3-2023

How Coteaching Impacts Student Academic Growth In Elementary School

Sally-Rose Cragin
Xavier University of Louisiana, scragin@xula.edu

HOW COTEACHING IMPACTS STUDENT ACADEMIC GROWTH IN ELEMENTARY SCHOOL

by

Sally-Rose Cragin

A Dissertation submitted in partial fulfillment of the requirement for the degree of

DOCTOR OF EDUCATION

XAVIER UNIVERSITY OF LOUISIANA

Division of Education and Counseling

MARCH 2023

New Orleans, Louisiana

Xavier University of Louisiana

New Orleans, Louisiana

CERTIFICATE OF APPROVAL

DOCTORAL DISSERTATION

This is to certify that the Doctoral Dissertation of

SALLY-ROSE CRAGIN

Has been approved by the examination committee for the dissertation requirement for the Doctoral Program in Educational Leadership in the Division of Education and Counseling, May 2023.

Dr. Ramona Jean-Perkins, Chair

Dr. Leslie Haas

Dr. Elizabeth LaForge

Dr. Sloane Signal-Dubose

Associate Dean of Graduate Programs

Abstract

The purpose of this study is to determine the effects of co-teaching on the academic achievement of elementary students in English Language Arts (ELA). The current body of research related to co-teaching is primarily qualitative and mostly inconclusive (Hurd & Weilbacher 2017). After the reauthorization of the Individuals with Disabilities Education Act (IDEA) in 2004, it is vital for educational institutions to implement research-based practices to support students with and without disabilities in their Least Restrictive Environments (LRE). This study took a quantitative approach and utilized a causal-comparative design to answer the question: How does a co-taught classroom in comparison to a traditional classroom impact the academic achievement of third and fifth grade students in ELA as indicated by the Louisiana Educational Assessment Program (LEAP) 360 assessments? Data were gathered from diagnostic and interim benchmark assessments from a co-taught group of students and a traditionally taught group of students. The difference between the scores was analyzed to determine student growth and to compare the average growth of students in a co-taught classroom to the average growth of students in a non-co-taught classroom. This study's intent was to determine if there is a statically significant difference between the ELA growth of students in co-taught classrooms and students in non-co-taught classrooms.

Keywords: co-teaching, inclusion, teacher collaboration, academic achievement

TABLE OF CONTENTS

ACKNOWLEDGEMENT

This endeavor would not have been possible without the never-ending support of my tireless chair and academic advisor, Dr. Ramona Jean-Perkins. I would also like to express my deepest gratitude to my dissertation committee members, Dr. Leslie Haas and Dr. Sloane Signal for their dedication and expertise, as well as Dr. Cissy LaForge, who has given me so much more than feedback throughout this journey.

I am also sincerely grateful for the support of my cohort peers, especially Dr. Nicole Moliere, who has shared all my woes and excitement over the past three years. Lastly, I would be remiss in not mentioning the patience and encouragement provided by my family and friends throughout this expedition. Special thanks to my husband, Mike, my mom and dad, my siblings, my in-laws, and my friends, Steph, Kelley, Diana, and Emily, for cheering me on and listening to all the grievances along the way. To all my former students, thank you for showing me that anything is possible and for giving me something to fight for. Finally, a huge thanks to my pup, Mallo, and my niece, Camille, for providing hugs, smiles, laughter, and comfort whenever I needed a break.

DEDICATION

This work is dedicated to two tremendously important people: My late grandfather, The Honorable Judge Adrian Duplantier, who always encouraged me to continue my education and advocate for those who cannot advocate for themselves, and our future baby Gaglione, expected in December 2023. You are my sunshine.

CHAPTER ONE

INTRODUCTION

In 1997, the United States federal government revised the Individuals with Disabilities Education Act (IDEA) to emphasize the need for high expectations and inclusive education for students with disabilities (IDEA, 2004). This revision led to a continually growing population of students with disabilities who were being taught in the general education setting with their general education peers (Winzer, 2009). The law gave rise to state and local autonomy for districts, administrators, and teachers to prescribe supports needed to effectively include students with disabilities in their Least Restrictive Environments (LRE). Depending on funding and fund allocation, these accommodations provided in conjunction with the general education teacher and curriculum could include curriculum-supporting visuals, permitted scheduled breaks, full-time support of a paraprofessional, or the dedicated support of a highly qualified Special Education teacher (Louisiana Department of Education, 2020). As inclusion rates increased, educational leaders began to explore ways to utilize their current staff to maximize student achievement. Schools began to place Special Education and general education teachers together in one classroom to collaboratively instruct all students (Murawski & Spencer, 2011). This mode of instructional delivery became known as co-teaching. The rationale for the instructional delivery model of co-teaching proposes to positively impact the academic achievement of both students with disabilities and general education students. Similarly, co-teaching is often viewed as an optional classroom construct used to improve teacher efficacy as two teachers collaborate to implement instruction in the same classroom, learning from other professionals and tackling daily classroom challenges together (Hornby, 2015).

Problem Statement

Special Education systems in the United States currently face a multitude of dilemmas as they grow toward creating access to a Free and Appropriate Public Education (FAPE) for all students (Goddard et al., 2023). Perspectives on including students with disabilities in the general education classroom vary greatly (Alsarawi, 2020; Hwang & Evans, 2011; Idol, 2006; Tondini, 2022), and the labels utilized for the approaches vary. Some of the most common approaches to inclusion and their well-known definitions consist of mainstreaming, supported classrooms, and co-teaching. Mainstreaming, sometimes called consultation, consists of students with disabilities being provided slight accommodations, if any, as they are exposed to the general education curriculum with minimal support (Hornby, 2015) from a special educator outside of the content-area classrooms (Mentink & Borrelle, 2022). In a supported classroom (also called the *push-in* approach), students with disabilities receive support, accommodations, and modifications from Special Education staff members (teachers or paraeducators) who make these decisions during instruction received in the general education classes (Hornby, 2015). Finally, when co-teaching takes place, a general education teacher and Special Education teacher co-plan, co-instruct, and co-assess a differentiated version of the curriculum for students with and without disabilities in the general education classroom.

Regardless of the approach to inclusion, there is empirical support that indicates the needs of students with disabilities in the United States school systems are not being met (Gilmour et al, 2018). Research supports the notion that self-contained settings are not beneficial for students who receive Special Education services (McGovern, 2015). Since the implementation of inclusion in the 1990's, and largely due to a lack of knowledge and funding,

students with disabilities and their general education teachers have been coupled in a delivery construct without proper support, such as professional development, qualified support staff, and knowledgeable administration (Buchner & Thomspon, 2021).

IDEA was first enacted in 1975, when it was known as the Education of Handicapped Children Act (EHA) (IDEA, 1975). Before EHA was enacted, many children with disabilities were denied access to any education. In 1990, the law was reauthorized as IDEA (Winzer, 2009). It has since been a living law, revised multiple times to ensure students with disabilities receive equal access to FAPE in their LRE (IDEA, 2004).

Since the implementation of IDEA, it is now widely accepted that students with disabilities deserve to be taught in their least restrictive environment with high expectations and access to their general education peers (Winzer, 2009). Significant research has focused on assessing Special Education and general education teachers' perceptions of inclusion practices, which can be helpful in preparing teachers for inclusion classrooms (Alsarawi, 2020; Hwang & Evans, 2011; Idol, 2006; Tondini, 2022). As educational leaders began implementing inclusion, they began to also explore co-teaching. The No Child Left Behind Act (NCLB) of 2001 defined co-teaching as instruction from two highly qualified teachers with four-year degrees, who are fully certified within their state, and have demonstrated proficiency in their instructional area as determined by their school system’s evaluation process. These specialized educators, such as a content-specific general education teacher and a Special Education teacher, collaboratively plan, instruct, assess, and reflect on the progress of a diverse group of students, including students with and without disabilities, within one cohesive classroom. Limited research indicates the effectiveness of co-teaching students with disabilities in the general education setting (Hurd & Weilbacher 2017). Similarly, empirical support of the impact of student achievement that can be

conclusively attributed to co-teaching is sparse. The most effective collaborative practices that lead to effective inclusion, as supported by student academic achievement and teacher efficacy, are still largely unknown (Van Garden et al., 2012).

This study aimed to fill the research gap created by the widely qualitative and otherwise inconclusive research that currently makes up the body of research encompassing co-teaching in inclusive education. The study analyzed the relationship between a co-taught classroom setting on the academic achievement of all students in ELA. Co-taught and non-co-taught classroom settings served as the independent variables. The academic achievement of all students, including students with and without disabilities, served as the dependent variable. The quantitative controlled variables included co-teacher training (required professional development sessions provided by the district and school in 2022) and proficiency (proficient or above as scored on the COMPASS Evaluation Rubric and a score of 53 or above on the Co-Teaching Core Competency Checklist) as well as district support (school-based administrators and district-based facilitators) and curriculum.

Purpose of the Study

This research aimed to explore how co-teaching as an approach to inclusion, affects student achievement in ELA. The study sought to add to the limited body of quantitative research addressing the academic growth of students with and without disabilities in the co-taught classroom setting. Aside from numbers reported within demographic data, student growth was not divided by students with an Individualized Education Program (IEP) and students without an IEP. Student achievement in ELA was analyzed in relation to their classroom environments. The study took place in one elementary school in St. Charles Parish in Louisiana. The following research question was used to address this purpose.

Research Question

This quantitative research study addressed the following question:

1. How does a co-taught classroom in comparison to a traditional classroom impact the academic achievement of third and fifth grade students in English Language Arts (ELA) as indicated by the Louisiana Educational Assessment Program (LEAP) 360 assessment?

Hypotheses

Null Hypotheses:

1. A co-taught classroom setting does not impact the academic achievement of third and fifth grade students in ELA.
2. A traditional classroom setting does not impact the academic achievement of third and fifth grade students in ELA.

Alternate Hypotheses:

1. A co-taught classroom setting does impact the academic achievement of third and fifth grade students in ELA.
2. A traditional classroom setting does impact the academic achievement of third and fifth grade students in ELA.

Definition of Terms

1. Inclusion - the situation in which all students, regardless of receiving Special Education services or not, receive instruction in the same, age-appropriate classroom setting as their general education peers (LRE, 2004)
2. Least Restrictive Environment – students with disabilities, to the maximum extent possible, must be educated with their general education peers (LRE, 2004)

3. Co-teaching – the situation in which two highly qualified teachers with different specialties (such as Special Education, Content-specific, and/or English Language Learners) partner to teach a diverse group of students in the general education classroom by co-planning, co-instruction, co-assessing, and co-reflecting (Kloo & Zigmond, 2008); both teachers share responsibility for the learning of all students in the group (Murawski & Spencer, 2011).
4. COMPASS evaluation rubric – the performance evaluation rubric created by the Louisiana Department of Education to evaluate and assess all teachers and school leaders; it assesses 5 components including instructional outcomes, classroom procedures, questioning and discussion techniques, student engagement, and assessment in instruction (Louisiana Department of Education, 2020). Teachers receive an effectiveness rating of (1) ineffective, (2) effective: emerging, (3) effective: proficient, or (4) highly effective.
5. Highly qualified – teachers in Louisiana are considered highly qualified when they obtain a 4-year bachelor's degree, are fully certified in the state of Louisiana, and receive a rating of effective: proficient or above on their most recent evaluation (Louisiana Department of Education, 2022).

Significance of the Study

The education system must continue to evolve with the ever-changing needs and population of students (Buchner & Thompson, 2021; NCES, 2019). The study of effective inclusion and co-teaching practices is vital in the growth of the field of Special Education and inclusion. This study is significant as results can lead to further research exploring additional variables of co-teaching that impact student achievement to assist in curating and supporting effective co-teaching teams in schools.

There is limited research on co-teaching that defines (1) how teachers can effectively implement co-teaching in an inclusion classroom, (2) how co-teaching impacts students without disabilities, (3) how administrative leaders can best support co-teachers, and (4) what professional development is recommended for teachers to execute a co-teaching model with the fidelity that it is designed to offer (Peery, 2017).

Specifically, this research will benefit:

1. **General and special educators** – This research focuses on providing data documenting the potential academic achievement of all students in a co-teaching environment.
2. **Students with and without disabilities** – This research supports the existing research that advocates for the inclusion of students with all abilities. It may directly impact students as they continue to learn in increasingly diverse and inclusive environments.
3. **School and district administrators** –Results from this study could assist school administrators in implementing research-based practices school-wide.
4. **Teacher preparation programs** – The data from this study and supported studies could influence how teacher preparation programs develop instruction for Special Education and general education teachers

Methodology Overview

The researcher used a quantitative approach with a causal-comparative design to compare the academic achievement of co-taught students and traditionally taught students. The researcher collected diagnostic ELA assessment scores from August and interim ELA scores from December of students with and without disabilities from two student groups: one who received instruction from a set of proficient co-teachers and one who received instruction through a proficient, traditional one-teacher model. Participating teachers were screened using the

COMPASS evaluation rubric and determined eligible based upon an effective: proficient score or higher. Co-Techers were also screened through the COMPASS evaluation system as well as the Co-Teaching Core Competency Checklist to establish eligibility for the study. The COMPASS and Co-Teaching Core Competency evaluation scores were not used as a correlational variable comparing co-teachers and test scores, but as a predictor of influence.

According to Johnson and Christensen (2020), a causal-comparative research design is "a form of nonexperimental research in which the primary independent variable of interest is a categorical variable" (p. 42). In this causal-comparative design, the researcher utilized the categorical variable of classroom setting (co-taught and traditional) and the dependent quantitative variable of ELA growth. From there, the researcher compared the cause-and-effect relationships of co-teaching on student ELA achievement and traditional teaching on student ELA achievement. The average of ELA growth, determined by the difference between the interim and diagnostic student scores, of students who were co-taught were compared to the average of academic growth of students who were taught through the traditional one-teacher instructional method. The use of scores from the beginning of the year and the middle of the year informed the impact of both the co-taught and traditionally taught classroom settings.

Participants and Sampling

The researcher utilized purposive and convenience sampling to select participants for the study. Purposive sampling is necessary to identify co-teaching pairs who meet a certain level of proficiency (Johnson & Christensen, 2020). Before data collection began, co-teaching pairs were observed and evaluated using both the COMPASS Evaluation Rubric and the Co-Teaching Core Competency Rubric. These observation scores informed the researcher to what extent the teachers and co-teaching pairs are considered proficient in the district. Due to time constraints

and limited availability of co-teaching pairs, the researcher limited all participants to the St. Charles Parish Public School System, and specifically, one elementary school that implements schoolwide co-teaching in all inclusion classrooms. The researcher collected data from two co-teaching pairs, two traditional teachers, and 154 students in grades three and five.

Data Collection

Data were collected from the Data Recognition Corporation (DRC), Louisiana's database collection system for common benchmark and standardized assessments, on the LEAP 360 diagnostic and interim assessments in ELA from August 2022 to December 2022. Data were collected for each individual student.

Data Analysis

Quantitative data gathered from student achievement scores, specifically diagnostic and interim ELA benchmark scores, were collected and posted using an excel spreadsheet. Student growth achievement was calculated by determining the difference between individual student's interim scores and the student's diagnostic scores. The average growth rate of co-taught students was then compared with the average growth rate of traditionally taught students. Statistical Package for the Social Sciences (SPSS) was then used to analyze each group of data through a one-way Analysis of Variance (ANOVA) test. Descriptive statistics were also utilized to summarize and display correlations (Johnson & Christensen, 2020).

CHAPTER TWO

LITERATURE REVIEW

Overview and Organization

Exploring the effects of, approaches to, and impacts of co-teaching on general and special educators as well as students with and without disabilities, is vital to the continued growth of education systems (Wilson & Blednick, 2011). As education progresses towards more inclusive classrooms and teachers continue to collaborate to utilize the best practices for instructing all students in their most inclusive environments, it is necessary to determine the effectiveness of the co-teaching model on student outcomes for both general education and Special Education students in co-teaching classrooms (Murawski & Lochner, 2011).

The literature included in this review encompasses a wide range of subjects that relate to co-teaching and overall student achievement in the modern classroom. It begins with a focus on the history of Special Education, inclusion, and co-teaching (Murawski & Swanson, 2001; NCES, 2019; U.S.C., 2004). The importance of laws that affect collaborative relationships and co-teaching for general and Special Education students are discussed (Lengyel & Vanbergeljk, 2021). The characteristics of effective co-teaching are carefully analyzed in relation to student and teacher outcomes (Hwang & Evans, 2011; Idol, 2006; Keeley, 2015; Keene, 2018; Ware, 2016). The research related to academic impacts of co-teaching are discussed. This discussion includes the positive (Castro, 2007; Jang, 2006; Thompson, 2010), inconclusive (Bezila, 2018; Franklin, 2015; Dwyer, 2018; Ware, 2016), and negative (Maultsby-Springer, 2009; Warner, 2009) relationships found in previous research between co-teaching and student achievement to emphasize the lack of consensus in the research related to co-teaching. Challenges to co-teaching as identified in previous research are discussed, including differing perspectives (Indelicato,

2014; Goldberg, 2017; Mackey et al., 2018), time constraints, and knowledge needed (Gallo-Fox et al., 2006). The review then briefly addresses the evaluation of co-teachers (La Monte, 2012; Wilson & Blednick, 2011; Wilson et al., 2013). Finally, the research highlights strengths, opportunities, and gaps in the research that support the future development of co-teaching as an educational delivery model (Kilian & Kilian, 2011).

History of Special Education

The history of Special Education began with Section 504 of the Rehabilitation Act of 1973, which made it illegal for public institutions to discriminate against people with disabilities (U.S. Department of Education, 2010). Shortly following Section 504, the Education for Handicapped Children Act (EHA) was passed in 1975. These two laws allowed students with disabilities to physically enter school buildings, but *equal access* halted there until the reauthorizations of EHA, which would later become known as the Individuals with Disabilities Education Act (IDEA), clarified terms and defined mandates (Lengyel & Vanbergeljk, 2021). The court cases that followed would expand and define the requirements to provide accommodations for students to access a Free and Appropriate Public Education (FAPE) inclusing: (1) the inclusion of early intervention services for children beginning at birth, (2) procedural safeguards to protect the provisions of due process, and (3)guidelines with legally identifiable approaches for disciplining students with behavioral challenges (Lengyel & Vanbergeljk, 2021).

When EHA became IDEA in 1990, the emphasis of defining the intricacies of the laws turned towards two new terms: Least Restrictive Environment (LRE) and inclusion (U.S. Department of Education, 2010). The reauthorizations that followed the 1990 changes would continue to highlight the need for students to be included in their LRE to the greatest extent

possible (Lengyel & Vanbergeljk, 2021). This began the current era of inclusive Special Education, where school systems would be encouraged to favor the education of students with disabilities in the general education classrooms with their nondisabled peers (Lengyel & Vanbergeljk, 2021).

History of Inclusion

According to the National Center for Education Statistics (2019), more than 14% of students enrolled in public schools receive Special Education services under IDEA. IDEA became law in 1975 as a response to the educational movement in which teachers and parents of students with disabilities began to see the benefits of including these students in schools and classrooms with their general education peers. IDEA required schools to provide all students with a FAPE in their LRE (U.S.C., 2004). A student's LRE refers to the unique setting in which a student's needs are met with accommodations and modifications, in the same classroom as their general education peers to the highest extent possible. To accomplish this, schools implemented mainstreaming policies to increase the presence of students with disabilities in general education classrooms. This often appeared to be students with disabilities placed into the general education classroom setting and expected to succeed, without the support of a certified Special Education teacher (Murawski & Swanson, 2001).

As teachers, administrators, and parents realized the lack of success that accompanied mainstreaming, the next era of Special Education reform led to inclusion. With inclusion, schools evolved to a different model designed to foster achievement in all students when students with disabilities were included in general education classrooms with a qualified Special Education teacher (Skiba, 2008; Watras, 2008). As the concept of inclusion continued to evolve, the structure of co-teaching has evolved to describe a setting in which a general education teacher

and a specialist (often a Special Education teacher) plan and teach together to meet the needs of all the students in the classroom. As research related to co-teaching continues to be conducted, districts, schools, administrators, and teachers explore the benefits and challenges of two teachers establishing parity in one classroom as well as ways to prepare teachers to implement this shared model (Murawski & Swanson, 2001).

Co-Teaching Definitions

Although Collaborative Teaching has continually been defined as a partnership between two professionals, the intricacies of the definitions of that relationship vary. Some researchers and educators believe that co-teachers are two people with instructional roles, supporting the education of all students in a classroom (Beninghof, 2020). However, most professionals in the field of education believe that a more specific definition of co-teaching can help research prove, or disprove, the benefits of the practice (Beninghof, 2020; Murawski, 2009; Wilson & Blednick, 2011).

Wilson and Blednick (2011) defined co-teaching as "the pairing of a Special Education teacher and a general education teacher in an inclusive general education classroom for the purpose of providing high-level instruction to meet the diverse needs of a wide range of students" (p. 6). This definition was derived from Murawski (2009). While it does gain specificity, some would argue that the simple *pairing* of two educators with the *purpose* of high-level instruction is not enough to designate co-teachers as such. Friend and Cook (2007) derived one of the most widely accepted definitions. They state that co-teaching is "when two or more professionals jointly deliver substantive instruction to a diverse, blended group of students in a single physical space" (p. 113). Although the word *jointly* insinuates a closer working and collaborative relationship than other definitions, some still believe this definition could be more

specific. Perhaps the most comprehensive definition of co-teaching as it has revolutionized inclusive education comes from Beninghof (2020) and defines co-teaching as "a coordinated instructional practice in which two or more educators simultaneously work with a heterogeneous group of students in a general education classroom" (p. 9).

While education can consist of multiple collaborative teams, including content areas, grade levels, leadership teams, and professional learning communities, co-teaching has been recognized as one of the foremost intimate relationships to be found in a classroom (Murawski & Lochner, 2011). True co-teacher collaboration involves trust, preparation, time, and energy in addition to the everyday requirements placed on teachers (Beninghof, 2020; Friend & Cook, 2007; Lodato, 2011; Murawski, 2009). Gately and Gately (1993) developed eight components to a co-teaching relationship, including interpersonal communication, physical arrangement, familiarity with curriculum, curriculum goals/modifications, instructional planning, instructional presentation, behavior management, and grading/evaluation.

Perspectives of Co-Teaching

One major impediment to successful co-teaching is the negative perspective and lack of understanding of educators (Wilson & Blednick, 2011). Most research reports generally positive perspectives of co-teaching from special educators, general educators, and students (Bauwens & Hourcade, 1991; Hang & Rabren, 2009; Woods, 2017). However, Hang and Rabren (2009) found that Special Education teachers had a higher confidence in the efficacy of co-teaching than general educators. A qualitative study by Woods (2017) found that most current co-teachers believed in the benefits of the practice while other general education teachers not currently co-teaching were often hesitant about the possible success of co-teaching, citing the professional difficulties of having two teachers instructing the same students. This study also found that some

general education teachers expected general education students to quickly turn to bullying if students with Special Education services were included in their classrooms (Woods, 2017). Expanding on some of the challenging perspectives of co-teaching, Tzivinikou (2015) discussed one of the most prominent beliefs about co-teaching: that sharing a classroom is a violation of the historical independence given to educators. Although these perspectives can cause a blockade to the successful implementation of co-teaching, researchers have also explored different approaches to build and foster positive perceptions about co-teaching.

Tzivinikou (2015) also found that administrators have a big impact on co-teaching perspectives and efficacy, citing the need for continued support, extra time and training, and conflict-resolving assistance. Bauwens and Hourcade (1991) found that equal respect and drawing from individuals' unique skills can help improve perspectives of co-teaching. Woods (2017) found that parity in the classroom, including grading, behavior management, and parent contact, can make a positive impact on teacher perceptions and efficacy of co-teaching.

Effective Co-Teaching

Attempting to identify a concise list of attributes characteristic of successful co-teachers has been an onerous task for research (Wilson & Blednick, 2011). Due to the varied spectrum of co-teaching pairs, experience, preparation, knowledge, and voice in current co-teaching practices, analyzing research-based characteristics of co-teaching has resulted in a wide continuum of attributes found in co-taught classrooms.

Limited research has concluded that students with disabilities who are taught in an inclusive environment experience more academic success when compared to students who are taught in a Special Education resource or self-contained setting (Hurt, 2012). Special Education teachers and students receiving Special Education services have been found to have a positive

perspective of inclusion and co-teaching practices. While general educators also have a positive perspective on inclusion practices, they tend to be more reluctant to implement inclusion practices in their current classrooms (Hwang & Evans, 2011; Idol, 2006; Keeley, 2015; Keene, 2018; Ware, 2016). Research also shows that inclusion practices are viewed more favorably when students with disabilities are receiving direct support services from Special Education personnel within inclusion classrooms (Idol, 2006; Kilanowski-Press et al, 2010; Kelley et al, 2017).

Professional development tailored to support co-teachers' collaborative efforts, the explicit implementation of the five co-teaching models, and other co-teaching practices has proven to benefit both co-teachers and the students in co-taught classrooms (Colson et al., 2021; Faraclas, 2018; Tzivinikou, 2015). There is also conclusive research that identifies and analyzes the different perceptions of educators of the co-taught classroom. The majority of research on the perceptions of the co-taught classroom shows that special educators possess the most positive view of the co-taught classroom and general educators have fewer positive outlooks (Keeley, 2015; Keene, 2018; Ware, 2016). General educators, specifically, were found to view inclusion practices positively, but often opted not to be a part of inclusive classrooms if given the opportunity to select the option. It was also found that students have positive perspectives of specific models of co-teaching such as parallel and team teaching (Keeley, 2015; Keene, 2018; Ware, 2016).

Supporting Co-Teachers

Research concludes that certain school site and administrative supports impact the efficacy of co-teaching. For example, Krammer et al. (2018) evaluated self-selected and predetermined teaching teams to determine whether the selection process had an effect on shared

responsibility, teaching skill, enjoyment, self-efficacy, and job satisfaction. That research found a highly statistically significant effect of self-selection on the teaching team in the areas of shared responsibility and enjoyment. Similarly, Wexler et al. (2018) found that true teacher and student integration into the general education classroom is vital for a positive outcome of co-teaching.

Research also supports the assumption that administration plays a vital role with supporting educators implementing co-teaching practices, and more importantly supporting to sustain effective relationships (Colson, et al., 2021; Cramer et al., 2010). School leaders should receive their own specialized training to support co-teachers on their campuses, as leading these unique relationships should be accompanied by a deep understanding of fostering collaboration among team members (Colson, et al., 2021; Cramer et al., 2010; Wilson & Blednick, 2011). Wilson and Blednick (2011) found that part of the administrative support of co-teaching includes observing co-teachers as one unit to assess their joint implementation of the curriculum. Since the role of co-teachers is co-planning, co-instructing, and co-assessing, evaluating co-teachers separately would be inconsequential and futile. Additionally, administrators should prioritize keeping successful co-teaching pairs together, if possible, as the longer effective co-teaching pairs are able to work together, the more impact their relationship has on student achievement (Wilson & Blednick, 2011). Both co-teachers and administrators must understand that developing a successful co-teaching relationship cannot be rushed or arbitrary, and the most effective co-teachers are given the opportunity to teach together and grow together over the course of several years. In addition, Farclas (2018) concluded that professional development and training given to both co-teachers and their administrators can have a beneficial impact on co-teacher efficacy. Although the positive effects of co-teaching have not been statistically proven,

the research does support a need for specialized training and understanding of supportive administrative leaders in the execution of co-teaching.

Academic Impact of Co-Teaching

As co-teaching is a recent practice being implemented in schools, there is continued need for research examining co-teaching efficacy. Similarly, there exists a dearth of research measuring the effectiveness of co-teaching within a classroom as well as criteria required to create a successful coaching relationship (Wilson & Blednick, 2011). The consensus of research on the idea that co-teaching positively impacts the academic performance of students with disabilities is non-existent. Many studies conducted on co-teaching efficacy have resulted in inconclusive or invalid findings. Researchers cite different variables of each co-taught classroom to explain these statistically insignificant findings, including administrative support, training and professional development, the types of disabilities included, teacher perspectives , and teacher autonomy (Bezila, 2018; Franklin, 2015; Dwyer, 2018; Ware, 2016). Other studies have shown positive academic results in students after experiencing co-teaching (Castro, 2007; Jang, 2006; Thompson, 2010). Few studies support a negative effect on student academic growth after being exposed to co-teaching (Maultsby-Springer, 2009; Warner, 2009).

Many studies on co-teaching have inconclusive results. For example, in 2018, Bezila completed a study to assess standardized test scores to determine if achievement of students in co-taught and non-co-taught classrooms were impacted differently by the instructional methods used in each classroom. The data collected were inconclusive and did not prove whether co-teaching had a positive or negative effect on student achievement outcomes in this situation. Franklin (2015) designed a mixed-methods study that assessed student mathematical achievement in co-taught and non-co-taught classrooms that also had inconclusive results. The

benchmark scores of students who were co-taught had a significant negative impact when compared with the scores of the students who were not co-taught. However, when student growth was compared to growth of students across the district, co-taught and non-co-taught students showed typically comparative growth. The researcher identified a lack of training and structure of co-teaching support as a possible limitation that yielded the inconclusive results. Participants of the study could yield little meaningful qualitative data because they had no formal training in co-teaching and their knowledge bases were minimal. Dwyer (2018) also examined the effectiveness of co-teaching practices in elementary school but found that due to a lack of previous research, the data was not significant enough to prove that co-teaching had any impact on general education student growth. The outcome of the standardized testing was varied and seemed independent of whether students did or did not receive co-teaching instruction. Ware (2016) found no significant difference in the test scores of students with disabilities after moving to the inclusive setting. This study also noted that general education students who were moved to the inclusive setting showed a statistically significant increase in their test scores. The researcher reported that despite inconclusive academic results, co-teaching settings provide all students with a more productive behavioral and social-emotional setting to grow.

Additional research that builds upon the concept of collaborative teaching shows that teachers' positive perspectives of a successfully co-taught classroom benefit teachers and students of all abilities. Castro (2007) examined the academic and attendance effects of students in co-taught classrooms as well as the job satisfaction of teachers in co-taught classrooms. The researcher analyzed growth in student standardized test scores over the course of one academic year. The study found that inclusive settings had the most positive academic impact on students with and without disabilities. Therefore, previous research findings on the impact of students

with disabilities are conflicting. Finally, the study found that inclusive, co-taught classrooms had a more positive impact on student attendance than non-inclusive classrooms. Similarly, Jang (2006) found, when looking at students with and without disabilities, the average student benchmark Reading and Math scores were higher in students that were team-taught compared to students who were taught traditionally. Data analyzed also showed that students preferred team teaching to traditional teaching, and the team-teaching environment led to higher post-test scores. Another study completed by Thompson (2010) focused on how co-teaching impacted the perspectives and academic success of students of different achievement levels within a classroom. The researcher found significant positive academic achievement differences for students with disabilities and no significant difference in achievement for general education and gifted students.

In contrast, one study found a negative effect of co-teaching in one specific situation. Maultsby-Springer (2009) examined the growth of co-taught students in grades five to eight in reading and math classes. The researcher gathered data from six classrooms, three co-taught and three independently taught. The study found that Math scores of co-taught students with disabilities increased while Reading scores of co-taught students with disabilities decreased. As a result, the researcher concluded that growth in a co-taught classroom is dependent upon teachers' ability to receive professional development, plan frequently, and utilize a variety of co-teaching approache. Warner (2009) analyzed the achievement levels of students taught in a co-taught classroom in comparison to those taught in a *consultative* classroom (also known as push-in with either Special Education teacher or paraeducator support). The results showed that students taught in consultative classrooms scored higher than students taught in co-taught classrooms; this

difference in achievement is attributed to students with disabilities receiving more one-to-one instruction in a consultative classroom when compared to an inclusion classroom.

More specifically related to co-teaching, McCain and Antia (2005) analyzed whether co-teaching had a positive effect on reducing the social isolation of Deaf and Hard of Hearing students in an inclusion setting. The researchers found that Deaf and Hard of Hearing students generally tended to view their inclusive classroom environment in a more positive light than the hearing students. After experiencing inclusion, the behavior issues and social isolation previously exhibited by the Deaf and Hard of Hearing students dramatically decreased. Additionally, Lemmons (2015) analyzed the social-emotional and behavioral effects of students with disabilities in an inclusion setting when compared to students with disabilities in a self-contained setting. The study concluded that students with disabilities experienced a significant reduction in office referrals as well as an increase in positive student perceptions after receiving academic instruction in an inclusive setting. Supporting Lemmons' 2015 findings, Parker (2017) and Sweigart and Landrum (2015) conducted research that resulted in findings to support the idea that students experience behavioral benefits from a co-taught inclusive setting.

Challenges of Co-Teaching

As many educators and researchers suggest, co-teaching may be a holistically beneficial practice to implement (Lemmons, 2015; McCain & Anite, 2005; Parker, 2017; Sweigart & Landrum, 2015). However, there are a multitude of challenges that can impact the effectiveness of co-teaching that can turn a potentially constructive situation into a detrimental one, in which no students or educators feel supportive, safe, or welcome in their learning environments. Co-teaching is not a simple or easily implemented practice. Wilson and Blednick (2011) describe co-teaching as a practice that is primarily dependent on two highly qualified professionals

collaborating to teach students together displaying proficiency in curriculum, instructional strategies, and differentiation. Aside from appropriate training, collaboration time, and proper support, interviews with co-teachers have shared experiential data

Research demonstrates that to participate in successful co-teaching relationships, the two teachers involved must be committed to flexibility, lifelong learning, and reflection, and have access to supportive leadership (Cramer et al., 2011; Mackey et al., 2018). Co-teachers share an environment that is typically allocated to one teaching professional. When interviewing co-teachers, Indelicato (2014) found that his participants "expressed an unwillingness to turn over more responsibility to their partner because of a lack of confidence in the other person's abilities" (p. 7). Similarly, Goldberg's 2017 study identified a challenge "for both teachers to figure out how they can both take ownership of the classroom and contribute meaningfully to the students' learning" (p. 27). Various studies root these vital differences in the distinct base perceptions between Special Education and general education teachers on co-teaching and inclusion. Extensive research reveals "that Special Education teachers' perceptions are more positive than their general education colleagues about inclusive education overall, the benefit of inclusive education to students, and the management of student behavior in the inclusive classroom" (Bruster, 2014, p. 43). One of the foremost difficulties encountered in the advocacy for co-teaching and inclusion is often a preconceived notion from general educators that co-teaching and inclusion are largely ineffective. The presence of these educator biases against inclusive education can be rooted in a lack of knowledge, a lack of training and preparedness, and a lack of time to properly communicate and collaborate with their partners (Tzivinikou, 2015).

Another major challenge of implementing co-teaching practices is the willingness of administrators to provide time for professional development and collaboration to build the knowledge for effective co-teaching. One survey of teachers revealed that most co-teacher participants did not have even the basic knowledge of the co-teaching models (Indelicato, 2014). Likewise, Gallo-Fox et al. (2006) found that co-teachers' understanding and interpretations of the different models of co-teaching and the expectations from each model are likely vastly different even amongst co-teaching pairs. Co-teachers also cited a lack of communication, collaboration, and co-planning related to the implementation of the curriculum as a primary source of ineffective co-teaching. Effective co-teaching practices include a wealth of knowledge not only of the curriculum but about co-teaching practices themselves. More than just a collegial relationship between co-workers, co-teachers must explicitly plan and implement co-teaching practices such as identifying situational models of co-teaching, co-planning, and co-reflecting.

Evaluating Co-Teachers

One major hole in co-teaching research is the absence of a consistent framework for the implementation and evaluation of co-teaching (La Monte, 2012; Wilson & Blednick, 2011). Murawski and Lochner (2015) created the Co-Teaching Core Competency Framework equipped with an observation checklist to be utilized in implementing and evaluating co-teachers. This framework identifies 120 co-teaching competencies, 22 of which were deemed *essential*, within four domains. The framework provides co-teachers with practices and behaviors that are believed to result in co-teacher efficacy, including approaches to monitoring student growth, differentiated instruction, professional responsibilities, and collaborative practices.

Many evaluation systems utilized by state departments of education are created to assess the instruction of one educator (La Monte, 2012). As a result, co-teachers are often evaluated

separately, which does not align with the premise or purpose of co-teaching as an instructional approach (Murawski & Lochner, 2015). Although co-teaching is being implemented nationwide, no states have documented the use of an evaluation system that is able to be modified to evaluate co-teachers collaboratively instructing in inclusive classrooms (Blankman, 2020). More research is needed to assess the utilization of evaluation systems in relation to collaborative teaching.

Gaps in Existing Knowledge

Research on co-teaching is sparse, and the results of current research are few enough to warrant more research in all areas related to co-teaching. Specifically, more controlled, and long-term research is needed to confirm the academic effects of co-taught classrooms. It would also be beneficial for the field of Special Education for future research to focus on the social-emotional and behavioral effects of co-taught classrooms that are already considered academically successful (Kilian & Kilian, 2011). This research, in addition to the current foundation of research in the field, can benefit administrators, school systems, and special educators in making collaborative decisions about annual student and educator placement.

Theoretical Framework

This causal-comparative quantitative research assessed the effects of a co-teaching setting on the academic competence of elementary school students. The educational theories that drove this research are twofold and interconnected: (1) Mugny and Doise's Socio-Cognitive Conflict Theory (1978) and (2) Watson's Theory of Behaviorism (1913). The analysis and application of these two theories aided the researcher in understanding how administrators can support collaborative adult relationships, resulting in student growth.

Mugny and Doise's Socio-Cognitive Conflict Theory (1978) states that when two people approach a task from different vantage points, the opportunity for learning and for success

increases. The basis for the discussions and collaborative conversations involved in everyday learning in the modern classroom is derived from Mugny and Doise's Socio-Cognitive Conflict Theory (1978). However, it also pertains to how co-teachers can display and support greater growth in a classroom led by two educators. Co-teachers can engage in real-time conflict and problem-solving to differentiate learning and benefit the needs of a variety of students. Watson's Theory of Behaviorism (1913) aids in explaining how a beneficial professional relationship with multiple opportunities for learning directly benefit the growth of the students in that same classroom.

Watson's Theory of Behaviorism (1913) states that learned behavior can have a similar effect on a person's actions that mimics innate behavior rooted in a person's personality developed throughout their life. Therefore, learned behavior can be just as influential as innate behavior. This theory also supports the idea that behavior is most effectively learned through copying behavior models. As students in a co-taught classroom have two models for learning behavior, and those models, according to the Socio-Cognitive Conflict Theory, have more opportunities for learning and success, students in a co-taught classroom have more implicit chances to successfully learn collaborative behaviors. Using this Theory of Behaviorism, this study suggests that administrative leaders within the education system can and should evolve to learn how to support co-teachers, in ways that result in the growth of their students.

Together, Mugny and Doise's Socio-Cognitive Conflict Theory (1978) and Watson's Theory of Behaviorism (1913) help researchers explain why the basis behind a co-taught classroom is bound to be beneficial for the teachers and students involved in the educational setting. As two co-teachers collaborate on instructing and meeting the needs of all learners in their classrooms, they create more learning opportunities for themselves. As students observe

these two teachers learning from and with each other, they begin to innately engage in the same increased learning with their peers. According to the foundation laid by these two theories, the students of co-taught classrooms are bound to be exposed to greater depths of academic learning through both participation and observation.

Summary

This review of the literature summarized the history of Special Education and co-teaching. It examined the characteristics of effective co-teaching, the support leaders can provide co-teachers, the academic impact of co-teaching, and the challenges co-teachers can encounter in the collaborative classroom. It also discussed previous literature related to educator collaboration and the importance of social-emotional and behavioral growth in students. Finally, this review concluded by identifying the gaps in the co-teaching literature to provide context and foundation for the direction of this quantitative study.

CHAPTER THREE

METHODOLOGY

The purpose of this chapter is to describe the research methodology for this causal-comparative study concerning the effects of co-teaching on student achievement in English Language Arts (ELA). This approach enabled the researcher to quantify the productive effects of co-taught classrooms in comparison to the effects of traditional classrooms on the academic achievement of students with and without disabilities. Findings from this research can be added to the limited body of research on co-teaching and created a foundation for future research to explore and confirm the effects of co-teaching.

Research Question

This study's objective was to respond the following question:

1. How does a co-taught classroom in comparison to a traditional classroom impact the academic achievement of third and fifth grade students in English Language Arts (ELA) as indicated by the Louisiana Educational Assessment Program (LEAP) 360 assessment?

Rationale

This study was conducted using a quantitative research approach and a causal-comparative research design. According to Bhandari (2020), quantitative research is utilized when a researcher needs to collect numerical data to find and test causal relationships between the general population and subgroups. This study examined possible relationships between the type of instructional delivery, co-taught or traditional, and student achievement. It tested the hypotheses that a co-teaching classroom environment has some impact on student achievement in ELA. This study used quantitative data because of the need to test a cause-and-effect relationship and use those findings to generalize the probable effects of co-teaching on a broader

population. The comparative nature of this study was utilized to compare the relationships between co-teaching and student academic achievement and traditional teaching and student academic achievement in ELA. Scores earned on the diagnostic and interim assessments provided achievement data for each student. Data collected from ELA scores supported the quantitative approach for this study.

Currently, existing research does not overwhelmingly support the notion that a co-taught setting positively benefits the academic, social-emotional, or behavioral growth of all students, including those with and without disabilities (Cahill, 2018; Wexler et al, 2018; Witcher & Feng, 2010). Similarly, many educators are unsure about the effectiveness of implementing co-teaching in the general education classroom and are resistant to implementing the practice with fidelity (Bruster, 2014; Gokbulut, 2020; Goldberg, 2017; Indelicato, 2014; Neifeald & Yonit, 2019; Ricci et al., 2019). These findings can add to the evidence that administrators and educators use to support and encourage the implementation of best practices in their classrooms and schools.

Site Selection

This research took place in one elementary school in St. Charles Parish Public School System in southern Louisiana, which serves students in grades three through five. The school demographics mimic those of St. Charles Parish Public Schools, including 65% White, 25% Black, 6% Hispanic, 3% Multiracial, and 1% Asian. The school serves a total of 565 students and has an average student-to-teacher ratio of 15:1.

Data were collected from eight total classes of students, four from grade 3 and four from grade 5. Participants from each grade level consisted of two co-taught classes and two traditionally taught classes. All teachers were highly qualified to teach their grade level and content area, with an average of six years of experience teaching. All teachers received a

COMPASS evaluation rating of *Effective Proficient* or higher on their most recent formal observation. All teachers involved in the study have taught ELA and third or fifth grade for at least one entire academic year prior to the collection of data. All co-teachers received the same professional learning opportunities designed for co-teachers. All co-teachers had supportive administrators who expected consistent evidence of teachers' co-planning, co-teaching, co-reflecting, and co-assessing.

Each classroom had a diverse population of students, including either a combination of general education students and students with disabilities or general education students including students with 504 plans and English Language Learners. The population of the non-general education students in each classroom ranged from 15%-30%. The disabilities included in the inclusion classrooms encompassed autism, specific learning disabilities, emotional/behavior disorder, and other health impairment. The inclusion classrooms that contained students with disabilities also included at least one support staff member, such as a paraeducator.

Procedures

This study looked at two pairs of co-teachers and two traditional single teachers who taught a total of approximately 154 students with and without disabilities. Approval from Xavier University of Louisiana's Institutional Review Board (IRB) and the superintendent of St. Charles Parish Public Schools was acquired before any research procedures began. After approval, the researcher contacted co-teachers and traditional teachers of ELA with diverse student populations at her school. Co-teacher pairs and individual teachers were selected based on their COMPASS evaluation rating of effective: proficient or above. Co-Teacher pairs were also evaluated using the Co-Teaching Core Competency rubric to determine eligibility. The COMPASS and Co-Teaching Core Competency evaluation scores were not used as a

correlational variable comparing co-teachers and test scores, but as a predictor of influence. Student diagnostic ELA scores from August were compared to their interim ELA scores from December. The use of scores from the beginning of the year and the middle of the year informed the impact of both the co-taught and traditionally taught classroom settings. Each student's growth was calculated by determining the difference between their interim score and their diagnostic score. The average of the growth scores of the co-taught students was compared with the average of the growth scores of the traditionally taught students to determine if there was a statistically significant difference between the impact of co-taught settings compared to the impact of traditional one-teacher classroom settings.

Data Collection

This study analyzed two pairs of co-teachers (two Special Education teachers and two general education teachers), two traditional general education teachers, and eight classes of students in grades 3 and 5, half of who received co-taught instruction for all subjects, and the other half who received traditional, one-teacher instruction. For this study, academic data was collected only from the ELA content area. Diagnostic and interim benchmark data from the LEAP 360 assessments informed the impact of both the co-taught and traditionally taught classroom settings.

Academic data was collected from each classroom twice over the course of the academic year: Once in early August and again in December. Data collection was focused on academic growth, determined by the difference between each student's interim assessment score and diagnostic assessment score. Diagnostic benchmark data from August and interim benchmark data from December had been collected prior to the beginning of the study and was gathered from the school's benchmark data collection system. The difference between each student's

scores was calculated. Following the individual growth scores, each teacher's average student growth was calculated. Data were stored on a private device in an encrypted excel sheet.

Data Analysis

The data gathered for this study were entered into an excel spreadsheet. Growth data were correlated as each student and teacher was assigned a number or letter to protect anonymity throughout the study. The excel spreadsheets were utilized to display correlations and growth patterns through simple line graphs. Then, the average growth of students in co-taught classrooms was compared to the average growth of students in traditionally taught classrooms. Data were also further analyzed using a 1-way ANOVA to compare the means of academic achievement in co-taught students and traditionally taught students and to determine whether the means compared are statistically significantly different. Data were displayed in charts to show the difference, if any, between the academic growth of the co-taught students and the academic growth of the students who were taught traditionally.

For the sake of this research, the researcher did not disaggregate data from students with disabilities and data from students without disabilities. The approach of the researcher was to emphasize full inclusion and the overall impact on every student in a co-taught classroom.

Assumptions and Biases

As stated in Chapter 1, there is one major assumption involved in this study: the assumption that students will give their best effort on the academic assessments.

There is also one major bias present within this research: ascertainment bias. The researcher for this study is a current co-teacher at the school from which the data for this study was collected. The researcher also believes in the benefits of co-teaching and recognizes the possibility of that bias to skew the data outcomes of the study.

Internal Validity

In choosing the benchmark assessments, the researcher analyzed testing validity. Academic growth was measured using district-given diagnostic and interim benchmark assessments. The classrooms chosen for co-teaching often include some of the lowest academically performing students in each grade level. Similarly, these classes rarely include the highest achieving students who qualify for gifted and talented services. This differential selection of subjects could threaten the validity of this research if students fall into the extremely high or extremely low achievement levels. Students who score a 100% on the pre-test will obviously not show growth on the post-test. Similarly, a student who receives a 0% on the pre-test may also score a 0% on the post-test, not showing growth due to the beginning threshold of the assessment being unachievable for that student. Many students with disabilities lag behind their peers by many grade levels (Kilion & Kilion, 2011). These students may still be performing with minimal achievement even after several weeks of targeted intervention. Rather than measuring student achievement scores, the average of the interim scores from each classroom, the researcher measured student growth, demonstrated through the difference between their diagnostic and interim scores. Therefore, the different characteristics found among student classes was not statistically relevant.

External Validity

Because the researcher utilized an externally created assessment, the external validity of this study remains intact. The LEAP 360 assessment is created by the Louisiana Department of Education to assess students on the application of skills based on the Louisiana Common Core Standards. The LEAP 360 assessments are administered to students across the state of Louisiana

in grades 3-12 as a benchmark to track growth before the annual administration of the LEAP 2025 standardized assessments.

Reliability and Objectivity

Due to the nature of the study, the researcher acted as a participant-as-observer (Blevins, 2017). At the time of research, the researcher was a member of the faculty at the school in which data were collected and had daily professional interactions with participants. The participants received a letter explaining the deesign and goal of the study. To study the specific characteristics of co-teaching, purposive sampling was utilized to identify participants for the study. Purposive sampling was necessary for this study because of the lack of co-teachers available in elementary schools and the limitations that would have been involved in random sampling, including differences in administrative support, access to professional development opportunities, and varying systems of effective evaluation.

Delimitations and Limitations

This study's delimitations included restricting participant scope to St. Charles Parish, a school system in which co-teaching is being regularly implemented in inclusion classrooms. To limit the variables impacting the data, the researcher focused on academic achievement in ELA only. Similarly, to explore a less-researched area, the researcher chose to include students with and without disabilities as a whole unit. Finally, due to time constraints, the researcher also limited the scope of data collection to six months.

This study took place in the state of Louisiana, which was ranked 48th in the US for education at the time of research. Co-teaching recently became common practice in the past two years in St. Charles, and many of the teachers recruited for the study had limited experience in the co-taught classroom. However, St. Charles was one of the only districts in the state of

Louisiana to implement co-teaching with fidelity and to do so using any type of implementation structure. The specific elementary school chosen was the only school within the district of St. Charles to implement school-wide co-teaching and a full-inclusion approach to educating their students with disabilities. The administrator supporting co-teachers at this school was certified in multiple areas of Special Education and has supported co-teachers for a total of ten years.

Researcher bias must be considered as a limitation to this study. The researcher conducting the study had a history of positive experiences in the co-taught classroom. The researcher was also participating in the implementation of co-teaching in the school utilized for this study. However, the data from the researcher's classroom were not included in the study. Also, the research was completed during the first semester of the researcher's career at this specific school. These two key elements allowed the researcher's data collection and analysis to remain valid. The researcher had no participation in the quantitative data collected and analyzed for this study. The diagnostic data was collected within the researcher's first week at the school site, resulting in the researcher being unable to influence that data.

Finally, there are many factors that go into effective co-teaching. This term has yet to be concretely defined in the educational community. Some administrators, teachers, and students define effective co-teaching in different ways. While all classrooms included in the study had met the parish's definition of an effectively co-taught class, it is possible that each co-teaching pair held themselves to different standards.

Implications and Contributions

The results of this study will build on previous research completed by Bezila (2018), Cahill (2018), Castro (2007), Dwyer (2018), and Gokbulut (2020) to confirm or reject the impacts of co-teaching on academic achievement. It will build upon the little research that

analyzes different variables of support that can impact co-teaching efficacy (Colson et al., 2021; Cramer et al., 2010; Faraclas, 2018; Franklin ,2015). Perhaps most importantly, the researcher believes that this study will support, emphasize, and build upon the findings of Lemmons (2015) to suggest that a co-taught inclusion classroom impacts not only the academic achievement of students with disabilities, but also the achievement of all students in the classroom.

Summary

This quantitative study researching the effects of co-teaching analyzed assessment data from students taught traditionally and students who were co-taught. The data was analyzed and reported using ANOVA. Aside from building upon previous research, this research lays the foundation for future quantitative research on co-teaching. This research serves as an impetus for future research to emphasize the importance of co-teaching implementation on more than just the academic growth of students with disabilities.

CHAPTER FOUR

FINDINGS

This chapter contains the results of the causal-comparative quantitative study conducted to answer the following question:

2. How does a co-taught classroom in comparison to a traditional classroom impact the academic achievement of third and fifth grade students in English Language Arts (ELA) as indicated by the Louisiana Education Assessment Program (LEAP) 360 assessment?

The chapter contains the data collected throughout this study as well as the steps taken to analyze the data. This chapter also discusses the analysis procedures and how they align with the causal-comparative methodology and relate back to the research question. The researcher used Statistical Package for the Social Sciences (SPSS) statistical analysis software to compare the academic achievement of students who were taught in a co-taught classroom to students who were taught in a traditional classroom. Data were analyzed using descriptive statistics as well as a comparative one-way Analysis of Variance (ANOVA) test to determine if there was a statistically significant difference between the two groups of students. Descriptive statistics are shown in the form of data tables and explained with a narrative. ANOVA results are also shown within each section.

Participants

Six teacher participants were utilized for this study: one single third grade ELA teacher, one pair of third grade ELA co-teachers, one single fifth grade ELA teacher, and one pair of fifth grade ELA co-teachers. Appendix C displays the demographics and minimum requirements met by each participant to be included in this study. Each teacher, or set of co-teachers, taught two

ELA classes of 34-43 students. Approximately 15-20% of students in each class were students with disabilities, English Language Learners, and/or 504 students.

Of the original 167 students who took the LEAP 360 diagnostic assessment, four were moved to a different class, three withdrew from the school, four were absent the day the interim assessment was taken, and two did not complete the interim assessment. These students' scores were excluded from the data and the findings. The remaining 154 students, 77 co-taught and 77 traditionally taught, in the four classes were able to complete both their diagnostic and interim assessments. This data was used for comparative analysis.

Data Collection

The LEAP 360 assessments are Math and ELA benchmark assessments created by the Louisiana Department of Education and aligned to the Louisiana Common Core Standard skills (LEAP 360 one-pager, 2021). The LEAP 360 diagnostic assessment is administered to students in third through eighth grades at the beginning of each academic year (August) to assess their readiness for instruction and provide teachers with a baseline for data collection. The interim assessments are administered in the middle of the academic year (December or January) and provide educators with data to monitor student progress and adjust instruction accordingly. The ELA LEAP 360 assessments are composed of two to three test sessions of 60-90 minutes. Each session includes a combination of literary and informational texts, multiple choice questions, multiple-response questions, drag-and-drop questions, and one constructed response essay question. The 2022 LEAP 360 ELA diagnostic assessment for third and fifth grades contained 29 possible points. The 2023 LEAP 360 ELA interim assessment for third and fifth grades contained 32 possible points.

The LEAP 360 diagnostic and interim assessment scores were used as the primary source of data for this study. Students took the LEAP 360 diagnostic assessment in August 2022 and the interim assessment in December 2022. Individual assessment scores were gathered from the Data Recognition Corporation (DRC), which is used by the state of Louisiana to administer and score common benchmark assessments. Scores were stored in an encrypted Excel file and a data-based equation was used to calculate each student's academic growth.

Data Analysis

To assess whether a co-teaching instructional approach influences student academic growth in ELA, the researcher collected diagnostic and interim assessment scores from third and fifth grade students who were co-taught and traditionally taught. The difference between each student's assessment scores was then found by using the difference calculation in Excel. The calculation subtracted the diagnostic score of each student from their interim score. Additionally, the averages of the co-taught student growth and the traditionally taught student growth were found through Excel by using a mean formula.

Descriptive statistics were used to analyze the data collected (see Table 1). Both groups of co-taught and traditionally taught students were found to have an average decrease in achievement from the diagnostic to the interim assessments. The co-taught students had a slightly less decrease on average (M = -3.78%, SD = 15.13%) than the traditionally taught students (M = 8.29%, SD = 14.59%). The standard deviation for both groups was relatively similar; therefore, the data collected had no outliers that needed to be excluded from the analysis.

Table 1

Descriptive statistical analysis

Setting	N	Mean	Std. Deviation	Std. Error
Single taught	77	-.0829	.1459	.0166
Co-taught	77	-.0378	.1513	.0172

After descriptive statistics were analyzed, a one-way ANOVA was performed to compare the effect of co-teaching on student academic growth in ELA. The one-way ANOVA revealed that there was not a statistically significant difference in the ELA growth of students who were co-taught and students who were traditionally taught ($F(1, 152) = 3.555$, $p = .061$). Since $p \geq .05$, the difference between the average growth of ELA assessment scores between co-taught students and traditionally taught students is not statistically significant.

Table 2

One-way ANOVA

Difference	Sum of squares	Mean Square	F	Significance
Between: Single taught Co-taught	.079	.079	3.555	.061

The above results led the researcher to accept the null hypotheses:

3. A co-taught classroom setting does not impact the academic achievement of third and fifth grade students in ELA.
4. A traditional classroom setting does not impact the academic achievement of third and fifth grade students in ELA.

The statistical results support the idea that co-taught and traditional settings do not make a statistically significant difference in the ELA growth of third and fifth grade students as determined by the LEAP 360 benchmark assessments.

Exploratory Findings

After the original findings, the researcher explored subgroup results to determine if there were statistically significant differences between grade levels and teachers. As with any subgroup analyses, the results that follow should be considered prudently as the sample sizes are small in comparison to the population they represent.

When comparing the overall achievement growth for students by teacher, or co-teachers, the results found that the third and fifth grade sets of co-teachers (represented as "Teachers B/C" and "Teachers E/F" in Table 2), had a similar average decrease in growth of approximately 4%. In contrast, the fifth-grade traditional teacher (Teacher A) and the third grade traditional teacher (Teacher D) had larger decreases of about 10% and 7% respectively. A one-way ANOVA was performed to compare the effect of four teachers or sets of teachers on student ELA growth. The one-way ANOVA revealed no statistically significant differences between the groups of teachers ($F(3, 150) = 1.417$, $p = .240$). Since $p \geq .05$, the difference between the average growth of ELA assessment scores between teachers or teacher pairs is not statistically significant.

Table 3

Analysis of growth by teacher

Descriptive				
Teacher	N	Mean	Std. Deviation	Std. Error
Teacher A	43	-.0958	.1618	.0246
Teachers B/C	43	-.0389	.1333	.0203
Teacher D	34	-.0667	.1234	.0211
Teachers E/F	34	-.0363	.1734	.0297
One-way ANOVA				

Difference	Sum of Squares	Mean Squares	F	Significance
Between Groups	.095	.032	1.417	.240
Within Groups	3.343	.022		

When analyzing average growth by grade level and comparing the means, the results found that there was not a statistically significant difference between the average ELA achievement growth of third graders when compared to fifth graders. A one-way ANOVA was performed to compare the effect of grade level on student ELA growth. The one-way ANOVA revealed no statistically significant differences between the grade levels ($F(1, 152) = .423$, $p = .516$). Since $p \geq .05$, the difference between the average growth of ELA assessment scores between grade levels is not statistically significant. This analysis supports the fact that overall study results are valid despite the difference in the total third graders and total fifth graders included in the study.

Table 4

Analysis of growth by grade level

Descriptive				
Grade	N	Mean	Std. Deviation	Std. Error
3rd	68	-.0515	.1502	.0182
5th	86	-.0673	.1503	.0161
One-way ANOVA				
Difference	Sum of Squares	Mean Squares	F	Significance
Between Groups	.010	.010	.423	.516
Within Groups	3.428	.023		

Conclusions

This chapter detailed the results of the data collection and analysis as well as how the analyses relate back to the central research question. Data from 154 students in six teachers' classrooms were used to conduct this causal-comparative study. Two teachers were traditional

teachers who taught their classrooms of students independently. The remaining four teachers made up two teams of co-teachers who collaboratively taught their groups of students. The students analyzed included students with and without disabilities.

Consistent with causal-comparative research, SPSS was used to compare the average growth of non-co-taught students to the average growth of co-taught students. Descriptive statistics showed that both groups of students had an average decrease in ELA achievement between the diagnostic and interim assessments. The co-taught students had a slightly smaller decrease in achievement, 3%, when compared to the non-co-taught students at 6%. When a one-way ANOVA test was conducted, it showed that the difference between the co-taught and non-co-taught average achievement was not statistically significant. As co-teaching becomes a more prevalent instructional practice throughout schools in the United States, it is vital that its implementation is consistently calibrated and research-based for future research to support the efficacy and benefits of co-teaching on all students. Chapter 5 includes a critical summary, discussion, and recommendations based on this data.

CHAPTER 5

DISCUSSION

The purpose of this causal-comparative quantitative study was to determine if a co-taught setting impacted third and fifth grade student English Language Arts (ELA) growth when compared to a non-co-taught setting. This chapter includes a discussion of major findings in relation to previous research on co-teaching. Also included is a discussion of the connections to this study and inclusive instructional models. The chapter concludes with a discussion on the limitations, implications for future research, and a summary.

This chapter contains discussions on the findings and future implications and suggestions for research related to the research question:

1. How does a co-taught classroom in comparison to a traditional classroom impact the academic achievement of third and fifth grade students in English Language Arts (ELA) as indicated by the Louisiana Educational Assessment Program (LEAP) 360 assessment?

This study's findings suggest no statistically significant difference between the ELA achievement of co-taught students and non-co-taught students as demonstrated by LEAP 360 diagnostic and interim scores.

In line with the null hypotheses, the data suggest that there is no difference in the impact of a co-taught classroom setting when compared to a traditional classroom setting on student ELA achievement. Contrary to the generalized accepted theory that a co-taught classroom is more beneficial to all students than a traditional classroom setting (Hurt, 2012). The data collected shows no statistically significant difference between the growth of students who were co-taught and the growth of students who were taught traditionally. In conclusion, the data

suggest that there are no additional benefits of co-taught instruction or single-teacher instruction on academic growth.

Limitations

Due to this study's small sample size, the generalizability of the results is limited. This study examined the overall growth of 154 students over the course of six months based on one standardized benchmark assessment. The small number of students, the limited time frame, and the singular source of data collection reduce the confidence that the results of this research will be applicable to larger situations.

Due to the overall decreased academic growth of all students involved in this study, the researcher must acknowledge the possibility that confounding variables were active throughout this research. Administrators, educators, and researchers should be cautious when examining the results of this study and using these results to affect educational instructional decisions. The overall negative growth of most students involved in this study suggests the possibility of underlying factors preventing student academic growth. These underlying factors resulting in negative student achievement could be related to student efficacy, learning delays and trauma from the COVID-19 pandemic and Hurricane Ida, school-based curriculum implementation, or assessment validity.

Implications for Research

The results suggesting that there are no additional benefits of co-taught instruction or single-teacher instruction on academic growth, support existing quantitative studies related to co-teaching (Bezila, 2018; Dwyer, 2018; Franklin, 2015; Ware, 2016). Although these results do not suggest a conclusively beneficial effect of co-teaching on academic growth, it is important to acknowledge that a negative effect of co-teaching was not found. Some perspectives of co-

teaching displayed in research present concerns that a co-taught classroom environment takes student learning away from all students to direct attention and lower leveled instruction to students with disabilities (Bauwens & Hourcade, 1991; Hang & Rabren, 2009; Woods, 2017). These findings help negate those opinions. It is also vital to remember that the co-teaching approach strives to address more than academic growth (Murawski & Lochner, 2022). Although this study does not suggest significantly more beneficial academic growth of students in a co-taught setting, more research is needed in the areas of social-emotional and behavioral growth before determining if co-teaching is worth implementing at a specific school site.

These results, along with the results of previous research, should be considered when implementing co-teaching in inclusive classrooms. As there is a lack of conclusive connections between co-teaching and improved student growth, teachers and administrators should determine whether co-teaching would be a beneficial use of their resources and achieve goals set for students and staff during a given school year. Similarly, these inconclusive results should be considered when continuing to research co-teaching and assess the efficacy of the instructional practice. Previous research often suggests that the goal of co-teaching is to invoke a higher rate of academic growth in students who are co-taught rather than students who are traditionally taught. However, the foundation of co-teaching was designed to create equal access to academic instruction for students with disabilities. Therefore, it is important for school sites, educators, and researchers to address the unique goals of co-teaching. As co-teaching continues to be analyzed, researchers should explore the intentions of co-teaching, what makes co-teaching effective, and why and how those goals are reached, or not reached. Recommendations for consistency in implementing co-teaching as well as contriving data from varied sources can be found at the end of this chapter.

Implications for Practice

The lack of statistical significance found within this study gleans important questions for the future field of research in education: How can co-teaching be calibrated so it can be implemented with fidelity and consistency in different classrooms, school sites, and districts? Are standardized assessments created by the state an appropriate sole measure of student growth? How can the efficacy of co-teaching be assessed most accurately? Does a lack of statistical significance yield a need for change in inclusion instruction? Does the impact of co-teaching lie only in the proof of academic growth of students? The recommendations that follow in this section address how future research can explore some of these ideas to create a suitable basis of research for subsequent studies to assess the academic efficacy of co-teaching when compared to a traditional classroom.

Future studies should consider co-teaching implementation. Before co-teaching can be considered a successful instructional strategy, research needs to be conducted in classrooms, schools, and districts, where co-teaching implementation is calibrated. There is existing research (Beninghof, 2020; Murawski & Lochner, 2015) that encourages administrators and educators to participate in certain activities to maximize the effects of implementing co-teaching. Beninghof (2020) created a co-teaching roll-out plan that encourages schools and districts to take one full year planning for co-teaching, one year piloting with one or two co-teaching pairs, and the third year beginning expansion across the school site(s). Murawski and Lochner (2015) created 22 co-teaching core competencies with tools for implementation, support, reflection, and evaluation of co-teaching. Before the academic impacts of co-teaching, in relation to traditional teaching, can be truly analyzed, a method of co-teaching implementation needs to be supported with valid research as a basis for the future of comparative studies.

It is also recommended that future researchers consider gathering academic growth data from multiple sources. This study based student academic growth on one common benchmark assessment created by the Louisiana Department of Education. Educators and educational leaders continue to question the validity of standardized tests as appropriate measures of academic growth (Katsiyannis et al., 2007). It would benefit future studies to examine academic growth data from multiple sources, such as online reading curriculums with benchmark assessments, standardized tests, report card grades, and schoolwide or district-wide summative assessments. This variety in sources of data collection would allow researchers to further triangulate their findings and validate any differences found. This would also allow researchers to exclude certain data from assessments that may have proven to be invalid due to outlier results.

Further research is needed to establish a more conclusive and direct relationship between co-teaching and academic growth. Once researchers have access to co-teaching that is being implemented consistently and with fidelity according to a specific, research-based implementation pathway, researchers are encouraged to gather data from multiple sources and across a longer period of time. This should allow researchers to analyze the effects of co-teaching more directly related to student academic achievement. Researchers should also consider what is being compared to the growth of students who are being co-taught. In this study, co-taught students were compared to traditionally taught students. However, research would benefit from comparing multiple scenarios across a longer time period. If a researcher analyzed students in second grade, during which all students with disabilities were self-contained and all students without disabilities were traditionally taught, the researcher could then assess how the implementation of co-teaching affects those same students once they reach third grade. This

comparison along with a comparison of parallel groups, like this study, could assist in resulting in a more impactful outcome.

Next, as stated briefly in the implications portion of this dissertation, it is important that researchers remember that an outcome that lacks statistical significance is not a negative outcome. Although the idea that co-teaching creates more academic growth in students when compared to traditional teaching, is not supported, this does not imply that co-teaching is not effective and should not be implemented. In fact, the results of this study show that a co-taught classroom of students, which includes 15-20% of students with mild and moderate disabilities, grows just about as much as a traditional classroom comprised of general education students. In this respect, co-teaching does achieve "equal access" to education and educational growth.

Finally, modern education is not only about academic growth. The behavioral and social-emotional impacts of the educational environment are just as vital for overall student growth (Duginske, 2017; Lemmons, 2015; Parker, 2017). Therefore, it is recommended that the lack of empirical evidence to support the academic growth of students who are co-taught does not overshadow the possibility of additional impacts being worth the possible plateau or equality of academic achievement between instructional settings. More research is needed to explore the behavioral and social-emotional impacts of co-teaching on all students.

Conclusion

This chapter reviewed the findings of this causal-comparative quantitative study examining how co-teaching, when compared with traditional teaching, affects students' academic achievement in grades three and five as determined by the LEAP 360 standardized assessment. The researcher found no statistically significant difference between the average growth of co-taught students and the average growth of traditionally taught students. The researcher utilized

this outcome to conclude that co-teaching can be a beneficial instructional method to allow students with disabilities equal access to education. As shown in the data analysis, classes composed of 15-20% of students with disabilities and classrooms comprised of general education students achieved similar amounts of growth. This supports the idea that, despite their medically diagnosed disabilities, co-teaching played a factor in the comparable academic growth of students with disabilities and students without disabilities. The researcher recommends that future research focuses on calibrated co-teaching implementation, varied and lengthened data collection, and further analysis of co-teachings' social-emotional and behavioral effects.

As populations of students continue to grow in diversity and ability, the implications and opportunities for future research related to co-teaching are endless. The only way for educational research to begin to produce more statistically significant and direct correlations related to co-teaching outcomes is to continue to calibrate, implement, and analyze co-teaching data through research. As with all educational research, the future of children educated in the United States is on the line as research attempts to correlate student achievement to the instructional methods being implemented in classrooms.

References

Alsarawi, A. A. (2020). *Perceptions regarding the effectiveness of co-teaching practices to support students with learning disabilities in secondary inclusive classrooms: Case study* (Order No. 27964536). Available from ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. (2424508948). https://www.proquest.com/dissertations-theses/perceptions-regarding-effectiveness-co-teaching/docview/2424508948/se-2

Bauwens, J., & Hourcade, J. J. (1991) Making co-teaching a mainstreaming strategy. *Preventing School Failure: Alternative Education for Children and Youth, 35*(4). 19-24.

Bezila, N. (2018). *The impacts of co-teaching on 7th grade math achievement* (Publication No. 10929504). [Doctoral dissertation, Point Park University]. ProQuest Dissertations and Theses Global.

Beninghof, A. M. (2020). *Co-Teaching That Works: Structures and Strategies for Maximizing Student Learning* (2nd ed.). John Wiley & Sons, Incorporated.

Bhandari, P. (2020) *An introduction to quantitative research.* Scribbr. https://www.scribbr.com/methodology/quantitative-research

Blankman, C. B. (2020). *The Danielson Framework for Teaching Evaluation Instrument and the Co-Teaching Core Competency Framework: A Crosswalk to Support Co-Teaching Continuous Improvement* (Order No. 28261655). Available from ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. (2531554493). https://www.proquest.com/dissertations-theses/danielson-framework-teaching-evaluation/docview/2531554493/se-2

Blednick, J., & Wilson, G. L. (2011). *Teaching in tandem: Effective co-teaching in the inclusive classroom.* Association for Supervision & Curriculum Development, Association for Supervision & Curriculum Development.

Blevins, M. (2017). Participant observation. *The Sage Encyclopedia of Communication Research Methods, (Vols. 1-4)*. https://doi.org/10.4135/9781483381411

Bruster, D. D. (2014). Comparing the perceptions of inclusion between general education and special education teachers. (Publication No. 3616654). [Doctoral dissertation, Liberty University]. ProQuest Dissertations Publishing.

Buchner, T., & Thompson, S. (2021). From plot twists, progress, and the persistence of segregated education: The continuing struggle for inclusive education in relation to students with intellectual disabilities. *Journal of Policy and Practice in Intellectual Disabilities, 18*. 4-6

Cahill, J. M. (2018). *A look at special education co-teaching models and their impact on student growth in reading.* (Publication No. 10834764) [Doctoral dissertation, St. John's University]. ProQuest Dissertations Publishing.

Castro, V. E. (2007). *The effects of co-teaching on academic achievement of K-2 students with and without disabilities in inclusive and noninclusive classrooms* (Publication No. 3255067). [Doctoral dissertation, Fordham University]. ProQuest Dissertations and Theses Global.

Colson, T., Xiang, Y., & Smothers, M. (2021). How professional development in co-teaching impacts self-efficacy among rural high school teachers. *The Rural Educator, 41*(1). 20-31. https://doi.org/10.35608/ruraled.v42i1.897

Cramer, E., Liston, A., Nevin, A., & Thousand, J. (2010). Co-teaching in urban secondary school districts to meet the needs of all teachers and learners: Implications for teacher education reform. *International Journal of Whole Schooling, 6*(2), 59–76.

Duginske, J. (2017). Tier two social emotional learning to increase academic achievement (Publication No. 10690421). [Doctoral dissertation, Concordia University Chicago]. ProQuest Dissertations and Theses Global.

Dwyer, E. E. (2018). *Co-teaching: The effects of co-teaching on reading and mathematics achievement for general education students in intermediate grade levels* (Publication No. 2164271859). [Doctoral dissertation, University of St. Francis]. ProQuest Dissertations and Theses Global.

Faraclas, K. L. (2018). A professional development training model for improving co-teaching performance. *International Journal of Special Education, 33*(3).

Franklin, J. C. (2015). *Co-teaching student outcomes and efficacious practices: A pragmatic mixed methods study* (Publication No. 3663855) [Doctoral dissertation, Mercer University]. ProQuest Dissertations and Theses Global.

Free appropriate public education for students with disabilities : requirements under Section 504 of the Rehabilitation Act of 1973. (1996). [Washington, DC] :U.S. Dept. of Education, Office of Educational Research and Improvement, Educational Resources Information Center : Office for Civil Rights.

Friend, M., & Cook, L. (2007). *Interactions: Collaboration skills for school professionals. (5th ed.)* (pp. 128-160). Boston: Pearson Education Inc.

Gallo-Fox, J., Wassell, B., Scantlebury, K., & Juck, M. (2006). Warts and all: Ethical dilemmas in implementing the coteaching model. *Forum Qualitative Sozialforschung 7*(4). 183.

Gately, S., & Gately, F. (2001). Understanding co-teaching components. *Teaching Exceptional Children, 33*(4). 40-47.

Gilmour, A. F., Fuchs, D., & Wehby, J. H. (2018). Are students with disabilities accessing the curriculum? A meta-analysis of the reading achievement gap between students with and without disabilities. *Council for Exceptional Children, 83*(3). 329-346.

Goddard, Y. L., Ammirante, L., & Jin, N. (2023). A thematic review of current literature examining evidence-based practices and inclusion. *Education Sciences, 13*(1), 38. https://doi.org/10.3390/educsci13010038

Gokbulut, O. D. (2020). Impact of co-teaching approach in inclusive education settings on the development of reading skills. *International Journal of Education and Practice*, *8*(1). 1-17. doi:10.18488/journal.61.2020.81.1.17.

Goldberg, R. (2017). *Co-teaching in inclusive classrooms.* [Masters thesis, Ontario Institute for Studies in Education of the University of Toronto].

Hang, Q., & Rabren, K. (2009). An examination of co-teaching: Perspectives and efficacy indicators. *Remedial and Special Education*, *30*(5), 259-268. doi: 10.1177/0741932508321018

Hornby, G. (2015). Inclusive special education: Development of a new theory for the education of children with special educational needs and disabilities. *British Journal of Special Education, 42*(3). 234-256.

Hurd, E., & Weilbacher, G.A. (2017). "You want me to do what?" The benefits of co-teaching in the middle level. *Middle Grades Review, 3*(1). 1-14.

Hurt, J. D. (2012). *A comparison of inclusion and pullout programs on student achievement for students with disabilities* [Doctoral dissertation, East Tennessee State University] (Publication No. 1487). Electronic Theses and Dissertations. https://dc.etsu.edu/etd/1487

Hwang, Y.-S., & Evans, D. (2011). Attitudes towards inclusion: Gaps between belief and practice. *International Journal of Special Education, 26*(1), 136–146.

Idol, L. (2006). Toward inclusion of special education students in general education: A program evaluation of eight schools. *Remedial and Special Education, 27*(2), 77–94. http://dx.doi.org/10.1177/07419325060270020601

Individuals With Disabilities Education Act, 20 U.S.C. § 1400-1419 (2004).

Indelicato, J. (2014). How to build an effective co-teaching relationship between teachers. [Masters thesis, Dominican University of California]. ProQuest Dissertations Publishing.

Jang, S. J. (2006) Research on the effects of team teaching upon two secondary school teachers. *Educational Research, 48*(2), 177-194, http://dx.doi.org/10.1080/00131880600732272

Johnson, R. & Christensen, L. (2020). *Educational Research: Quantitative, Qualitative, and Mixed Approaches*. SAGE Publications.

Katsiyannis, A., Zhang, D., Ryan, J. B., & Jones, J. (2007). High-stakes testing and students with disabilities: Challenges and promises. *Journal of Disability Policy Studies, 18*(3), 160-167. https://doi.org/10.1177/10442073070180030401

Keeley, R. G. (2015). Measurements of student and teacher perceptions of co-teaching models. *Journal of Special Education Apprenticeship, 4*(1). 520-537.

Keene, M. E. (2018). *Co-teaching in inclusion classrooms: An investigation of secondary inclusion practices* (Publication No. 10813459) [Doctoral dissertation, Gardner-Webb University School of Education]. ProQuest Dissertations and Theses Global.

Kelley, R. G., Brown, M. R., & Knapp, D. (2017). Evaluation of the student experience in the co-taught classroom. *International Journal of Special Education, 32*(3), 520–537.

Kilanowski-Press, L., Foote, C. J., & Rinaldo, V. J. (2010). Inclusion classrooms and teachers: A survey of current practices. *International Journal of Special Education, 25*(3), 43–56.

Kilian, J. M. & Kilian, D. W. (2011). A school intervention to increase prosocial behavior and improve academic performance of at-risk students. *Improving Schools, 14*, 65-83. https://doi.org/10.1177/1365480211399748

Kloo, A., & Zigmond, N. (2008). Coteaching revisited: Redrawing the blueprint. *Preventing School Failure, 52*(2), 12-20. https://www.proquest.com/scholarly-journals/coteaching-revisited-redrawing-blueprint/docview/228519557/se-2

Krammer, M., Rossmann, P., Gastager, A., & Gasteiger-Klicpera, B. (2018). Ways of composing teaching teams and their impact on teachers' perceptions about collaboration. *European Journal of Teacher Education, 41*(4), 463–478.

La Monte, M. E. (2012). *Towards an Operational Definition of Effective Co-Teaching: Instrument Development, Validity, and Reliability* (Order No. 3553755). Available from ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. (1315237201). https://www.proquest.com/dissertations-theses/towards-operational-definition-effective-co/docview/1315237201/se-2

Langyel, L. S., & Vanbergelik, E. (2021). A brief history of special education: Milestones in the first 50 years. EP Magazine. *50th Year Special Edition.*

Least Restrictive Environment Requirements (2004). P.L. 300 20 U.S.C. § 1412

Lemmons, H. R. (2015). *Study of the social and emotional growth and development of students with disabilities in an inclusive setting in an inner-city middle school* (Publication No.

10023673) [Doctoral dissertation, Gardner-Webb University School of Education]. ProQuest Dissertations and Theses Global.

Louisiana Department of Education (2020). Title 28: Bulletin 746. Louisiana standards for state certification of school personnel.

Louisiana Department of Education (2021). LEAP 360 one-pager. Louisiana believes. https://www.louisianabelieves.com/docs/default-source/key-initiatives/louisianas-key-initiatives_leap-360.pdf?sfvrsn=5

Louisiana Department of Education (2022). Title 28: Bulletin 130. Regulations for the evaluation and assessment of school personnel.

Mackey, J., O'Rielly. N., Jansen, C., & Fletcher, J. (2018). Leading change to co-teaching in primary schools: A "down under" experience. *Educational Review, 70*(4), 465–485. https://doi.org/10.1080/00131911.2017.1345859

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50,* 370-396.

Mentink, D., & Borrelle, R. (2022). *Special education rights and responsibilities (SERR) handbook.* Disabilities Rights California.

Maultsby-Springer, B. M. (2009). *A descriptive analysis of the impact of co-teaching on the reading/language arts and math achievement of selected middle school students in a middle Tennessee school district* (Publication No. 3408564) [Doctoral dissertation, Tennessee State University]. ProQuest Dissertations and Theses Global.

McCain, K. G., & Antia, S. D. (2005). Academic and social status of hearing, Deaf, and hard of hearing students participating in a co-enrolled classroom. *Council for Exceptional Children 27*(1). 20-32.

McGovern, M. (2015). Least restrictive environment: Fulfilling the promises of IDEA. *Widener Law Review, 21*(1). 117-137.

Mugny, G., & Doise, W. (1978). Socio-cognitive conflict and structure of individual and collective performances. *European Journal of Social Psychology, 8*(2). 181–192.

Murawski, W. W. (2009). *Collaborative teaching in secondary schools: Making the co-teaching marriage work!*. Corwin Press, https://doi.org/10.4135/9781452219370

Murawski, W., & Lochner, W. (2011). Observing co-teaching: What to ask for, look for, and listen for. *Intervention in School and Clinic, 46*(3). 174-183. 10.1177/1053451210378165.

Murawski, W.W., & Spencer, S. A. (2011). *Collaborate, communicate, and differentiate! Improving student learning in today's diverse classrooms.* Thousand Oaks, CA: Corwin.

National Center for Education Statistics (2019). Current population survey.

Neifeald, E., & Yonit, N. (2019). Co-teaching in the 'academia class': Evaluation of advantages and frequency of practices. *International Education Studies, 12*(5). doi:10.5539/ies.v12n5p86.

No Child Left Behind Act of 2001, P.L. 107-110, 20 U.S.C. § 6319 (2002).

Parker, A. (2017). *The impact of co-teaching on student achievement and behavior at a title I middle school* [Master's Thesis, California State University San Marcos]. ProQuest Dissertations and Theses Global.

Peery, A. (2017). *A brief history of co-teaching.* Cult of Pedagogy. https://x78251kcpll2l2t9e46kf96a-wpengine.netdna-ssl.com/wp-content/uploads/2017/02/Brief-History-of-Co-Teaching.pdf

Ricci, L. A., Persiani, K., & Williams, A. (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- 52.

Skiba, R. J., Simmons, A. B., Ritter, S., Gibb, A. C., Rausch, M. K., Cuadrado, J., & Chung, C. (2008). Achieving equity in special education: History, status, and current challenges. *Exceptional Children, 74*(3), 264-288. https://www.proquest.com/scholarly-journals/achieving-equity-special-education-history-status/docview/201209818/se-2

Sweigart, C. A., & Landrum, T. J. (2015). Impact of number of adults on instruction: Implications for co-teaching. *Preventing School Failure, 59*(1). 22-29. https://doi.org/10.1080/1045988X.2014.919139

Thompson, K. (2010). *The many faces of co-teaching: How does co-teaching impact students at different levels of academic functioning?* (Publication No. 3443013) [Doctoral dissertation, University of West Georgia]. ProQuest Dissertations & Theses Global.

Tondini, M. (2022). *Teachers' Perspectives on Co-Teaching in an Inclusive Classroom* (Order No. 28721930). ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/teachers-perspectives-on-co-teaching-inclusive/docview/2582062770/se-2

Tzivinikou, S. (2015). Collaboration between general and special education teachers: Developing co-teaching skills in heterogeneous classes. *Problems of Education in the 21st Century, 64*, 108-119. https://doi.org/10.33225/pec/15.64.108

Van Gardne, D., Stormont, M., & Goel, N. (2012). Collaboration between general and special educators and student outcomes: A need for more research. *Psychology in the Schools 49*(5). 483-497.

Ware, S. (2016). Effects of inclusion classrooms on academic achievement of students with learning disabilities and students in general education. *Journal of the American Academy of Special Education Professionals*, 125–140.

Warner, R. J. (2009). *A comparison of teaching models that promote academic achievement in an inclusive secondary classroom* (Publication No. 3358173) [Doctoral dissertation, Tarleton State University]. ProQuest Dissertations & Theses Global.

Watras, J. (2008). The history of special education: A struggle for equality in American public schools. *Choice, 45*(12), 2208. https://www.proquest.com/trade-journals/history-special-education-struggle-equality/docview/225730751/se-2

Watson, J. B. (1913). Psychology as the behaviorist views it. *Psychological Review, 20*(2), 158–177. https://doi.org/10.1037/h0074428

Wexler, J., Kearns, D., Lemons, C., Mitchel, M., Clancy, E., Davidson, K., Sinclair, A., & Wei, Y. (2018). Reading comprehension and co-teaching practices in middle school English Language Arts classrooms. *Exceptional Children, 84*(4). 384-402. doi:10.1177/0014402918771543.

Wilson, G. L., & Blednick, J. (2011). *Teaching in tandem: Effective co-teaching in the inclusive classroom*. Association for Supervision & Curriculum Development, Association for Supervision & Curriculum Development.

Winzer, M. (2009). *From integration to inclusion: A history of special education in the 20th century.* Gallaudet University Press.

Witcher, M., & Feng, J. (2010). *Co-teaching vs. solo teaching: Comparative effects on fifth graders' math achievement* [Online Submission]. Annual Meeting of the Mid-South Educational Research Association.

Woods, P. K. (2017). *Perceptions of secondary teachers on the co-teaching model: An examination of the instructional practices in co-teaching classrooms in Western Pennsylvania* (Doctoral dissertation, Indiana University of Pennsylvania). Retrieved from https://knowledge.library.iup.edu/cgi/viewcontent.cgi?article=2372&context=etd

APPENDIX A

COMPASS Teacher Evaluation Rubric

Domain 1: Planning and Preparation			
Component 1c: Setting Instructional Outcomes			
Ineffective	**Effective: Emerging**	**Effective: Proficient**	**Highly Effective**
• Outcomes represent low expectations for students and lack of rigor, nor do they all reflect important learning in the discipline. • Outcomes are stated as activities, rather than as student learning. • Outcomes reflect only one type of learning and only one discipline or strand, and are suitable for only some students.	• Outcomes represent moderately high expectations and rigor. • Some reflect important learning in the discipline, and consist of a combination of outcomes and activities. • Outcomes reflect several types of learning, but teacher has made no attempt at coordination or integration. • Most of the outcomes are suitable for most of the students in the class based on global assessments of student learning.	• Most outcomes represent rigorous and important learning in the discipline. • All the instructional outcomes are clear, written in the form of student learning, and suggest viable methods of assessment. • Outcomes reflect several different types of learning and opportunities for coordination. • Outcomes take into account the varying needs of groups of students.	• All outcomes represent rigorous and important learning in the discipline. • The outcomes are clear, written in the form of student learning, and permit viable methods of assessment. • Outcomes reflect several different types of learning and, where appropriate, represent opportunities for both coordination and integration. • Outcomes take into account the varying needs of individual students.

Domain 2: The Classroom Environment			
Component 2c: Managing Classroom Procedures			
Ineffective	**Effective: Emerging**	**Effective: Proficient**	**Highly Effective**
• Much instructional time is lost due to inefficient classroom routines and procedures. • There is little or no evidence of the teacher managing instructional groups, transitions, and/or the handling of materials and supplies effectively. • There is little evidence that students know or follow established routines.	• Some instructional time is lost due to only partially effective classroom routines and procedures. • The teacher's management of instructional groups, transitions, and/or the handling of materials and supplies is inconsistent, leading to some disruption of learning. • With regular guidance and prompting, students follow established routines	• There is little loss of instructional time due to effective classroom routines and procedures. • The teacher's management of instructional groups and/or the handling of materials and supplies are consistently successful. • With minimal guidance and prompting, students follow established classroom routines.	• Instructional time is maximized due to efficient classroom routines and procedures. • Students contribute to the management of instructional groups, transitions, and/or the handling of materials and supplies. • Routines are well understood and may be initiated by students.

Domain 3: Instruction			
Component 3b: Using Questioning and Discussion Techniques			
Ineffective	**Effective: Emerging**	**Effective: Proficient**	**Highly Effective**
• Teacher's questions are of low cognitive challenge, single correct responses, and asked in rapid succession. • Interaction between teacher and students is predominantly recitation style, with the teacher mediating all questions and answers. • A few students dominate the discussion.	• Teacher's questions lead students through a single path of inquiry, with answers seemingly determined in advance. • Alternatively the teacher attempts to frame some questions designed to promote student thinking and understanding, but only a few students are involved. • Teacher attempts to engage all students in the discussion and to encourage them to respond to one another, with uneven results.	• While the teacher may use some low-level questions, he or she poses questions to students designed to promote student thinking and understanding. • Teacher creates a genuine discussion among students, providing adequate time for students to respond, and stepping aside when appropriate. • Teacher successfully engages most students in the discussion, employing a range of strategies to ensure that most students are heard.	• Teacher uses a variety or series of questions or prompts to challenge students cognitively, advance high level thinking and discourse, and promote metacognition. • Students formulate many questions, initiate topics and make unsolicited contributions. • Students themselves ensure that all voices are heard in the discussion.

Domain 3: Instruction			
Component 3c: Engaging Student in Learning			
Ineffective	**Effective: Emerging**	**Effective: Proficient**	**Highly Effective**
• The learning tasks and activities, materials, resources, instructional groups and technology are poorly aligned with the instructional outcomes or require only rote responses. • The pace of the lesson is too slow or rushed. • Few students are intellectually engaged or interested.	• The learning tasks or prompts are partially aligned with the instructional outcomes but require only minimal thinking by students to be passive or merely compliant. • The pacing of the lesson may not provide students the time needed to be intellectually engaged.	• The learning tasks and activities are aligned with the instructional outcomes and are designed to challenge student thinking, resulting in active intellectual engagement by most students with important and challenging content, and with teacher scaffolding to support that engagement. • The pacing of the lesson is appropriate, providing most students the time needed to be intellectually engaged.	• Virtually all students are intellectually engaged in challenging content, through well designed learning tasks, and suitable scaffolding by the teacher, and fully aligned with the instructional outcomes. • In addition, there is evidence of some student initiation of inquiry, and student contributions to the exploration of important content. • The pacing of the lesson provides students the time needed to intellectually engage with and reflect upon their learning, and to consolidate their understanding. • Students may have some choice in how they complete tasks and may serve as resources for one another.

Domain 3: Instruction			
Component 3d: Using Assessment in Instruction			
Ineffective	**Effective: Emerging**	**Effective: Proficient**	**Highly Effective**
• There is little or no assessment or monitoring of student learning; feedback is absent, or of poor quality. • Students do not appear to be aware of the assessment criteria and do not engage in self-assessment.	• Assessment is used sporadically to support instruction, through some monitoring of progress of learning by teacher and/or students. • Feedback to students is general, and students appear to be only partially aware of the assessment criteria used to evaluate their work but few assess their own work. • Questions/prompts/ assessments are rarely used to diagnose evidence of learning.	• Assessment is regularly used during instruction, through monitoring of progress of learning by teacher and/or students, resulting in accurate, specific feedback that advances learning. • Students appear to be aware of the assessment criteria; some of them engage in self-assessment. • Questions/ prompts/ assessments are used to diagnose evidence of learning.	• Assessment is fully integrated into instruction, through extensive use of formative assessment. • Students appear to be aware of, and there is some evidence that they have contributed to, the assessment criteria. • Students self-assess and monitor their progress. • A variety of feedback, from both the teacher and peers, is accurate, specific, and advances learning. • Questions/prompts/assessments are used regularly to diagnose evidence of learning by individual students.

APPENDIX B

CO-TEACHING CORE COMPETENCIES OBSERVATION CHECKLIST

General Educator: _____ Special Service Provider: _____Grade:____
Observer: _____ Date/Time: _____ Period/Room:____

	LOOK FOR ITEMS	✓ 0 – Didn't See It ✓ 1 – Saw an Attempt ✓ 2- Saw It ✓ 3 – Saw It Done Well				
		0	1	2	3	DNOT
4.5 Two or more professionals working together in the same physical space.	*0 = Only one adult; two adults not communicating at all; class always divided into two rooms* *1 = Two adults in same room but very little communication or collaborative work* *2 = Two adults in same room; both engaged in class and each other (even if not perfectly)* *3 = Two adults collaborating together well in the same room*					
9.5 Class environment demonstrates parity and collaboration (both names on board, sharing materials, and space).	*0 = No demonstration of parity/collaboration; room appears to belong to one teacher only* *1 = Some attempt at parity; both adults share a few materials and general space* *2 = Parity exists; adults share classroom materials* *3 = Clear parity; both names on board/report card; two desks or shared space; obvious feeling from teachers that it is "our room"*					
11.6 Both teachers begin and end class together and remain in the room the entire time.	*0 = One adult is absent or late; adults may leave room for times not related to this class* *1 = One adult may be late or leave early or may leave for brief time* *2 = One adult may be late or leave early but for remaining time, they work together* *3 = Both adults begin and end together, and are with students the entire time* *Note: if adults have planned to use a regrouping approach (e.g., "parallel") and one adult takes a group of students out of the room (e.g., to the library), that is perfectly acceptable*					
8.6 During instruction, both teachers assist students with and without disabilities.	*0 = Adults are not helping students or are only helping "their own" students* *1 = There is some helping of various students but at least one adult primarily stays with a few of "their own"* *2 = Both adults are willing to help all students but students seem to have one adult they prefer to work with* *3 = It is clear that both adults are willing to help all students & that students are used to this*					
9.6 The class moves smoothly with evidence of co-planning and communication between co-teachers.	*0 = Little to no prior planning is evident* *1 = All planning appears to have been done by one adult* *2 = Minimal planning is evident; most appears to be done by one adult* *3 = It is clear that both adults are comfortable with the lesson and know what is supposed to happen*					
8.8 Class instruction and activities proactively promote multiple modes of representation, engagement and expression (Universal Design for Learning-UDL)	*0 = There is no evidence of universal design; all students are expected to do the same thing* *1 = There is minimal evidence of universal design; limited opportunities for choice in how students learn, engage & show what they've learned* *2 = There is some evidence of universal design; some opportunities for choice in how students learn, engage & show what they've learned* *3 = The class was universally designed; opportunities for choice in how students learn, engage & show what they've learned were well selected*					

		0	1	2	3	DNOT
3.7 Differentiated content and strategies, based on formative assessment are used to meet the range of learning needs.	*0 = There is no evidence of differentiation of instruction in the classroom* *1 = There is minimal differentiation; most differentiation appears to be focused on groups rather than individuals* *2 = Some differentiation is evident for individuals and/or groups* *3 = It is clear that adults consider individual student needs and regular use of differentiation is evident*					
8.13 Technology (to include Assistive Technology) is used to enhance accessibility and learning	*0 = There is no evidence of technology use* *1 = Limited use of technology* *2 = Technology provides students with access and is used intermittently or sporadically* *3 = Multiple technologies are utilized to make materials and content accessible and are used regularly*					
5.7 A variety of instructional approaches (5 co-teaching approaches) are used, include regrouping students.	*0 = Students remain in large class setting and adults use One Teach-One Support with one adult primarily in lead* *1 = Adults rely solely on One Teach/One Support or Team* *2 = Adults regroup students (using Alternative, Parallel, or Station) at least once* *3 = Adults use more than one of the 5 approaches (Friend & Cook's One Teach/One Support, Team, Parallel, Station & Alternative); at least one of the approaches involves regrouping students* ** note – if teachers have been observed using other approaches in the past and only one approach is observed today (e.g., Stations), it is acceptable to recall previous observations and give a 2 for using a variety of approaches as adults have demonstrated competency*					
2.7 Both teachers engage in appropriate behavior management strategies as needed and are consistent in their approach to behavior management.	*0 = There is no obvious plan for behavior management, nor do adults appear to communicate about how they are approaching class management; possibly inappropriate class management* *1 = Very little classroom management; mainly conducted by one teacher* *2 = Behavior management strategies are utilized but there is very little clear evidence of how adults have communicated about their use* *3 = It is evident that adults have discussed how they will approach classroom/behavior management and adults are consistent in their approach*					
11.3 It is difficult to tell the specialist from the general educator.	*0 = Observer could easily determine who was the general/specialist by their language/roles/ lack of parity* *1 = Teachers kept traditional roles in the classroom but shared or switched roles once or twice* *2 = Teachers worked at having parity in the class and shared most roles and responsibilities* *3 = Adults shared the roles and responsibilities in the classroom and observer would not be able to tell who was the general/specialist was*					
1.6 It is difficult to tell students with special needs from the general education students.	*0 = Observer could easily determine who were the general education or students with special needs by their lack of integration (e.g., students at back or separated from class)* *1 = There was some inclusion of most students in most activities* *2 = There was a clear attempt at inclusion of all students for most activities* *3 = All students were included and integrated seamlessly into all activities, even when adaptations were needed*					
Notes:				Look Fors Total:		

CO-TEACHING CHECKLIST: LISTEN FORS

	LISTEN FOR ITEMS	✓ 0 - Didn't Hear It ✓ 1 - Heard it somewhat ✓ 2 - Heard it ✓ 3 - Heard it often				
		0	1	2	3	DNOT
9.10 Co-Teachers use language ("we"; "our") that demonstrates true collaboration and shared responsibility	*0 = Adults do not communicate with one another.* *1 = Adults use "I" language frequently (e.g., "I want you to..." Or "In my class..."), lacking parity.* *2 = Adults attempt to use "we" language and include each other, but it is clear that one adult is more used to "ruling" the class* *3 = Adults clearly use "we" language (e.g., "We would like you to..."), showing that they both share the responsibility and students know they are equally in charge.*					
5.9 Communication (both verbal and non-verbal) between co-teachers is clear and positive	*0 = Little to no communication is evident* *1 = Communication is minimal, directive, or negative* *2 = Limited communication but it is positive in nature* *3 = Both adults communicate regularly as class progresses & are respectful and positive*					
1.8 Co-Teachers phrase questions and statements so that it is obvious that all students in the class are included	*0 = Class is very teacher-directed and little involvement by students* *1 = Questions/statements are general and not inclusive of all students* *2 = Most statements/questions are phrased to encourage participation from a variety of students.* *3 = A clear attempt is made by both adults to engage all students through the use of a variety of types of questions and statements.*					
1.9 Students' conversations evidence a sense of community including peers with disabilities and from diverse backgrounds	*0 = Students do not talk to one another ever during class* *1 = Specific students appear to be excluded from the majority of student interactions.* *2 = Most students appear to be included in the majority of student interactions.* *3 = It is evident from the students' actions and words that all students are considered an equal part of the class and are included in all student interactions.*					
8.16 Co-Teachers ask questions at a variety of levels to meet All students' needs(basic recall to higher order thinking)	*0 = Adults do not use questions and most instruction is directive.* *1 = Questions are almost all geared just to one level (to the middle or "watered down")* *2 = Teachers use closed and open questions at a variety of levels in a general manner.* *3 = Closed and open questions are asked at a variety of levels in a way that demonstrates they are able to differentiate for specific students in order to ensure maximum (appropriate) levels of challenge.*					

Notes:

Listen Fors Total:

APPENDIX C

Teacher Demographics

	Certification(s)	Years Teaching	Co-Teaching Core Competency Score
Teacher A	Elementary 1-5	3	N/A
Teacher B	Mentor Teacher, Elementary 1-5	10	76
Teacher C	Mentor Teacher, Mild/Moderate and Elementary1-5	16	
Teacher D	Elementary 1-5	2	N/A
Teacher E	Elementary 1-5	3	72
Teacher F	Mild/Moderate K-8, Significant Disabilities	26	

APPENDIX D

Informed Consent

Title of Project: How Co-Teaching Impacts Student Academic Growth in Elementary School

Principal Investigator: Sally-Rose Gaglione, doctoral candidate, Xavier University of Louisiana, scragin@xula.edu, (504) 258-7627

Advisor Information: Dr. Ramona Perkins, Division of Education and Counseling, rperkins@xula.edu

---

Please read the following material that explains this research study. Signing this form will indicate that you have been informed about the study and that you want to participate. We want you to understand what you are being asked to do and what risks and benefits—if any—are associated with this study. This should help you decide whether or not you want to participate in the study.

PURPOSE OF THE RESEARCH

This research aims to fill the research gap related to the impact of co-teaching on student academic achievement. Previously reported quantitative research in the field of co-teaching has resulted in mixed findings related to student academic achievement. This study will contribute to the minimal body of current quantitative research on co-teaching.

PROCEDURES

Six teachers, both single classroom teachers and teams of co-teachers, will be invited to participate in this study. Participation is completely voluntary. If you decide to participate, you can withdraw your participation at any time. Your decision to participate, not participate, or withdraw from the study at any point will have no consequences and will not be disclosed to anyone.

Participation in the study will include:

1) The researcher will access each teacher's COMPASS evaluation score for both single teachers and co-teachers. For co-teachers, the researcher will observe the pair of co-teachers using the Co-Teaching Core Competency Checklist (CCC). To be eligible to participate in the study, a teacher's COMPASS score must be an overall rating of Effective: Proficient (3.0) or above and their CCC score must be a 53 or above, if applicable.
2) The researcher will access students' ELA scores on the 2022 ELA LEAP 360 diagnostic and interim assessments.

DISCOMFORT AND RISKS

If at any time, the collection of data makes you feel uncomfortable, you can choose to withdraw from the study with no repercussions.

POTENTIAL BENEFITS

There are no personal benefits to participation in this study. Your participation would contribute to the body of research related to co-teaching and inclusion.

COSTS AND COMPENSATION

There are no costs associated with participation in this study. You will not be paid or compensated for your participation in this study.

STATEMENT OF CONFIDENTIALITY

The research records will be reviewed, stored, and analyzed at the home of the researcher. They will be kept in a secured area and digital files will be stored on a password-protected device and within encrypted documents. All materials related to participants will be destroyed a minimum of three years after the study is completed. In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared. All participants will be given pseudonyms within the reporting of the research. Consent forms will not include a participant's pseudonym. The list linking pseudonyms to respondents will be kept as a password-protected file on the researcher's personal computer. This file will never be placed on a shared drive. A pseudonym will be used in all analysis files and presentations. The researcher will keep your participation in this research study confidential to the extent that I am able. However, the Xavier University Institutional Review Board (a committee that reviews and approves research studies) may inspect and copy research records.

STUDY WITHDRAWAL

If you choose to participate, you are free to withdraw your permission for the use and sharing of your information at any time. You must formally withdraw from the study in writing through an email to scragin@xula.edu.

VOLUNTARY PARTICIPATION

Taking part in this research study is voluntary. You are not required to participate in this study. If you choose to take part in the study, you can revoke your consent or withdraw from the study at any time. If you choose not to participate in the study, or choose to withdraw at any time, there will be no penalty or loss of benefits to which you are otherwise entitled.

CONTACT INFORMATION FOR QUESTIONS OR CONCERNS

If you have any questions, concerns, or complaints related to this research, contact Sally-Rose Gaglione at (504) 258-7627 or by email at scragin@xula.edu.

If you have any questions regarding your rights as a human participating in research, you may contact Dr. Charles Gramlich, Chair of the Xavier University IRB, at cgramlich@xula.edu, or at (504) 520-7397.

SIGNATURE AND CONSENT/PERMISSION TO BE IN THE RESEARCH

APPENDIX E

IRB Approval

XAVIER UNIVERSITY OF LOUISIANA
Office of Research and Sponsored Programs

1 Drexel Drive – Box 68
New Orleans, Louisiana 70125-1098
(504) 520-5444 (office) – (504) 520-7901(fax)

TO: **Sally-Rose Cragin Gaglione, MA, Principal Investigator**

FROM: **Charles Gramlich, PhD, Chair of Institutional Review Board**
Xavier University of Louisiana IRB

DATE: **April 5, 2023**

RE: **"HOW COTEACHING IMPACTS STUDENT ACADEMIC GROWTH IN ELEMENTARY SCHOOL."**

The above-named study involves the analysis of archival research. It is eligible for expedited review. The following actions have been taken regarding this study.

1. The proposed study is approved.
2. The Email solicitation is approved.
3. The Informed consent is approved.
4. The Administrator correspondence is approved.

This study is approved for a period of one year from the date of this memo. Any request to extend this study for more than one year must be made in writing to the Xavier University IRB at least two weeks prior to **April 5, 2023**. Any changes to the proposal that might affect the wellbeing of participants must be approved by the IRB prior to implementation. Please inform the Chair of the IRB when all data collection has been completed.

This project is assigned study number **#920** in the IRB files. It is *very* important that you refer to this project number in future correspondence regarding the study.

Reviewed and Approved

Dr. Charles Gramlich, Chair of IRB

Digitally signed by Dr. Charles Gramlich, Chair of IRB
Date: 2023.04.07 10:31:10 -05'00'

Charles Gramlich, PhD, Chair of Institutional Review Board
Xavier University of Louisiana IRB

cc. Kaneisha Bailey Akinpelumi, Associate V.P. for Research and Sponsored Programs