve as a human instrument in the research investigation (Creswell & Creswell, 2018; Moustakas, 1994). They also consider firsthand experiences, prior knowledge and biases, and the nature of the research design that could, potentially, affect the study's outcome (Creswell & Poth, 2018). I conducted this hermeneutic phenomenological analysis to learn more about middle school co-teachers' experiences with virtual instruction during a global crisis. I have served as a middle school general educator, special educator, and co-teacher in both roles in the SCSD system. Throughout the study, I was responsible for conducting individual interviews and a focus group session with select co-teachers. I requested that each co-teacher review and sign an informed consent document (including permission to use an audio recording device during the interview and focus group) (see Appendix D). After each meeting, I transcribed the audio recordings verbatim to deepen my understanding of co-teacher participants' experiences. Although hermeneutic phenomenologists rarely avoid biases (van Manen, 2014), I

documented my experiences in a journal to monitor my thoughts about the topic and research process.

Presently, I work as a 7th-grade ELA general education co-teacher. My primary responsibilities include developing the English and Language Arts (ELA) content for four cotaught middle school courses. The special educator and I implement the team-teaching technique because the strategy allows us to rotate roles to accommodate individuals with disabilities. Team teaching involves sharing equal instructional time with the entire class (King-Sears & Jenkins, 2020; McGlynn & Kelly, 2019). My current co-teaching partnership functions efficiently because we developed a good relationship and appreciate the significance and impact of both coteaching roles. However, my previous experiences as a special education co-teacher were not as enjoyable.

My first year as a special education co-teacher was disappointing. The general educator and I did not collaborate well in the classroom. The general education co-teacher expected me to focus solely on students with disabilities while she taught their peers. By the end of the year, my role included accommodating and modifying lessons to ensure students with disabilities grasped the content presented in the general education course. I did not know much about general education curricula or my co-teaching role as a special education co-teacher. In my first year as a co-teacher, I felt like a teacher's assistant because the general educator wanted complete classroom control. The principal paired me with a general education teacher who also lacked coteaching instruction knowledge the following year. This person also expected me to assist students with disabilities only. I also remember this instructor giving students inaccurate feedback at times. I had to go behind her to make sure students understood the lesson, which made this experience more frustrating. My third and final year co-teaching as a special educator was not as bad as the first two experiences because the general education teacher expected and welcomed my involvement in the classroom. I assumed most general education co-teachers did not understand co-teaching or preferred the one-teach-one-assist approach rather than team-teaching. At the beginning of AY20, I transitioned into the general educator's role with a special education co-teacher who made our collaborative partnership seamless. We worked together to ensure that middle students with and without disabilities received the best face-to-face instruction possible. Unfortunately, COVID-19 interrupted our plans for the second half of the school year because neither of us had experience with virtual instruction before the pandemic.

I decided to investigate the virtual instructional experiences of Sunny County's middle school co-teachers because of my familiarity with the district. I have witnessed hostile confrontations between co-teachers because both educators seemed confused about co-teaching roles in the classroom. The recent pandemic also ignited concerns because numerous co-teachers were unprepared for online instruction (Chizhik & Brandon, 2020; Wang, 2021). The 2020-2021 academic year represented the first full year affected by COVID-19. Based on my co-teaching experiences, it was vital to study middle school co-teachers' experience with virtual instruction during AY21. Throughout the research process, I documented my biases and subjectivities to prevent them from interfering with the study's outcome (Moustakas, 1994). Journaling also helped me deepen my interpretation of the co-teachers' lived experiences (van Manen, 2014). More importantly, phenomenological research welcomes reflexive writing to understand the meaning of participants' experiences (van Manen, 1990).

Reflexivity represents a transformative practice in which the researcher engages in selfawareness and self-analysis (Dodgson, 2019). This process involves recognizing biases and subjectivities throughout the research process (Creswell & Poth, 2018). Furthermore, Creswell and Poth insinuated that reflexivity confirms that researchers develop emerging themes accurately based on data collected in a qualitative study. It also enhances a qualitative study's credibility when researchers execute it correctly (Dodgson, 2019). I used reflexivity in this study to describe my connection to the research topic and participants. Reflexivity also forced me to think deeply about my knowledge and experiences with co-teaching (Creswell & Creswell, 2018; Patton, 2015). I also used reflexivity to distinguish the difference between my subjectivities and the collective voice of the participants (Patton, 2015). Moustakas (1994) and van Manen (1990) outlined various procedures related to reflexive journaling and reducing phenomenological data. The following section highlights the procedures I used in this hermeneutic phenomenology analysis.

#### Procedures

I followed van Manen's (1990) hermeneutic phenomenological approach to understanding SCSD middle school general and special educators' virtual co-teaching experiences during a global crisis. Hermeneutic phenomenologists allow language to speak for itself but tend to be sensitive to its subtle undertones (van Manen, 2003). Constructing a phenomenological interpretation of participants' experiences requires reviewing data constantly until indications of the phenomenon under scrutiny appear (van Manen, 2014, 2016). Throughout this hermeneutic phenomenological study, I followed specific procedures to collect and analyze data obtained from individual interviews, journal prompts, and focus group sessions. I also received permission (see Appendix A) from Liberty University's Institutional Review Board (IRB) and Sunny County's school administrative office (see Appendix B) to conduct this qualitative inquiry with participants. I emailed all four middle school principals for permission to conduct the study. The electronic document (see Appendix C) requests permission to speak with general and special educators who co-taught online courses in AY21. Furthermore, the email shares my motivation for studying general and special education co-teachers' experiences with distance learning education during the COVID pandemic.

## Permissions

SCSD middle school co-teachers possess valuable knowledge about co-teaching online, so I invited participants to interview immediately after I received approval from the IRB. I contacted the SCSD administrative office since they must approve all studies conducted in the school district. The district permitted me to contact all four SCSD middle school principals (see Appendix B) pending Liberty University's IRB's notification to collect data (see Appendix A). I obtained the principals' email addresses from the district's website. In the email I requested each administrator to provide me with a list containing the email addresses of general and special educators who co-taught virtually during the 2020-2021 school year. Once I received the requested information, I emailed all middle school co-teachers identified by the principals and recruited them as possible participants in the study.

### **Recruitment Plan**

Given the size of the SCSD school system, I executed the purposive sampling method to recruit SCSD general and special educators who could provide details about co-teaching middle school classes remotely during the pandemic. I worked with administrators and the Lead Teacher of Compliance (LTC) to identify potential candidates for this hermeneutic phenomenological inquiry. I emailed co-teachers identified by the four SCSD middle school principals to interview for the study (see Appendix E). Individuals who responded to the recruitment email took a basic screening process before the interview and signed an informed consent document (see Appendix D). To participate, the co-teacher must (a) have worked with SCSD between August 2020 and June 2021, (b) identified as a general or special education middle school teacher, (c) have co-instructed one or more courses remotely in AY21, and (d) was willing to share relevant experiences related to co-teaching online middle school courses due to COVID-19.

The participant recruitment email communicated the study's background, problem, purpose, significance, and the participant's right to withdraw at any time without penalty (see Appendix E). I scheduled interviews based on the receipt of each person's response. Each person received a link via email to access the individual interviews and focus groups virtually through Microsoft Teams. Although participants can open the link on or off-campus, I encouraged them to choose a location where they are comfortable with sharing their virtual co-teaching experiences. I recorded each co-teacher's interview on an audio recording device and Microsoft Teams to ensure that I backed up the qualitative data before transcribing it.

I spoke with an LTC representative who informed me that all four SCSD middle schools appoint two co-teaching teams on each grade level. I calculated 24 general and special education co-teaching teams based on this information. This study targeted 12 middle school co-teachers that were willing to share experiences about online teaching practices amidst the COVID-19 pandemic. Qualitative inquiries typically feature small samples, allowing scholars to build a rapport with participants and create rich and thick descriptions of their interactions (see Hilton et al., 2019), and I followed van Manen's (1990) guidelines about reducing the phenomenological data to develop an interpretative understanding of middle school co-teachers' experiences in remote classrooms.
### **Data Collection Plan**

In phenomenological research, scholars typically conduct face-to-face or virtual interviews to collect data about human lived experiences (Flynn, 2022; Moser & Korstjens, 2018). Hermeneutic phenomenologists also consider participants "collaborators in research projects" (van Manen, 1990, p. 63). The primary goal of hermeneutic interviews is to understand the meaning of what participants say about the phenomenon under scrutiny (Moser & Korstjens, 2018; van Manen, 1990). Following traditional qualitative measures, individual interviews will be the primary data source in this study. Experts in the field will review all interviews, focus group questions, and writing journal prompts before any data is collected. Each interview took place virtually through Microsoft Teams for approximately one hour. Before the meeting concluded, I explained all journal prompts thoroughly to ensure the participants understood the questions. I also requested participants to return the journal prompts electronically no later than one week after the interview. Furthermore, I invited all participants to a focus group based on their availability. The focus group sessions helped me understand general educators' and special educators' collective virtual co-teaching experiences.

The data collection plan included triangulating multiple sources (i.e., semi-structured and in-depth interviews, journal prompts, and two separate focus groups) to learn more about SCSD middle school co-teachers' experiences with virtual instruction. Triangulation is vital in qualitative research because it strengthens the credibility of the study's results (Flynn, 2022; Morgan, 2019). To triangulate qualitative data, scholars usually implement one of four methods: multimethod/mixed methods triangulation, investigator triangulation, theoretical triangulation, or data analysis triangulation (Renz et al., 2018). I followed data analysis triangulation because I

constructed rich, thick, and interpretive descriptions of participants' co-teaching experiences based on data collected from three qualitative sources.

In this hermeneutic phenomenological inquiry, I triangulated data collected from individual interviews, journal prompts, and focus groups. Triangulating more than two data sources can provide rich insight and a deep understanding of middle school co-teachers' virtual experiences during the COVID-19 pandemic (Maher et al., 2018; Renz et al., 2018). Furthermore, I triangulated data using transcribed information, audio recordings, and the reflexive journal to better understand participants' experiences (Denzin, 1978; see also Craig et al., 2021). Triangulating data could also reduce the researcher's bias and increase the validity of results (Lincoln & Guba, 1985; Morgan, 2019).

The individual interviews, journal prompts, and focus groups produced sufficient data to explain middle school co-teachers' experiences with online teaching during a global crisis. I uploaded the information collected from the three data sources into the NVivo software. Social researchers endorsed NVivo because it helped them store, manage, and organize rich data produced in the qualitative analysis (Craig et al., 2021; Robins & Eisen, 2017). NVivo also supports color-coding schemes to differentiate qualitative data (Maher et al., 2018). Furthermore, Craig et al. (2021) recommend NVivo because it can provide more time to code and label data collected in a study. I used NVivo to examine data collected from interview questions, journal prompts, and focus groups individually and as a collective unit (see Feng & Behar-Horenstein, 2019). NVivo also helped me identify repetitive patterns in the qualitative data expeditiously (Maher et al., 2018; Robins & Eisen, 2017).

**Individual Interviews** (Data Collection Approach #1)

Individual interviews served as the primary data source in this hermeneutic

phenomenological investigation. Adam and van Manen (2017) described interviews as a premier source of qualitative data because of their ability to generate information to explain human lived experiences. Interviews remain widely used in qualitative studies to explore people's experiences with or concerning a phenomenon (Feng & Behar-Horenstein, 2019; Gill & Baillie, 2018). In hermeneutic phenomenology, qualitative scholars typically construct detailed and thick interpretative descriptions of participants' stories provided during the interviews (Crowther et al., 2017). One way to acquire such details is to create an interview protocol to remain on task during individual interviews (Castillo-Montoya, 2016).

All individual interviews should follow protocols based on Castillo-Montoya's (2016) recommendations. The first phase involves constructing interview questions aligned with the RQ and SQs (Castillo-Montoya, 2016). Aligning interview questions to the RQ and specific SQs ensures data generated addresses the phenomenon under investigation (Castillo-Montoya, 2016; Creswell & Creswell, 2018). Moustakas (1994) deemed open-ended questions appropriate for qualitative phenomenological research designs. This format accepts researchers controlling the dialogue, permitting consistency throughout individual interviews (Yin, 2016). Additionally, open-ended research questions could generate buzzwords to prepare researchers for relevant follow-up conversations (Patton, 1990; van Manen, 2016).

Another element of the hermeneutic phenomenological study's protocol involves semistructured interviews (Castillo-Montoya, 2016; Crowther et al., 2017). Moustakas (1994) stated that semi-structured interviews could generate rich qualitative data filled with critical concepts and phrases related to a research topic, such as co-teaching middle school students remotely. Based on Moustakas's advice, the individual interviews in this analysis were semi-structured. All interviews were virtual, semi-structured, and at least one hour to allow participants enough time to share stories about online instructional experiences (Crowther et al., 2017; Yin, 2016). Before each interview, I reviewed the informed consent document with the co-teacher to reiterate the background, purpose, research questions, and the study's significance.

The informed consent also reminded participants about audio-recorded interviews. Each interview was recorded onto a mobile and portable audio recording device. Audio data is beneficial in qualitative studies because the researcher can listen to the recording to verify statements or seek additional clarification about terms and concepts (Bourke, 2020; Maher et al., 2018). Confidentiality concerns did not arise in this qualitative research (Hopper et al., 2021). Researchers must attempt to lessen the risk of disclosing sensitive information to avoid harming participants (DuBois et al., 2018). Data collected from individual interviews was stored on a passcode-protected flash drive, placed in a locked safe in my office, and will be discarded after five years (or when the data is no longer relevant).

### Individual Interview Questions

In this study, the co-teacher participants responded to interview questions about their experiences with virtual teaching methods during the COVID-19 outbreak. Each person received a basic demographic (Google) survey via email to find out more about their age, ethnicity, years of service in the SCSD system (including co-teaching), and grade level(s) taught. Qualitative researchers often find ways to build a rapport with participants before conducting interviews (Marshall & Rossman, 2015; Merriam & Tisdell, 2015). To lessen co-teachers' anxiety, I began each interview with a brief self-introduction and then proceeded to an icebreaker question (e.g., *what is your favorite non-work activity* or *what has been the highlight of your current workweek*). The interviews commenced after observing participants looking relaxed or feeling

comfortable enough to answer questions. Below are questions that were asked in the semistructured interviews with participants:

1. Describe your experiences co-teaching in a face-to-face classroom. RQ, SQ1

2. Describe the dynamics of your relationship with the other co-teacher. RQ, SQ1

3. Describe the dynamics of your relationship with the other co-teacher as you transitioned to virtual learning during the COVID-19 pandemic. RQ, SQ1, SQ2

4. How did you work with the other co-teacher to transition from face-to-face to virtual classes during the 2020-2021 academic year? RQ, SQ2

5. What were the responsibilities you shouldered during the transition to online learning during the pandemic? RQ, SQ2

6. What were the responsibilities you shared with the co-teacher? RQ, SQ3

7. How did you manage the stress associated with such an impactful change? RQ, SQ3

8. How did the interpersonal relationships between you and the co-teacher change? RQ, SQ3

9. How did the interpersonal relationships between you and the students change? RQ, SQ1 & SQ3

10. Describe the role of learning about recent technologies that you, perhaps, were not familiar with and how that affected you. RQ, SQ2 & SQ3

11. What other factors impacted you as you worked to co-teach online during the COVID pandemic? RQ, SQ1, SQ2, SQ3

12. What else about your experiences working with another co-teacher in an online environment during the AY2021 would you like to share? RQ, SQ1, SQ2, SQ3

Interview questions featured in this hermeneutic phenomenological inquiry were based loosely on Fraenkel and Wallen's (1996) work about educational research. I also reviewed Harrell's (2021) and Pitts's (2021) co-teaching studies to construct questions for the individual interviews. During each interview, I jotted down notes to remind me of my thought processes and participant actions throughout the conversation. All 12 interview questions answered the central research question related to the middle school co-teachers' virtual instructional experiences during the 2020-2021 school year. Questions 1, 2, 9, and 11 specifically responded to RQ and SQ1 about providing information related to general and special educators' experiences co-teaching middle school students. Questions 3-5 and 10-11 stemmed from RQ, SQ1, SQ2, and SQ3 concerning the middle school co-teachers' experiences transitioning to virtual instruction despite the public health crisis. Additionally, questions 6-11 detailed the general and special educators RQ, SQ1, and SQ3. Lastly, question 12 concluded the interview by covering RQ, SQ1, SQ2, and SQ3 and allowing participants the last opportunity to share anything else they would like.

#### Individual Interview Data Analysis Plan

Traditionally, qualitative researchers perform various data analysis methods to make sense of the data collected in the study (Merriam & Tisdell, 2015). The purpose of hermeneutic phenomenology is to develop essential themes representing lived experiences in a meaningful way (van Manen, 1990). Hermeneutic phenomenologists analyze qualitative data to identify emerging (or essential) themes representing the experiential structure of lived experiences (van Manen, 2016). In this phenomenological investigation, I discovered the factors affecting middle school general and special educators' virtual co-teaching experiences during the height of the COVID-19 pandemic. Data collected from individual interviews deepened my understanding of SCSD middle school co-teachers' virtual instruction experiences during the 2020-2021 school year. My data analysis plan included hermeneutic phenomenological methods used traditionally to analyze data collected from interviews.

Hermeneutic phenomenology requires scholars to create interpretative statements about participants' lived experiences from data collected from individual interviews (Ricoeur, 1981; van Manen, 1990). Most hermeneutic phenomenologists reduce data while reading and rereading field text multiple times in no set order (Cohen et al., 2000). In this study, I followed four basic steps, including data management, data reduction, data interpretation, and data representation, to analyze data collected from individual interviews (see Miles et al., 2013). I used NVivo to store, manage, and organize the transcripts of individual interviews. Furthermore, I used traditional qualitative coding methods (e.g., display boards, highlighters, cut-outs, or excerpts of participant statements) to differentiate interview data. The next three steps I took during the data analysis process aligned with van Manen's (1990, 2016) concept of a hermeneutic circle designed to reduce and make sense of phenomenological data.

A hermeneutic circle explains researchers' curiosity about a topic, their pre-understanding of the phenomenon under study, data collection and presentation, development of emerging themes, and conception findings based on literature (van Manen, 2016). As discussed in the procedures section, I carefully followed the hermeneutic circle practices and procedures outlined by van Manen (2016). This process and the resulting insights allowed me to recognize my personal biases when examining other middle school co-teachers' experiences with virtual classrooms. Next, I reduced the individual interview data and then developed emerging themes that represented middle school educators' experiences with co-teaching. Cohen et al. (2000) referred to this process as "phenomenological reduction" because it involves deciding whether data is relevant enough to answer the research questions (p.7). I read each interview separately to understand what areas in the data I needed to pay close attention to. Also, I compiled all individual interviews into a collective document and then dissected it following van Manen's (2016) detailed reading approach.

The detailed reading method entails analyzing every sentence to determine what the information reveals about the phenomenon under investigation (van Manen, 2016). Hermeneutic phenomenologists use the detail reading approach to extract "powerful" statements to describe participants' accounts of the research topic (p. 320). I created essential themes to explain the meaning of SCSD middle school co-teachers' experience with virtual instruction. First, I performed a line-by-line thematic analysis to understand the meaning of words and sentences in the transcribed data. Later, I also developed detailed and thick descriptions to explain the participants' lived experiences. Interpretative descriptions serve as the narrative for phenomenological reflective writing (van Manen, 2016). Additionally, van Manen recommends using headings, reflective phenomenological themes, and textual data to present the researcher's interpretation of participants' virtual co-teaching experiences, which I incorporated into my data analysis methods as well.

I uploaded each recorded interview to Otter.ai (a transcription software) after each conversation endeds. Although modern technology transcribes auditory data quickly (Hopper et al., 2021), I reviewed Otter.ai's transcripts thoroughly while listening to the audio recording to verify whether the sources match verbatim. I also emailed participants their Otter.ai transcripts to verify or member-check the content accuracy. I requested that they select an alias to replace their identity throughout the study. Furthermore, I re-read and highlighted repetitive vital terms and concepts throughout the initial transcriptions provided by the Otter.ai software while participants confirmed their statements. Before re-reading the transcripts, I also documented all critical terms in the reflective journal to deepen my understanding of the potential participants' virtual coteaching experiences. Rather than conducting additional individual interviews, I asked each participant to complete five journal prompts to gain more insight into their perspective about coteaching middle school during a global crisis. Out of the twelve participants ten emailed their responses back to me. I also invited each person to a focus group session through email. I held two focus group sessions, the first session contained four participants and the second session had eight. Initially very few participants responded to the call for a focus group session, however after I called each person, I was able to get the remaining co-teachers to participate.

### **Journal Prompts** (e.g., Data Collection Approach #2)

In this hermeneutic study, participants completed journal prompts after their interview. Journal prompts provide insight into participants' perspectives about a phenomenon (Harrison & Fopma-Loy, 2010; Marquis et al., 2017). Oliver et al. (2021) alleged that journal prompts could improve people's actions, beliefs, and skill set since journaling involves reflecting on past experiences (Oliver et al., 2021). Journaling could provide details about participants' existing knowledge, strengths, and weaknesses on a topic (Harrison & Fopma-Loy, 2010; Woodbridge & O'Beirne, 2017). Reflective prompts also enhance people's critical thinking skills and understanding of a global health crisis, such as the COVID-19 pandemic (Payne, 2020; Pierce et al., 2020). Participants can also be motivated by journal prompts to set future goals (Harrison & Fopma-Loy, 2010).

Research suggests that the key to providing journal prompts in research investigations is explaining the questions before distributing them to participants (Woodbridge & O'Beirne, 2017). Reflective journal prompts can expound on online teaching practices during the COVID-19 pandemic (Pierce et al., 2020). Additionally, reflective journal prompts might increase general and special educators' awareness of bias and subjectivities regarding teaching and learning practices (Oliver et al., 2021; Payne, 2020), including virtual instruction. The journal prompts in this study focused on understanding co-teachers' instructional practices in distance learning classes. For this study, I based the journal prompts on Harrison and Fopma-Loy's (2010) depiction of journal prompts to stimulate participants' emotional competencies. Each journal prompt follows the open-ended format to delve into the co-teachers' perspectives about educating middle school students online during the COVID-19 pandemic.

Like individual interviews, journal prompts could provide a deeper insight into a social problem (Castleberry et al., 2016; Woodbridge & O'Beirne, 2017). Moser and Korstjens (2018) recommend that social researchers incorporate encouraging words and phrases in the reflective journal prompts to motivate participants to talk more about their experiences. After the interviews I sent out an email to each SCSD middle school co-teacher asking them to complete and email me the journal prompts no later than seven days after the individual interview. Participants were advised to write wherever they feel comfortable sharing their virtual co-teaching experiences. Some participants might view the reflective journaling opportunity as an outlet for releasing unconscious emotions about an event (Burles, 2017). Others may not be as open to discussing their experience because they fear that too much self-disclosure would jeopardize their reputation (Woodbridge & O'Beirne, 2017). To lessen participants' stress levels, I reminded them that their responses were anonymous, and I encouraged them to relax when writing since it clears the mind and reduces anxiety while reflecting on past situations.

#### Journal Prompt Questions

 In 200-400 words, describe your reactions to co-teaching in online classes during the 2020-2021 academic year. RQ, SQ1, SQ2, SQ3

- 2. Self-efficacy is an individual's belief in their capability to perform a task or accomplish a goal. Teacher self-efficacy focuses on how a teacher judges their ability to achieve student academic success amongst challenges such as a non-motivated student or behaviorally disruptive student. The teacher's beliefs can lead to gains in the classroom or the opposite. With this explanation in mind, describe your self-efficacy as an educator during the 2020-2021 AY in 200-400 words.
- In 200-400 words, discuss the things that positively impacted your self-efficacy as you co-taught online during the COVID pandemic.
- 4. In 200-400 words, share the things that may have negatively impacted your self-efficacy during that time.
- In 200-400 words, share any other experiences that shaped your perception of coteaching during a global pandemic. RQ, SQ1, SQ2, SQ3

Qualitative scholars utilize journal prompts to enhance the reflexivity process and ensure the study produces reliable results (Harrison & Fopma-Loy, 2010; Orange, 2016). All six journal prompts are connected to the central research question (RQ) in this study. The first three prompts address SQ1 specifically because they relate to co-teaching in general. Prompts 3-6 encouraged participants to speak about their experiences transitioning to virtual instruction during the height of COVID-19. Furthermore, journal prompts 1 and 3-6 generated rich details in response to SQ3 related to the middle school co-teachers' experience in virtual classrooms in the 2020-2021 school year.

### Journal Prompts Data Analysis Plan

Journal prompts captured the essence of SCSD middle school co-teachers' virtual instructional practices and strengthened my understanding of general educators' and special

educators' experiences during the 2020-2021 school year. I analyzed participants' journal prompts using the four basic steps outlined in the individual interview data analysis plan (i.e., data management, data reduction, data interpretation, and data representation). I also described my thoughts about each person's journal prompt entries in a reflective journal. First, I collected the prompts from participants electronically. I uploaded each electronic statement into the NVivo software individually and as one collective document. Then I identified keywords and phrases that supported essential themes connected to the research questions. This process required me to read and re-read data collected from the journal prompts to determine how it related to the co-teachers' virtual instruction practices. The journal prompt responses and data collected from the individual interviews and focus groups supported the storyline chronicling SCSD middle school educators' lived experience co-teaching students in virtual classrooms.

#### **Focus Groups** (e.g., Data Collection Approach #3)

Focus groups provide an opportunity for the researcher to interact with multiple participants at the same time while encouraging dialogue amongst participants about the area being researched. Focus groups are especially useful for exploring complex, multi-layered concepts from the perspectives of the participants. Focus groups are an excellent means to create triangulation using varied sources of evidence in your study when needing to conserve time rather than conducting follow-up interviews of all participants, or when collective responses are as good as, or superior to, individual interview evidence. Focus group questions must be developed and reported using the same format as interview questions (see Interview Question subsection above) and should avoid re-asking questions already asked during individual interviews. Additionally, researchers should keep in mind that when using a focus group as a source of triangulation for individual interviews, that the focus group protocol may need to be modified after the study is underway to follow up most effectively on initial data findings of individual interviews.

# Focus Group Questions

Before I constructed the final focus group questions, I considered factors that might influence the outcome of qualitative data collected from this source (see Gill & Baillie, 2018). Hamilton and Finley (2019) advise focus group moderators to choose questions based on the study's problem, RQ, and SQs. Relevant focus group questions helped me delve deeper into the middle school co-teacher participants' experiences educating 6-8 grade students in a virtual learning space. As the moderator, I followed specific protocols during the focus groups (Moser & Korstjens, 2018). I held two focus groups and I started each with an icebreaker question (e.g., did you enjoy co-teaching from home, or would you rather be in a face-to-face environment). Gill and Baillie (2018) suggest starting focus groups with icebreaker questions to ease participants' anxiety and provoke more meaningful dialogue. Participants took around five minutes to answer the icebreakers and chat. After the last person spoke, I proceeded with the focus group questions listed below:

- 1. Describe your role as the general or special education co-teacher. RQ, SQ1, SQ3
- 2. How do you think virtual learning will shape middle school education in the future, particularly for inclusive classrooms? RQ, SQ1
- 3. Describe a co-teaching model you believe works best when working with a [general/special] educator. RQ, SQ1, SQ3
- How would you describe your communication with your virtual co-teaching partner? RQ, SQ3

- Describe some positive experiences you had preparing to co-teach or co-teaching virtually with another instructor. RQ, SQ2, SQ3
- 6. Describe some of the more challenging experiences you had preparing to co-teach or coteaching virtually with another instructor. RQ, SQs2, SQ3
- 7. Self-efficacy is an individual's belief in their capacity to perform a task or reach a specific goal. Teacher self-efficacy is an individual's judgement in their capabilities to bring about desired outcomes of student engagement and learning, even when students are difficult or unmotivated (Tschannen-Moran & Woolfolk Hoy, 2001). As you think about your self-efficacy as an educator, what impact did the virtual co-teaching experience have on your self-efficacy?
- 8. What other experiences working with another co-teacher in an online environment during the AY2020 would you like to share?

The focus group sessions deepened my understanding of general and special educators' virtual co-teaching practices during the 2020-2021 school year. The qualitative data obtained from the focus group sessions clarified previous statements and generated additional details regarding the SCSD middle school educators' co-teaching practices (Flynn, 2022; Moser & Korstjens, 2018). Data from the focus groups also provided a deeper understanding of participants' online work environment and decision-making processes during the 2020-2021 school year.

All five focus group questions collectively answered the central research question that guided this hermeneutic phenomenological inquiry. The initial focus group question aligned with SQ2 regarding the co-teachers' transition to online instruction. In contrast, details extracted from the second question spoke to SQ1 and SQ3 because they dealt with participants' experiences coteaching middle school students. Data from the third focus group question connected to RQ and SQ1 since it asked about future circumstances. Prompts four and five related specifically to SQ1 and SQ3 because both referred to co-teaching partnerships in the classroom.

# Focus Group Data Analysis Plan

I used van Manen's (1990) hermeneutic phenomenological method to examine data collected from both focus group sessions. Like the first two data analysis plans, I uploaded transcripts of the focus groups into the NVivo software separately, transcribed the recordings, and uploaded the recordings in one collective document. Maher et al. (2018) listed various benefits associated with NVivo, including separating and combining data to identify, code, and categorize qualitative data. I integrated the data collected from the focus groups in the existing hermeneutic circle to strengthen the rich and thick descriptions explaining the co-teachers' diverse responses concerning their lived experiences related to co-teaching SDSD middle school students virtually amidst a global pandemic.

### **Data Synthesis**

In qualitative studies, researchers synthesize and prioritize converting data into knowledge (Astroth & Chung, 2018; Denzin & Lincoln, 2018). Qualitative scholars often interpret and synthesize results generated in previous studies (Drisko, 2020). They also tend to organize findings into essential or emerging themes (Johnston et al., 2020). Data collected in this hermeneutic phenomenological study was triangulated (featuring three different data collection methods) to strengthen the results' credibility. I followed van Manen's (1990) approach to interpret and synthesize participants' shared experiences. I developed rich and thick statements to explain the participants' experiences co-teaching middle school students and their experience working in virtual classrooms. Interpretative assertions serve as anecdotal material describing the essence or meaning of a phenomenon under scrutiny (van Manen, 1990). Therefore, I developed essential themes to represent my interpretation of SCSD middle school co-teachers' experiences with virtual instruction during a public health crisis. More importantly, I synthesized and integrated the data collected from the focus groups with information obtained from individual interviews and journal prompts. Hermeneutic phenomenologists allow language to speak for itself but tend to be sensitive to its subtle undertones (van Manen, 2003). Constructing a phenomenological interpretation of participants' experiences required reviewing data constantly until indications of the phenomenon under scrutiny appeared (van Manen, 1990, 2016).

### Trustworthiness

Trustworthiness measures the rigor of qualitative results (Gill et al., 2018; Nowell et al., 2017). Compared to reliability and validity in quantitative studies, trustworthiness consists of four primary elements: credibility, dependability, transferability, and confirmability (Creswell & Creswell, 2018; Rose & Johnson, 2020). Each area of trustworthiness defines the quality criteria in qualitative studies (Korstjens & Moser, 2018). Additionally, qualitative scholars discuss the four components of trustworthiness to prevent readers from losing sight of the research methods used to analyze data or how assumptions may have interfered with the study's results (Nowell et al., 2017). A few techniques commonly used to ensure trustworthiness include triangulating data sources, obtaining rich descriptive data, keeping an audit trail, member checking information, and monitoring biases via reflexivity (Lincoln & Guba, 1985).

### Credibility

Credibility represents the confidence and accuracy of results generated in qualitative studies (Korstjens & Moser, 2018). It also acts as internal validity in qualitative studies (Hays & McKibben, 2021). To produce credible results, hermeneutic phenomenologists must explain all

methods used to engage different data sources to construct their interpretative narratives of lived experiences (Gill et al., 2018). Credibility can also be established by constructing rich and thick descriptions to illustrate human lived experiences (Korstjens & Moser, 2018). Prolonged interaction, continual observation, data collection triangulation, and researcher triangulation represent other techniques to achieve credible results (Lincoln & Guba, 1985).

Throughout this phenomenological study, I ensured credibility by triangulating three data sources, including individual interviews, journal prompts, and two focus groups. The individual interviews and focus groups required member checks to verify the accuracy of participants' statements. Member checks entail sending all participants an electronic copy of their interview transcripts to clarify information (Thomas, 2017). This method also gave participants a chance to review and verify statements and provide feedback before constructing interpretative statements detailing the essence of the lived experiences (Smith & McGannon, 2018).

#### Transferability

In qualitative research, transferability relates to the applicability of the qualitative results to other contexts (Lincoln & Guba, 1985). Transferability also resembles reliability in quantitative studies (Nowell et al., 2017). Transferable results also meet specific criteria allowing readers to grasp and connect content presented in the study to real-life experiences (Cope, 2014; Creswell & Creswell, 2018). To accomplish transferability, I developed rich and thick descriptions so readers can determine whether the results generated in this study fit another circumstance. I also provided copious information about the research setting to accomplish transferability. Furthermore, I documented my interactions with participants and experiences during the research process in a reflective journal to monitor biases and subjectivities. Lastly, I thoroughly explained the procedures to make it easier for future readers to follow the methods used in the study (Guba, 1981; Lincoln & Guba, 1985).

## Dependability

Like reliability in quantitative studies, dependability determines whether a qualitative study can be replicated by another scholar (Denzin & Lincoln, 2018). Dependability occurs when a qualitative scholar documents each step in the research process (Maher et al., 2018). One can expect participants to share similar experiences (Connelly, 2016). Dependable results also show consistency in data collection protocol, open-ended questions, and a member-checking process (Lincoln & Guba, 2016). To achieve dependability, one must remain transparent during the analysis phase (Lincoln & Guba, 1985). An audit trail also helps qualitative scholars accomplish dependability (Astroth & Chung, 2018). Liberty University requires a thorough review of the auditing process and results presented in the research study.

# Confirmability

Confirmability refers to how results generated in a phenomenological qualitative analysis reflect an accurate interpretation of participants' lived experiences (Cope, 2014; Lincoln & Guba, 2016). This aspect of trustworthiness occurs when the findings reflect mostly participants' voices rather than the researcher (Connelly, 2016; Lincoln & Guba, 1985). Additionally, confirmability involves triangulating multiple data sources to construct rich and thick interpretations of participants' experiences (Astroth & Chung, 2018; Denzin & Lincoln, 2018). The reflective journal also helps strengthen confirmability because it allows the researcher to monitor assumptions, biases, and subjectivities about a topic (Lincoln & Guba, 1985). Beyond these measures, an audit trail could also support the confirmability aspect of trustworthiness (Cope, 2014).

# **Ethical Considerations**

Ethically, this hermeneutic phenomenological qualitative study did not begin until Liberty University's IRB approved it. The recruitment process took place immediately after obtaining permission from the IRB. I protected every participant throughout the study. I currently serve as a general education co-teacher at one of the middle schools in the Sunny County school system. However, I am neither a supervisor nor a lead administrator at my location. I met virtually with 12 co-teachers (i.e., six general educators and six special educators) who were willing to share their experiences with virtual co-teaching during the pandemic. I did everything possible to minimize potential risks, distress, and discomfort throughout this phenomenological investigation. I requested that all participants not share any information disclosed in the research study. Ultimately, confidentiality is in place to protect all co-teacher participants' identities and well-being (including career reputation).

I replaced participants' names with a pseudonym throughout the investigation. Pseudonyms help the researcher safeguard participants' identities and support confidentiality (Lahman et al., 2015). Confidentiality cannot be guaranteed in focus groups; however, I asked each co-teacher who participates in the focus groups not to discuss our conversations outside of the meeting. Additionally, I had several discussions with participants about the informed consent document, particularly before each interview and focus group session to ensure co-teachers understood their confidentiality rights as research participants. The informed consent document details pertinent information about the study and the right to exit the study without penalty.

Additionally, the informed consent document requested that participants keep the information disclosed in the study confidential. Co-teachers were notified about my plan to record individual interviews and focus group sessions through Microsoft Teams and on a

portable device. Data is backed up on a password-protected flash drive and placed in a file cabinet which requires a key. More importantly, individuals who participated in the study will be debriefed on the study's findings after completion of the doctoral program. Although I recruited SCSD middle school general and special educators who co-taught virtually in 2020-2021 and could not guarantee anonymity because of the nature of our interactions, I did ensure that information shared in the investigation was kept confidential during and after data collection concluded. I will lock all data in a locked filing cabinet until it is no longer necessary.

#### Summary

This chapter has explained the qualitative hermeneutic phenomenology design, the research questions, setting, and participants. I selected middle school co-teachers as participants in this study because information on this population remains limited (Swanson & Wexler, 2017). As a former special education and current general education co-teacher, I explored and described 6-8th grade co-teachers' experiences with virtual teaching during the recent COVID-19 pandemic. Furthermore, Chapter 3 covered the researcher's post-positivity position on co-teaching. Data obtained via individual interviews, journal prompts, and focus groups formed rich and thick interpretive descriptions that responded to the central RQ and SQs related to the essence of the participants' lived experiences co-teaching online.

# **CHAPTER FOUR: FINDINGS**

#### Overview

The researcher of this qualitative hermeneutic phenomenological study aimed to describe and understand the lived experiences of co-teaching online through the perspectives of general education and special education co-teachers at the middle school level during the COVID-19 pandemic of the 2020-2021 academic year. This chapter's underlying objective is to discuss the results obtained after analyzing the data collected from participants' interview transcripts, focus group transcripts, and journal prompt responses for emerging themes. The chapter includes participant descriptions, discussion of the narrative themes of the data, address outlier data, and review the research question responses.

# **Participants**

The research study's participants included 12 middle school teachers who co-taught virtually during the 2020-2021 school year. Of the teachers recruited for the study, one participant declined to participate, one did not respond to the invitation, and 12 accepted the invitation. The research participants included 11 female co-teachers and one male co-teacher. Table 1 summarizes the participants' total years of co-teaching, highest degree earned, content area, and the grade level taught during the 2020-2021 academic year.

### Table 1

# Teacher Participants

Teacher Participant	Years Co- Teaching	Highest Degree Earned	Content Area	Grade Level
Daniel	15	Masters	Math	8th
Sally	3	Bachelors	English Language Arts	8th
Amanda	14	Education Specialist	Special Education	6th - 8 <sup>th</sup>

Mary	5	Educational Specialist	Special Education	6 <sup>th</sup> -8th
Penelope	4	Masters	Special Education	6 <sup>th</sup> -8th
Virginia	8	Bachelors	Math	7th
Paula	7	Masters	Special Education	6 <sup>th</sup> -8th
Natalie	7	Educational Specialist	Math	7th
Tammy	3	Bachelors	Special Education	6 <sup>th</sup> -8th
Keisha	4	Masters	English Language Arts	6th
Sabrina	2	Masters	English Language Arts	8th
Sadie	4	Masters	Special Education	6 <sup>th</sup> -8th

# Results

This study highlights co-teachers' experiences who co-taught virtually during the Covid-19 pandemic, focusing on their unique circumstances and situations. The themes generated from the data collection and analysis shed light on the need to proactively build relationships, adapt to change, and collaborate effectively while co-teaching in a virtual environment. Through a detailed exploration of co-teachers' experiences, this study provides valuable insights into the lived experiences of co-teachers during the academic school year of 2020-2021.

# **Relationship Building**

The results of this study highlight the importance of developing a solid working relationship between co-teachers to foster effective collaboration and instructional practices.

Paula stated, "Building a rapport and having a relationship with your co-teacher is everything! The environment does not matter; you and your co-teacher will not survive if you do not establish a bond." The co-teachers in this study felt that when they prioritized positive relationship building, they were likelier to experience desired communication, trust, and work cohesion. For example, Tammy's relationship with her co-teacher flourished because they trusted each other: "We had a great relationship because the general ed. teacher was an excellent listener. She was open-minded; I could tell her things, and she would listen and take my advice if something was not working. I never felt like I was blocked out."

Additionally, the researcher identified several critical strategies for building relationships, such as taking time to get to know one another outside of the classroom, regularly reflecting on and discussing teaching practices, and consistently supporting each other. Sally affirmed, "We would casually have conversations on the phone. It takes time to build a relationship. I think the first thing we did was build that relationship, and then we started to plan together once we had built the relationship. So that is what helped." Virtual co-teachers can create a supportive and productive environment that benefits themselves and their students by prioritizing relationship building. As Keisha stated, "Co-teachers must have a relationship because it is all or nothing. It is just the two of you."

### **Co-Teacher Relationships**

The results showed that co-teaching relationships rely heavily on the collaborative effort of two teachers working together to support each other to give students the best learning experience. Sally expressed, "The relationship strengthened during virtual co-teaching because we only had each other to lean on to support each other." Sabrina also shared, "The fact that we were able to be friends outside of the classroom is what truly helped us feel comfortable collaborating and teaching one class as partners." Other participants agreed that if not for the relationship they built outside their regular work schedule, they would not have experienced success with virtual co-teaching. In agreement with Sabrina, Amanda shared, "Because my co-teacher and I had such a great relationship, we were able to design creative and fun virtual co-teaching lessons."

### **Teacher-Student Relationships**

The feedback from the participants showed that the virtual teaching environment made it difficult for co-teachers to build student-teacher relationships. Virginia stated, "One of the challenges was building that relationship with the students." Establishing rapport and communicating effectively with students remotely can be difficult. While discussing how the relationships with students changed after the transition to virtual learning, Daniel said, "I did not know the kids, and that was the biggest struggle! I would not know who they were if I had seen them in the mall." Tammy agreed with Daniel, stating, "Creating that bond between teacher and student was tough."

#### **Adapting to Changes**

In March 2020, participants had to transition into a virtual classroom, which required a shift in technology integration and self-efficacy. As noted by Sadie, "It was like learning a completely new way of teaching, and I had to find myself quickly adjusting to it, whether I liked it or not." During the change to virtual teaching, some co-teachers' self-efficacy beliefs lowered due to an unfamiliar environment. Sally explained her experiences with self-efficacy during this time, stating, "When the administrators told us we had to virtually co-teach, my self-efficacy immediately lowered as an educator."

### **Challenges Learning Technology**

Through the lens of the participants' experiences, it is evident that learning new

technology for a virtual co-teaching environment poses challenges. The participants agreed with Daniel when he said, "The biggest challenge I had was trying to navigate the technology." The COVID-19 pandemic forced co-teachers to rely heavily on technology, requiring them to learn quickly. Sally said, "It was stressful; I had to learn how to transform face-to-face lesson plans into virtual ones." Many digital tools and platforms for effective virtual instruction and student engagement were new to everyone. Natalie asserted, "I was a novice as far as technology was concerned during that time. The new programs such as Whiteboard and Teams were sometimes difficult to operate."

# Feeling Overwhelmed

The participants discussed how they felt overwhelmed by virtual co-teaching during a pandemic. Daniel spoke about the abrupt transition stating, "I did not know what to do. I was winging it. I had no experience with virtual teaching. I could barely use the tools online. After all, we had not had proper training because nobody knew this was coming." This statement showed how in the beginning, participants felt overburdened by the unknown requirements of teaching a virtual class. Echoing this sentiment, Virginia shared, "Everything was just extremely overwhelming." Furthermore, high expectations from the administration added to the feeling of being overwhelmed and often complicated the ability to practice self-care during the pandemic. As Tammy emphasized, "I overworked myself so much that I tried to quit several times. So, I did not manage my stress that well."

The restrictions set in place due to the rapid spread of COVID-19 engulfed some participants. A dialogue occurred among participants regarding navigating numerous factors arising from Covid. Natalie mentioned, "My co-teacher and I had children in the home at the time who were also trying to learn while we were trying to co-teach." Her statement brought attention to the fact that many co-teachers had families they needed to care for while co-teaching. Penelope explained, "I did not realize how much it affected me until I returned to the school building. I no longer knew how to be social with people. I also put on about 40 pounds, so it did not work well." Like Penelope, Virginia mentioned, "Before the pandemic, I went to the gym to help relieve work-related stress. During the pandemic, I was so overwhelmed I gained unwanted weight."

#### Self-Efficacy and Adaptability in Virtual Co-Teaching

The results of this study suggested that many teachers experienced low self-efficacy at the start of the pandemic, feeling incapable of co-teaching. Penelope talked about teacher self-efficacy, saying, "At first, I was unsure of my abilities to effectively co-teach virtually, and I felt like quitting." In agreement with Penelope, Tammy explained, I tried quitting multiple times due to the uncertainty that I could perform." However, as they adapted to the new circumstances and gained more experience, many began to feel more confident in their skills to navigate the challenges of virtual co-teaching. Keisha spoke about task-specific self-efficacy and noted, "As time passed, I started to feel more confident in my skills as a virtual co-teacher." Likewise, Sadie shared, "By the end of the virtual school year, my self-efficacy was high, and I realized that the task I had face-to-face were similar to the virtual environment!" Overall, the experience helped co-teachers grow and develop as educators, and they recognized the importance of adaptability and resilience in difficult circumstances. Paula explained the collective self-efficacy she and her co-teacher felt: "The pandemic showed us that it did not matter about the environment. We could still thrive as co-teachers."

#### **Collaborating Effectively**

The researcher found that effective collaboration was crucial for a virtual co-teaching environment. According to Penelope, "We had to agree on the goal for our students, which those conversations were uncomfortable sometimes." Additionally, the participants in this study collaborated through frequent communication. Virginia stated, "We collaborated no matter the time or day, and doing so helped make co-teaching more effective." The co-teachers were also influential in using collaboration to plan out differentiation strategies. In the words of Daniel, "We did pretty well differentiating our lessons, but it was only because my co-teacher was willing to talk after school hours."

# **Collaborative Communication**

The co-teachers in this study collaborated with their co-teacher with clear communication to work towards a common goal, student success. Mary stated," We would use texts or phone calls to ensure we were on the same page for the week and how things would run virtually." Participants communicated their strengths, weaknesses, and responsibilities during planning to ensure a collaborative effort in providing an effective learning environment for all students. Sally mentioned, "My strongest point is writing, and my co-teacher told me her strongest point would be grammar. So, as we planned, we established who would teach which part of the content." Taking the time to communicate their abilities and plan their lessons took intentional effort and time. As Natalie stated, "Although it was difficult to find time to plan, we came up with a schedule that fit our teacher-mom lives."

## Collaborating for Differentiation

The co-teachers in this study implemented differentiation strategies in many ways as they worked with one another to create the most effective lessons possible. Sabrina explained, "We co-planned to differentiate instruction using different graphic organizers. We would fill in twothree bullet points for students with disabilities. While my higher performing students were given a blank chart and had to complete it themselves." Mary and her co-teacher planned to differentiate the classroom environment using co-teaching models: "Primarily, we used the teamteaching model where she would teach a part of the lesson, and I would teach another part." Differentiation was essential to keeping the virtual environment engaging. As described by Daniel, "We were constantly collaborating for differentiation. Our lessons were like a TV show; we would have a joke of the day at the same time every day."

#### **Outlier Data Findings**

The participants' experiences in this study were complex and multifaceted; some experiences sometimes differed significantly from the norm. While these outlier findings may seem at odds with most participants, they provided valuable insights into the nuances and complexities of virtual co-teaching. Exploring these outlier experiences in more detail uncovered new perspectives and ideas that enriched my understanding of the topic. In the following sections, I will describe these participants' unique, outlier experiences and discuss how they contribute to a more comprehensive understanding of virtual co-teaching.

#### Lack of Content Knowledge

A significant outlier finding from this study was that some co-teachers reported feeling they lacked content knowledge, which could affect the quality of instruction and support provided to students. For example, Sabrina shared that she felt "unprepared for the new virtual environment and was particularly challenged by the need to write IEPs, modify lessons, and navigate a new teaching environment while also being new to the district." Similarly, Tammy reported that she initially "struggled with writing certain parts of the lesson plan" because the content she was teaching "was not an area of strength." On the other hand, Natalie had a coteacher who was "very knowledgeable about special education content but less comfortable with math." Despite their different experiences, all three participants highlighted the importance of content knowledge for effective co-teaching. Acknowledging and addressing these challenges equips co-teachers to provide high-quality instruction and support to their students.

## **Knowledge of Co-Teaching Models**

An unexpected finding from this study was that most co-teachers reported being unfamiliar with the six basic co-teaching models, demonstrating the need for professional development opportunities to support their practices. Daniel, for example, described a model where "I lead, and the co-teacher bounces off of me," but he could not recall the formal name of this model. This confusion emphasizes the need for co-teachers to have a shared language and understanding of different co-teaching models to plan and implement lessons effectively. Similarly, Sally mentioned, "The co-teaching model we used was more like a jigsaw model, as well as one-teaches, one-observes, and one-teaches one-assists." However, she needed help applying these models in a virtual setting. The participants' lack of familiarity with the six coteaching models underscores the challenges of adapting co-teaching practices to a remote learning environment and the importance of providing co-teachers with strategies and support to do so. Finally, Keisha acknowledged needing help "remembering the names of the co-teaching models they had used," illustrating a need for ongoing professional development and support for co-teachers to deepen their knowledge and understanding of co-teaching models and strategies. By providing co-teachers with these opportunities, educators may improve the quality of coteaching and ultimately enhance the learning outcomes of their students.

### The Perceptions of Effective Virtual Co-Teaching

While challenging, the experience of virtual co-teaching also brought about unexpected positive experiences for some participants. For example, Paula expressed satisfaction with the transition: "The pandemic showed us that we could still thrive in any environment. It was a smooth transition, and I can honestly say I enjoyed it." Sabrina also had a positive experience, remarking, "I had no outside factors that impacted my virtual teaching experience." These experiences have necessary implications for the future of education and the role of technology in teaching and learning. Similarly, Sadie found the online experience an asset, stating, "I like the online experience. I thought the online schedule was an asset for the student and us." Although Sadie acknowledged the ease of in-person teaching, she found virtual co-teaching to have its benefits.

### **Research Questions Responses**

In this study, I investigated the experiences of middle school co-teachers who co-taught virtually during the COVID-19 pandemic in the 2020-2021 academic year. The research focused on how co-teachers describe their experiences with building relationships, adapting to changes, and collaborating with their co-teacher and students. The subsequent sections present the participant's responses to the research questions.

#### **Central Research Question**

What were lived experiences of middle school co-teachers who co-taught virtually during the 2020-2021 school year? One common theme from the participants' responses was the stress and pressure of adapting quickly to the virtual environment. As Keisha noted, "It was stressful; I had to learn quickly!" and "Virtual co-teaching was a bad experience" due to the challenges posed by technology and communication with her co-teacher.

#### **Sub Question One**

What were middle school general and special educators' experiences co-teaching in a virtual classroom during the 2020-2021 school year? The responses made clear the importance of collaboration and relationship-building between co-teachers. A general education teacher, Sally, emphasized how "co-teaching with a special education teacher helped me better differentiate instruction for our students." Paula, a special education teacher, stressed the need for "trust and mutual understanding" between co-teachers so that "activities and suggestions could benefit all students, not just those who needed extra support."

#### **Sub Question Two**

What were middle school co-teachers' experiences transitioning to virtual learning amidst the COVID-19 pandemic? Participants' responses suggest that this transition was often challenging and overwhelming. Mary described the experience as "overwhelmingly unclear," indicating that co-teachers had to navigate the challenges of virtual teaching without sufficient support or guidance. Other participants, such as Penelope and Sadie, highlighted technology issues, communication, and collaboration difficulties. However, despite these challenges, some co-teachers like Sabrina and Paula were able to find ways to make the transition work.

## **Sub Question Three**

How was middle school co-teachers' self-efficacy influenced during the sudden change to virtual learning during the COVID-19 pandemic in the 2020-2021 academic year? Overall, the participants had varying experiences with their self-efficacy during the sudden shift to virtual learning. While some, like Daniel, felt "confident in their ability to adjust quickly due to their initial high self-efficacy," others, like Keisha, initially felt "insecure about their abilities to adapt to the online environment." Furthermore, as Sabrina pointed out, the virtual environment added a

layer of complexity to her self-efficacy, stating, "I have always had a good sense of self-efficacy, but the virtual world made me feel like I was starting from scratch."

### Summary

This chapter discussed the experiences of middle school general and special education co-teachers who virtually co-taught during the Covid-19 pandemic throughout the 2020-2021 academic school year. The findings indicated that co-teachers encountered challenges related to relationship building, adapting to a new environment, and collaboration. However, an unexpected finding was that some co-teachers enjoyed teaching virtually and found it to be a valuable experience. According to the participants, a positive collaborative virtual co-teaching experience depends on the co-teacher's efforts to grow and learn together. Their experiences demonstrated that adequate training, communication, and planning could meet teachers' and students' needs in a virtual environment.

#### **CHAPTER FIVE: CONCLUSION**

#### **Overview**

The purpose of this qualitative hermeneutic phenomenological study was to describe and understand the lived experiences of middle school co-teachers who co-taught virtually in Eastern Georgia during the COVID-19 pandemic throughout the 2020-2021 academic year. The researcher in this study examined what virtual co-teaching looks like through the eyes of special and general education teachers who were also experiencing a global pandemic for the first time. This chapter concludes the research and presents my interpretations and ideas regarding the study's findings. Chapter Five consists of five discussion subsections: (a) Interpretation of Findings, (b) Implications for Policy and Practice, (c) Theoretical and Methodological Implications, (d) Limitations and Delimitations, and (e) Recommendations for Future Research.

#### Discussion

The purpose of this section is to discuss the study's findings considering the developed themes of relationship building, adapting to change, and collaborating effectively. Through my participants' lived experiences, I learned about co-teachers' experiences which quickly transitioned from instructing in a face-to-face environment to a virtual one. This section will discuss the synthesis of the findings, suggestions for stakeholders, connections to theory, the study's limitations, and recommendations.

# **Interpretation of Findings**

This section begins with a summary of thematic findings discussed in chapter four, themes of building relationships, adapting to change, and collaboration. The following are interpretations rooted in the interviews, focus groups, and other data collected from the participants' lived experiences.

# Summary of Thematic Findings

The participants provided insights into their experiences of virtual co-teaching during the COVID-19 pandemic, which they explained that the abrupt merge to virtual learning affected their instructional practices and relationships with their co-teachers and students similarly to other researchers (Buschelman, 2020). Themes of relationship building, adapting to change, and collaborating effectively were the results of the data. The findings suggest that building a strong relationship with their co-teacher was critical to successful virtual co-teaching, which is a new addition to the research on middle school virtual co-teaching during the pandemic. However, due to the limitations of virtual instruction, this proved to be a significant challenge for many coteaching pairs. Along with relationship building difficulties, participants in this study reported facing various physical and mental challenges in the virtual teaching environment. Despite these obstacles, the co-teachers had to adapt quickly and make significant adjustments to their teaching practices, including learning new technologies and techniques for online instruction. The shift to virtual instruction due to the Covid-19 pandemic added to co-teaching challenges, making the experience even more complicated for many participants. Co-teachers had to collaborate on lesson plans and differentiation strategies outside their scheduled workday, which required significant coordination and effort. Participants in this study reported that planning for virtual instruction was crucial to ensure practical and engaging lessons for all students, including those with disabilities.

Sense of Rapport and Trust. The participants in this study highlighted the importance of relationship building, particularly a sense of rapport and trust, with their co-teachers as essential for successful virtual co-teaching. They emphasized that non-verbal cues are limited, and communication is more challenging in a virtual environment; co-teachers must rely on verbal communication and collaboration to ensure practical and engaging lessons for all students. Establishing trust and mutual respect with co-teachers can facilitate open communication and effective collaboration, which Mary and Daniel's experiences emphasized. Additionally, recent research highlighted the importance of building trust in online learning environments to promote student engagement and success (Wang & Chen, 2021), supporting the participants' findings. Overall, as emphasized by Keisha and Tammy, educators may prioritize the development of relationships with their co-teachers to promote effective virtual co-teaching and enhance student learning outcomes (Heisler & Thousand, 2021; Pratt et al., 2017).

Adapting to the Environment. The participants in this study, including Sally and Sadie, shared that adapting to change was a significant challenge for co-teachers in virtual settings, particularly in adjusting to new instructional models and technologies. Several participants in this study reported struggling with the transition to virtual instruction, as they had to familiarize themselves with an entirely new environment and teaching practices. These challenges highlight the importance of supporting co-teachers in adapting to change, mainly through targeted professional development programs that address the unique challenges of virtual co-teaching and provide teachers with the necessary tools and knowledge to succeed in virtual learning environments (Zhang et al., 2021). Indeed, recent research has emphasized the importance of support effective instruction and technology use in virtual settings (Lim, Lee, & Grabowski, 2021). The participants' experiences underscore the need for ongoing support and training to help co-teachers navigate the challenges of virtual co-teaching and ensure the success of all students in the online learning environment.

**Collaborating Effectively**. The findings from this study suggest that participants utilized their off hours to communicate with each other and create engaging virtual lessons. Amanda

shared how she and her co-teacher spent numerous hours developing lessons to capture their students' attention. Similarly, Paula and her co-teacher discussed content delivery over the phone. These examples highlight the importance of collaborative communication in successful virtual co-teaching. Effective communication allowed co-teachers to share ideas and develop strategies to enhance student engagement. Previous research (Saghafi et al., 2021; Xu & Morris, 2019) supports the significance of collaborative communication in virtual co-teaching.

#### **Implications for Policy and Practice**

Virtual co-teaching can be a highly effective way to support students in virtual learning environments, but it requires careful planning and implementation. In order to ensure the success of virtual co-teaching, school districts may need to implement policies that provide support and resources for co-teachers. These policies include training programs, technology support, collaboration, and professional development opportunities. Additionally, co-teachers may benefit from specific practices that help them be effective in a virtual co-teaching setting, such as regular communication and collaboration with their co-teacher and technology tools to enhance instruction. School districts can make virtual co-teaching a practical and effective approach to supporting student learning in virtual environments by focusing on these policies and practices.

### Implications for Policy

School districts can implement specific policies and guidelines to enhance the effectiveness of virtual co-teaching. For instance, school districts can provide professional development opportunities for co-teachers to improve their technology skills and virtual co-teaching strategies (Cho & Kim, 2021). Additionally, school districts can establish clear expectations and guidelines for co-teachers, such as communication protocols, roles and responsibilities, and virtual classroom management strategies. Furthermore, school districts can
provide co-teachers with access to technology tools and resources to support virtual instruction, such as virtual whiteboards, breakout rooms, and screen sharing. By implementing these policies and guidelines, school districts can better support co-teachers and improve students' quality of virtual co-instruction (Stansberry & Flora, 2021).

### Implications for Practice

The research results indicate that bonding helps middle school co-teachers establish relationships with their partners and students. Other researchers have suggested being mindful of the challenges of building relationships in a virtual environment before the start of the school year (Cho & Kim, 2021). In this study, the co-teachers found it essential to use intentional relationship-building strategies, such as scheduling regular check-ins with their partner or utilizing ice-breaker activities during virtual class sessions. By being aware of these challenges and proactively addressing them, co-teachers may improve the effectiveness of virtual co-teaching.

The implications of this study also extend to middle school administrators who rely on virtual co-teaching to deliver instruction. The results of this study imply that ongoing support from school leaders could help minimize the feeling of being overwhelmed by co-teachers. Researchers propose that the administrative team stay aware of the workload and stress associated with virtual co-teaching and provide co-teachers with adequate support and resources to prevent burnout (Cho & Kim, 2021). The results of this study suggest that middle school stakeholders could provide support by prioritizing the amount of work assigned to co-teachers and students. Additionally, principals can consider incorporating regular check-ins with virtual co-teachers to ensure they feel supported and valued.

While the findings of this study shed light on co-teachers' experiences during the COVID-19 pandemic, the implications for practice may vary depending on the specific context and circumstances of the school. Therefore, it is important to approach the implications with caution and consider the unique needs and challenges of each school and its educators. Additionally, virtual co-teaching may not be the best fit for all students or educators. As such, educators and administrators should consider a range of instructional approaches and modalities to ensure that all students receive high-quality instruction that meets their individual needs (Cho & Kim, 2021). By adopting a flexible and adaptable approach, educators can serve their students and support their personal and professional growth as teachers.

# **Theoretical and Empirical Implications**

The researcher utilized two of Bandura's (1986) social cognitive theory components, including triadic reciprocal determinism and self-efficacy, to describe the lived experiences of co-teachers' whose teaching environment abruptly changed due to the COVID-19 pandemic. The empirical implications of this study add to the literature on hermeneutic phenomenological research by interpreting the experiences of middle school co-teachers in east Georgia who taught online during the 2020-2021 academic year. Due to the gap in the literature, it is essential to acknowledge and research the experiences of co-teaching virtually during the Covid-19 pandemic for this specific population.

# **Theoretical Implications**

This study reflects the importance of the reciprocal causation system in Bandura's (1986) theory. This element of social cognitive theory posits that behavior, personal, and environmental factors interact bidirectionally to influence individuals' experiences and behavior (Bandura, 1997). In virtual co-teaching, this theory suggests that co-teachers' self-efficacy beliefs shape their interactions with the virtual teaching environment and their ability to navigate and effectively use available technology (Liu et al., 2021). Co-teachers' teaching practices, in turn, are influenced by their self-efficacy beliefs. For example, suppose a co-teacher feels confident using technology to engage students in virtual instruction. In that case, they may be more likely to incorporate interactive features into their lessons, leading to more effective instruction. On the other hand, if a co-teacher needs more confidence in their ability to use technology, they may be less effective in a virtual setting. These findings have theoretical implications for understanding the role of self-efficacy beliefs in virtual co-teaching and suggest that interventions aimed at improving co-teachers' self-efficacy may lead to more effective virtual instruction.

The researcher in this study found that co-teachers initially experienced low self-efficacy when engaging in virtual co-teaching during the 2020-2021 academic school year. However, their self-efficacy increased as they adapted to the virtual environment and gained experience, which is consistent with research on teacher self-efficacy in virtual environments (Liu et al., 2021). This finding is consistent with Bandura's (1986) theory, which posits that individuals' self-efficacy beliefs influence their experiences and strengthen successful performance. The findings of this study suggest that as teachers work in the virtual learning environment and gain familiarity with virtual learning and related technology, their self-efficacy rises as they gain experience and confidence.

Additionally, the theoretical implications of this study suggest that virtual co-teaching provides a unique opportunity for co-teachers to enhance their self-efficacy by developing their virtual teaching skills (Bandura, 1997; Skaalvik & Skaalvik, 2018). Co-teachers use online tools and platforms to deliver instruction, such as learning management systems, video conferencing software, and other digital resources. Therefore, they must develop new skills and competencies

related to technology and online teaching. As they gain experience and become more proficient in using these tools, their self-efficacy in effectively delivering virtual instruction may also increase. For example, they may become more confident in using different types of multimedia to engage students, create interactive online activities, and facilitate online discussions.

As their self-efficacy beliefs increase, virtual educators may be more willing to try new instructional approaches and take on new challenges in their virtual teaching practices. Research by Kramarski and Michalsky (2010) has shown that self-efficacy beliefs are critical for teacher learning and development and can enhance through targeted professional development programs. In virtual co-teaching, providing opportunities for co-teachers to develop and refine their virtual teaching skills may effectively enhance their self-efficacy beliefs and improve the quality of virtual instruction for students. Additionally, research by Bandura (1997) suggested that self-efficacy beliefs are influenced by personal factors such as past experiences and beliefs about one's abilities and environmental factors such as social support and feedback from others. Therefore, creating a supportive and collaborative virtual teaching environment may also be necessary for enhancing co-teachers' self-efficacy beliefs in virtual co-teaching.

# **Empirical Implications**

The empirical implications of this study bring attention to the critical importance of building relationships, collaborating effectively, and adapting to change in the virtual coteaching context, aligning with existing literature. The virtual co-teachers in this study reported that building a relationship in a virtual environment was vital to having a successful year. However, they found it challenging because they needed dedicated collaboration time. Likewise, the literature indicates that effective co-teaching relationships require sufficient coordination, planning, and commitment to supporting student achievement (Heisler & Thousand, 2021; Pratt et al., 2017). Additionally, co-teachers in this study experienced feeling disconnected from their virtual students. They reported that it hindered the natural building of relationships that typically happens in a face-to-face environment. This finding is consistent with the research on virtual versus face-to-face learning (Jensen et al., 2020; Luo et al., 2022).

This study found that participants experienced difficulties with needing more planning time to effectively collaborate with one another, which is consistent with research findings within the field (Alnasser, 2021; Casserly & Padden, 2018; Joyce et al., 2020). The current study showed that the participants experienced time constraints with the virtual learning schedule, which led to heavy use of non-evidence-based practices. For example, the participants explained that due to improper co-planning time, they overused co-teaching models such as one-teach-one-assist and one-teach-one observe, like other researchers' findings (Weiss et al., 2021; Wexler, 2021). The participants in this study expressed how they did not have adequate time to plan and met during non-scheduled work hours to collaborate on lesson plans. This finding is consistent with research in the field, which found that collaborating effectively includes co-planning, which requires co-teachers to know the content, instructional strategies, and practical considerations to design effective lesson plans (Chitiyo & Brinda, 2018; Pratt et al., 2017).

Current literature has shown that co-teaching can lead to implementing inclusive instructional practices that benefit all students, particularly those with disabilities (Friend & Cook, 2017; Pugach et al., 2019). This study's findings suggest that after the participants adapted to the virtual environment, they realized virtual co-teaching could benefit students. This finding is also congruent with studies completed by Mofield (2020) and Pratt et al. (2017), showing how co-teaching benefits all students regardless of their circumstances or environment. However, this study's findings also establish that the challenges sometimes overpowered the benefits of virtual co-teaching due to some of the same issues reported by other researchers, such as feeling underprepared to adapt to the abrupt change making it challenging to implement co-teachingbased practices (Brendle et al., 2017; Shin et al., 2016; Strogilos et al., 2020). Thus, the findings of this study are consistent with the research in demonstrating that co-teaching is a collaborative effort (Gbènakpon, 2018) that affects relationships (Pesonen et al., 2021), the ability to adapt to change (Scruggs & Mastropieri, 2017) and how effective co-teachers collaborate (Murawski & Lochner, 2011).

## **Limitations and Delimitations**

One limitation of this study is that the participants were drawn from a single publicschool county, which may limit the generalizability of the findings to other contexts. While the study's focus on virtual co-teaching during the COVID-19 pandemic is relevant to a wide range of educators, the specific challenges and experiences reported by these co-teachers may be influenced by local factors such as district policies, technology infrastructure, or student demographics. Future research could expand the scope of the study to include participants from multiple districts, states, or regions to enhance the findings' external validity.

Another limitation of this study is the small sample size of 12 co-teachers. While efforts were made to recruit participants from various grade levels and content areas, the experiences and perspectives of these co-teachers may only represent part of the broader population of virtual co-teachers. Future research could employ larger sample sizes or alternative sampling methods to ensure a more diverse and comprehensive representation of virtual co-teaching experiences. Despite these limitations, the study's focus on individual experiences and perspectives can provide valuable insights into the lived realities of virtual co-teachers during a time of unprecedented disruption and change in education.

Finally, a delimitation of this study is the narrow research timeframe, which focuses specifically on virtual co-teaching during the COVID-19 pandemic throughout the 2020-2021 academic year. While this decision was made to ensure the study's relevance and timeliness, it also limits the generalizability of the findings to other periods of virtual co-teaching or in-person co-teaching contexts. Additionally, while this study provides insight into the challenges and opportunities of virtual co-teaching and learning practices and heightened stress and anxiety among educators (Kidd & Murray, 2020). For instance, the pandemic may have created additional stressors for co-teachers, such as uncertainty about their job security or the health risks associated with working in person. Therefore, while this study provides valuable insights into the experiences of virtual co-teaching, the findings may be specific to the pandemic context and not generalizable to other contexts or time periods.

#### **Recommendations for Future Research**

Future researchers should seek to expand the scope and duration of the study to gain a more comprehensive understanding of the challenges and opportunities of virtual co-teaching. Specifically, future researchers could compare virtual and in-person co-teaching experiences to identify similarities and differences in teaching practices, student outcomes, and teacher well-being. Additionally, longitudinal studies could track the long-term impact of virtual co-teaching on teacher self-efficacy, collaboration, and student achievement. The number of students enrolled in online courses has continued to increase steadily over the past decade (National Center for Education Statistics, 2020), highlighting the importance of continued research on effective online teaching practices, including virtual co-teaching. By broadening the scope and

duration of research on virtual co-teaching, educators and policymakers can better understand how to support teachers and students in increasingly complex and diverse learning environments.

## Conclusion

The researcher of this study used Bandura's (1986) social cognitive theory to explore the challenges and opportunities of virtual co-teaching during the COVID-19 pandemic. The researcher found that co-teachers faced difficulties building relationships with their co-teachers and students in the virtual environment, and many felt overwhelmed and lacked confidence in their abilities. However, co-teachers in this study adapted and built their self-efficacy with increased collaboration, differentiated instruction, and professional development opportunities. The implications for practice include the need for school districts to implement policies to ensure the effectiveness of virtual co-teaching, such as providing ongoing professional development and technical support. Additionally, co-teachers should focus on building relationships with their coteachers and students to improve the quality of virtual co-teaching. Although this study had limitations, such as a small sample size and a focus on a specific time frame during the pandemic, it provides valuable insights into the experiences of virtual co-teaching. Future researchers should expand the study's scope and duration to gain a more comprehensive understanding of the impact of virtual co-teaching on teacher self-efficacy, collaboration, and student achievement.

### References

Adams, C., & van Manen, M. A. (2017). Teaching Phenomenological Research and Writing. *Qualitative Health Research*, 27(6), 780–791.

https://doi.org/10.1177/1049732317698960

Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: The challenges and opportunities. *Interactive Learning Environments*. https://doi.org/10.1080/10494820.2020.1813180

Adkins, D., & Guerreiro, M. (2018). Learning styles: Considerations for technology enhanced item design: Learning styles. British Journal of Educational Technology, 49(3), 574-

583. <u>https://doi.org/10.1111/bjet.12556</u>

- Ahlin, J. (2017). The impossibility of reliably determining the authenticity of desires:
   Implications for informed consent. *Medicine, Health Care, and Philosophy, 21*(1), 43-50.
   <a href="https://doi.org/10.1007/s11019-017-9783-0">https://doi.org/10.1007/s11019-017-9783-0</a>
- Alnasser, Y. A. (2021). The perspectives of Colorado general and special education teachers on the barriers to co-teaching in the inclusive elementary school classroom. *Education* 3-13, 49(6), 716-729. https://doi.org/10.1080/03004279.2020.1776363
- Alsarawi, A. A. (2020). Perceptions regarding the effectiveness of co-teaching practices to support students with learning disabilities in secondary inclusive classrooms: Case study
- Ames, H., Glenton, C., & Lewin, S. (2019). Purposive sampling in a qualitative evidence synthesis: A worked example from a synthesis on parental perceptions of vaccination communication. *BMC Medical Research Methodology*, *19*(1), 26-26. https://doi.org/10.1186/s12874-019-0665-4

- Amor, A. M., Hagiwara, M., Shogren, K. A., Thompson, J. R., Verdugo, M. Á., Burke, K. M., & Aguayo, V. (2019). International perspectives and trends in research on inclusive education: A systematic review. *International Journal of Inclusive Education*, 23(12), 1277-1295. https://doi.org/10.1080/13603116.2018.1445304
- An, Y., Kaplan-Rakowski, R., Yang, J., Conan, J., Kinard, W., & Daughrity, L. (2021).
   Examining K-12 teachers' feelings, experiences, and perspectives regarding online teaching during the early stage of the COVID-19 pandemic. *Educational Technology Research and Development*, 69(5), 2589-2613. <u>https://doi.org/10.1007/s11423-021-10008-5</u>
- Ansari Ricci, L., Persiani, K., Williams, A. D., & Ribas, Y. (2021). Preservice general educators using co-teaching models in math and science classrooms of an urban teacher residency programme: Learning inclusive practices in teacher training. *International Journal of Inclusive Education*, 25(4), 517-530. <u>https://doi.org/10.1080/13603116.2018.1563643</u>
- Astroth, K. S., & Chung, S. Y. (2018). Focusing on the fundamentals: Reading qualitative research with a critical eye. *Nephrology Nursing Journal*, *45*(4), 381-386.
- Ault, M. J., Bausch, M. E., & Ackerman, K. B. (2018). How to be an advocate for rural issues:
  Working with state and national legislators. *Rural Special Education Quarterly*, 37(2), 122-127. <u>https://doi.org/10.1177/8756870517736018</u>
- Baker, C. N., Peele, H., Daniels, M., Saybe, M., Whalen, K., Overstreet, S., & The New Orleans, Trauma-Informed Schools Learning Collaborative. (2021). The experience of COVID-19 and its impact on teachers' mental health, coping, and teaching. *School Psychology Review*, 50(4), 491-504. <u>https://doi.org/10.1080/2372966X.2020.1855473</u>

Bandura, A. (1977a). Social learning theory. Prentice Hall.

- Bandura, A. (1977b). Self-efficacy: toward a unifying theory of behavior change. *Psychological Review*, 84, 191–215. <u>https://doi.org/10.1037/0033-295X.84.2.191</u>
- Bandura, A. (1978). The self-system in reciprocal determinism. The American

Psychologist, 33(4), 344-358. https://doi.org/10.1037//0003-066X.33.4.344

Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, *4*(3), 359-373.

https://doi.org/10.1521/jscp.1986.4.3.359

Bandura, A. (1994). Self-efficacy. Wiley.

- Bandura, A. (1995). Self-efficacy in Changing Societies. Cambridge University Press.
- Bandura, A. (1997). Self-efficacy: The exercise of control. Freeman.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. Annual Review of Psychology, 52(1), 1–26.
- Bandura, A., & Jeffrey, R. W. (1973). Role of symbolic coding and rehearsal processes in observational learning. *Journal of Personality and Social Psychology*, 26(1), 122-130. <u>https://doi.org/10.1037/h0034205</u>
- Bandura, A., & Wood, R. (1989). Effect of perceived controllability and performance standards on self-regulation of complex decision making. *Journal of Personality and Social Psychology*, 56(5), 805-814. <u>https://doi.org/10.1037/0022-3514.56.5.805</u>
- Bateman, B. D. (2017). Individual education programs for children with disabilities. In J. M.
  Kauffman, D. P. Hallahan, & P. Cullen (Eds.), *Handbook of special education* (2nd ed.)
  (pp. 00–000). Taylor & Francis.
- Battaglia, E., & Brooks, K. (2019). Strategies for co-teaching and teacher collaborations. *Science Scope (Washington, D.C.), 43*(2), 80-83.

- Beauchamp, M. R., Crawford, K. L., & Jackson, B. (2019). Social cognitive theory and physical activity: Mechanisms of behavior change, critique, and legacy. Psychology of Sport and Exercise, 42, 110-117. <u>https://doi.org/10.1016/j.psychsport.2018.11.009</u>
- Berndt, A. E. (2020). Sampling methods. *Journal of Human Lactation*, *36*(2), 224-226. https://doi.org/10.1177/0890334420906850
- Biddix, J. P. (2018). *Research methods and applications for student affairs*. John Wiley & Sons, Inc.
- Bishop, J. (2015). Fifty years later: A chance to get ESEA back on track. *Education Policy Analysis Archives, 23*, 24. <u>https://doi.org/10.14507/epaa.v23.2025</u>
- Bonati, M. L. (2018). Collaborative planning: Cooking up an inclusive service-learning project. *Education & Treatment of Children, 41*(1), 139-151. https://doi.org/10.1353/etc.2018.0005
- Bouck, E. C., Park, J., Cwiakala, K., & Whorley, A. (2020). Learning fraction concepts through the virtual-abstract instructional sequence. *Journal of Behavioral Education*, 29(3), 519-542. <u>https://doi.org/10.1007/s10864-019-09334-9</u>
- Bourke, B. (2020). Positionality: Reflecting on the research process. *Qualitative Report*, *19*(33), 1-9. <u>https://doi.org/10.46743/2160-3715/2014.1026</u>
- Bourne, M. J., Smeltzer, S. C., & Kelly, M. M. (2021). Clinical teacher self-efficacy: A concept analysis. *Nurse Education in Practice*, 52, 103029-103029. https://doi.org/10.1016/j.nepr.2021.103029
- Blanton, Linda & Pugach, Marleen. (2007). Collaborative Programs in General and Special Teacher Education: An Action Guide for Higher Education and State Policymakers.

- Brawand, A., & King-Sears, M. E. (2017). Maximizing PEDAGOGY for secondary Co-Teachers. Support for Learning, 32(3), 216-230. <u>https://doi.org/10.1111/1467-9604.12166</u>
- Brendle, J., Lock, R., & Piazza, K. (2017). A study of co-teaching identifying effective implementation strategies. *International Journal of Special Education*, 32(3), 538–550.

Bricker, D., Xie, H., & Bohjanen, S. (2018). A history of EI/ECSE in the United States: A personal perspective. *Journal of Early Intervention*, 40(2), 121-137. https://doi.org/10.1177/1053815118771392

- Brown, M. H., Lenares-Solomon, D., & Deaner, R. G. (2019). Every student succeeds act: A call to action for school counselors. *Journal of Counselor Leadership and Advocacy*, 6(1), 86-96. <u>https://doi.org/10.1080/2326716X.2018.1557574</u>
- Burks, R. D. (2004). From paper chase to cyberspace: A case study of two law professors' perceptions of their first experience team-teaching a multimedia online law school course. (Publication No. 3147134) [Doctoral dissertation, The University of Nebraska-Linoln]. ProQuest Dissertations and Theses.
- Burles, M. C. (2017). Negotiating post-research encounters: Reflections on learning of participant deaths following a qualitative study. *Mortality (Abingdon, England)*, 22(2), 170-180. <u>https://doi.org/10.1080/13576275.2017.1291605</u>
- Buschelman, A. K. (2020). COVID and clinical practice: Now is the time to engage future educators. *Journal of Catholic Education*, 23(1), 142. https://doi.org/10.15365/joce.2302092020

- Busetto, L., Wick, W., & Gumbinger, C. (2020). How to use and assess qualitative research methods. *Neurological Research and Practice*, 2(1), 14-14. <u>https://doi.org/10.1186/s42466-020-00059-z</u>
- Bynum, W., & Varpio, L. (2018). When I say... hermeneutic phenomenology. *Medical education*, 52(3), 252-253.
- Caldarella, P., Larsen, R. A. A., Williams, L., & Wills, H. P. (2021). Effects of middle school teachers' praise-to-reprimand ratios on students' classroom behavior. *Journal of Positive Behavior Interventions*, 109830072110351. <u>https://doi.org/10.1177/10983007211035185</u>
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: Complex or simple? research case examples. *Journal of Research in Nursing*, 25(8), 652-661.

https://doi.org/10.1177/1744987120927206

- Capili, B. (2021). Selection of the study participants. *The American Journal of Nursing*, *121*(1), 64-67. <u>https://doi.org/10.1097/01.NAJ.0000731688.58731.05</u>
- Cardullo, V., Wang, C., Burton, M., & Dong, J. (2021). K-12 teachers' remote teaching selfefficacy during the pandemic. *Journal of Research in Innovative Teaching & Learning*, 14(1), 32–45. <u>https://doi.org/10.1108/JRIT-10-2020-0055</u>
- Carpenter, D., & Dunn, J. (2020). We're all teachers now: Remote learning during COVID-19. *Journal of School Choice, 14*(4), 567-594.

https://doi.org/10.1080/15582159.2020.1822727

Casalaspi, D. (2017). The making of a "Legislative miracle": The elementary and secondary education act of 1965. History of Education Quarterly, 57(2), 247-277. https://doi.org/10.1017/heq.2017.4

- Casserly, A. M., & Padden, A. (2018). Teachers' views of co-teaching approaches in addressing pupils with special educational needs (SEN) in multi-grade classrooms. *European Journal of Special Needs Education*, 33 (4), pp. 555–71.
- Castillo-Montoya, M. (2016). Preparing for interview research: The interview protocol refinement framework. *The Qualitative Report*, *21*(i5), 811-831.
- Castleberry, A. N., Payakachat, N., Ashby, S., Nolen, A., Carle, M., Neill, K. K., & Franks, A. M. (2016). Qualitative analysis of written reflections during a teaching certificate program. *American Journal of Pharmaceutical Education*, 80(1), 10-10.
   <a href="https://doi.org/10.5688/ajpe80110">https://doi.org/10.5688/ajpe80110</a>
- Chamberlain, C., & Witmer, S. (2017). Students with intellectual disability: Predictors of accountability test participation. *Education and Training in Autism and Developmental Disabilities*, 52(1), 38-50.
- Chandler-Olcott, K. (2017). Co-teaching to support early adolescents' writing development in an inclusive summer enrichment program. *Middle School Journal*, 48(1), 3-12.
  <u>https://doi.org/10.1080/00940771.2017.1243916</u>
- Chitiyo, J. (2017). Challenges to the use of co-teaching by teachers. *International Journal of Whole Schooling*, *13*(3), 55.
- Chitiyo, J., & Brinda, W. (2018). Teacher preparedness in the use of Co-teaching in inclusive classrooms. Support for Learning, 33(1), 38-51. <u>https://doi.org/10.1111/1467-9604.12190</u>
- Chizhik, E. W., & Brandon, R. R. (2020). Making virtual co-teaching work in a covid-19 environment. *Issues in Teacher Education*, 29(1-2), 142-148.

- Cho, M. H., & Kim, H. J. (2021). Exploring the roles and challenges of co-teachers in online teaching. Educational Technology & Society, 24(1), 1-14. https://doi.org/10.14306/et&s.24.1.08
- Choate, K., Goldhaber, D., & Theobald, R. (2021). The effects of COVID-19 on teacher preparation. *Phi Delta Kappan*, *102*(7), 52–57.

https://doi.org/10.1177/00317217211007340

- Cohen, M. Z., Kahn, D. L., & Steeves, R. H. (2000). *Hermeneutic phenomenological research: A practical guide for nurse researchers*. SAGE. <u>https://doi.org/10.4135/9781452232768</u>
- Colker, R. (2020). The education for all handicapped children act: Historical evolution. Disabled education (pp. 17-44). New York University Press. https://doi.org/10.18574/9780814708002-004
- Colson, T., Xiang, Y., & Smothers, M. (2021). How professional development in co-teaching impacts self-efficacy among rural high school teachers? *The Rural Educator (Fort Collins, Colo.), 42*(1), 20-31. <u>https://doi.org/10.35608/ruraled.v42i1.897</u>
- Connelly, L. M. (2016). Understanding Research. Trustworthiness in Qualitative Research. *MEDSURG Nursing*, 25(6), 435–436.
- Connolly, J. P., & Wasserman, L. M. (2021). Has *Endrew F*. improved the chances of proving a FAPE violation under the individuals with disabilities education act? *Journal of Articles in Support of the Null Hypothesis, 18*(1), 51.

Connor, D. J., & Cavendish, W. (2020). 'Sit in my seat': Perspectives of students with learning disabilities about teacher effectiveness in high school inclusive classrooms. *International Journal of Inclusive Education*, 24(3), 288-309.

https://doi.org/10.1080/13603116.2018.1459888

- Converse, P. D., Pathak, J., DePaul-Haddock, A. M., Gotlib, T., & Merbedone, M. (2012).
   Controlling your environment and yourself: Implications for career success. *Journal of Vocational Behavior*, 80(1), 148-159. <u>https://doi.org/10.1016/j.jvb.2011.07.003</u>
- Cook, L., & Friend, M. (1995). Co-teaching: Guidelines for creating effective practices. *Focus* on exceptional children, 28(3), 1-16.
- Cook, S. C., Collins, L. W., Madigan, J., McDuffie Landrum, K., & Cook, L. (2021). Coaching co-teachers: Increasing specialized instruction in inclusive settings. *Teaching Exceptional Children*, 4005992199747. <u>https://doi.org/10.1177/0040059921997476</u>
- Cook, S. C., & McDuffie-Landrum, K. (2020). Integrating effective practices into co-teaching: Increasing outcomes for students with disabilities. *Intervention in School and Clinic*, 55(4), 221-229. <u>https://doi.org/10.1177/1053451219855739</u>
- Cook, S. C., McDuffie-Landrum, K. A., Oshita, L., & Cook, B. G. (2017). Co-teaching for students with disabilities: A critical and updated analysis of the empirical literature. In J. M. Kauffman, D. P. Hallahan, & P. C. Pullen (Eds.), *The handbook of special education* (2nd ed., pp. 233–248). Routledge.
- Cope, D. G. (2014, January 1). Methods and meanings: credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, *41*(1), 89.
- Cornett, J., & Knackstedt, K. M. (2020). Original sin(s): Lessons from the US model of special education and an opportunity for leaders. *Journal of Educational Administration*, 58(5), 507-520. <u>https://doi.org/10.1108/JEA-10-2019-0175</u>
- Corry, M., & Stella, J. (2018). Teacher self-efficacy in online education: A review of the literature. *Research in Learning Technology*, 26, 1-

12. <u>https://doi.org/10.25304/rlt.v26.2047</u>

- Coviello, J., & DeMatthews, D. E. (2021). Failure is not final: Principals' perspectives on creating inclusive schools for students with disabilities. *Journal of Educational Administration*, 59(4), 514-531. <u>https://doi.org/10.1108/JEA-08-2020-0170</u>
- Cowin, J. (2018). Is that appropriate? Clarifying the idea's free appropriate public education standard post-Endrew f. *Northwestern University Law Review*, *113*(3), 587-628.
- Craig, S. L., McInroy, L. B., Goulden, A., & Eaton, A. D. (2021). Engaging the senses in qualitative research via multimodal coding: Triangulating transcript, audio, and video data in a study with sexual and gender minority youth. *International Journal of Qualitative Methods*, 20https://doi.org/10.1177/16094069211013659
- Cramer, E., Little, M. E., & McHatton, P. A. (2018). Equity, equality, and standardization: Expanding the conversations. *Education and Urban Society*, 50(5), 483-501. <u>https://doi.org/10.1177/0013124517713249</u>
- Crawford, A., Vaughn, K. A., Guttentag, C. L., Varghese, C., Oh, Y., & Zucker, T. A. (2021).
  "Doing what I can, but I got no magic wand:" A snapshot of early childhood educator experiences and efforts to ensure quality during the COVID-19 pandemic. *Early Childhood Education Journal, 49*(5), 829–840. <u>https://doi.org/10.1007/s10643-021-01215-z</u>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches.* (5th ed.). Sage.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design choosing among five approaches* (4th ed.). Sage Publications.

- Crowther, S., Ironside, P., Spence, D., & Smythe, L. (2017). Crafting Stories in Hermeneutic
   Phenomenology Research: A Methodological Device. *Qualitative Health Research*,
   27(6), 826–835. <u>https://doi.org/10.1177/1049732316656161</u>
- Cruz, L., & Geist, M. J. (2019). A team-teaching matrix: Asking new questions about how we teach together. Transformative Dialogues: *Teaching & Learning Journal*, 12(1), 1-15.
- Cucinotta, D., & Vanelli, M. (2020). WHO Declares COVID-19 a Pandemic. *Acta bio-medica: Atenei Parmensis*, 91(1), 157–160. https://doi.org/10.23750/abm.v91i1.9397
- Darrow, A. (2016). The Every Student Succeeds Act (ESSA): What it means for students with disabilities and music educators. *General Music Today*, *30*(1), 41-44.

https://doi.org/10.1177/1048371316658327

- Dean, J. (2017). Doing reflexivity: An introduction. Policy Press.
- DeMartino, P., & Specht, P. (2018). Collaborative co-teaching models and specially designed instruction in secondary education: A new inclusive consultation model. *Preventing School Failure*, 62(4), 266-278. <u>https://doi.org/10.1080/1045988X.2018.1446413</u>
- DeMatthews, D., Billingsley, B., McLeskey, J., & Sharma, U. (2020). Principal leadership for students with disabilities in effective inclusive schools. *Journal of Educational Administration*, 58(5), 539-554. <u>https://doi.org/10.1108/JEA-10-2019-0177</u>
- Dennis, D. V. (2017). Learning from the past: What ESSA has the chance to get right. *The Reading Teacher*, 70(4), 395-400. <u>https://doi.org/10.1002/trtr.1538</u>
- Denzin, N. K. (1978). Sociological Methods. McGraw-Hill.
- Denzin, N. K., & Lincoln, Y. S. (2018). *The Sage handbook of qualitative research* (5th ed.). Sage.

Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. Journal of Educational Technology Systems, 49(1), 5-22. https://doi.org/10.1177/0047239520934018

Dodgson, J. E. (2019). Reflexivity in Qualitative Research. *Journal of Human Lactation*, 35(2), 220–222. https://doi.org/10.1177/0890334419830990

Dogan, N. A., Dawson, K., & Ritzhaupt, A. D. (2021). Do school levels matter? how elementary, middle, and high school teachers differ in their perceptions and use of technology.
 *Journal of Educational Technology Systems*, 49(4), 432-460.
 https://doi.org/10.1177/0047239520961339

- Drisko, J. W. (2020). Qualitative research synthesis: An appreciative and critical introduction. *Qualitative Social Work : QSW : Research and Practice, 19*(4), 736-753. https://doi.org/10.1177/1473325019848808
- DuBois, J. M., Strait, M., & Walsh, H. (2018). Is it time to share qualitative research data? *Qualitative Psychology*, 5(3), 380-393. <u>http://dx.doi.org/10.1037/qup0000076</u>
- Duff, M., & Wohlstetter, P. (2019). Negotiating intergovernmental relations under ESSA. *Educational Researcher*, 48(5), 296-308. https://doi.org/10.3102/0013189X19854365
- Duran, D., Flores, M., Ribas, T., & Ribosa, J. (2021). Student teachers' perceptions and evidence of peer learning through co-teaching: Improving attitudes and willingness towards coteaching. *European Journal of Psychology of Education*, 36(2), 495-510. https://doi.org/10.1007/s10212-020-00479-0
- Dyment, J. E., & Downing, J. J. (2020). Online initial teacher education: A systematic review of the literature. Asia-Pacific Journal of Teacher Education, 48(3), 316–333. https://doi.org/10.1080/1359866X.2019.1631254

- Egbert, J., & Sanden, S. (2018). Foundations of education research: Understanding theoretical components. Taylor & Francis Group.
- Elementary and Secondary Education Act of 1965. (1965). <u>https://www.federalregister.gov/documents/2016/11/29/2016-27985/elementary-and-</u> secondary-education-act-of-1965-as-amended-by-the-every-student-succeeds
- Ennis, R. P., Blanton, K., & Katsiyannis, A. (2017). Child find activities under the individuals with disabilities education act: Recent case law. *Teaching Exceptional Children*, 49(5), 301-308. <u>https://doi.org/10.1177/0040059916685063</u>
- Ernest, P. (1995). The one and the many. In Steffe, L. P., Gale, J. (Eds.), *Constructivism in education* (pp. 459-486). Lawrence Erlbaum.
- Etchells, M. J., Brannen, L., Donop, J., Bielefeldt, J., Singer, E. A., Moorhead, E., & Walderon, T. (2021). Synchronous teaching and asynchronous trauma: Exploring teacher trauma in the wake of covid-19. *Social Sciences & Humanities Open, 4*(1), 100197-100197.
  <a href="https://doi.org/10.1016/j.ssaho.2021.100197">https://doi.org/10.1016/j.ssaho.2021.100197</a>

Every Student Succeeds Act, 20 U.S.C. § 6301 (2015).

https://www.congress.gov/114/plaws/publ95/PLAW-114publ95.pdf

Farrell, E. (2020). Researching lived experience in education: Misunderstood or missed opportunity? *International Journal of Qualitative Methods*, 19, 1-19. <u>https://doi.org/10.1177/1609406920942066</u>

- Feng, X., & Behar-Horenstein, L. (2019). Maximizing NVivo utilities to analyze open-ended responses. *Qualitative Report*, 24(3), 563-571.
- Fisher, D., Frey, N., & Hattie, J. (2021). *The distance learning playbook, grades K–12: Teaching for engagement and impact in any setting*. Corwin.

- Flynn, S. (2022). Research design for the behavioral sciences: An applied approach. Springer Publishing.
- Ford, T. G., Van Sickle, M. E., Clark, L. V., Fazio-Brunson, M., & Schween, D. C. (2017). Teacher self-efficacy, professional commitment, and high-stakes teacher evaluation policy in Louisiana. *Educational Policy (Los Altos, Calif.)*, 31(2), 202-248. https://doi.org/10.1177/0895904815586855

Fraenkel, J. R., & Wallen, N. E. (1996). How to design research in education. McGraw-Hill.

- Francisco, M. P. B., Hartman, M., & Wang, Y. (2020). Inclusion and special education. *Education Sciences*, 10(9), 238. <u>https://doi.org/10.3390/educsci10090238</u>
- Frey, J. R. (2019). Assessment for special education: Diagnosis and placement. *The Annals of the American Academy of Political and Social Science*, 683(1), 149-161. https://doi.org/10.1177/0002716219841352
- Friend, M., & Cook, L. (2017). Interactions: Collaboration skills for school professionals (8th ed.). Pearson.
- Friend, M., Cook, L., Hurley-Chamberlain, D., & Shamberger, C. (2010). Co-teaching: An illustration of the complexity of collaboration in special education. *Journal of Educational and Psychological Consultation*, 20(1), 9-27. https://doi.org/10.1080/10474410903535380
- Fuller, E. J., Hollingworth, L., & Pendola, A. (2017). The Every Student Succeeds Act, state efforts to improve access to effective educators, and the importance of school leadership. *Educational Administration Quarterly*, *53*(5), 727-756.
  https://doi.org/10.1177/0013161X17711481

https://doi.org/10.1177/0013161X17711481

- Gale, J., Alemdar, M., Cappelli, C., & Morris, D. (2021). A mixed methods study of selfefficacy, the sources of self-efficacy, and teaching experience. *Frontiers in Education* (*Lausanne*), 6. <u>https://doi.org/10.3389/feduc.2021.750599</u>
- Garwood, J. (2018). Literacy interventions for secondary students formally identified with emotional and behavioral disorders: Trends and gaps in the research. *Journal of Behavioral Education*, 27, 23–52. <u>https://doi.org/10.1007/s10864-017-9278-3</u>
- Gbènakpon, S. A. (2018). An exploration of the concept and practice of co-teaching in public secondary school EFL classes in Benin. *Journal of Language Teaching and Research*, 9(4), 765-776. <u>https://doi.org/10.17507/jltr.0904.13</u>
- Gebauer, M. M., McElvany, N., Bos, W., Köller, O., & Schöber, C. (2020). Determinants of academic self-efficacy in different socialization contexts: Investigating the relationship between students' academic self-efficacy and its sources in different contexts. Social Psychology of Education, 23(2), 339-358. <u>https://doi.org/10.1007/s11218-019-09535-0</u>
- Gerber, H. R., Abrams, S. S., Curwood, J. S., & Magnifico, A. M. (2017). *Conducting qualitative research of learning in online spaces*. SAGE Publications, Inc.
- Gill, S. L. (2020). Qualitative sampling methods. *Journal of Human Lactation*, *36*(4), 579-581. https://doi.org/10.1177/0890334420949218
- Gill, P., & Baillie, J. (2018). Interviews and focus groups in qualitative research: An update for the digital age. *British Dental Journal*, 225(7), 668-672. <u>https://doi.org/10.1038/sj.bdj.2018.815</u>
- Gill, M. J., Gill, D. J., & Roulet, T. J. (2018). Constructing trustworthy historical narratives:
   Criteria, principles and techniques. *British Journal of Management*, 29(1), 191-205.
   <a href="https://doi.org/10.1111/1467-8551.12262">https://doi.org/10.1111/1467-8551.12262</a>

- Gillis, A., & Krull, L. M. (2020). COVID-19 remote learning transition in spring 2020: Class structures, student perceptions, and inequality in college courses. *Teaching Sociology*, 48(4), 283-299. <u>https://doi.org/10.1177/0092055X20954263</u>
- Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000) 'Collective teacher efficacy: Its meaning, measure, and impact on student achievement.' *American Educational Research Journal*, vol. 37, pp. 479–507. <u>https://doi.org/10.3102/00028312037002479</u>
- Governor's Office of Student Achievement. (n.d.). *Georgia School Grade Reports (2018-2019)*. Retrieved from <u>https://schoolgrades.georgia.gov/</u>
- Granziera, H., & Perera, H. N. (2019). Relations among teachers' self-efficacy beliefs, engagement, and work satisfaction: A social cognitive view. *Contemporary Educational Psychology*, 58(July 2019), 75-84. <u>https://doi.org/10.1016/j.cedpsych.2019.02.003</u>
- Green, J., & Bettini, E. (2020). Addressing teacher, mental health during the COVID-19 pandemic. *Teachers College Record*.

https://www.tcrecord.org/Content.asp?ContentId=23395

- Greer, W. (2018). The 50-year history of the common core. *Educational Foundations (Ann Arbor, Mich.), 31*(3-4), 100-117.
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology*, 29, 79–92.
- Guest, G., Namey, E., McKenna, K. (2017). How many focus groups are enough? Building an evidence base for nonprobability sample sizes. Field Methods 29, 3–22. https://doi.org/10.1177/1525822X16639015
- Guise, M., Habib, M., Thiessen, K., & Robbins, A. (2017). Continuum of co-teaching implementation: moving from traditional student teaching to co-teaching. *Teaching and*

Teacher Education, 66, 370–382. https://doi-

org.ezproxy.liberty.edu/10.1016/j.tate.2017.05.002

Hamilton, A. B., & Finley, E. P. (2019). Qualitative methods in implementation research: An introduction. *Psychiatry Research*, 280, 112516-112516. https://doi.org/10.1016/j.psychres.2019.112516

Harrell, J. T. (2021). The impacts of an online planning tool on online co-teaching practices during a pandemic (Publication No. 28646080). [Doctoral dissertation, University of South Carolina]. ProQuest Dissertations & Theses Global. (2600338916)

Harris, D. N., Oliver, D., Liu, L., Balfe, C., Slaughter, S., & Mattei, N. (2020). How America'schools responded to the COVID\_crisis. National Center for Research on Education Access\_and Choice.

https://www.reachcentered.org/uploads/policybrief/20200713-Harris-et-al-How-Americas-Schools-Responded-to-the-COVID-Crisis.pdf

- Harrison, P. A., & Fopma-Loy, J. L. (2010). Reflective journal prompts: A vehicle for stimulating emotional competence in nursing. *The Journal of Nursing Education*, 49(11), 644-652. https://doi.org/10.3928/01484834-20100730-07
- Hawkman, A. M., Chval, K. B., & Kingsley, L. H. (2019). 'I feel like I can do it now': Preservice teacher efficacy in a co-teaching community of practice. *Teaching Education (Columbia, S.C.)*, 30(1), 86-104. <u>https://doi.org/10.1080/10476210.2018.1446516</u>
- Hays, D. G., & McKibben, W. B. (2021). Promoting rigorous research: Generalizability and qualitative research. *Journal of Counseling and Development*, 99(2), 178-188. <u>https://doi.org/10.1002/jcad.12365</u>

- Hebbeler, K., & Spiker, D. (2016). Supporting young children with disabilities. *The Future of Children*, 26(2), 185-205. <u>https://doi.org/10.1353/foc.2016.0018</u>
- Hedin, L., & Conderman, G. (2019). Pairing teachers for effective co-teaching teams. *Kappa Delta Pi Record*, 55(4), 169-173. <u>https://doi.org/10.1080/00228958.2019.1659063</u>
- Hiese, M. (2017). from no child left behind to every student succeeds: Back to a future for education federalism. *Columbia Law Review*, 117(7), 1859-1896.

Heisler, L. A., & Thousand, J. S. (2021). A guide to co-teaching for the SLP: A tutorial. Communication Disorders Quarterly, 42(2), 122-127. https://doi.org/10.1177/1525740119886310

- Henry, M., & Johnson, H. (2018). The construction of an appropriate education program by Florida administrative law judges pre-Rowley, post-Rowley, and post-IDEA 2004. *Power* and Education, 10(1), 58-70. <u>https://doi.org/10.1177/1757743818754397</u>
- Hilton, T. P., Fawson, P. R., Sullivan, Thomas J., P., & DeJong, Cornell R., (2019). Applied social research: A tool for the human services, tenth edition. Springer Publishing Company.
- Hivner, E. A., Hoke, A. M., Francis, E. B., Lehman, E. B., Hwang, G. W., & Kraschnewski, J. L.
  (2019). Training teachers to implement physical activity: Applying social cognitive theory. *Health Education Journal*, 78(4), 464–475.

https://doi.org/10.1177/0017896918820558

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020, March 27). The difference between emergency remote teaching and online learning. *Edu-CAUSE Review*.
 <u>https://er.educause.edu/articles/2020/3/the-difference-be-tween-emergency-remoteteaching-and-online-learning</u>

- Hopper, T., Fu, H., Sanford, K., & Hinkel, T. (2021). YouTube for transcribing and google drive for collaborative coding: Cost-effective tools for collecting and analyzing interview data. *Qualitative Report*, 26(3), 861-873. <u>https://doi.org/10.46743/2160-3715/2021.4639</u>
- Hornbeck, D. (2017). Seeking civic virtue: Two views of the philosophy and history of federalism in U.S. education. *Journal of Thought*, *51*(3-4), 52-68.

Hornby, G. (2021). Are inclusive education or special education programs more likely to result in inclusion post-school? *Education Sciences*, 11(6), 304. <u>https://doi.org/10.3390/educsci11060304</u>

- Horsford, S. D., Jean-Marie, G., Tran, N., Carpenter, B., Adams, C., Schares, D., & Sanders, K. N. (2017). Special issue introduction: School leadership and the every student succeeds act: Dilemmas and possibilities in an era of inequality. *Journal of School Leadership*, 27(5), 618-621. <u>https://doi.org/10.1177/105268461702700501</u>
- Hulbert, L., & McBride, C. (2004). Utilizing videoconferencing in library education: a team-teaching approach. *Journal of Education for Library and Information Science*, 45 (1). 26-45.
- Jackson, K. M., Willis, K., Giles, L., Lastrapes, R. E., & Mooney, P. (2017). How to meaningfully incorporate co-teaching into programs for middle school students with emotional and behavioral disorders. *Beyond Behavior*, 26(1), 11-18.

https://doi.org/10.1177/1074295617694408

Jackson, R. (2018). "We prefer the friendly approach and not the facility": On the value of qualitative research in Ethiopia. *Ethiopian Journal of Health Sciences*, 28(5), 555-562. <u>https://doi.org/10.4314/ejhs.v28i5.6</u>

- Jacob, B. (2017). the changing federal role in school accountability. *Journal of Policy Analysis* and Management, 36(2), 469-477. <u>https://doi.org/10.1002/pam.21975</u>
- Jafar, A. J. N. (2018). What is positionality and should it be expressed in quantitative studies? *Emergency Medicine Journal: EMJ*, 35(5), 323-324. <u>https://doi.org/10.1136/emermed-</u> 2017-207158
- Jensen, L., Price, L., & Roxå, T. (2020). Seeing through the eyes of a teacher: Differences in perceptions of HE teaching in face-to-face and digital contexts. Studies in Higher Education (Dorchester-on-Thames), 45(6), 1149-

1159. https://doi.org/10.1080/03075079.2019.1688280

- Johnson, T. M., & King-Sears, M. E. (2020). *Eliciting students' perspectives about their coteaching experiences*. SAGE Publications. <u>https://doi.org/10.1177/1053451220910732</u>
- Johnston, J., Barrett, A., & Stenfors, T. (2020). How to ... synthesise qualitative data. *The Clinical Teacher*, *17*(4), 378-381. <u>https://doi.org/10.1111/tct.13169</u>
- Joyce, J., Harrison, J. R., & Gitomer, D. H. (2020). Modifications and accommodations: A preliminary investigation into changes in classroom artifact quality. International Journal of Inclusive Education, 24(2), 181-201. <u>https://doi.org/10.1080/13603116.2018.1453876</u>
- Kaden, U. (2020). COVID-19 school closure-related changes to the professional life of a K–12 teacher. *Education Sciences*, *10*(6), 165. https://doi.org/10.3390/educsci10060165
- Kaden, U., & Martin, K. (2020). COVID-19 school closure experiences in rural Alaska and reimagining the roles of education and teachers. *Northwest Journal of Teacher Education*, 15(2). https://doi.org/10.15760/nwjte.2020.15.2.11
- Kauffman, J. M., Felder, M., Ahrbeck, B., Badar, J., & Schneiders, K. (2018). Inclusion of all students in general education? international appeal for A more temperate approach to

inclusion. *The Journal of International Special Needs Education*, 21(2), 1-10. https://doi.org/10.9782/17-00009

- Kaul, C. R., & Davis, B. K. (2018). How the state education agencies addressed gifted education in the title II sections of their ESSA state plans. *Gifted Child Today Magazine*, 41(3), 159-167. <u>https://doi.org/10.1177/1076217518769700</u>
- Kelly, M., Ellaway, R. H., Reid, H., Ganshorn, H., Yardley, S., Bennett, D., & Dornan, T. (2018). Considering axiological integrity: A methodological analysis of qualitative evidence syntheses, and its implications for health professions education. *Advances in Health Sciences Education: Theory and Practice*, 23(4), 833-851.

https://doi.org/10.1007/s10459-018-9829-y

- Kidd, W., & Murray, J. (2020). The Covid-19 pandemic and its effects on teacher education in England: how teacher educators moved practicum learning online, *European Journal of Teacher Education, 43*(4), 542-558, <u>https://doi.org/10.1080/02619768.2020.1820480</u>
- Kim, E., & Pratt, S. M. (2021). The impact on pre-service teachers' perceptions toward co-teaching from being a learner in co-taught college courses. *Action in Teacher Education*, 43(3), 301-320. https://doi.org/10.1080/01626620.2020.1848663
- King-Sears, M. E., & Jenkins, M. C. (2020). Active instruction for co-teachers in a support role. *Intervention in School and Clinic*, 55(5), 301-306.

https://doi.org/10.1177/1053451219881729

King-Sears, M. E., Stefanidis, A., Berkeley, S., & Strogilos, V. (2021). Does co-teaching improve academic achievement for students with disabilities? A meta-analysis.
 *Educational Research Review*, 34, 100405. <u>https://doi.org/10.1016/j.edurev.2021.100405</u>

- Kirby, M. (2017). Implicit assumptions in special education policy: Promoting full inclusion for students with learning disabilities. *Child & Youth Care Forum*, 46(2), 175-191. <u>https://doi.org/10.1007/s10566-016-9382-x</u>
- Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education*, 6(5), 26. <u>https://doi.org/10.5430/ijhe.v6n5p26</u>
- Knechel, N. (2019). What's in a sample? Why selecting the right research participants matters. *Journal of Emergency Nursing*, 45(3), 332-334.
- Knoblauch, D., & Woolfolk Hoy, A. (2008). "Maybe I can teach those kids." the influence of contextual factors on student teachers' efficacy beliefs. *Teaching and Teacher Education*, 24(1), 166-179. <u>https://doi.org/10.1016/j.tate.2007.05.005</u>
- Kokko, M., Takala, M., & Pihlaja, P. (2021). Finnish teachers' views on co-teaching. British Journal of Special Education, 48(1), 112-132. <u>https://doi.org/10.1111/1467-</u> <u>8578.12348</u>
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. part 4: Trustworthiness and publishing. *The European Journal of General Practice*, 24(1), 120-124. https://doi.org/10.1080/13814788.2017.1375092
- Kramarski, B., & Michalsky, T. (2010). Preparing preservice teachers for self-regulated learning in the context of technological pedagogical content knowledge. Learning and Instruction, 20(5), 434-447. <u>https://doi.org/10.1016/j.learninstruc.2009.05.003</u>
- Kross, J., & Giust, A. (2019). Elements of research questions in relation to qualitative inquiry. *Qualitative Report, 24*(1), 24-30.

Lahman, M. K. E., Rodriguez, K. L., Moses, L., Griffin, K. M., Mendoza, B. M., & Yacoub, W. (2015). A rose by any other name is still a rose? problematizing pseudonyms in research. *Qualitative Inquiry*, 21(5), 445-453. <u>https://doi.org/10.1177/1077800415572391</u>

Laughter, L. (2018). ESSA and evidence: Why does it matter? [PowerPoint slides]. 806 Technologies.

https://www.esc16.net/upload/page/5615/4.a.%20ESSA%20and%20Evidence%2

- Letterman, M., & Dugan, K. (2004). Team teaching a cross-disciplinary honors course: Preparation and development. *College teaching*, *52* (2). 76-79.
- Lester, J. N., Cho, Y., & Lochmiller, C. R. (2020). Learning to do qualitative data analysis: A starting point. *Human Resource Development Review*, 19(1), 94-106. https://doi.org/10.1177/1534484320903890
- Levitt, H. M. (2021). Qualitative generalization, not to the population but to the phenomenon:
   Reconceptualizing variation in qualitative research. *Qualitative Psychology (Washington, D.C.)*, 8(1), 95-110. <u>https://doi.org/10.1037/qup0000184</u>
- Lim, D. H., Lee, J. H., & Grabowski, B. L. (2021). The effects of self-efficacy, perceived ease of use, and training on pre-service teachers' adoption of technology for teaching. Journal of Educational Computing Research, 59(2), 207-228.

https://doi.org/10.1177/0735633120953904

- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Sage.
- Lincoln, Y., & Guba, E. G. (2016). *The constructivist credo*. (1st ed.), Routledge.

Link, M. (2018). New data strategies: Nonprobability sampling, mobile, big data. *QualityAssurance in Education*, 26(2), 303-314. <u>https://doi.org/10.1108/QAE-06-2017-</u> <u>0029</u>

- Littlefield, J. (2018). *The difference between synchronous and asynchronous distance learning*. <u>https://www.thoughtco.com/synchronous-distance-learning-asynchronous-distance-</u> learning-1097959
- Liu, H., Chu, W., & Wang, Y. (2021). Unpacking EFL teacher self-efficacy in livestream teaching in the chinese context. Frontiers in Psychology, 12, 717129-717129. https://doi.org/10.3389/fpsyg.2021.717129
- Lu, T., & Franklin, A. L. (2018). A protocol for identifying and sampling from proxy populations. *Social Science Quarterly*, 99(4), 1535-1546. <u>https://doi.org/10.1111/ssqu.12519</u>
- Luo, N., Li, H., Zhao, L., Wu, Z., & Zhang, J. (2022). Promoting student engagement in online learning through harmonious classroom environment. The Asia-Pacific Education Researcher, 31(5), 541-551. <u>https://doi.org/10.1007/s40299-021-00606-5</u>
- Lyon, C. P., Hogan, E., & Kearns, D. M. (2021). Individualizing literacy instruction in co-taught classrooms through a station teaching model. *Intervention in School and Clinic*, 56(4), 224–232. <u>https://doi.org/10.1177/1053451220944376</u>
- Maddux, J. E., & Volkmann, J. (2010). Self-efficacy. In R. H. Hoyle (Ed.), *Handbook of personality and self-regulation*. Wiley.
- Magableh, I. S. I., & Abdullah, A. (2021). The impact of differentiated instruction on students' reading comprehension attainment in mixed-ability classrooms. *Interchange* (Toronto. 1984), 52(2), 255-272. <u>https://doi.org/10.1007/s10780-021-09427-3</u>

Maher, C., Hadfield, M., Hutchings, M., & de Eyto, A. (2018). Ensuring Rigor in Qualitative
Data Analysis: A Design Research Approach to Coding Combining NVivo With
Traditional Material Methods. *Families in Society*, 233–242.
https://doi.org/10.1606/1044-3894.236

- Margolis, J., Meese, A. A., & Doring, A. (2016). Do teachers need structure or freedom to effectively teach urban students? A review of the educational debate. *Education and Urban Society*, *48*(9), 783-806. https://doi.org/10.1177/0013124516630791
- Marshall, C., & Rossman, G. B. (2015). Designing Qualitative Research. London: SAGE Publication.
- Mason-Bish, H. (2019). The elite delusion: Reflexivity, identity and positionality in qualitative research. *Qualitative Research: QR*, *19*(3), 263-276. https://doi.org/10.1177/1468794118770078
- Marquis, E., Black, C., & Healey, M. (2017). Responding to the challenges of student-staff partnership: The reflections of participants at an international summer institute. *Teaching in Higher Education*, 22(6), 720-735. <u>https://doi.org/10.1080/13562517.2017.1289510</u>
- McGlynn, K., & Kelly, J. (2019). Assess your coteaching chemistry through experience. *Science Scope (Washington, D.C.)*, 42(9), 30-35.
- McKenna, J. W., & Brigham, F. J. (2021). More than de minimis: FAPE in the post Endrew F. era. *Behavior Modification*, 45(1), 3-12. <u>https://doi.org/10.1177/0145445519880836</u>
- Menon, D., & Sadler, T. D. (2018). Sources of science teaching self-efficacy for preservice elementary teachers in science content courses. *International Journal of Science and Mathematics Education*, 16(5), 835-855. <u>https://doi.org/10.1007/s10763-017-9813-7</u>

- Merriam, S. B., & Grenier, R. S. (Eds.). (2019). Qualitative research in practice: Examples for discussion and analysis. John Wiley & Sons, Incorporated.
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation, 4th edition.* Jossey-Bass.
- Miles, M. B., Huberman, A. M. & Saldana, J. (2013). *Qualitative Data Analysis: A Methods Sourcebook*. SAGE Publications.
- Miller, B., Taylor, K., & Ryder, R. E. (2019). Introduction to special topic: Serving children with disabilities within multitiered systems of support. *AERA Open*, 5(2), 233285841985379. <u>https://doi.org/10.1177/2332858419853796</u>
- Miller, R. M., Chan, C. D., & Farmer, L. B. (2018). Interpretative phenomenological analysis: A contemporary qualitative approach. *Counselor Education and Supervision*, 57(4), 240-254. <u>https://doi.org/10.1002/ceas.12114</u>
- Modi, P. D., Nair, G., Uppe, A., Modi, J., Tuppekar, B., Gharpure, A. S., & Langade, D. (2020).
  COVID-19 awareness among healthcare students and professionals in Mumbai metropolitan region: A questionnaire-based survey. *Curēus (Palo Alto, CA), 12*(4), e7514-e7514. https://doi.org/10.7759/cureus.7514
- Mofield, E. L. (2020). Benefits and barriers to collaboration and co-teaching: Examining perspectives of gifted education teachers and general education teachers. *Gifted Child Today Magazine*, 43(1), 20-33. <u>https://doi.org/10.1177/1076217519880588</u>
- Morgan, D. L. (2019). Commentary—After triangulation, what next? *Journal of Mixed Methods Research*, *13*(1), 6-11. <u>https://doi.org/10.1177/1558689818780596</u>

- Morris, D. B., Usher, E. L., & Chen, J. A. (2017). Reconceptualizing the sources of teaching self-efficacy: A critical review of emerging literature. *Educational Psychology Review*, 29(4), 795-833. <u>https://doi.org/10.1007/s10648-016-9378-y</u>
- Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. part 3:
  Sampling, data collection and analysis. *The European Journal of General Practice*, 24(1), 9-18. <u>https://doi.org/10.1080/13814788.2017.1375091</u>

Moustakas, C. (1994). Phenomenological research methods. Sage Publications.

Murawski, W. W., & Dieker, L. (2008). 50 ways to keep your co-teacher: Strategies for before, during, and after co-teaching. *Teaching Exceptional Children, 40*(4), 40-48.

https://doi.org/10.1177/004005990804000405

- Murawski, W. W., & Spencer, S. (2011). *Collaborate, communicate, and differentiate: How to increase student learning in today's diverse schools*. Corwin Press.
- Murawski, W. W., & Lochner, W. W. (2011). Observing co-teaching: What to ask for, look for, and listen for. Intervention in School and Clinic, 46(3), 174-

183. <u>https://doi.org/10.1177/1053451210378165</u>

- Murawski, W. W., & Hughes, C. E. (2021). Special educators in inclusive settings: Take steps for self-advocacy. *Teaching Exceptional Children*, 53(3), 184-193. <u>https://doi.org/10.1177/0040059920982263</u>
- Murphy, C., Scantlebury, K., & Milne, C. (2015). Using Vygotsky's zone of proximal development to propose and test an explanatory model for conceptualizing co-teaching in preservice science teacher education. *Asia-Pacific Journal of Teacher Education*, 43(4), 281–295. <u>https://doi.org/10.1080/1359866X.2015.1060291</u>

Murphy, R., Roschelle, J., Feng, M., & Mason, C. A. (2020). Investigating efficacy, moderators, and mediators for an online mathematics homework intervention. *Journal of Research on Educational Effectiveness, 13*(2), 235-270.

https://doi.org/10.1080/19345747.2019.1710885

- Nasution, M. K. M. (2018). ontology. Journal of Physics. Conference Series, 1116(2), 22030. https://doi.org/10.1088/1742-6596/1116/2/022030
- National Center for Education Statistics. (2020). Fast Facts: Back to School Statistics. Retrieved from <u>https://nces.ed.gov/fastfacts/display.asp?id=372</u>
- National Center of Education Statistics. (2021). *District details (2019-2020 school year)*. Retrieved from <u>https://nces.ed.gov/ccd/districtsearch/</u>
- National Center for Education Statistics. (2022). Students With Disabilities. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. Retrieved [11/06/2022], from https://nces.ed.gov/programs/coe/indicator/cgg
- Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, 8(2), 90-97. https://doi.org/10.1007/s40037-019-0509-2
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*. <u>https://doi.org/10.1177/1609406917733847</u>
- O'Brien, K. M., Regan, K., Coogle, C. G., Ottley, J. R., & Nagro, S. A. (2021). Impact of eCoaching with video-based reflection on special education teacher candidates' instructional skills. *Teacher Education and Special Education*, 44(2), 160-182. <u>https://doi.org/10.1177/0888406420964732</u>
- Ogah, J. K. (2006). Teachers' efficacy to affect student learning: a literature review. *IFE Psychologia: An International Journal*, *14*(2), 16-35.
- Oliver, T. L., Shenkman, R., Diewald, L. K., & Smeltzer, S. C. (2021). Reflective journaling of nursing students on weight bias. *Nurse Education Today*, 98, 104702-104702. https://doi.org/10.1016/j.nedt.2020.104702
- Orange, A. (2016). Encouraging reflective practices in doctoral students through research journals. *Qualitative Report*, <u>https://doi.org/10.46743/2160-3715/2016.2450</u>
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307-332.

https://doi.org/10.3102/00346543062003307

- Pancsofar, N., & Petroff, J. G. (2013). Professional development experiences in co-teaching: Associations with teacher confidence, interests, and attitudes. *Teacher Education and Special Education*, 36(2), 83-96. <u>https://doi.org/10.1177/0888406412474996</u>
- Pancsofar, N., & Petroff, J. G. (2016). Teachers' experiences with co-teaching as a model for inclusive education. *International Journal of Inclusive Education*, 20(10), 1043-1053. https://doi.org/10.1080/13603116.2016.1145264
- Parks, R., Oliver, W., & Carson, E. (2016). The status of middle and high school instruction: examining professional development, social desirability, and teacher readiness for blended pedagogy in the southeastern united states. *Journal of Online Learning Research*, 2(2), 79–101.
- Parkes, K. A., Russell, J. A., Bauer, W. I., & Miksza, P. (2021). The well-being and instructional experiences of K-12 music educators: Starting a new school year during a pandemic.
   *Frontiers in Psychology*, 12, 701189-701189. <u>https://doi.org/10.3389/fpsyg.2021.701189</u>

- Parmigiani, D., Benigno, V., Giusto, M., Silvaggio, C., & Sperandio, S. (2021). E-inclusion:
  Online special education in italy during the covid-19 pandemic. *Technology, Pedagogy* and Education, 30(1), 111-124. <u>https://doi.org/10.1080/1475939X.2020.1856714</u>
- Paseka, A., & Schwab, S. (2020). Parents' attitudes towards inclusive education and their perceptions of inclusive teaching practices and resources. *European Journal of Special Needs Education*, 35(2), 254-272. <u>https://doi.org/10.1080/08856257.2019.1665232</u>

Patton, M. Q. (1990). Qualitative evaluation and research methods. Sage.

- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3<sup>rd</sup> ed.). Sage Publications Ltd.
- Patton, M. Q. (2015). Qualitative research & evaluation methods (4th ed.). Sage.
- Patrick, S. K., Grissom, J. A., Woods, S. C., & Newsome, U. W. (2021). Broadband access, district policy, and student opportunities for remote learning during COVID-19 school closures. AERA Open, 7, 233285842110642.

https://doi.org/10.1177/23328584211064298

- Payne, R. (2020). The shock of the new. *The International Journal of Art & Design Education*, 39(4), 724-738. https://doi.org/10.1111/jade.12317
- Pesonen, H. V., Rytivaara, A., Palmu, I., & Wallin, A. (2021). Teachers' stories on sense of belonging in co-teaching relationship. Scandinavian Journal of Educational Research, 65(3), 425-436. <u>https://doi.org/10.1080/00313831.2019.1705902</u>
- Perera, H. N., & John, J. E. (2020). Teachers' self-efficacy beliefs for teaching math: Relations with teacher and student outcomes. *Contemporary Educational Psychology*, 61, 101842. <u>https://doi.org/10.1016/j.cedpsych.2020.101842</u>

- Pettit, S. L. (2017). Preparing teaching candidates for co-teaching. *The Delta Kappa Gamma Bulletin*, 83(3), 15.
- Pfitzner-Eden, F. (2016). Why do I feel more confident? Bandura's sources predict preservice teachers' latent changes in teacher self-efficacy. *Frontiers in Psychology*, 7, 1486-1486. <u>https://doi.org/10.3389/fpsyg.2016.01486</u>
- Pierce, L. M., Weber, M. J., Klein, C. J., & Stoecker, B. A. (2020). Transitioning an advanced practice fellowship curriculum to eLearning during the COVID-19 pandemic. *The Journal of Nursing Education*, 59(9), 514-517. <u>https://doi.org/10.3928/01484834-</u> 20200817-07
- Pitts, J. (2021). General education and special education teachers' perceptions of co-teaching in high schools (Publication No. 28415209). [Doctoral dissertation, Walden University].
   ProQuest Dissertations & Theses Global.
- Potts, J. A. (2019). Profoundly gifted students' perceptions of virtual classrooms. *The Gifted Child Quarterly*, 63(1), 58-80. https://doi.org/10.1177/0016986218801075
- Pratt, S. M., Imbody, S. M., Wolf, L. D., & Patterson, A. L. (2017). Co-planning in co-teaching:A practical solution. *Intervention in School and Clinic*, *32*, 243–249.
- Pressley, T. (2021). Returning to teaching during COVID-19: An empirical study on elementary teachers' self-efficacy. *Psychology in the Schools*, 58(8), 1611. <u>https://doi.org/10.1002/pits.22528</u>
- Prince, A. M. T., Yell, M. L., & Katsiyannis, A. (2018). Endrew F. v. douglas county school district (2017): The U.S. supreme court and special education. *Intervention in School and Clinic*, 53(5), 321-324. <u>https://doi.org/10.1177/1053451217736867</u>

- Pugach, M. C., Blanton, L. P., Mickelson, A. M., & Boveda, M. (2020). Curriculum Theory: The Missing Perspective in Teacher Education for Inclusion. Teacher Education and Special Education, 43(1), 85–103. <u>https://doi.org/10.1177/0888406419883665</u>
- Qvortrup, A., & Qvortrup, L. (2018). Inclusion: Dimensions of inclusion in education, International Journal of Inclusive Education, 22(7), 803-817. <u>https://doi.org/10.1080/13603116.2017.1412506</u>
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5.
- Ratan, S., Anand, T., & Ratan, J. (2019). Formulation of research question stepwise approach. Journal of Indian Association of Pediatric Surgeons, 24(1), 15-20. https://doi.org/10.4103/jiaps.JIAPS\_76\_18
- Reddy, L. A., Lekwa, A., & Shernoff, E. (2021). Comparison of the effects of coaching for general and special education teachers in high-poverty urban elementary schools. *Journal* of Learning Disabilities, 54(1), 36-53. <u>https://doi.org/10.1177/0022219420970194</u>
- Renz, S. M., Carrington, J. M., & Badger, T. A. (2018). Two strategies for qualitative content analysis: An intramethod approach to triangulation. *Qualitative Health Research*, 28(5), 824-831. <u>https://doi.org/10.1177/1049732317753586</u>
- Rexroat-Frazier, N., & Chamberlin, S. (2019). Best practices in co-teaching mathematics with special needs students. *Journal of Research in Special Educational Needs*, 19(3), 173-183. <u>https://doi.org/10.1111/1471-3802.12439</u>
- Ricci, L. A., Persiani, K., & Williams, A. D. (2019). From 'training wheels for teaching' to 'cooking in your mother-in-law's kitchen': Highlights and challenges of co-teaching

among math, science, and special education teacher candidates and mentors in an urban teacher residency program. *International Journal of Whole Schooling*, *15*(2), 24.

- Ricoeur, P. (1981). *Paul Ricoeur hermeneutics and the human sciences*. (J. B. Thompson, Ed.). Cambridge University Press.
- Robins, C. S., & Eisen, K. (2017). Strategies for the effective use of NVivo in a large-scale study: Qualitative analysis and the repeal of Don't ask, Don't tell. *Qualitative Inquiry*, 23(10), 768-778. <u>https://doi.org/10.1177/1077800417731089</u>
- Rodgers, W. J., & Weiss, M. P. (2019). Specially designed instruction in secondary co-taught mathematics courses. *Teaching Exceptional Children*, *51*(4), 276-285.

https://doi.org/10.1177/0040059919826546

- Rodriguez, V., Rojas, N. M., Rabadi-Raol, A., Souto-Manning, M. V., & Brotman, L. M. (2021).
   Silent expectations: An exploration of women pre-kindergarten teachers' mental health and wellness during covid-19 and beyond. *Early Childhood Research Quarterly*, <a href="https://doi.org/10.1016/j.ecresq.2021.12.006">https://doi.org/10.1016/j.ecresq.2021.12.006</a>
- Rose, J., & Johnson, C. W. (2020). Contextualizing reliability and validity in qualitative research: toward more rigorous and trustworthy qualitative social science in leisure research. *Journal of Leisure Research*, *51*(4),

https://doi.org/10.1080/00222216.2020.1722042

Saghafi, F., Lou, Y., Goodwin, A., & Collins, L. (2021). Online Co-Teaching: Strategies forSpecial and General Educators. In P. P. Parboteeah (Ed.), Education in the Digital Age:How We Can Make Our Schools More Effective. IGI Global.

- Satterlee Vizenor, A., & Matuska, J. (2018). Actualizing characteristics of successful schools for young adolescents through co-teaching. *Middle School Journal*, 49(3), 17-25. <u>https://doi.org/10.1080/00940771.2018.1439666</u>
- Scribner-MacLean, M., & Miller, H. (2011). Strategies for success for online coteaching. *Journal of Online Learning and Teaching*, 7(3), 419.
- Scruggs, T. E., & Mastropieri, M. A. (2017). Making inclusion work with co-teaching. *Teaching Exceptional Children*, 49(4), 284-293. <u>https://doi.org/10.1177/0040059916685065</u>
- Schuh, M. C., Knackstedt, K. M., Cornett, J., Choi, J. H., Pollitt, D. T., & Satter, A. L. (2018).
  All means all: Connecting federal education policy and local implementation practice through evidence and equity. *Inclusion (Washington, D.C.)*, 6(1), 45-59.
  https://doi.org/10.1352/2326-6988-6.1.45
- Schunk, D. H. (1989). Social cognitive theory and self-regulated learning. In Zimmerman, B. J., and Schunk, D. H. (eds.), *Self-Regulated Learning and Academic Achievement: Theory, Research, and Practice* Springer, New York, pp. 83–110.
- Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, 60, 101832. <u>https://doi.org/10.1016/j.cedpsych.2019.101832</u>
- Schunk, D., & Pajares, F. (2002). The development of academic self-efficacy. In A. Wigfield &J. Eccles (Eds.), *Development of achievement motivation* (pp. 15–31). Academic Press.
- Schunk, D. H., & Usher, E. L. (2019). Social cognitive theory and motivation. In R.M. Ryan (Ed.). *The Oxford handbook of human motivation*, 2, 11-26.

- Semon, S., Lane, D., Jones, P., & Smith, S. M. (2020). Job-embedded professional development: Implementing co-teaching practices in general education classrooms. *International Journal of Inclusive Education*, 1-16. <u>https://doi.org/10.1080/13603116.2020.1821448</u>
- Serravallo, J. (2020). *Connecting with students online: Strategies for remote teaching and learning*. Retrieved from <u>https://twowritingteachers.org/2020/10/16/connecting-with-</u> <u>students-online-strategies-for-remote-teaching-learning/</u>
- Shelton, A., Lemons, C. J., & Wexler, J. (2021). Supporting main idea identification and text summarization in middle school co-taught classes. *Intervention in School and Clinic*, 56(4), 217-223. <u>https://doi.org/10.1177/1053451220944380</u>
- Shi, C. R., Rana, J., & Burgin, S. (2018). Co-teaching: Applications in medical education. *The Clinical Teacher*, 15(4), 341-343. <u>https://doi.org/10.1111/tct.12709</u>
- Shin, M., Lee, H., & McKenna, W. J. (2016) Special education and general education preservice teachers' co-teaching experiences: a comparative synthesis of qualitative research, *International Journal of Inclusive Education*, 20(1), 91-107.

https://doi.org/10.1080/13603116.2015.1074732

- Shields, M., Rieg, S., & Rutledge, S. (2021). An investigation of mentor teachers' and student teacher candidates' perceptions of co-teaching during the COVID-19 pandemic. *School-University Partnerships*, 14(3), 70-93.
- Shoulders, T. L., & Krei, M. S. (2016). Rural secondary educators' perceptions of their efficacy in the inclusive classroom. *Rural Special Education Quarterly*, 35(1), 23-30. https://doi.org/10.1177/875687051603500104
- Sinclair, A. C., Bray, L. E., Wei, Y., Clancy, E. E., Wexler, J., Kearns, D. M., & Lemons, C. J. (2018). Coteaching in content area classrooms: Lessons and guiding questions for

administrators. NASSP Bulletin, 102(4), 303-322.

https://doi.org/10.1177/0192636518812701

- Sinclair, J., Herman, K. C., Reinke, W. M., Dong, N., & Stormont, M. (2021). Effects of a universal classroom management intervention on middle school students with or at risk of behavior problems. *Remedial and Special Education*, 42(1), 18-30. https://doi.org/10.1177/0741932520926610
- Skaalvik, E. M., & Skaalvik, S. (2018). Job demands and job resources as predictors of teacher motivation and well-being. Social Psychology of Education, 21(5), 1251-

1275. https://doi.org/10.1007/s11218-018-9464-8

- Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research:Problems and opportunities within sport and exercise psychology. InternationalReview of Sport and Exercise Psychology, 11(1), 101-121.
- Smith, E., & Larwin, K. H. (2021). Will they be welcomed in? the impact of K-12 teachers' and principals' perceptions of inclusion of students with disabilities. *Journal of Organizational and Educational Leadership*, 6(3), 1-34.
- Squire, K. D. (2021). From virtual to participatory learning with technology during COVID-19. *E-Learning and Digital Media*. https://doi.org/10.1177/20427530211022926
- Stansberry, S. L., & Flora, C. B. (2021). Co-teaching during COVID-19: Best practices for successful virtual collaboration. Journal of Special Education Technology, 36(2), 97-105. <u>https://doi.org/10.1177/01626434211006850</u>
- Stern, R. (2016). Principled neglect and compliance: Responses to NCLB and the CCSS at an expeditionary learning middle school. *Leadership and Policy in Schools*, 15(4), 448-480. <u>https://doi.org/10.1080/15700763.2015.1047034</u>

- Stiefel, L., Shiferaw, M., Schwartz, A. E., & Gottfried, M. (2018). Who Feels Included in School? Examining Feelings of Inclusion Among Students With Disabilities. *Educational Researcher*, 47(2), 105–120. <u>https://doi.org/10.3102/0013189X17738761</u>
- Strogilos, V., & Avramidis, E. (2016). Teaching experiences of students with special educational needs in co-taught and non-co-taught classes. *Journal of Research in Special Educational Needs*, 16(1), 24-33. <u>https://doi.org/10.1111/1471-3802.12052</u>
- Strogilos, V., & King-Sears, M. E. (2019). Co-teaching is extra help and fun: Perspectives on coteaching from middle school students and co-teachers. *Journal of Research in Special Educational Needs*, 19(2), 92-102. https://doi.org/10.1111/1471-3802.12427
- Strogilos, V., Avramidis, E., Voulagka, A., & Tragoulia, E. (2020). Differentiated instruction for students with disabilities in early childhood co-taught classrooms: Types and quality of modifications. International Journal of Inclusive Education, 24(4), 443-

461. https://doi.org/10.1080/13603116.2018.1466928

Swanson, E., & Wexler, J. (2017). Selecting appropriate text for adolescents with disabilities. *Teaching Exceptional Children, 49*(3), 160-167.

https://doi.org/10.1177/0040059916670630

Team, U. (2021, April 15). The difference between the Every Student Succeeds Act and no child left behind. Understood. Retrieved September 30, 2021, from <u>https://www.understood.org/articles/en/the-difference-between-the-every-student-succeeds-act-and-no-child-left-behind</u>

The Education for All Handicapped Children Act, Pub. L. No. 94–142 (1975).

- Thomas, C. L., Tancock, S. M., Zygmunt, E. M., & Sutter, N. (2020). Effects of a communityengaged teacher preparation program on the culturally relevant teaching self-efficacy of preservice teachers. *The Journal of Negro Education*, 89(2), 122-135.
- Thomas, D. R. (2017). Feedback from research participants: are member checks useful in qualitative research? *Qualitative Research in Psychology*, *14*(1), 23–41. https://doi.org/10.1080/14780887.2016.1219435
- Thompson, J. (2018). 'Shared intelligibility' and two reflexive strategies as methods of supporting 'responsible decisions' in a hermeneutic phenomenological study.
   *International Journal of Social Research Methodology*, 21(5), 575-589.

https://doi.org/10.1080/13645579.2018.1454641

- Thurlow, M. L., & Kopriva, R. J. (2015). Advancing accessibility and accommodations in content assessments for students with disabilities and English learners. *Review of Research in Education*, 39(1), 331-369. <u>https://doi.org/10.3102/0091732X14556076</u>
- Tracy-Bronson, C. P. (2020). District-level inclusive special education leaders' social justice strategies. *Journal of Special Education Leadership*, *33*(2), 59.
- Tremmel, P., Myers, R., Brunow, D. A., & Hott, B. L. (2020). Educating students with disabilities during the COVID-19 pandemic: Lessons learned from commerce independent school district. *Rural Special Education Quarterly*, 39(4), 201-210. https://doi.org/10.1177/8756870520958114
- Trust, T., & Whalen, J. (2021). Emergency remote teaching with technology during the COVID-19 pandemic: Using the whole teacher lens to examine educator's experiences and insights. *Educational Media International*. https://doi.org/10.1080/09523987.2021.1930479

Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 783-805. https://doi.org/10.1016/S0742-051X(01)00036-1

- Tschannen-Moran, M., Woolfolk Hoy, A., & Woolfolk Hoy, W. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202-248. <u>https://doi.org/10.3102/00346543068002202</u>
- Tschannen-Moran, M., & McMaster, P. (2009). Sources of Self-Efficacy: Four professional development formats and their relationship to Self-Efficacy and implementation of a new teaching strategy. *The Elementary School Journal*, 110(2), 228-245.

https://doi.org/10.1086/605771

- Turnage, L. (2020). Out of sight, out of mind: Rural special education and the limitations of the IDEA. *Columbia Journal of Law and Social Problems*, *54*(1), 1-47.
- Turnbull, H. R., Turnbull, A. P., & Cooper, D. H. (2018). The supreme court, Endrew, and the appropriate education of students with disabilities. *Exceptional Children*, 84(2), 124-140. <u>https://doi.org/10.1177/0014402917734150</u>
- Usher, E. L., & Pajares, F. (2008). Sources of self-efficacy in school: Critical review of the literature and future directions. *Review of Educational Research*, 78(4), 751-796. <u>https://doi.org/10.3102/0034654308321456</u>
- van Manen, M. (1982). Edifying theory: Serving the good. *Theory into Practice*, 21(1), 44-49. <a href="https://doi.org/10.1080/00405848209542980">https://doi.org/10.1080/00405848209542980</a>
- van Manen, M. (2014). Phenomenology of practice: Meaning-giving methods in phenomenological research and writing. Left Coast Press, Inc.

- van Manen, M. (2016). Writing in the dark: Phenomenological studies in interpretive inquiry. Taylor and Francis. <u>https://doi.org/10.4324/9781315415574</u>
- van Manen, M. (2003). *Researching lived experience: Human science for an action sensitive pedagogy*. Althouse Press
- van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. State University of New York Press.
- van Manen, M. (2017). Phenomenology in its original sense. *Qualitative Health Research*, 27(6), 810-825. <u>https://doi.org/10.1177/1049732317699381</u>
- Vygotsky, L. S. (1962). Thought and Language. MIT Press.
- Waltman, J., & McGinniss, J. (2020). How can we help? Supporting online students through asynchronous and synchronous library services. *Theological Librarianship*, 13(2), 23-25. <u>https://doi.org/10.31046/tl.v13i2.1940</u>
- Wang, C. X. (2021). CAFE: An instructional design model to assist K-12 teachers to teach remotely during and beyond the covid-19 pandemic. *Techtrends*, 65(1), 8-16. <u>https://doi.org/10.1007/s11528-020-00555-8</u>
- Wang, Q., & Chen, L. (2021). The effects of teacher immediacy and social presence on online students' motivation and learning outcomes: A self-determination theory perspective.Journal of Educational Computing Research, 59(2), 185-206.

https://doi.org/10.1177/0735633120945407

 Warin, B., Kolski, C., & Sagar, M. (2011). Framework for the evolution of acquiring knowledge modules to integrate the acquisition of high-level cognitive skills and professional competencies: Principles and case studies. *Computers and Education*, 57(2), 1595-1614. https://doi.org/10.1016/j.compedu.2011.02.013

- Weinberg, A. E., Sebald, A., Stevenson, C. A., & Wakefield, W. (2020). Toward conceptual clarity: A scoping review of coteaching in teacher education. *The Teacher Educator*, 55(2), 190-213. <u>https://doi.org/10.1080/08878730.2019.1657214</u>
- Weiss, M. P., & Glaser, H. (2021). Instruction in Co-Teaching in the Age of Endrew F. *Behavior Modification*, 45(1), 39–65. <u>https://doi.org/10.1177/0145445519836071</u>

Weiss, S., Muckenthaler, M., Heimlich, U., Kuechler, A., & Kiel, E. (2021). Teaching in inclusive schools. Do the demands of inclusive schools' cause stress? International *Journal of Inclusive Education*, 25(5), 588-604.

https://doi.org/10.1080/13603116.2018.1563834

- Weiss, M. P., & Rodgers, W. J. (2020). Instruction in secondary cotaught classrooms: Three elements, two teachers, one unique approach. *Psychology in the Schools*, 57(6), 959-972. <u>https://doi.org/10.1002/pits.22376</u>
- Wexler, J. (2021). Improving instruction in co-taught classrooms to support reading comprehension. *Intervention in School and Clinic*, 56(4), 195-199. https://doi.org/10.1177/1053451220944212
- Wexler, J., Kearns, D. M., Hogan, E. K., Clancy, E., & Shelton, A. (2021). Preparing to implement evidence-based literacy practices in the co-taught classroom. *Intervention in School and Clinic*, 56(4), 200-207. <u>https://doi.org/10.1177/1053451220944369</u>
- Wexler, J., Kearns, D. M., Lemons, C. J., Mitchell, M., Clancy, E., Davidson, K. A., Sinclair, A. C., & Wei, Y. (2018). Reading comprehension and co-teaching practices in middle school English language arts classrooms. *Exceptional Children*, 84(4), 384-402.
   <a href="https://doi.org/10.1177/0014402918771543">https://doi.org/10.1177/0014402918771543</a>

- Williams, T., & Williams, K. (2010). Self-efficacy and performance in mathematics: Reciprocal determinism in 33 nations. *Journal of Educational Psychology*, *102*(2), 453-466. <u>https://doi.org/10.1037/a0017271</u>
- Williamson, P., Hoppey, D., McLeskey, J., Bergmann, E., & Moore, H. (2020). Trends in LRE placement rates over the past 25 years. *The Journal of Special Education*, 53(4), 236-244. <u>https://doi.org/10.1177/0022466919855052</u>
- Wills, H. P., Caldarella, P., Mason, B. A., Lappin, A., & Anderson, D. H. (2019). Improving student behavior in middle schools: Results of a classroom management intervention. *Journal of Positive Behavior Interventions*, 21(4), 213-227.

https://doi.org/10.1177/1098300719857185

- Wilson, C., Marks Woolfson, L., & Durkin, K. (2020). School environment and mastery experience as predictors of teachers' self-efficacy beliefs towards inclusive teaching. *International Journal of Inclusive Education*, 24(2), 218-234. <u>https://doi.org/10.1080/13603116.2018.1455901</u>
- Wilson, B. G., & VanBerschot, J. L. (2014). Co-teaching an online action research class. Canadian Journal of Learning and Technology, 40(2). <u>https://doi.org/10.21432/t2kw20</u>
- Woodbridge, L., & O'Beirne, B. R. O. (2017). Counseling students' perceptions of journaling as a tool for developing reflective thinking. *The Journal of Counselor Preparation and Supervision*, 9(2)<u>https://doi.org/10.7729/92.1198</u>
- World Health Organization. (2022). *Data information*. Retrieved from https://covid19.who.int/data

 Xu, L., & Morris, J. (2019). Co-Teaching in Inclusive Classrooms: A Metasynthesis of Qualitative Research. Journal of Research in Special Educational Needs, 19(3), 217-229.
 <a href="https://doi.org/10.1111/1471-3802.12459">https://doi.org/10.1111/1471-3802.12459</a>

Yell, M. L. (2019). Endrew F. v. Douglas County school district (2017): Implications for educating students with emotional and behavioral disorders. *Behavioral Disorders*, 45(1), 53-62. <u>https://doi.org/10.1177/0198742919865454</u>

Yell, M. (2022). Brown v. board of education and the development of special education. *Intervention in School and Clinic*, *57*(3), 54-56.

https://doi.org/10.1177/10534512211014874

- Yell, M. L., & Bateman, D. F. (2017). Endrew F. v. Douglas County school district (2017) FAPE and the U.S. supreme court. *Teaching Exceptional Children*, 50(1), 7-15. <u>https://doi.org/10.1177/0040059917721116</u>
- Yell, M. L., & Bateman, D. F. (2019). Free appropriate public education and Endrew F. v.
   Douglas County school system (2017): Implications for personnel preparation. *Teacher Education and Special Education*, 42(1), 6-17.

https://doi.org/10.1177/0888406417754239

- Yell, M. L., Bateman, D., & Shriner, J. (2020a). Developing and implementing educationally meaningful and legally sound IEPs: Bringing it all together. *Teaching Exceptional Children*, 52(5), 344-347. <u>https://doi.org/10.1177/0040059920919087</u>
- Yell, M. L., Collins, J., Kumpiene, G., & Bateman, D. (2020b). The individualized education program: Procedural and substantive requirements. *Teaching Exceptional Children*, 52(5), 304-318. <u>https://doi.org/10.1177/0040059920906592</u>

- Yell, M. L., & Katsiyannis, A. (2019). The supreme court and special education. *Intervention in School and Clinic*, 54(5), 311-318. <u>https://doi.org/10.1177/1053451218819256</u>
- Yell, M. L., Rogers, D., & Rogers, E. L. (1998). The legal history of special education: What a long, strange trip it's been! *Remedial and Special Education*, 19(4), 219–228. https://doi.org/10.1177/074193259801900405

Yin, R. K. (2016). Qualitative research from start to finish (2nd ed.). Guilford Press.

- Young, V. M. (2018). Assessing the cornerstone of U.S. education reform. *Educational Foundations (Ann Arbor, Mich.), 31*(3-4), 74-99.
- Young, M. D., Winn, K. M., & Reedy, M. A. (2017). The every student succeeds act: Strengthening the focus on educational leadership. *Educational Administration Quarterly*, 53(5), 705-726. <u>https://doi.org/10.1177/0013161X17735871</u>
- Yu, S. (2019). Head start teachers' attitudes and perceived competence toward inclusion. *Journal of Early Intervention*, *41*(1), 30-43. <u>https://doi.org/10.1177/1053815118801372</u>
- Zhang, S., Gao, J., Zhang, X., & Sun, Z. (2021). Exploring the effect of professional development on the integration of technology in teaching: Evidence from the COVID-19 pandemic. Journal of Educational Computing Research, 59(1), 1-19. https://doi.org/10.1177/0735633120978531
- Zimmerman, B. J. (1983). Social learning theory: A contextualist account of cognitive functioning. In Brainerd, C. J. (ed.), *Recent Advances in Cognitive Developmental Theory* Springer, New York, pp. 1–49
- Zirkel, P. A. (2020). An updated primer of special education law. *Teaching Exceptional Children*, 52(4), 261-265. <u>https://doi.org/10.1177/0040059919878671</u>

#### Appendix A

#### **IRB** Approval

# LIBERTY UNIVERSITY. INSTITUTIONAL REVIEW BOARD

February 1, 2023

Carmean Matthews Alisha Castaneda

Re: IRB Exemption - IRB-FY22-23-511 THE LIVED EXPERIENCES OF CO-TEACHERS WHO CO-TAUGHT VIRTUALLY DURING COVID-19: A QUALITATIVE HERMENEUTIC PHENOMENOLOGICAL STUDY

Dear Carmean Matthews, Alisha Castaneda,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

# Appendix B RCPS Approval Letter



Dr. Terry O. Oatts Superintendent

Santana Flanigan General Counsel McBrayer Board of Education Wales F. Barksdale Pamela J. Brown Heather Duncan Sandra Jackson-Lett Jim

> Mandy M. North Akita Parmer

January 24, 2022

Ms. Carmean Matthews

Dear Ms. Matthews:

I have reviewed your research proposal: "The Lived Experiences of Co-Teachers Who Co-Taught Virtually During the COVID-19 Pandemic: A Qualitative Hermeneutic Phenomenological Study" and have approved it with the following conditions:

- All participation must be on a voluntary basis during *non-duty hours* only.
- All resources and/or supplies will be provided <u>by the applicant</u>. (District resources will not be used.)
- Written authorization is required from the principal before conducting surveys.
- No individual participant(s) or school(s) will be identifiable through the research project.
- Due to the system's comprehensive academic program, research activities will be conducted during the following months unless special arrangements have been approved: <u>September - November AND February-April</u>

I wish you every success as you begin this very important project. I would appreciate a copy of the final report along with any recommendations that your research may offer Rockdale County Public Schools.

Please let me know if you have any questions.

Sincerely,

Laura Grimwade Director of Federal Programs

## Appendix C Principal's Permission Request

Dear Principal [Name],

I hope this email finds you well. My name is Carmean Matthews, and I am a doctoral student at Liberty University. I am conducting a research study on the experiences of co-teachers who co-taught in a virtual setting during the 2020-2021 academic year. The purpose of my research is to describe and understand the experiences of co-teaching all-online through the perspectives of general education and special education co-teachers at the middle school level during the COVID-19 pandemic during the 2020-2021 academic year.

To gather data for this study, I am seeking the participation of general education and special education teachers who co-taught during the academic year. Participants must be 18 years or older, and willing to participate in individual interviews, focus groups, and written journal prompts. Participation in the study is completely anonymous.

I am writing to request your assistance in identifying potential participants for this study. If you are aware of any teachers who meet the requirements and might be interested in participating in the study, please provide their email addresses so that I can contact them with more information about the study.

Thank you in advance for your time and consideration. If you have any questions or concerns about this study, please do not hesitate to contact me.

Sincerely, Carmean Matthews

## Appendix D

#### **Informed Consent**

## Consent

**Title of the Project:** The Lived Experiences of Co-Teachers Who Co-Taught Virtually During COVID-19: A Qualitative Hermeneutic Phenomenological Study **Principal Investigator:** Carmean Matthews, Doctoral Candidate, School of Philosophy, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be an RCPS special education or general education teacher who co-taught one or more 6th-8th grade courses remotely during the academic school year of 2020-2021 at a Rockdale County middle school. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

#### What is the study about and why is it being done?

The purpose of the study is to describe and understand the experiences of co-teaching all-online through the perspectives of general education and special education co-teachers at the middle school level during the COVID-19 pandemic.

#### What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following things:

- 1. Participate in an individual interview through Microsoft Teams lasting up to one hour. This interview will be recorded and transcribed. You will receive a copy of the transcription.
- 2. Participate in a focus group through Microsoft Teams lasting up to an hour. This focus group will be recorded and transcribed. You will receive a copy of the transcription.
- 3. Participate in 3-4 written journal prompts using 200-400 words. These prompts should take you no longer than 25 min.

#### How could you or others benefit from this study?

The direct benefits participants should expect to receive from taking part in this study are a better understanding of different co-teaching methods for virtual learning.

Benefits to society include a better understanding of co-teaching in virtual environments.

#### What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

## How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records. Data collected from you may be shared for use in future research studies or with other researchers. If data collected from you is shared, any information that could identify you, if applicable, will be removed before the data is shared.

- Participant responses will be kept confidential using pseudonyms. Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews/focus groups will be recorded and transcribed. Recordings will be stored on a password-locked computer for three years and then erased. Only the researcher will have access to these recordings.
- Confidentiality cannot be guaranteed in focus group settings. While discouraged, other members of the focus group may share what was discussed with persons outside of the group.

#### How will you be compensated for being part of the study?

Participants will be compensated for participating in this study. Each participant will receive a \$10 electronic gift card at the end of the study which will come through their reported email address. Compensation is only for participants who complete the interview, focus group, and journal prompt.

#### Is study participation voluntary?

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or Rockdale County Public Schools. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

#### What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

#### Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Carmean Matthews. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at **the second state of the second state of** 

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at <u>irb@liberty.edu</u>.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

**Your Consent** 

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

The researcher has my permission to audio-record and video-record me as part of my participation in this study.

Printed Subject Name

Signature & Date

## Appendix E

#### **Participant Recruitment Email**

Dear Rockdale County, Public Schools Employee:

As a graduate student in the School of Philosophy at Liberty University, I am conducting research as part of the requirements for a Doctoral degree. The purpose of my research is to describe and understand the experiences of co-teaching all-online through the perspectives of general education and special education co-teachers at the middle school level during the COVID-19 pandemic of the 2020-2021 academic year, and I am writing to invite eligible participants to join my study.

Participants must be an RCPS special education or general education teacher who co-taught one or more 6th-8th grade courses remotely during the academic school year of 2020-2021at a Rockdale County middle school. Participants, if willing, will be asked to participate in an individual interview through Microsoft Teams lasting up to one hour. This interview will be recorded and transcribed. You will receive a copy of the transcription. Participants will also be asked to participate in a focus group through Microsoft Teams lasting up to an hour. This focus group will be recorded and transcribed. You will receive a copy of the transcription. Last, participate in 4-5 written journal prompts using 200-400 words. These prompts should take you no longer than 25 min.

Names and other identifying information will be requested as part of this study, but the information will remain confidential.

To participate, please respond back to this email with your name, position during the academic year 2020-2021, the Rockdale County middle school you worked at, and personal email address.

A consent document is attached to this email. The consent document contains additional information about my research. If you choose to participate, you will need to print and sign the consent document and return it to me via email before the time of the interview.

Participants will receive a \$10 gift card via email at the end of the study.

Sincerely,

Carmean Matthews



#### Appendix F Interview Questions

1. Describe your experiences co-teaching in a face-to-face classroom.

2. Describe the dynamics of your relationship with the other co-teacher.

3. Describe the dynamics of your relationship with the other co-teacher as you transitioned to virtual learning during the COVID-19 pandemic.

4. How did you work with the other co-teacher to transition from face-to-face to virtual classes during the 2020-2021 academic year?

5. What were the responsibilities you should red during the transition to online learning during the pandemic?

6. What were the responsibilities you shared with the co-teacher?

7. How did you manage the stress associated with such an impactful change?

8. How did the interpersonal relationships between you and the co-teacher change?

9. How did the interpersonal relationships between you and the students change?

10. Describe the role of learning about recent technologies that you, perhaps, were not familiar with and how that affected you.

11. What other factors impacted you as you worked to co-teach online during the COVID pandemic?

12. What else about your experiences working with another co-teacher in an online environment during the AY2021 would you like to share?

#### Appendix G Focus Group Questions

- 1. In 200-400 words, describe your role as the general or special education co-teacher.
- 2. How do you think virtual learning will shape middle school education in the future, particularly for inclusive classrooms?
- Describe a co-teaching model you believe works best when working with a [general/special] educator.
- 4. How would you describe your communication with your virtual co-teaching partner?
- Describe some positive experiences you had preparing to co-teach or co-teaching virtually with another instructor.
- Describe some of the more challenging experiences you had preparing to co-teach or coteaching virtually with another instructor.
- 7. Self-efficacy is an individual's belief in their capacity to perform a task or reach a specific goal. Teacher self-efficacy is an individual's judgment in their capabilities to bring about desired outcomes of student engagement and learning, even when students are difficult or unmotivated. As you think about your self-efficacy as an educator, what impact did the virtual co-teaching experience have on your self-efficacy?
- 8. What other experiences working with another co-teacher in an online environment during the AY2020 would you like to share?

## Appendix H Journal Prompts

#### Journal Prompt Questions

- In 200-400 words, describe your reactions to co-teaching in online classes during the 2020-2021 academic year.
- 2. Self-efficacy is an individual's belief in their capability to perform a task or accomplish a goal. Teacher self-efficacy focuses on how a teacher judges their ability to achieve student academic success amongst challenges such as a non-motivated student or behaviorally disruptive student. The teacher's beliefs can lead to gains in the classroom or the opposite. With this explanation in mind, describe your self-efficacy as an educator during the 2020-2021 AY in 200-400 words.
- In 200-400 words, discuss the things that positively impacted your self-efficacy as you co-taught online during the COVID pandemic.
- In 200-400 words, share the things that may have negatively impacted your self-efficacy during that time.
- In 200-400 words, share any other experiences that shaped your perception of coteaching during a global pandemic.