

Fall 2023

## TEACHER SELF-EFFICACY AND THE INCLUSIVE CHRISTIAN SCHOOL CLASSROOM

Richard J. Mudrow  
*Southeastern University*

Follow this and additional works at: <https://firescholars.seu.edu/coe>



Part of the [Disability and Equity in Education Commons](#), [Educational Leadership Commons](#), [Educational Methods Commons](#), and the [Teacher Education and Professional Development Commons](#)

---

### Recommended Citation

Mudrow, Richard J., "TEACHER SELF-EFFICACY AND THE INCLUSIVE CHRISTIAN SCHOOL CLASSROOM" (2023). *Doctor of Education (Ed.D)*. 146.  
<https://firescholars.seu.edu/coe/146>

This Dissertation is brought to you for free and open access by FireScholars. It has been accepted for inclusion in Doctor of Education (Ed.D) by an authorized administrator of FireScholars. For more information, please contact [firescholars@seu.edu](mailto:firescholars@seu.edu).

TEACHER SELF-EFFICACY AND THE INCLUSIVE CHRISTIAN SCHOOL CLASSROOM

By

JEFF MUDROW

A doctoral dissertation submitted to the  
College of Education  
in partial fulfillment of the requirements  
for the degree Doctor of Education  
in Organizational Leadership

Southeastern University  
August 2023

TEACHER SELF-EFFICACY AND THE INCLUSIVE CHRISTIAN SCHOOL CLASSROOM

by

JEFF MUDROW

Dissertation Approved:

*Sarah J. Yates*

---

Sarah J. Yates, EdD, Dissertation Chair

*Thomas J. Gollery*

---

Thomas J. Gollery, EdD, Committee Member

*Lisa A. Coscia*

---

Lisa A Coscia, EdD, Dean, College of Education

## DEDICATION

As educators, it is easy to become overly focused on student growth goals and survey data, but there are times when the simple joy of life and a willingness to do hard things become the better teacher. I dedicate this study to my nephew, who inspired my pursuit of a better way to teach students who learn differently. I hope your quick wit and hilarious antics never stop bringing people joy.

To my wife and family, thank you for your continuous encouragement to “keep on, keeping on” and for your willingness to endure the countless early mornings, long weekends, and holiday vacations when I was busy with homework, all without complaint.

Who would have thought that walking in the rain, playing with a barrel of toy monkeys on the stairs, memorizing the poems of Lewis Carroll, or enjoying a glass of strawberry milk could inspire an imagination that led to a lifetime of learning, but it did. Thank you, Grandma.

Finally, to my Lord and Savior, Jesus Christ. Whether it is a walk through dark valleys, a feast in the presence of enemies, or rest in a green pasture – you are there.

## ACKNOWLEDGMENTS

I want to thank Dr. Sarah Yates for serving as my dissertation chair and for her role in my doctoral journey. The encouraging emails, positive yet detailed feedback, and the regular reassurance that I could accomplish this educational goal showed that you have a genuine desire to help people thrive in school and life. Dr. Gollery, while your mind helped me understand the intricacies of a quantitative study, the early morning Zoom meetings and our discussions of working with students with disabilities showed me your heart. You encouraged me to continue helping the students that often need it the most.

To each of my SEU professors in this doctoral journey, Dr. Matthew Lee of the ACSI Research Department, Dr. Julie Lane, Dr. Tammy Bachrach, my fellow Christian school administrators, co-workers, and last but certainly not least, the remarkable Cohort N, thank you. I would not be where I am today without you.

## **Abstract**

Research indicates that one in five students nationwide struggles with a learning difficulty or disability that affects the student's ability to learn (Galiatsos et al., 2019). Nationwide, Christian schools are enrolling students with disabilities (SWDs), but it is difficult to determine the specific number of SWDs enrolled in Christian schools (Association of Christian Schools International, 2021). In the inclusive school setting, whether public or private, teachers and administrators are often underprepared in their approach to the education of SWDs (Cooc, 2019; Kirk et al., 2021; Krämer et al., 2021). The purpose of this study is to explore how teaching SWDs in an inclusive setting affects the Christian school teacher's efficacy or confidence. Further, the study considers key demographic identifiers, the power of a supportive administrator, and the relationship between these factors and teacher efficacy. Study participant perceptions of self-efficacy or confidence in educating students with disabilities were statistically significant, reflecting a very large response effect. Perceptions of administrative support were statistically significantly predictive of study participants' perceptions of self-efficacy. The survey data indicated that numerous teachers working in an inclusive Christian school are underprepared and that while access to professional development (PD) is readily available, the content of the PD appears to have a limited effect on improving teacher pedagogy or efficacy. Due to a limited sample size, the relationship between key demographic identifiers and teacher efficacy could not be statistically established. However, the study data offered promising findings regarding years of teaching experience and ESE coursework, which would benefit from future research.

*Keywords:* disability, efficacy, inclusion, Christian school, confidence

TABLE OF CONTENTS

Dedication..... iii

Acknowledgments..... iv

Abstract..... v

Table of Contents ..... vi

List of Tables..... ix

List of Figures ..... xii

I. INTRODUCTION ..... **ERROR! BOOKMARK NOT DEFINED.**

    Background of the Study ..... **Error! Bookmark not defined.**

    Conceptual Framework/Theoretical Foundation ..... 5

    Problem Statement..... 7

    Purpose Statement..... 8

    Overview of Methodology ..... 8

        Research Questions..... 9

        Research Hypotheses ..... 10

    Overview of Analyses ..... 10

        Preliminary Analysis..... 10

        Data Analysis by Research Questions ..... 11

    Delimitations..... 11

II. REVIEW OF LITERATURE ..... 13

    The Underprepared Inclusive Classroom Teacher.....14

    The Underprepared Inclusive Christian School.....17

    The Power of Efficacy in Teachers.....25

    Improving Teacher Efficacy.....31

    Summary..... 37

III. METHODOLOGY ..... 39

Description of Methodology .....	39
Research Context .....	39
Participants .....	40
Research Instrument(s) .....	41
Validity of Title of Instrument 1 .....	41
Reliability of Title of Instrument 1 .....	41
Procedures.....	42
Data Analysis .....	43
Preliminary Analysis .....	43
Research Question 1 .....	43
Research Question 2 .....	43
Research Question 3 .....	44
Summary .....	45
IV. RESULTS.....	47
Methods of Data Collection .....	47
Data Analysis by Research Question .....	61
Research Question 1 .....	61
Hypothesis .....	61
Analysis .....	62
Research Question 2 .....	62
Hypothesis .....	62
Analysis .....	63
Research Question 3.....	63
Hypothesis .....	64
Analysis .....	65
Summary .....	66
V. DISCUSSION.....	68
Review of Methodology .....	68
Discussion by Research Question.....	70
Research Question 1 .....	70
Research Question 2 .....	75



Research Question 3 .....	79
Implications for Future Practice.....	80
Significance.....	82
Study Limitations.....	83
Recommendations for Future Research .....	84
Conclusion .....	85
References.....	86
Appendix A .....	94

## LIST OF TABLES

Table	Page
Table 1: Descriptive Statistics Summary Table: Demographic Identifying Information (Gender, Educational Degree, Years of Experience, Community SES Status, and Community Type)....	49
Table 2: Descriptive Statistics Summary Table: Demographic Identifying Information (Undergraduate ESE Course Hours, Graduate ESE Course Hours, and Family Relative LD Status).....	50
Table 3: Descriptive Statistics Summary Table: Dimensions of Teacher Self-Efficacy.....	51
Table 4: Descriptive Statistics Summary Table: Dimensions of Teacher Self-Efficacy by Gender of Study Participant.....	52
Table 5: Descriptive Statistics Summary Table: Dimensions of Teacher Self-Efficacy by Community Type.....	53
Table 6: Unstandardized Loadings (Standard Errors), Standardized Loadings, and Significance Levels for Each Parameter in the CFA Model (N = 65).....	54
Table 7: CFA Fit Indices Summary Table: Construct of Teacher Self-Efficacy.....	55
Table 8: Internal Reliability Summary Table: Study Participant Perceptions of Self-Efficacy in Educating ESE Students.....	56
Table 9: Unstandardized Loadings (Standard Errors), Standardized Loadings, and Significance Levels for Each Parameter in the CFA Model (N = 66).....	57
Table 10: Estimated Error Variances and R <sup>2</sup> Values for Each Indicator Variable - Latent Variable Relationship in the CFA model.....	60

Table 11: Internal Reliability Summary Table: Study Participant Perceptions of Administrative Support in Educating ESE Students.....	61
Table 12: Summary Table: Evaluating the Statistical Significance of Study Participant Perceptions of Confidence in Their Ability to Teach Students with Disabilities.....	62
Table 13: Predictive Model Summary: Perceptions of Administrative Support Predicting Perceptions of Teacher Self-Efficacy in Teaching Students with Disabilities.....	63
Table 14: Linear Model Comparison Table: Non-Interaction and Interaction Model for Community SES.....	64
Table 15: Linear Model Comparison Table: Non-Interaction and Interaction Model for Community Type.....	65
Table 16: Linear Model Comparison Table: Non-Interaction and Interaction Model for Gender .....	65
Table 17: Linear Model Comparison Table: Non-Interaction and Interaction Model for Educational Degree.....	65
Table 18: Linear Model Comparison Table: Non-Interaction and Interaction Model for Years of Professional Experience.....	65
Table 19: Linear Model Comparison Table: Non-Interaction and Interaction Mode for Undergraduate ESE Course Hours.....	65
Table 20: Linear Model Comparison Table: Non-Interaction and Interaction Model for Graduate ESE Course Hours.....	66

Table 21: Linear Model Comparison Table: Non-Interaction and Interaction Model for Family  
Relative LD Status.....66

## LIST OF FIGURES

Figure	Page
Figure 1: CFA Node Illustration: Teacher Self-Efficacy.....	55
Figure 2: CFA Node Illustration: Administrative Support.....	58

## I. INTRODUCTION

The National Center for Education Statistics (2021) indicates that over 7 million students, which is 15% of all students enrolled in public schools, have been identified as students with disabilities (SWDs) and receive services under the Individuals with Disabilities Education Act (IDEA). According to the Council for American Private Education (2022), 34,576 private schools exist in the United States, with an enrollment of 5.7 million students, which accounts for 10% of the total student population in America. The Association of Christian Schools International (ACSI) is an accrediting agency working with over 2,200 member schools in the United States. Annually, ACSI surveys its member schools. In the 2020-21 school year survey, approximately 31% of the member schools responded. In the section relating to the education of SWDs, only 45% of the respondents completed the special education services section. Of the schools responding to the special education services section, 37% reported that special education services were offered (Association of Christian Schools International, 2021)

Determining the specific number of Christian schools that accept SWDs would be a complex task, as the literature on schools that serve SWDs is limited (Burke & Griffin, 2016). Although it may be difficult to accurately determine the total number of SWDs enrolled in Christian schools, research suggests that one in five students nationwide struggle with a learning disability, diagnosed ADHD, or a related disorder that negatively impacts the student's ability to learn (Galiatsos et al., 2019).

Pre-service training specific to working with SWDs is limited, with only seven states requiring coursework for teaching students with disabilities. Four states have added SWD-related licensure standards, and one mandates a minimum number of internship hours focused on teaching SWDs (Galiatsos et al., 2019). In California, Gottfried et al. (2019) reported that of the 44 institutions with programs that offer a combined master's degree in education and a California teaching credential, pre-service teachers must complete only one course focused exclusively on educating SWDs. Though many universities offer exemplary teacher education programs, minimal time is dedicated to the pre-service teacher's study of meeting the needs of SWDs.

### **Background of the Study**

In most instances, the placement of SWDs in the general education classroom, or inclusion, is a requirement in the public school system (Individuals with Disabilities Act, 2004). However, to properly educate SWDs, teachers working in inclusive classrooms must receive sufficient pre-service training to succeed in an inclusive classroom setting, but that training is often lacking (Krämer et al., 2021). As pre-service teachers move into full service in the general education classroom, the teacher's abilities and skills should be enhanced with ongoing professional development specifically designed to improve learning for all students enrolled in the class (Cooc, 2019). However, Kirk et al. (2021) noted that many administrators, due to limited knowledge of SWD learning needs, are limited in their ability to support teachers working with SWDs appropriately. The administrative lack of knowledge limits the ability of the administrator to offer appropriate emotional support to the faculty and reduces the effectiveness of ongoing professional development in a crucial area (Kirk et al., 2021).

Christian schools can determine their own admissions procedures and are not obligated to follow IDEA. The lack of federal requirements and the limited amount of SWD-specific school

policy places the burden of creating SWD policy, correctly following SWD procedures, and appropriately educating SWDs upon general education classroom teachers assigned to teach in an inclusive environment (Lane & Jones, 2015).

The number of programs that offer training to Christian school educators related to teaching SWDs is limited, which often leaves the Christian school dependent upon teachers who were trained to teach in public schools to meet the needs of SWDs (Lane, 2017). If, as Lane (2017) suggested, Christian schools heavily rely on teachers trained to work in public schools, then the likelihood of teaching SWDs with underprepared teachers increases. Data from a recent national ACSI survey indicated that only 26% of ACSI schools report having 80% or more of the school's teachers hold a state teaching certification. Additionally, the survey data indicated that 34% of ACSI schools reported that less than 30% of the classroom teachers hold state certification, with multiple schools reporting classroom teachers who have not completed any post-high school degree program (Association of Christian Schools International, 2021). The responding schools may have teachers working to complete a degree or teacher certification program. Still, the data suggest that numerous SWDs in Christian schools are placed in classrooms with underprepared teachers.

Christian schools often lack specific policies and procedures for admitting or educating SWDs, and improved professional development targeted at teaching SWDs is needed (Clausen et al., 2022). Burke and Griffin (2016) noted that administrative oversight and clear expectations are critical elements of a school's plan to educate SWDs cohesively. In Christian schools, where SWDs are inclusively placed in the general education classroom, the teacher must possess the skill and ability to understand the specific learning needs of the SWD and develop a quality differentiated lesson plan that provides targeted instruction. Due to being underprepared and



having limited guidance offered by school administrators, many general education classroom teachers in Christian schools face challenges when asked to teach students with disabilities. According to Bachrach (2021), the administration must require that all professionally recommended learning accommodations or modifications are followed and should pursue specialized services when needed.

Christian school administrators and teachers should be cautioned that knowledge of classroom instruction techniques and pedagogical skills is insufficient for efficacious teaching (Nwoko et al., 2022). For all students, including SWDs, to succeed in pursuing their full potential, the general education classroom teacher must possess a positive attitude and genuinely want each student to excel (Krämer et al., 2021). When school administration enrolls SWDs in the general education classroom, an underprepared teacher may begin to doubt their ability to educate every student in the class appropriately. The doubt may lead to undesirable attitudes and questioning the teacher's belief in their ability to perform the task before them, resulting in a declining degree of self-efficacy.

The undesirable attitude regarding the teaching of SWDs in an inclusive setting was observed by Clausen et al. (2022), who noted that not all teachers and administrators favor fully inclusive student placement practices in Christian schools. Clausen et al. (2022) surveyed teachers and administrators in a large private Christian school district in the southeastern United States and found that 78.9% of respondents felt that SWDs should receive only some instruction in the general education classroom. An additional 7.8% of respondents felt that SWDs should be included only in the general education classroom for social skill learning.

Christian schools that educate kindergarten through grade 12 students cannot easily effect substantial change in the state requirements for pre-service teachers. Still, Christian school

leaders and general education teachers could develop cohesive policies and incorporate ongoing professional development that would guide the school and the individual teachers in their approach to educating SWDs. When teachers believe in themselves and their abilities to teach all students, a classroom environment can be developed where every student can and will learn (Burke & Griffin, 2016).

### **Conceptual Framework**

Self-efficacy theory is easily defined in the theme reflected in the childhood book *The Little Engine That Could*. In the story, a small train succeeded in climbing the hill where other larger and more powerful trains either would not or could not succeed, based on belief and the repeated mantra of “I think I can, I think I can” (Piper, 1930, p. 30). Bandura (1977) conducted early research using the self-efficacy theory. Bandura’s research suggested that psychological experiences can raise or lower a person’s self-efficacy regardless of the setting. Within each experience, the level of self-efficacy possessed will determine if a coping behavior is utilized, the level of effort the person is willing to exert, and the duration of the effort given in the face of sustained difficulty. Bandura (1977) noted that individuals develop an outcome expectancy, which is the individual’s belief that a specific action will or will not accomplish a particular task.

Additionally, the individual will hold an efficacy expectation, which is the level of belief that the individual possesses the unique ability necessary to achieve a specific task.

The self-efficacy theory contains three elements used to measure efficacy levels: generality, strength, and magnitude (Bandura, 1986). The element of generality refers to the relation of success or failure in one area and how the resulting increased or decreased efficacy is generally applied to another similar application. Second, the element of strength applies to a person’s steadfastness in the belief that the individual possesses the necessary skills to succeed.

Finally, magnitude refers to the level of difficulty faced, which can range from simple tasks to moderately difficult to incredibly taxing, and answers the question of how much the individual can handle given the level of efficacy (Maddux & Stanley, 1986).

Individuals possess varying levels of efficacy depending on the circumstance, but within each unique situation, outside factors can increase or decrease the individual's personal belief in their ability to succeed. Bandura (1977) noted that four situations affect a person's efficacy. The first situation occurs from actual accomplishments. When an individual attempts to overcome a problem and succeeds, the feeling of success enhances self-efficacy, which carries over to the next opportunity to solve a problem (Schunk & DiBenedetto, 2016). Performance accomplishments offer the longest lasting and most significant impact on an individual's self-efficacy, and the efficacy increase after finding success provides a buffer to more easily withstand future failure (Bandura, 1977).

Second, efficacy can increase or decrease based on vicarious experiences. When an individual is assessing their ability to overcome an obstacle, efficacy can increase vicariously as the individual observes a peer finding success in overcoming the same obstacle (Bandura, 1977). For a vicarious experience to create a sustained increase in efficacy, studies have shown that the observed experience must be a modeled behavior with clear expectations and a defined measure of success (Schunk & DiBenedetto, 2016). Bandura (1977) suggested that a discrepancy between efficacy and actual performance most often occurs when an individual is faced with situational or ambiguous conditions that lack clear goals.

Third, encouragement from a peer or supervisor can verbally persuade an individual that they possess the skills necessary to succeed, and the support offered provides sufficient motivation to move forward. Peers and supervisors easily offer encouragement, but research has

indicated that verbal persuasion provides only a short-term impact on efficacy. Thus, it is the least effective (Maddux & Stanley, 1986).

Finally, the emotional state of an individual can affect efficacy. Anxiety and stress levels naturally increase when an individual faces a new or intimidating challenge; if the individual's emotional state can improve, the individual's belief in their ability to overcome the challenge increases (Bandura, 1977).

Pre-service teachers begin to accrue performance accomplishments in the educational setting, which increase as the teacher moves into a regular teaching role. Once the teacher enters full-service teaching, targeted professional development becomes the most common source of new success as the teacher can enhance a skillset and then quickly put it into practice (Yang, 2020). Likewise, pre-service teachers gain vicarious experiences throughout the pre-service teaching internships and through partnerships with mentor teachers and peers. The school administration plays an integral role in increasing or decreasing a teacher's self-efficacy based on the level of genuine and consistent feedback and encouragement (Kirk et al., 2021). Finally, when the teacher experiences the combined power of performance accomplishments, relevant professional development, and genuine encouragement from the school administration, the teacher's emotional state will settle into a healthy place, and increased efficacy will follow (Specht & Metsala, 2018).

### **Problem Statement**

Due to federal requirements, public schools must place SWDs in the least restrictive learning environment, which is the general education classroom in most cases (Individuals with Disabilities Act, 2004). Christian schools, however, are not obligated to follow IDEA and can implement their own admissions procedures and SWD-related school policy. The lack of federal

requirements and inconsistent Christian school policies related to SWDs places the burden of appropriately educating SWDs upon teachers assigned to teach in an inclusive environment (Lane & Jones, 2015). The number of programs that offer training to Christian school administrators and educators related to teaching SWDs is limited, which often leaves the Christian school dependent upon former public school teachers hired to teach in Christian schools (Lane, 2017).

Due to being underprepared and offered limited school guidance, many general education classroom teachers in Christian schools face challenges when asked to teach students with disabilities (Kirk et al., 2021).

### **Purpose Statement**

The purpose of this non-experimental quantitative study was to measure the self-efficacy of teachers who work with students with disabilities in the inclusive classroom at private Christian schools. At this research stage, self-efficacy was defined as an outcome expectancy which is the individual's belief that a specific action will or will not accomplish a specific task (Bandura, 1977).

### **Overview of Methodology**

This quantitative research study was non-experimental and focused on the measurement of teachers' efficacy. For this study, the term students with disabilities (SWDs) refers to a student that may or may not have a diagnosed learning disability, difficulty with attention span, or reoccurring attitude/behavior that negatively impacts the student's ability to learn.

## Research Questions

This study addressed the following research questions:

1. To what extent do Christian school teachers assigned to inclusive classrooms perceive themselves as confident in their ability to teach students with disabilities?
2. To what degree is the support of the Christian school administration predictive of the self-efficacy of the inclusive classroom teacher?
3. Do the study's demographic identifier variables moderate a predictive relationship between a supportive school administration and the self-efficacy of the inclusive classroom teacher?

The purposive sample population was obtained through a nationally distributed survey of Christian school teachers. In partnership with ACSI's graduate research program, a survey link would be distributed to Christian schools, which would offer a varied response from schools of different sizes, geographic locations, socio-economic status, and school locations in urban, suburban, and rural settings.

The instrument used to measure teacher self-efficacy when teaching SWDs was the Teaching Students With Disabilities Efficacy Scale (TSDES; Solomon & Scott, 2013). Tests were conducted to determine the validity and reliability of the TSDES instrument ( $\alpha = .93$ ). The TSDES utilizes a 5-point Likert scale divided into five categories: instruction, professionalism, teacher support, classroom management, and related duties. To measure how the school culture affects teacher efficacy, additional questions specific to school culture were added, plus several questions related to teacher and school demographics. The participants in the study were assured

that the responses would be confidential and private, and all study information would be password protected.

## **Research Hypotheses**

1. To what extent do Christian school teachers assigned to inclusive classrooms perceive themselves as confident in their ability to teach students with disabilities?

*H<sub>1</sub>*: Teacher confidence, when asked to teach students with disabilities, will be lacking.

2. To what degree is the support of the Christian school administration predictive of the self-efficacy of the inclusive classroom teacher?

*H<sub>2</sub>*: The factor of school administration will significantly impact teacher self-efficacy.

3. Do the study's demographic identifier variables moderate a predictive relationship between a supportive school administration and the self-efficacy of the inclusive classroom teacher?

*H<sub>3</sub>*: A significant relationship between demographic identifiers and increased efficacy will exist.

## **Overview of Analyses**

### **Preliminary Analysis**

The research questions were answered through a quantitative, non-experimental research design that utilized a survey format to gather relevant data. The research instrument was validated through confirmatory factor analysis, and descriptive, inferential, and predictive statistical methods were used to analyze the data.

## **Data Analysis by Research Questions**

A one sample  $t$  test was used to analyze the data from research question one, where the statistical significance of the mean score of the study responses was compared to the perceptions of confidence in the teacher's ability to educate an SWD assigned to their classroom appropriately. The participant mean score perceptions of efficacy to teach SWDs were statistically significant ( $p < .001$ ), and the effect size was very large at  $d = 1.37$ .

For research question two, simple linear regression was used to analyze the predictive relationship between teacher efficacy and the role of a supportive school administrator. The model was statistically significant ( $p = < .001$ ), which indicated that the perception of a supportive administrator explained 47.67% of the variance in perceptions of teacher efficacy.

Formal moderation analysis was utilized in research question three, which evaluated whether the respondent's demographic identifiers might moderate teacher efficacy. The conditions required to support the formal moderation analysis were not fully met; however, the data analysis for research question three produced promising findings.

## **Delimitations**

This study intended to determine how teaching SWDs in an inclusive Christian school affected teacher efficacy. Only teachers from ACSI-accredited or member schools were surveyed, so the findings may not be generalizable to other non-religious private schools. The sample was also limited because the study focused only on Christian schools in the western United States.

Previous research has indicated that Christian school teachers often need more pre-service preparation to teach SWD, and policies enacted by administrators who lead inclusive Christian schools can be limited in scope. However, whether from students enrolled at a young



age, who later exhibited signs of a learning difficulty, or through a regular new student admissions process, SWDs attend Christian schools. The purpose of the study was to understand better how teacher self-efficacy was affected when the teacher was asked to work in an inclusive environment. As teacher efficacy studies specific to inclusive Christian schools were limited, the researcher hoped to discover findings that may enhance teacher efficacy, thus improving teachers' abilities and the SWD's access to quality education.

## II. REVIEW OF LITERATURE

The purpose of this non-experimental quantitative study was to measure the self-efficacy of teachers who work with students with disabilities in the inclusive classroom at private Christian schools. At this research stage, self-efficacy was defined as an outcome expectancy which is the individual's belief that a specific action will or will not accomplish a specific task (Bandura, 1977).

The 10<sup>th</sup> Amendment to the United States Constitution gives powers that are not expressly reserved for the federal government to the individual states. When the Constitution was adopted in 1787, the power to regulate the education of the citizens was reserved for state and local governments (U.S. Const. amend. X). When approaching the task of educating its citizens, which included SWDs, the individual states took vastly different approaches leading to substantial inconsistencies and an unequal teaching environment (Yell et al., 1998). In 1954, the United States Supreme Court, in the landmark civil rights case of *Brown v. Board of Education*, determined that an education that was theoretically equal yet separated by race was a violation of the 14<sup>th</sup> Amendment and was, therefore, unconstitutional (*Brown v. Board of Education, 1954*). Relying heavily on the concept of a separate educational system being unequal and unconstitutional, the federal government passed numerous educational reform laws that now give specific guidance to state and local educational agencies (Yell et al., 1998).

President Gerald Ford signed the Education for All Handicapped Children Act in 1975, now known as the Individuals with Disabilities Education Act (Individuals with Disabilities Education Act, 2022). The Individuals with Disabilities Education Act (IDEA) is an expansive set of regulations. Still, the law specifically requires that all children in the United States are

offered a free appropriate public education (FAPE), obtainable whenever possible in the least restrictive environment (LRE), which is most often the general education classroom. The IDEA establishes multiple guidelines for educational agencies, but the process of appropriately preparing a pre-service general education classroom teacher to teach successfully in an inclusive classroom setting was not included (Individuals with Disabilities Education Act, 2022).

The National Center for Education Statistics (NCES) reported that 7.2 million students, ages 3-21, attend school with a diagnosed learning disability. The NCES data from 1989 notes that only 11% of SWDs spent greater than 80% of their day in a general education classroom, but by 2020 that number had grown to 66%, placing an increasing amount of responsibility on the general education classroom teacher (National Center for Education Statistics, 2022).

### **The Underprepared Inclusive Classroom Teacher**

Krämer (2021) noted that specific training is required during pre-service coursework to teach in the inclusive setting and to successfully develop integrated lessons that will meet the needs of learners, including SWDs. Gottfried et al. (2019) interviewed a pre-service graduate degree teacher cohort in southern California, where passing a subject-specific assessment instrument called edTPA is required. The edTPA was created to improve the skills of pre-service teachers by assessing mastery of a rigorous set of teaching standards (Darling-Hammond, 2021). The research team reported that California has 44 institutions where edTPA is a mandatory component of graduation, yet only one course is specifically focused on the instruction of SWDs. The report data indicated that multiple classes include components on meeting all learners' needs, including SWDs (Gottfried et al., 2019; Hagaman & Casey, 2018).

Classroom teachers must be able to create differentiated lesson plans that address the learning needs of each student in the classroom. However, teacher training programs must

intentionally teach this complex skill to pre-service teachers (Auhl & Bain, 2021). Nwoko et al. (2022) noted that in most cases, pre-service teacher training offers only basic teaching skills that must be enhanced through a lived experience once the teacher is assigned to a full-time teaching assignment. The respondents in the study by Nwoko et al. (2022) said that teachers needed to receive pre-service training that was sufficient preparation to manage an inclusive classroom environment, particularly in handling disruptive behaviors presented by SWDs. One respondent stated, "I'm confident only because of my years of experience. I think if I was a new teacher, I wouldn't be confident at all" (Nwoko et al., 2022, p. 82). Friesen and Cuning (2020) also found that pre-service teachers expressed concern about their ability to manage the classroom behavior exhibited by SWDs, causing a disorderly environment where learning was hindered.

Auhl and Bain (2021) studied the ability of final-year pre-service teachers ( $n = 158$ ) from three universities in Australia to utilize previous life experiences and acquired knowledge to develop appropriate lesson plans for an inclusive classroom. When given 30 minutes to create an inclusive and differentiated lesson plan, the respondents struggled to succeed, with 66% scoring a level zero, indicating no proper understanding of an appropriate professional response to the scenario. Within the study framework, the findings were significant ( $p = .05$ ; Auhl & Bain, 2021).

Pre-service teachers often feel poorly prepared to teach SWDs and cite a need for specific pedagogical training and an improved understanding of the many types of SWD learning needs, to meet better the learning needs of all students (Young, 2018). Nwoko et al. (2022) noted that pre-service training does not properly inform future teachers of how learning disabilities manifest in the classroom. Often two students with a similar diagnosis may require two different educational approaches. Young (2018) surveyed teachers and administrators ( $n = 77$ ) who

worked in an inclusive school setting. When asked what pedagogical skills are essential in teaching SWDs, respondents noted that differentiated instruction and teaching methods to calm and refocus students scored most critical. Yet, research indicates these skills are often lacking in pre-service training (Auhl & Bain, 2021; Krämer et al., 2021; Nwoko et al., 2022; Specht & Metsala, 2018). Auhl and Bain (2021) echoed this sentiment, noting, "If entry-level teachers are to act with competence in relation to inclusive practice, they need to be able to think about the specifics of their practice in ways that produce reasoned plans of action" (p. 372).

In the United States, school administrators struggle to overcome a substantial shortage of teachers with specified training in teaching SWDs. Nationwide, almost 50% of local school administrators have reported that teaching SWDs has been negatively impacted by the lack of teachers with training specific to special education (Cooc, 2019). The result is that inclusive students are often taught by part-time or temporary instructors who often have less training and fewer years of teaching experience than students in non-inclusive classrooms (Cooc, 2019). In the state of California, which hosts some of the nation's largest school districts, 80% of school administrators are reporting a shortage of qualified teachers, and 90% of the administrators note that the situation in their specific schools is worse than in the previous year (Darling-Hammond et al., 2018).

The federal government has expanded SWDs' access to an appropriate education. Yet, while educational access has increased, due to the shortage of qualified teachers, the quality of the inclusive classroom teacher appears to be lagging. Due to limited pre-service teacher training and a nationwide teacher shortage, many SWDs placed in an inclusive setting may continue to struggle (Cooc, 2019).

## **The Underprepared Inclusive Christian School**

Christian schools are not required to follow federal laws specific to inclusive education, such as IDEA, and are not mandated to report SWD-related admissions or learning data to federal databases. Additionally, Christian schools are not required to enroll SWDs or offer any specialized program specific to SWDs (Bonfiglio & Kroh, 2020). However, a growing number of Christian school directors and administrators believe that educating all children, regardless of ability, is a spiritual calling and is viewed as an integral part of the Christian school mission to educate all of God's children (Lane et al., 2019). Admitting SWDs into Christian schools is admirable, but unfortunately, Christian schools are often underprepared to offer the quality education that an SWD needs and deserves (Bartholio, 2020).

Clausen et al. (2022) studied three Christian schools in the southeast United States, which were functioning as a small integrated school district. The schools in the study were specifically selected due to the schools' commitment to inclusive education. All three schools admit SWDs and employ at least one faculty member trained in special education who serves as the building expert on special education. However, only 16% of the general education classroom teachers hold a special education credential, and 10% do not have a degree in education, placing a heavy burden on a relatively small number of teachers.

Lane (2017) surveyed multiple Christian schools ( $n = 329$ ) located in 44 states and one territory, and 328 respondents indicated that they enrolled SWDs. The data suggested that the number of trained special education teachers was limited, with 53% of the schools responding that the school enrolls SWDs but has no faculty members trained in special education. Bartholio (2020) reported similar data from 16 Christian schools that accepted SWDs, yet 13 reported no faculty members with a special education credential.

Although some Christian schools may not have faculty members specifically trained in the education of SWDs, hiring multiple trained faculty members may not be essential. Scanlon (2017) reported on an education model where the school employed a single teacher with a special education credential who served as the building expert and was given the title of "learning consultant." The learning consultant acted as a mentor and coach to the other faculty members and coordinated a school-wide effort to provide quality education to all enrolled SWDs.

The parent of a child with a learning disability is federally guaranteed an appropriate education for their child in the public school system, which often has a vast array of resources to provide for the SWD. However, many Christian families are turning to a biblically based education, knowing that special education-specific resources may be severely limited (Bartholio, 2020). For many religious schools that admit SWDs, the belief that God does not make mistakes is foundational to the school's mission. Therefore, the enrollment of God's children is valued, yet the school teachers may not be able to adequately meet the learning needs of the SWDs that the school administration chooses to enroll (Lane et al., 2019). The growth of families seeking a Christian school and the Christian schools enrolling SWDs in ever-increasing numbers can create a situation where both the families and the teachers face obstacles that can limit the educational success of the SWD (Clausen et al., 2022).

Christian schools that have assigned SWDs to the general education classroom face different obstacles on the path to quality education beyond the difficulty presented by teachers who are underqualified to teach SWDs. Parents of an SWD desire what is best for their child, but if they feel a Christian education would meet these criteria, the parent is faced with a difficult choice. The special education system in the public school system is well-equipped with trained

teachers and multiple programs to meet student needs. Yet, many public school systems are struggling due to staffing shortages and may not align with the values and lifestyle of the family. Alternatively, the Christian school may offer an exceptional lifestyle alignment, but the Christian school may offer little to no system for educating or supporting an SWD (Bartholio, 2020).

In Christian schools, the classroom teacher will often be the first to notice when a student begins to struggle. Christian school teachers often develop important relationships with their students and allowing the teacher to quickly recognize that the student can no longer keep up with other students in the class. After implementing multiple methods of instruction to meet the learning needs of the struggling student, the teacher often requests a meeting with parents where the student's academic struggles are discussed and more formalized testing is recommended (Nwoko et al., 2022). Unfortunately, the recommendation can be met with parental resistance, as discussed by a Christian school classroom teacher who shared that having children in the class who have not been diagnosed can be more of a challenge than the children who have been diagnosed. The teacher went on to note that the undiagnosed students have specific needs that have not been ascertained because parents just do not want to have their child tested (Nwoko et al., 2022).

Parents of SWDs who have enrolled their child in a Christian school often know that the schools are not adequately equipped to meet their child's needs, and the emotional strain of being asked to leave the school can be substantial. Teachers have reported that knowing how to have difficult conversations with the parent of an SWD is a challenging area in which many teachers have no formal training (Young, 2018).

However, in some cases, the Christian mission and desire to avoid looking at outward appearances but instead examine the child's heart can overcome the lack of a well-funded and



formalized special education program (Lane et al., 2019). Educating an SWD in a Christian school can be a difficult academic journey, but success can be found when parents and the Christian school are committed to the child's education. A parent of an SWD with a son enrolled in a Christian school stated:

Every day, the faculty of the school and I prayed for my son, and we all just kept showing up. New grace was given to Jonah, his teachers, his classmates, and us every day, and by the end of the school year, everyone could see that a corner had been turned. (Bachrach, 2021, p.11)

Catholic schools, and in more recent years, Protestant Christian schools, have often struggled to meet the needs of all students, including SWDs. However, it is not for lack of desire but rather a fear that the teachers do not possess essential knowledge or the school cannot offer the necessary resources for the student to succeed (Bonfiglio & Kroh, 2020). One resource that is lacking is the offering of top-quality professional development provided on a consistent basis that is specific to meeting the learning needs of SWDs. Approximately 60% of teachers across the United States report having no SWD-specific professional development in the past 12 months. Of the 40% of teachers who did participate in SWD-specific professional development, only 20% reported that the professional development enhanced their ability to meet the learning needs of the SWDs in their classrooms (Cooc, 2019). Clausen (2022) reported on the lack of quality professional development offered to teachers in Christian schools, with 81% of the respondents stating that the lack of appropriate professional development is a barrier to success in the inclusive classroom environment.

School administrators are not immune from the lack of pre-service training or regular professional development in the area of special education. White et al. (2021), in a study focused

on K-12 school administrators ( $n = 105$ ) in one southeastern state, reported that 74% of principals do not have a background in special education. The data also indicated that 19% of the respondents reported having taken no courses relating to special education, and an additional 49.5% reported less than nine hours of coursework in special education. The data indicated that professional development is limited for school administrators, with 46.7% of respondents reporting participation in 15 or fewer hours of training specific to educating SWDs.

Teachers report that finding ways to manage the classroom behavior of SWDs is particularly challenging. Though professional development might be offered multiple times yearly, it does not provide specific strategies to improve student progress. Specifically, teachers requested professional development that allowed for a more detailed understanding of specific types of disabilities giving the teachers an improved ability to plan lessons designed to meet the learning needs of each SWD in the class (Nwoko et al., 2022). Young (2018) noted that teachers specifically requested actionable research and information from settings specific to where teachers work and taught by those who understand the realities of the classroom environment.

The limited pre-service coursework completed by most general education classroom teachers makes quality professional development essential for successfully teaching SWDs. Lane (2019) reported tremendous value for faculty members when the building expert in special education can "empower staff by teaching them and building confidence in the tools they had in their tool chest." (p. 51)

After the limited access to quality professional development, another commonly encountered obstacle in the education of SWDs relates to daily scheduling. Clausen (2022) reported that 84% of teachers report that overall class size creates a barrier to a quality teaching experience for SWDs. Quality lesson planning is the key to success in any classroom and

becomes critical yet time-consuming in the inclusive classroom environment, particularly when the teacher experiences an overcrowded classroom. Auhl and Bain (2021) found that pre-service teachers struggle to develop quality lesson plans that implement specific learning strategies for SWDs. The lack of pre-service training is compounded by the limited number of Christian schools that offer quality professional development.

One planning method that has enhanced an educator's ability to educate SWDs appropriately is effective collaboration in the lesson planning process. Lane et al. (2019) utilized a qualitative method to explore the inclusive culture of three Christian schools in the western United States and reported that teachers found value in collaborating with a teacher who had training in special education. The planning sessions allowed the teachers to consider the accommodations and modifications offered to each SWD, and lesson plans could be developed in light of each student's education plan. One teacher noted that the SWD specialist was "constantly available, highly responsive to peers and parents, and empowered the staff by teaching them how to use the tools in their (the teachers) tool chest" (Lane et al., 2019, p. 51). Teachers often turn to their peers who are experienced in working with SWDs or know a specific SWD. However, a positive and non-judgmental school culture must exist for collaborative lesson planning to be effective.

Quality professional development can enhance pedagogy, and collaborative lesson planning can improve the effectiveness of a student's ability to learn. The ongoing availability for teacher growth is the responsibility of the school administration to develop and the classroom teacher to implement. Scanlan (2017) conducted a case study of two Catholic secondary schools in an urban area of the United States. The two schools were selected for the study due to similar demographics and the implementation of a similar program involving a learning consultant, a

special education expert, to educate SWDs. The data collected through teacher interviews indicated that one school's faculty found great success in teaching SWDs, while the other faculty struggled. The school administration at the effective school established school policies focused on collaborative teaching and collective learning and pushed the faculty toward success. The teachers collaborated and improved the quality of their lesson plans through peer observations and interdepartmental faculty meetings (Scanlan, 2017).

In contrast, the school administration where SWDs continued to struggle utilized a traditional walk-through observation method where teachers were given isolated feedback via email. Scanlan (2017) noted that neither of the methods used by the two schools was incorrect. However, one school administration developed a learning culture that connected the teachers, and one administration created a link between the administration and a single isolated teacher. When a Christian school administration develops a comprehensive set of policies that encourage consistent communication and collaboration, the variables in the educational journey are reduced, and an established pathway is made clear.

Christian schools are faced with a complex task when deciding whether to enroll SWDs, as information regarding the student's needs is often limited, and the school's ability to appropriately educate the child is difficult to determine. Due to limited resources, Christian schools often enroll the SWD and quickly look to the local public school for educational support. Unfortunately, families who wish to attend a Christian school may have just left the public school system as they sought a new academic environment for their child with a learning disability (Ramirez & Stymeist, 2019). In addition to a clear admissions policy, Christian schools must develop a formal process for recognizing a child exhibiting signs of a learning disability. As

a component of IDEA, public schools follow a formalized "child find" process, and Christian school administrators are responsible for developing a similar strategy (Scanlan, 2017).

Christian schools must develop and adhere to policies relating to the timely grading of assignments, allowing for responsive student feedback and appropriate adjustments to lesson plans. The student's academic grades and any standardized testing or educational evaluations should be organized and systematically retained for future reference (Scanlan, 2017). The year-over-year academic data can guide the school in decision-making and in developing an individualized program for each SWD. The program should include student accommodations and modifications similar to the individualized education program (IEP) or 504 plan used in the public school system (Bonfiglio & Kroh, 2020; Lane et al., 2019).

Established school procedures and admissions policies often dictate who is enrolled in a Christian school, but the most prominent obstacle teachers face in education is not lack of funding or limited professional resources but rather the mindset and heart attitude of the school administration (Ramirez & Stymeist, 2019). One difficulty school administrators face in Christian schools is balancing the rising demands of a society focused on inclusivity and equity and the thoughts of what the school administrator actually believes (Lüke & Grosche, 2018). Students with disabilities are unique individuals, divinely designed by their Creator. School administrators must allow for an open mindset and the willingness to not pre-judge a student due to a learning difference (Carter et al., 2022). School administrators must take the time to reflect upon the reality that SWDs learn differently and that the school's definition of excellence may need to be reconsidered if SWDs are allowed to attend (Lane et al., 2019). Christian school administrators focus considerable energy on increasing student enrollment and boosting standardized test scores. These areas are important, yet an inclusive Christian school may need to

redefine these metrics to create an educational environment that is genuinely inclusive of students of all learning styles (Ramirez & Stymeist, 2019).

Bonfiglio and Kroh (2020) reported that 87% of Catholic schools do not have the capacity to meet the learning needs of the SWDs who are enrolled. Should a Christian school seek to develop an inclusive environment, the school administration and teachers will need to consider far more than simply providing access to a seat in a classroom (Clausen et al., 2022). Christian school administrators must evaluate the specific learning needs of each SWD. Classroom teachers must develop differentiated lesson plans that meet the needs of all learners, and the whole school community must be willing to create an inclusive culture where students of all learning styles are embraced (Bachrach, 2021).

### **The Power of Efficacy in Teachers**

The difficulty of being unable to meet the academic needs of SWDs is increased by the substantial amount of annual teacher attrition, resulting in a revolving door of faculty changes and staffing shortages. Each year, school administrators are faced with 8% of the teachers nationwide choosing to leave the profession and an additional 8% electing to move to a new school (Carver-Thomas & Darling-Hammond, 2019). The National Education Association reported that 55% of educators are considering leaving the teaching field earlier than initially planned and that 90% believe burnout is a serious issue facing classroom teachers (GBAO, 2022)

Gilmour and Wehby (2020) conducted a three-year study utilizing teachers ( $n = 116,827$ ) who worked in 2,305 public schools in North Carolina. Gilmour's data were statistically significant ( $p < .001$ ) and indicated that the likelihood of teacher turnover increased as the number of SWDs in the classroom rose. The data indicated that teachers with special education credentials favorably moderated the percentage of teachers who leave the profession, suggesting

that the additional training specific to teaching SWDs decreased the likelihood of an early professional exit. Unfortunately, within the sample population, only 6% of the teachers held a special education credential, which did little to affect the overall level of teacher attrition (Gilmour & Wehby, 2020).

In education, the teacher's identity becomes intertwined with their career, with an unhealthy confusion between who they are and what they do. Research has shown that a teacher's work becomes the teacher's identity, and any perceived failure in the classroom becomes personal (Sproles, 2018). One attribute that all excellent teachers possess is a commitment to accomplishing academic growth for all students. However, when the number of SWDs enrolled in a class increases, the need to develop uniquely differentiated lesson plans increases. When the creation of multiple lesson plans becomes necessary, the effort exerted by the teacher in both the planning phase of teaching and the daily classroom management rises, and the potential for exhaustion, stress, and, eventually, burnout becomes a reality (Hagaman & Casey, 2018).

School administrators struggle to manage the lack of credentialed teachers, and teachers face increased levels of stress and exhaustion. Research indicates, particularly in the inclusive school setting, that one piece of the solution is found in something as simple as the positive attitude often fostered by supportive school administrators (Krämer et al., 2021). Kirk et al. (2021) conducted a study exploring the relationship between administrative support and the efficacy of teachers working with SWDs. The study's findings were statistically significant ( $p = .009$ ), and the effect size was small. The quantitative study utilized surveys completed by principals ( $n = 31$ ) and classroom teachers ( $n = 226$ ) who worked in 77 public schools in 13 states and served kindergarten through grade 12 students. The data analysis indicated a positive

correlation between the support shown by school principals and increased teacher efficacy. As school principals offer increased support to teachers working in an inclusive classroom, the teacher's efficacy level increased. Likewise, as the support level provided by the principal decreased, so did the teacher's efficacy (Kirk et al., 2021).

Savolainen et al. (2022) conducted a study in Finland that took place over 3.5 years, and data were collected from classroom teachers ( $n = 1,452$ ) who worked in 69 different schools. Of the 1,452 respondents, 76.2% were female. The purpose of the study was to explore whether teacher self-efficacy regarding SWDs affected the teacher's attitude or if the teacher's attitude towards inclusive education affected their self-efficacy. The findings were significant ( $p = .001$ ), and the data indicated that the level of teacher efficacy affected teacher attitude. The data also indicated that neither gender nor teaching experience changed the effect that efficacy had on attitude. The research team explored the general attitudes held by teachers regarding their belief in the value of inclusive schools and also a specific sub-dimension the team identified as teacher concerns. The teacher concern sub-dimension differed from general attitude category in that it related to the specific teacher's personal views on teaching SWDs in their classroom, taking the findings to a more personal level. The level of efficacy affecting teacher attitude increased when specifically addressing teacher concerns indicating a greater likelihood of acceptance of general inclusive practices, but more importantly, the acceptance of SWDs in the individual teacher's classroom (Savolainen et al., 2022).

In Saudi Arabia, a second study was conducted by Alnahdi and Schwab (2021), where the researchers considered the relationship between the efficacy of inclusive classroom teachers and the role of the teacher's attitude. The teachers ( $n = 185$ ) taught in eight public elementary schools in Riyadh, Saudi Arabia. The respondents were 85% male, contrasting the similar study



conducted by Savolainen et al. (2022), where 76.2% of respondents were female. The researchers considered multiple variables, such as gender, major, and work experience, in pursuit of factors impacting teacher efficacy. Of all aspects considered, the only significant result ( $p = .002$ ) was the effect that the attitude of the teacher had on self-efficacy. The data analysis completed by Alnahdi and Schwab (2021), which differed from the conclusions reached by Savolainen et al. (2022), concluded that teacher attitude toward inclusive education was the main predictor of overall teacher efficacy.

In a study that investigated teachers' understanding of inclusive educational practices, data indicated a correlation between positive attitude and teacher efficacy (Clark-Howard, 2019). The mixed method study was completed in New Zealand and included a sample of secondary public school teachers ( $n = 44$ ). Overall, qualitative themes indicated positive attitudes towards educating SWDs were present in most teachers, with over 75% valuing an inclusive school setting. Comments supporting the quantitative data, such as "every student feeling accepted" and "everyone is welcome and has a place," were noted (Clark-Howard, 2019, p. 49). The positive attitude toward educating SWDs and the teacher's belief in their ability to offer an appropriate education to SWDs are supported by quantitative data, which indicated that 63.7% of the respondents believed that every student can learn and find success in an inclusive setting. In addition to the respondents believing that every student, including SWDs, should be allowed to learn, the data also indicated that most respondents believed in their ability to offer an education appropriate for an inclusive setting. One interesting item of note reported by Clark-Howard (2019) was that 67% of teachers whose ages ranged from under 25 through age 45 had confidence in their ability to educate SWDs in an inclusive setting. For teachers in the 46-55 age

group, only 56% reported a feeling of confidence, and the percentage fell to 50% for teachers over the age of 56.

Research indicated that there was a link between teacher attitudes toward educating SWDs and the efficacy possessed by the teacher, although the degree that one affects the other is inconclusive (Alnahdi & Schwab, 2021; Savolainen et al., 2022). However, the intentionality a teacher places upon the education of SWDs, and therefore the quality of the education provided, is affected by the teacher's attitude and overall efficacy in teaching in an inclusive environment (Hellmich et al., 2019).

When teachers who work with SWDs believe in the value of inclusive education and possess high levels of efficacy in their ability to educate SWDs appropriately, the educational benefits offered to all students increase (Woodcock & Faith, 2021). Nwoko et al. (2022) interviewed private school teachers ( $n = 8$ ) and classroom assistants ( $n = 2$ ) in a qualitative study conducted in Australia. The respondents reported that, as teachers, they did not initially possess adequate training and were often underprepared to manage an inclusive classroom setting. However, despite reported feelings of under-preparedness, the teacher efficacy level increased, with one teacher stating, "I think I know the kids really well enough now to see the little signs that they are coping, and then I'm able to adjust" (Nwoko et al., 2022, p. 82).

Teacher efficacy is an influential factor that impacts how a teacher approaches an inclusive classroom and affects each student's learning ability. Educators who possess a greater level of efficacy believe that student success is the teacher's responsibility and that when a failure occurs, the teacher works to adapt lesson plans accordingly. In contrast, a teacher with low levels of efficacy believes that the fault for the lack of learning rests upon the student (Woodcock & Faith, 2021). A recent study by Woodcock and Faith (2021) included 105 secondary classroom

teachers working in 10 public schools in Australia. The sample was comprised of 76% female teachers, reflecting the typical gender ratio found in Australian public schools. Other demographic factors, such as age and teaching experience, indicated a balanced mix of respondents. The quantitative study was a sub-component of a more extensive study designed to understand teacher beliefs towards inclusive education and the teacher perception of SWDs.

Teacher efficacy affects the feedback given to all students, with or without disabilities. The findings were significant ( $p < .001$ ), and the effect size was medium. The data indicated a positive correlation between greater levels of efficacy possessed by the teacher and an increased level of positive feedback, regardless of whether the student had a learning disability. The correlation between teacher efficacy and effective student feedback continued with statistically significant findings for students with high or low ability levels ( $p < .001$ ; medium size effect) and exhibiting high or low levels of effort ( $p < .001$ ; medium size effect; Woodcock & Faith, 2021).

Woodcock and Faith (2021) continued to explore the role of teacher efficacy in the classroom in the realm of teacher frustration levels, sympathy towards students, and a belief that each student could succeed. The findings relating to the correlation between high levels of teacher efficacy and low levels of frustration toward students were significant ( $p < .001$ ). The effect size was medium, indicating that teachers with high efficacy feel lower frustration levels. The data relating to teacher sympathy indicated a slight variation in the efficacy theme found throughout the study. There was no significant correlation between a teacher with high levels of efficacy and the sympathy that would be felt for SWDs ( $p = .014$ ). However, a positive correlation exists between teacher efficacy and sympathy toward students without learning

disabilities ( $p < .01$ ). In the section of the study relating to sympathy, the effect size was small for students with and without disabilities.

The final section of the study included data indicating a significant correlation ( $p < .01$ ; small effect size) between teachers with high levels of efficacy and the possibility of the student failing in the future. Thus, teachers with higher levels believed that it was less likely a student, with or without a disability, would fail again in the future (Woodcock & Faith, 2021).

The conclusions reached in the study indicated that teachers with high levels of efficacy approach inclusive education with an intrapersonal lens, meaning that the responsibility for the student's educational success lies within the actions and abilities of the teacher. Whereas teachers with lower levels of efficacy approach inclusive education with an interpersonal lens, where the teacher will look to the student's actions and abilities as the reason for failure rather than consider ways that the teaching activities could have been improved. SWDs placed in a classroom with a teacher possessing low efficacy may find themselves in a situation where the teacher believes the responsibility for success lies within the student. Should the responsibility of learning be placed upon the student, a stable status quo may set in where the teacher believes student success is beyond the teacher's ability to influence, and student learning plateaus (Woodcock & Faith, 2021).

### **Improving Teacher Efficacy**

Data from numerous studies have indicated that a teachers efficacy level affects the quality of education offered to SWDs (Alnahdi & Schwab, 2021; Clark-Howard, 2019; Hellmich et al., 2019; Kirk et al., 2021; Nwoko et al., 2022; Savolainen et al., 2022; Woodcock & Faith, 2021). Knowing that school administrators and teachers may recognize the correlation between efficacy and effective education, the question should then be asked how efficacy could be

increased, thus enhancing the learning experience of SWDs. Data collected from research to answer this question have indicated that the professional knowledge possessed by the teacher and a supportive climate cultivated by the school administration are two critical factors for improving teacher efficacy (Clark-Howard, 2019; Edinger & Edinger, 2018).

Teacher knowledge is gained through pre-service coursework, professional development, and classroom experience. In a mixed methods study, Young (2018) found that knowledge gained through pre-service coursework specific to working with SWDs left teachers feeling inadequately prepared upon entering the classroom as a full-time teacher. The sample was comprised of teachers and administrators ( $n = 77$ ). The respondents who were classroom teachers worked primarily in special education (82%), with 7% of the respondents working in either primary or secondary inclusive classrooms. The respondents were asked to consider their time while completing pre-service training and to identify their confidence level in several critical areas of inclusive education. The data indicated a lack of confidence in the area of policies and regulations, with 56.6% of respondents feeling no, low, or neutral levels of confidence in the realm of applying school policies. The lack of confidence extends to the understanding and application of state-level and federal-level policies, with 72.3% of respondents reporting no, low, or neutral levels of confidence in this area (Young, 2018).

Respondents to the Young (2018) study also indicated a limited confidence level in the ability to write individual student learning plans and complete necessary documentation relating to the student learning plans. The data indicated that 60% of respondents reported no, low, or neutral levels of confidence in writing the initial plans, and 61.8% of respondents report no, low, or neutral levels of confidence in the required ongoing documentation for student learning plans. When asked to discuss what could be done within the school setting to improve the teacher

confidence levels in these areas, the qualitative themes related to a collaborative work environment supported by the school administration. One respondent noted the need for hands-on research and information that was actually being used in the classroom setting, that was realistic, and was able to be easily implemented (Young, 2018). Specific areas of improvement included time to collaborate with and observe peers, consulting with experts, and analyzing different programs that could lead to improved lesson planning (Young, 2018).

Research conducted on teacher efficacy by Specht and Metsala (2018) also identified the need to improve pre-service training, with three critical areas being identified as methods that increase teacher efficacy. The first area of research involves pre-service teachers. The data indicated ( $p < .05$ ) that extended internship opportunities working with SWDs and special education teachers in an inclusive setting improve their ability to collaborate with parents and other school stakeholders. Second, teacher efficacy for managing student behavior increased ( $p < .05$ ) with each successive mastery experience completed in a pre-service internship. Finally, the data indicated ( $p < .05$ ) that pre-service teachers at both the elementary and secondary levels who had more time working with SWDs during internships expressed a higher level of efficacy in their ability to deliver lessons utilizing inclusive teaching techniques that were a benefit to all learners (Specht & Metsala, 2018).

Data suggest that while pre-service teachers were aware of the demands of an inclusive classroom, the pre-service teachers did not realize the complexity and difficulties faced daily by an inclusive classroom teacher (Hagaman & Casey, 2018). For administrators and educators working in an inclusive setting, the knowledge that teachers may be underprepared presents the need for quality professional development to improve upon the knowledge gained during the pre-service teaching phase. Unfortunately, quality professional development is not consistently

offered to inclusive classroom teachers. Data analyzed from a study conducted by Clark-Howard (2019) indicated that 42% of respondents felt that professional development had not helped improve their teaching skills, and an additional 31.8% responded that they were uncertain if the professional development had been helpful.

Inclusive classroom teachers and their students benefit from quality professional development that improves the teacher's ability to develop lesson plans that meet the needs of all learners, thereby improving the education the students receive. Studies have shown that basic workshop-style professional development where teachers are presented with new information is often ineffective and does little to improve teacher efficacy (Sancar et al., 2021; Yang, 2020). However, professional development does improve teacher efficacy when the school administration offers opportunities that engage the inclusive classroom teacher in three fundamental ways.

First, professional learning, where the topic is developed based on feedback from the inclusive classroom teachers, creates an engaged audience, which is further enhanced when the learning opportunity is produced and presented by peers. Data indicated that this professional development builds a teacher's enthusiasm, increasing teacher efficacy (Edinger & Edinger, 2018; Yang, 2020).

Second, Sancar et al. (2021) reached conclusions that built upon the importance of targeted professional learning developed with specific teachers and their identified needs as the primary focus. The data indicated that teacher efficacy increased when teachers believed professional development was intentionally designed to support individual teacher characteristics, providing a tangible benefit to identified teacher needs. Further data analysis indicated that efficacy was enhanced through targeted professional development and improved

upon the willingness to utilize the newfound knowledge and directly apply it to new classroom teaching strategies (Sancar et al., 2021).

One final component of quality professional development, designed to improve teaching and increase efficacy, involves learning that comes in small manageable pieces and is immediately actionable. For efficacy to grow, teachers need to take small steps in implementing new knowledge, which creates mastery experiences that can be built upon in the future (Edinger & Edinger, 2018).

In addition to quality professional development, the climate and culture of an inclusive school affects teacher efficacy. Schools with a culture that values student achievement and where administrators set high expectations for the classroom teachers create an environment where teacher efficacy can grow. However, within these expectations, teachers must feel valued and supported by the school administration (Wilson et al., 2020).

Research data indicated that inclusive classroom teachers have identified two critical areas of support offered by school administrators that are necessary for increasing teacher efficacy: the provision of necessary resources and the allowance for adequate time to complete tasks. Often, the word *resource* refers to physical items used in the classroom, but inclusive classroom teachers have identified the resource of knowledge and support provided by special education experts as critical. Hagaman and Casey (2018) identified that school administrators often lack a background in special education, which can lead to a teacher feeling isolated, with one respondent noting that the teachers have nowhere to go for input if they cannot independently find a solution and expressed frustration over the lack of an available expert. Nwoko et al. (2022) noted that for efficacy to increase, inclusive classroom teachers need access to special education experts who can serve as guides and mentors.



In an interpretive phenomenological study, Anglim et al. (2018) interviewed six inclusive elementary classroom teachers, each teaching for at least five years. Four of the six teachers interviewed indicated that efficacy was directly related to the amount and type of support provided by the school administration. One respondent stated, "maybe if I had, had help, I wouldn't have had such a tough year" (Anglim et al., 2018, p. 80). The respondents expressed frustration with a lack of information provided through educational resources such as educational evaluations of student abilities. Five of the six respondents indicated the lack of information hindered their ability to offer appropriate lesson plans to SWDs. The teachers went on to note that the lack of a knowledgeable resource and limited student data forced a reliance on lesson planning by trial and error, which ultimately would meet the needs of the students but was an inefficient use of time (Anglim et al., 2018).

In addition to access to the resource of knowledge provided by special education experts, teachers indicated that the knowledge gained through collaboration with peers while planning lessons and the opportunity to observe peers who also teach in an inclusive setting were simple ways that teacher efficacy could be increased (Yang, 2020; Young 2018).

Clark-Howard (2019) conducted a small-scale mixed methods study involving secondary teachers ( $n = 44$ ) in New Zealand where barriers to a quality inclusive education were explored. The respondents indicated that the number one barrier faced by inclusive classroom teachers was a lack of time. The limited amount of available time to complete tasks within the teaching day affected teacher morale, but the differing perception of time usage held by administrators and teachers can cause substantial changes to teacher efficacy.

In a mixed methods study, Hagaman and Casey (2018) interviewed a group of pre-service teachers studying to work in special education ( $n = 22$ ), special education teachers who had

worked three or fewer years in education ( $n = 18$ ), and principals who supervised special education teachers ( $n = 12$ ). The pre-service teachers attended two universities located in two states in the mid-western United States. The new teachers represented 12 public school districts, and the school principals represented 10 public school districts, with both group locations located within the same mid-western two states. The study explored why special education teachers tend to leave the teaching field and considered ways to improve the attrition rates facing schools.

When asked for key actions and programs that could be implemented to reduce special education teacher attrition, school administrators identified a robust mentoring program for new teachers as the number one priority. The second priority was the importance of creating a school environment that fostered building relationships between teachers. However, the pre-service and in-service teachers viewed working with a mentor and attending team-building activities as time-consuming. The two administrative priorities were considered tasks to complete, limiting the ideas' potential benefit (Hagaman & Casey, 2018).

The differing perspectives between administrators and teachers continued with school administrators ranking teacher caseload as an issue with low priority. In contrast, pre-service and in-service teachers indicated that difficult caseloads were a leading cause of teacher attrition. One in-service teacher stated, "I only have two arms, and I can only be in one place at a time" (Hagaman & Casey, 2018, p. 286).

### **Summary**

School administration holds the responsibility to offer appropriate resources and also can influence time management through an awareness of teacher workloads. By controlling the ability to effect change in these critical areas, school administrators can affect teacher efficacy and the resulting educational success of all students (Edinger & Edinger, 2018). Although student

achievement based on test scores is important to measure success, a singular focus on scores alone can negatively affect teacher efficacy. However, fostering a culture of collaboration, encouragement, and trust will increase efficacy and likely be one way to improve student achievement. School administrators invest in improving the work environment by offering engaging professional development, showing an intentional awareness of the expectations of the teachers, and ensuring that every teacher is appropriately supplied with necessary resources. When the school administration is appropriately involved, teachers see a partner engaged with them in the pursuit of student learning (Edinger & Edinger, 2018). The result is improved education for all students, accomplished by efficacious teachers who enter the classroom each day with the same mindset held by the Little Engine that could, stating, "I think I can, I think I can" (Piper, 1930, p. 30).

### III. METHODOLOGY

The purpose of the study was to measure the self-efficacy of teachers who work with students with disabilities in the inclusive classroom at private Christian schools. Self-efficacy was defined as an outcome expectancy, which is the individual's belief that a specific action will or will not accomplish a specific task (Bandura, 1977).

#### **Description of Methodology**

The study was conducted utilizing a survey research approach. The survey data were collected by distributing a digital survey that included 28 questions designed around the constructs of teacher efficacy and administrative support. The survey also included an additional nine questions that were demographic in nature. The study aimed to measure the efficacy of Christian school teachers who work in an inclusive classroom. A dearth of knowledge in the professional literature specific to teacher efficacy in inclusive Christian schools was apparent. Therefore, the collection of data via a survey from this population was intuitive.

#### **Research Context**

The researcher partnered with the Association of Christian Schools International (ACSI) graduate research department, which assisted the researcher by distributing the survey member schools in the ACSI Western Division, which included states west of the Rocky Mountains. The electronic survey was distributed by email to lead school administrators via email and the school administrators were asked to forward the survey link to their respective teachers.

## Participants

The target population included Christian school teachers employed in inclusive classrooms. Due to the substantial number of fully accredited or member ACSI schools located in the western division, the total size of the teacher population was unknown at the outset of the study.

A purposive sampling technique was selected considering the study's focus upon Christian school teachers working in an inclusive setting. The sample population ( $n = 68$ ) was obtained through a partnership with ACSI and was sufficiently random in nature.

The respondents were defined as inclusive classroom teachers who teach at private Christian schools. The survey instrument was distributed to ACSI school lead administrators, who then forwarded the survey instrument link to the teachers in their schools. Participation in the survey was voluntary and anonymous, and compensation for participation in the study was not offered in any form. The survey included nine questions focused on respondent demographics, which included basic information such as gender, years of teaching experience, and degrees held. Additional demographic questions were asked to ascertain the amount of undergraduate or graduate-level coursework specific to working with SWDs to further explore teacher efficacy levels in an inclusive classroom. In one question, respondents were asked if they had a close relative with a learning disability. The remaining demographic questions collected data related to the type and setting of the Christian schools where the respondents worked.

The survey included an introductory letter describing the study's purpose and a digital consent form. The data were collected via an anonymous survey developed using the SurveyMonkey software. The respondents were assured that all data were confidential, private and that all study information would be password protected.

## Research Instrument

The research instrument used in the study to measure teacher self-efficacy when teaching SWDs was the Teaching Students With Disabilities Efficacy Scale (TSDES; Solomon & Scott, 2013). The study utilized a 5-point Likert scale divided into five categories: instruction, professionalism, teacher support, classroom management, and related duties. Additional items specific to school culture were added to measure how the school culture affected teacher efficacy. The TSDES was explicitly developed to assess the efficacy or confidence of general education classroom teachers who work in an inclusive setting, making the instrument the perfect fit for this study. The original author of the TSDES was contacted, and permission was given to utilize the TSDES instrument.

The TSDES was initially piloted utilizing doctoral students ( $n = 15$ ) enrolled in a course focused on various beliefs held by teachers. The pilot group was selected due to their expertise in the education field and their years of classroom teaching experience. Based on feedback from the pilot group, the TSDES was adapted and field-tested using a pre-service teacher sample ( $n = 245$ ) that attended a large university in the Midwest. The instrument's reliability was examined using principal components factor analysis with varimax rotation.

The TSDES was initially modeled from the Teachers' Sense of Self-Efficacy Scale (TSES; Tschannen-Moran & Hoy, 2001). To determine the validity of the TSDES, the correlation between the TSES and TSDES was evaluated. A positive correlation was reflected in the evaluation, with a paired-sample  $t$  test conducted to determine if any significant difference between the TSES and the TSDES scores existed. The correlation between the TSES and TSDES suggested that the new instrument demonstrated an appreciable level of concurrent validity as an indicator of teacher efficacy (Solomon & Scott, 2013).

In the current teacher efficacy study, a confirmatory factor analysis (CFA) model was used to establish the degree to which the latent variable (teacher self-efficacy) adequately described the study's data represented at the summary response level of measurement (Meyers et al., 2017). Maximum likelihood estimation was utilized to determine the standard errors for the parameter estimates. CFA model fitness for the construct of teacher self-efficacy was addressed using a chi-square goodness of fit (GOF) test. The internal reliability of study participant responses to survey items associated with the construct of teacher self-efficacy was evaluated using Cronbach's alpha ( $\alpha$ ) statistical technique (Field, 2018).

## **Procedures**

The study explored how teaching SWDs in a general education or inclusive classroom affected a Christian school teacher's efficacy. Utilizing the TSDES, a previously designed instrument, the researcher evaluated the responses from teachers in two core constructs: teacher self-efficacy and administrative support. The first construct, teacher self-efficacy, further explored five domains: instruction, professionalism, teacher support, classroom management, and related duties. The research instrument was validated using CFA modeling and evaluations of internal reliability using Cronbach's alpha, resulting in excellent levels of internal reliability.

Through a partnership with the ACSI graduate research department, the survey instrument was distributed to numerous Christian schools, primarily located in the western United States. The survey was open and available for completion for one month, at which time the researcher closed the survey and began the analysis of the collected data. The data analysis indicated an exceptional level of survey completion, and the data missingness was sufficiently random. Within the first construct, the respondents' perceptions of self-efficacy in the education of SWDs were statistically significant, reflecting a very large response effect. The evaluation of

the second construct also indicated perceptions of administrative support, which were statistically significant predictors of study participant perceptions of self-efficacy.

## **Data Analysis**

### **Preliminary Analysis**

The demographic identifying information from the study and the study's response set data within the construct of teacher self-efficacy were evaluated using descriptive statistical techniques. A confirmatory factor analysis (CFA) model was established to the degree to which the latent variable of the administrative support domain adequately described the study's data. The study's extent of missing data was evaluated using the descriptive statistical techniques of frequencies ( $n$ ) and percentages (%).

### **Analysis by Research Question**

#### ***Research Question 1***

To what extent do Christian school teachers assigned to inclusive classrooms perceive themselves as confident in their ability to teach students with disabilities?

$H_1$ : Teacher confidence, when asked to teach students with disabilities, will be lacking.

The one sample  $t$  test was used to assess the statistical significance of the study participants' mean score response to perceptions of efficacy in their ability to teach SWDs. The assumption of data normality was evaluated by inspecting the dependent variable's skew and kurtosis values.

#### ***Research Question 2***

To what degree is the support of the Christian school administration predictive of the self-efficacy of the inclusive classroom teacher?

$H_2$ : The factor of school administration will significantly impact teacher self-efficacy.



Simple linear regression was used to evaluate the predictive relationship between perceptions of administrative support and teacher self-efficacy. The assumptions of linear regression were addressed and satisfied through statistical means (independence of error; normality of residuals) and visual inspection of scatter plots (influential outliers; linearity; homoscedasticity).

### ***Research Question 3***

Do the study's demographic identifier variables moderate a predictive relationship between a supportive school administration and the self-efficacy of the inclusive classroom teacher?

*H<sub>3</sub>*: A significant relationship between demographic identifiers and increased efficacy will exist.

A formal moderation analysis was conducted to determine if the study's demographic identifier variables might moderate the relationship between study participants' perceptions of supportive school administration and the self-efficacy of the inclusive classroom teacher (Hayes, 2020). Mean centering was used for the independent variable of administrative support. In the first step of moderation analysis, a simple effects model was created using linear regression with the dependent variable of teacher self-efficacy and administrative support as the independent predictor variable. In the second step of moderation analysis, a non-interaction model was established by adding respective demographic-identifying variables to the predictor in the linear model or simple effects model. In the third step of moderation analysis, an interaction model was created by adding the interaction between administrative support and each demographic identifier variable to the predictors in the linear model noted in step two (non-interaction model). Assumptions for using linear regression analysis were addressed and satisfied for the third step in the modeling process (interaction model).

For moderation to be supported, two conditions must be met (Netemeyer et al., 2001). First, the predictor variable of administrative support must be statistically significantly predictive of the dependent variable of teacher self-efficacy (simple effects model). Secondly, the interaction model, step three in the moderation process, must explain statistically significantly more variance in the dependent variable of teacher efficacy than the non-interaction model, step two in the moderation process. If either of these conditions fails, formal moderation is not supported.

The analysis of study data was conducted using the 29<sup>th</sup> version of IBM's Statistical Package for the Social Sciences (SPSS).

### **Ethical Procedures**

The participants in the study were anonymous, and all data were kept confidential and secured by password protection. The Southeastern University Institutional Review Board and the Association of Christian Schools International graduate research department granted permission to conduct the study. All participants in the study were over the age of 18.

### **Summary**

Access to quality education for all students, including SWDs, is essential. It is, therefore, incumbent upon the school system, whether public or private, the school administration, and the inclusive classroom teacher to be sufficiently prepared to offer this education. The study was designed to explore the effect that the teaching of SWDs in an inclusive setting had on teacher efficacy, specifically in Christian schools. Contemporary research has explored teacher efficacy in the public school setting, but teacher efficacy related to the inclusive classroom was limited in the Christian school arena. The researcher expanded the study in search of other factors, such as administrative support and key demographic identifiers, that may affect teacher efficacy.

Although the sample size ( $n = 68$ ) was a limiting factor, the data corroborated much of the available contemporary research and indicated that many inclusive Christian school teachers were underprepared to teach in an inclusive setting and that Christian schools and their respective school administrators were also not fully equipped to enroll and educate SWDs.

## IV. RESULTS

### **Purpose Statement**

The purpose of this non-experimental quantitative study was to measure the self-efficacy of teachers who work with students with disabilities in the inclusive classroom at private Christian schools. At this research stage, self-efficacy was defined as an outcome expectancy, which is the individual's belief that a specific action will or will not accomplish a specific task (Bandura, 1977).

### **Results**

Chapter IV contains a presentation of the study's findings. The study's topic was addressed using a quantitative, non-experimental research design. A survey research approach represented the study's research methodology. Research instrument validation was conducted using confirmatory factor analysis (CFA) and evaluations of internal reliability of study participant response to survey items represented on the research instrument. Three research questions were stated in the study. Descriptive, inferential, and predictive statistical techniques were used to analyze study data. The following represents the formal reporting of findings achieved in the study.

### **Findings: Descriptive Statistical Analyses**

#### **Demographic Identifying Information**

The study's demographic identifying information was evaluated using the descriptive statistical techniques of frequencies (*n*) and percentages (%).

Table 1 contains a summary of findings for the descriptive statistical analysis of the study's demographic identifying information of participant gender, educational degree, years of professional experience, community socio-economic status (SES), and community type.

**Table 1**

*Descriptive Statistics Summary Table: Demographic Identifying Information (Gender, Educational Degree, Years of Experience, Community SES Status, and Community Type)*

Demographic Variable	<i>n</i>	%	Cumulative %
<b>Gender</b>			
Male	15	21.13	21.13
Female	53	74.65	95.77
Missing	3	4.23	100.00
<b>Educational Degree</b>			
High school diploma/GED	3	4.23	4.23
Associates degree	2	2.82	7.04
Bachelor's degree	29	40.85	47.89
Master's degree	31	43.66	91.55
Doctoral degree	3	4.23	95.77
Missing	3	4.23	100.00
<b>Years of Experience</b>			
0-2	4	5.63	5.63
3-5	7	9.86	15.49
6-8	11	15.49	30.99
9-12	7	9.86	40.85
13-15	6	8.45	49.30
16-20	6	8.45	57.75
21+	27	38.03	95.77
Missing	3	4.23	100.00
<b>Community SES Status</b>			
Low	4	5.63	5.63
Medium	44	61.97	67.61
High	21	29.58	97.18
Missing	2	2.82	100.00
<b>Community Type</b>			
Rural	22	30.99	30.99
Suburban	36	50.70	81.69
Urban/Metropolitan	11	15.49	97.18
Missing	2	2.82	100.00

Table 2 contains a summary of finding for the descriptive statistical analysis of the study’s demographic identifying information of participant undergraduate ESE course hours, graduate ESE course hours, and family relative learning disability (LD) status.

**Table 2**

*Descriptive Statistics Summary Table: Demographic Identifying Information (Undergraduate ESE Course Hours, Graduate ESE Course Hours, and Family Relative LD Status)*

Demographic Variable	<i>n</i>	%	Cumulative %
<b>Undergraduate ESE Course Hours</b>			
Undergraduate: 0	28	39.44	39.44
Undergraduate: 1-3	18	25.35	64.79
Undergraduate: 4-6	14	19.72	84.51
Undergraduate: 7+	7	9.86	94.37
Missing	4	5.63	100.00
<b>Graduate ESE Course Hours</b>			
Graduate: 0	43	60.56	60.56
Graduate: 1-3	14	19.72	80.28
Graduate: 4-6	5	7.04	87.32
Graduate: 7+	5	7.04	94.37
Missing	4	5.63	100.00
<b>Relative LD Status</b>			
Yes	40	56.34	56.34
No	29	40.85	97.18
Missing	2	2.82	100.00

**Descriptive Statistics: Study Construct of Teacher Self-Efficacy**

Descriptive statistical techniques were utilized to assess the study’s response set data within the construct of teacher self-efficacy. The study’s response data for survey items associated with the construct of teacher self-efficacy were specifically addressed using the descriptive statistical techniques of frequencies (*n*), measures of typicality (mean scores), variability (minimum/maximum; standard deviations), standard errors of the mean (*SE<sub>M</sub>*), and data normality (skew; kurtosis).

Table 3 contains a summary of finding for the descriptive statistical analysis of the study's response set data associated with the construct of teacher self-efficacy, the dimensions of teacher self-efficacy, and the overall summary response level value for the 17 survey items represented on the study's research instrument for perceptions of teacher self-efficacy.

**Table 3**

*Descriptive Statistics Summary Table: Dimensions of Teacher Self-Efficacy*

Construct Dimension	<i>M</i>	<i>SD</i>	<i>n</i>	<i>SE<sub>M</sub></i>	Min	Max	Skew	Kurtosis
Instruction	3.77	0.72	71	0.08	2.00	5.00	-0.12	-0.59
Professionalism	3.97	0.86	71	0.10	1.33	5.00	-0.84	0.40
Teacher Support	4.46	0.54	71	0.06	3.00	5.00	-0.81	-0.15
Classroom Management	3.96	0.71	70	0.08	1.75	5.00	-0.69	0.23
Related Duties	2.64	1.07	66	0.13	1.00	5.00	0.34	-0.63
Overall Self-Efficacy	3.81	0.59	65	0.07	2.35	5.00	-0.30	-0.51

Table 4 contains a summary of finding for the descriptive statistical analysis of the study's response set data associated with the construct of teacher self-efficacy, the dimensions of teacher self-efficacy, and the overall summary response level value for the 17 survey items represented on the study's research instrument for perceptions of teacher self-efficacy by gender of study participant.



**Table 4**

*Descriptive Statistics Summary Table: Dimensions of Teacher Self-Efficacy by Gender of Study Participant*

Gender/Construct Dimension	<i>M</i>	<i>SD</i>	<i>n</i>	<i>SE<sub>M</sub></i>	Min	Max	Skew	Kurtosis
Male								
Instruction	3.80	0.56	15	0.14	3.00	5.00	0.39	-0.31
Professionalism	4.11	0.69	15	0.18	3.00	5.00	-0.21	-1.08
Teacher Support	4.40	0.66	15	0.17	3.00	5.00	-1.16	0.44
Classroom Management	3.87	0.74	15	0.19	2.50	5.00	-0.27	-0.67
Related Duties	3.10	0.76	15	0.20	2.00	4.50	0.03	-0.77
Overall Self-Efficacy	3.89	0.51	15	0.13	2.94	4.65	-0.39	-0.56
Female								
Instruction	3.78	0.76	53	0.10	2.00	5.00	-0.21	-0.71
Professionalism	3.97	0.90	53	0.12	1.33	5.00	-0.97	0.50
Teacher Support	4.50	0.51	53	0.07	3.33	5.00	-0.64	-0.79
Classroom Management	4.03	0.69	52	0.10	1.75	5.00	-0.96	1.12
Related Duties	2.52	1.14	48	0.17	1.00	5.00	0.53	-0.62
Overall Self-Efficacy	3.82	0.62	47	0.09	2.35	5.00	-0.37	-0.48

Table 5 contains a summary of finding for the descriptive statistical analysis of the study's response set data associated with the construct of teacher self-efficacy, the dimensions of teacher self-efficacy, and the overall summary response level value for the 17 survey items represented on the study's research instrument for perceptions of teacher self-efficacy by community type of study participant.

**Table 5***Descriptive Statistics Summary Table: Dimensions of Teacher Self-Efficacy by Community Type*

Community Type/Construct Dimension	<i>M</i>	<i>SD</i>	<i>n</i>	<i>SE<sub>M</sub></i>	Min	Max	Skew	Kurtosis
<b>Rural</b>								
Instruction	3.51	0.59	22	0.13	2.80	4.80	0.40	-0.70
Professionalism	3.71	1.03	22	0.22	1.33	5.00	-0.57	-0.46
Teacher Support	4.45	0.45	22	0.10	3.67	5.00	-0.11	-1.17
Classroom Management	4.02	0.62	22	0.13	2.75	5.00	-0.03	-0.61
Related Duties	2.36	1.14	21	0.25	1.00	5.00	0.67	-0.51
Overall Self-Efficacy	3.66	0.55	21	0.12	2.76	4.71	0.25	-0.81
<b>Suburban</b>								
Instruction	3.91	0.74	36	0.12	2.00	5.00	-0.47	-0.08
Professionalism	4.13	0.75	36	0.13	1.67	5.00	-1.05	1.35
Teacher Support	4.55	0.50	36	0.08	3.00	5.00	-1.08	0.79
Classroom Management	3.98	0.70	35	0.12	1.75	5.00	-1.11	1.43
Related Duties	2.88	1.06	32	0.19	1.00	5.00	0.19	-0.63
Overall Self-Efficacy	3.93	0.57	31	0.10	2.35	5.00	-0.78	0.77
<b>Urban/Metropolitan</b>								
Instruction	3.87	0.83	11	0.25	2.40	5.00	-0.37	-0.88
Professionalism	4.09	0.75	11	0.23	3.00	5.00	-0.30	-1.31
Teacher Support	4.30	0.80	11	0.24	3.00	5.00	-0.58	-1.40
Classroom Management	3.98	0.88	11	0.26	2.50	5.00	-0.68	-0.73
Related Duties	2.59	0.94	11	0.28	1.00	4.00	0.008	-0.78
Overall Self-Efficacy	3.86	0.69	11	0.21	2.65	4.82	-0.47	-0.90

**Data Missingness**

The study's extent of missing data was evaluated using the descriptive statistical techniques of frequencies (*n*) and percentages (%). As a result, the study's extent of missing data at the survey response was minimal and inconsequential, according to at 1.10% (*n* = 21, Schafer & Graham, 2002). Moreover, the study's data missingness at the survey response level was sufficiently random (MCAR  $\chi^2(197) = 213.44; p = .20$ ).

### Instrument Validation: Construct of Teacher Self-Efficacy

A confirmatory factor analysis (CFA) model was established to the degree to which the latent variable (teacher self-efficacy) adequately describes the study's data represented at the summary response level of measurement (Meyers et al., 2017). Maximum likelihood estimation was utilized to determine the standard errors for the parameter estimates. The results of the CFA model are summarized and presented in Table 6. The CFA node diagram is illustrated in Figure 1.

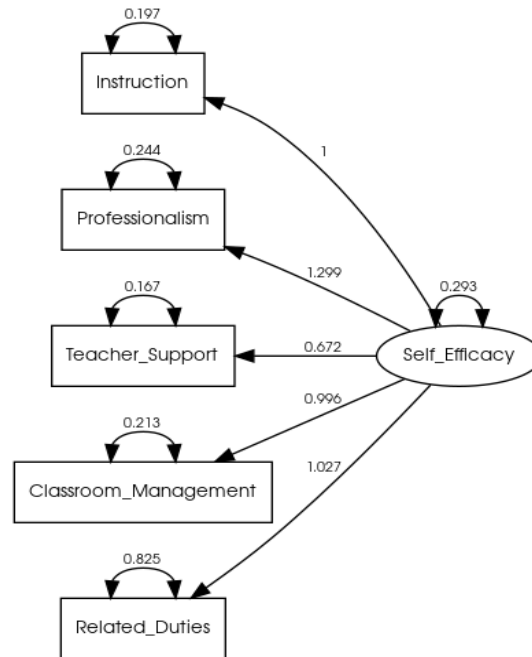
**Table 6**

*Unstandardized Loadings (Standard Errors), Standardized Loadings, and Significance Levels for Each Parameter in the CFA Model (N = 65)*

Parameter Estimate	Unstandardized	Standardized	<i>p</i>
<b>Loadings</b>			
Teacher Self-Efficacy → Instruction	1.00(0.00)	0.77	--
Teacher Self-Efficacy → Professionalism	1.30(0.21)	0.82	< .001
Teacher Self-Efficacy → Teacher Support	0.67(0.13)	0.67	< .001
Teacher Self-Efficacy → Classroom Management	1.00(0.17)	0.76	< .001
Teacher Self-Efficacy → Related Duties	1.03(0.26)	0.52	< .001
<b>Errors</b>			
Error in Teacher Support	0.17(0.03)	0.56	< .001
Error in Classroom Management	0.21(0.05)	0.42	< .001
Error in Related Duties	0.83(0.15)	0.73	< .001
Error in Instruction	0.20(0.05)	0.40	< .001
Error in Professionalism	0.24(0.07)	0.33	< .001
Error in Teacher Self-Efficacy	0.29(0.08)	1.00	< .001

**Figure 1**

*CFA Node Illustration: Teacher Self-Efficacy*



CFA model fitness for the construct of teacher self-efficacy was addressed using a chi-square goodness of fit (GOF) test. As a result, the chi-square GOF test was non-statistically significant ( $\chi^2(5) = 6.92, p = .23$ ), indicating that the CFA model fit the study’s data well for the construct of teacher self-efficacy. Follow-up model fit indices were conducted, validating, more specifically, the CFA model’s fitness. The TLI was greater than or equal to .95, indicating that the model fits the data well. The CFI was greater than .95, indicating that the model fit the data well. The RMSEA index was less than .08, which is indicative of a good model fit, and the SRMR was less than .05, indicating that the model fits the data well. Table 7 contains a summary of the CFA fit indices associated with the construct of teacher self-efficacy.

**Table 7**

*CFA Fit Indices Summary Table: Construct of Teacher Self-Efficacy*

NFI	TLI	CFI	RMSEA	SRMR
0.95	0.97	0.98	0.08	0.04

### Internal Reliability: Teacher Self-Efficacy

The internal reliability of study participant response to survey items associated with the construct of teacher self-efficacy was evaluated using Cronbach's alpha ( $\alpha$ ) statistical technique (Field, 2018). Using the conventions of alpha interpretation offered by George and Mallery (2020), the internal reliability levels achieved in the study across all 17 survey items represented on the research instrument for the construct of teacher self-efficacy was excellent at  $\alpha = .90$ .

Table 8 contains a summary of finding for the evaluation of internal reliability of study participant response to survey items across all 17 survey items associated with the construct of teacher self-efficacy represented on the research instrument.

**Table 8**

*Internal Reliability Summary Table: Study Participant Perceptions of Self-Efficacy in Educating ESE Students*

Scale	# of Items	$\alpha$	Lower Bound	Upper Bound
Teacher Self-Efficacy	17	.90	.87	.93

*Note.* The lower and upper bounds of Cronbach's  $\alpha$  were calculated using a 95.00% confidence interval.

### Instrument Validation: Construct of Administrative Support

A confirmatory factor analysis (CFA) model was established to the degree to which the latent variable of administrative support (AS) adequately describes the study's data. Maximum likelihood estimation was utilized to determine the standard errors for the parameter estimates.

The results of the CFA model are summarized and presented in Table 9. The CFA node diagram is illustrated in Figure 2.

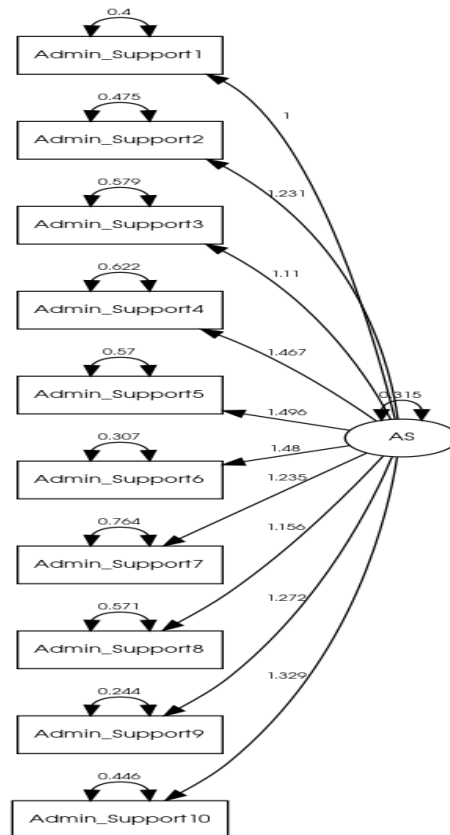
**Table 9**

*Unstandardized Loadings (Standard Errors), Standardized Loadings, and Significance Levels for Each Parameter in the CFA Model (N = 66)*

Parameter Estimate	Unstandardized	Standardized	<i>p</i>
<b>Loadings</b>			
AS → Administrative Support 1	1.00(0.00)	0.66	--
AS → Administrative Support 2	1.23(0.24)	0.71	< .001
AS → Administrative Support 3	1.11(0.24)	0.63	< .001
AS → Administrative Support 4	1.47(0.28)	0.72	< .001
AS → Administrative Support 5	1.50(0.28)	0.74	< .001
AS → Administrative Support 6	1.48(0.25)	0.83	< .001
AS → Administrative Support 7	1.23(0.27)	0.62	< .001
AS → Administrative Support 8	1.16(0.24)	0.65	< .001
AS → Administrative Support 9	1.27(0.22)	0.82	< .001
AS → Administrative Support 10	1.33(0.25)	0.74	< .001
<b>Errors</b>			
Error in Administrative Support 1	0.40(0.07)	0.56	< .001
Error in Administrative Support 2	0.48(0.09)	0.50	< .001
Error in Administrative Support 3	0.58(0.11)	0.60	< .001
Error in Administrative Support 4	0.62(0.12)	0.48	< .001
Error in Administrative Support 5	0.57(0.11)	0.45	< .001
Error in Administrative Support 6	0.31(0.07)	0.31	< .001
Error in Administrative Support 7	0.76(0.14)	0.61	< .001
Error in Administrative Support 8	0.57(0.11)	0.58	< .001
Error in Administrative Support 9	0.24(0.05)	0.32	< .001
Error in Administrative Support 10	0.45(0.09)	0.45	< .001
Error in AS (Administrative Support)	0.31(0.11)	1.00	.003

**Figure 2**

*CFA Node Illustration: Administrative Support*



### Sample Size Adequacy for CFA

Schreiber et al. (2006) suggested that the consensus for a sufficient  $N:q$  ratio is 10:1. Bentler and Chou (1987) recommended a lower end ratio in which an acceptable  $N:q$  ratio could be 5:1. The participant-to-item ratio for the analysis for the construct of administrative support was approximately 3 to 1, where the sample size was 66, and the number of variables included was 20. According to the  $N:q$  ratio rule of thumb, the given sample size is insufficient for CFA modeling.

### **CFA Model: Explained Variance (Squared Multiple Correlations)**

Although the study's data were insufficient CFA modeling, the individual relationship between each indicator variable and latent variable of administrative support were assessed by the observed variable's  $R^2$  values. The  $R^2$  value identifies the degree to which the indicator variable's variance explains the factor in the CFA modeling process.  $R^2$  values of  $\leq .20$  are indicative of the fact that the respective observed variable in the CFA modeling process does not adequately describe the factor and should be considered for removal from the model (Hooper et al., 2008). As a result, all 10 observed variables reflected  $R^2$  values well beyond the threshold value of .20.

The  $R^2$  values, along with the error variances for each observed variable in the CFA modeling for the latent variable of administrative support are summarized and presented in Table 10.



**Table 10**

*Estimated Error Variances and R<sup>2</sup> Values for Each Indicator Variable - Latent Variable Relationship in the CFA model.*

Endogenous Variable	Standard Error	R <sup>2</sup>
Administrative Support 1	0.40	.44
Administrative Support 2	0.48	.50
Administrative Support 3	0.58	.40
Administrative Support 4	0.62	.52
Administrative Support 5	0.57	.55
Administrative Support 6	0.31	.69
Administrative Support 7	0.76	.39
Administrative Support 8	0.57	.42
Administrative Support 9	0.24	.68
Administrative Support 10	0.45	.55

### **Internal Reliability: Administrative Support**

The internal reliability of study participant response to survey items associated with the construct of administrative support was evaluated using the Cronbach's alpha ( $\alpha$ ) statistical technique (Field, 2018). Using the conventions of alpha interpretation offered by George and Mallery (2020), the internal reliability levels achieved in the study across all 10 survey items represented on the research instrument for the construct of teacher self-efficacy was excellent at  $\alpha = .91$ .

Table 11 contains a summary of finding for the evaluation of internal reliability of study participant response to survey items across all ten survey items associated with the construct of administrative support represented on the research instrument.

**Table 11**

*Internal Reliability Summary Table: Study Participant Perceptions of Administrative Support in Educating ESE Students*

Scale	# of Items	$\alpha$	Lower Bound	Upper Bound
Administrative Support	10	.91	.88	.94

*Note.* The lower and upper bounds of Cronbach's  $\alpha$  were calculated using a 95.00% confidence interval.

### **Finding by Research Question**

The study's purpose was addressed through the statement of three research questions. The probability level of  $p < .05$  was adopted for use in the study to represent the threshold value for findings in the study's research questions to be considered as statistically significant. The conventions of effect size interpretation proposed by Sawilowsky (2009) were applied to numeric effect sizes achieved in the analyses of the study's three research questions as the means of determining specific magnitudes of effect in the analyses. The following represents the reporting of findings by research question stated in the study.

#### **Research Question 1**

To what extent do Christian school teachers assigned to inclusive classrooms perceive themselves as confident in their ability to teach students with disabilities?

The one sample  $t$  test was used to assess the statistical significance of the study participant mean score response to perceptions of confidence in their ability to teach students with disabilities. The assumption of data normality in research question one was assessed by inspecting the dependent variable's skew and kurtosis values. Applying the conventions of data normality through the data array's skew and kurtosis values, the skew value of -0.31 and kurtosis value of -0.51 were well within the parameters of  $-/+2.0$  for skewness and  $-/+7.0$  for kurtosis, thereby satisfying of the assumption of data normality associated with the use of the one sample  $t$  test in research question one (George & Mallery, 2020).

Study participant mean score perceptions of confidence in their ability to teach students with disabilities of 3.81 ( $SD = 0.59$ ) was statistically significant ( $t_{(64)} = 11.08$ ;  $p < .001$ ). The magnitude of effect for study participant perceptions of confidence in their ability to teach students with disabilities was considered as very large at  $d = 1.37$ . Table 12 contains a summary of finding for study participant perceptions of confidence in their ability to teach students with disabilities.

**Table 12**

*Summary Table: Evaluating the Statistical Significance of Study Participant Perceptions of Confidence in Their Ability to Teach Students with Disabilities*

Variable	<i>M</i>	<i>SD</i>	$\mu$	<i>T</i>	<i>p</i>	<i>d</i>
Confidence	3.81	0.59	3	11.08	< .001	1.37

*Note.* Degrees of freedom for the *t*-statistic = 64. *d* represents Cohen's *d*.

**Research Question 2**

To what degree is the support of the Christian school administration predictive of the self-efficacy of the inclusive classroom teacher?

Simple linear regression was used to evaluate the predictive relationship between perceptions of administrative support and teacher self-efficacy. The assumptions of linear regression were addressed and satisfied through statistical means (independence of error; normality of residuals) and visual inspection of scatter plots (influential outliers; linearity; homoscedasticity).

The predictive model was statistically significant ( $F(1,60) = 54.67$ ,  $p < .001$ ,  $R^2 = .48$ ), indicating that 47.67% of the variance in perceptions of teacher self-efficacy is explainable by perceptions of administrative support. Perceptions of administrative support were statistically significant in predicting perceptions of teacher self-efficacy ( $B = 0.53$ ,  $t_{(60)} = 7.39$ ,  $p < .001$ ), indicating that on average, a one-unit increase in perceptions of administrative support will

increase the value of perceptions of teacher self-efficacy by 0.53 units. The predictive effect was considered approximating a huge effect ( $R^2 = .48$ ). Table 13 contains a presentation and summarization of the results achieved in the predictive model used in research question two.

**Table 13**

*Predictive Model Summary: Perceptions of Administrative Support Predicting Perceptions of Teacher Self-Efficacy in Teaching Students with Disabilities*

Model	<i>B</i>	<i>SE</i>	95.00% CI	$\beta$	<i>t</i>	<i>p</i>
(Intercept)	1.72	0.29	[1.14, 2.30]	0.00	5.94	< .001
Administrative Support	0.53	0.07	[0.39, 0.68]	0.69	7.39	< .001

### Research Question 3

Do the study’s demographic identifier variables moderate a predictive relationship between a supportive school administration and the self-efficacy of the inclusive classroom teacher?

Formal moderation analysis was conducted to determine if the study’s demographic identifier variables might moderate the relationship between study participant perceptions of supportive school administration and the self-efficacy of the inclusive classroom teacher (Hayes, 2020). Mean centering was used for the independent variable of administrative support. In the first step of moderation analysis, a simple effects model was created using linear regression with the dependent variable of teacher self-efficacy and administrative support as the independent predictor variable. In the second step of moderation analysis, a non-interaction model was established by adding respective demographic identifying variables to the predictor in the linear model or simple effects model. In the third step of moderation analysis, an interaction model was created by adding the interaction between administrative support and each demographic identifier variable to the predictors in the linear model noted in step two (non-interaction model). Assumptions for the use of linear regression analysis were addressed and satisfied for the third step in the modeling process (interaction model).

For moderation to be supported, two conditions must be met (Netemeyer et al., 2001). First, the predictor variable of administrative support must be statistically significantly predictive of the dependent variable of teacher self-efficacy (simple effects model). Secondly, the interaction model, step three in the moderation process, must explain statistically significantly more variance in the dependent variable of teacher efficacy than the non-interaction model, step two in the moderation process. If either of these conditions fails, formal moderation is not supported.

The simple effects models for each of the moderation analyses involving the study’s demographic identifier variables were statistically significant, thereby satisfying the first condition of moderation for each of the demographic identifier variables. However, statistically significant interaction effects were not manifested in any of the models using the study’s demographic identifier variables as moderators. As a result, formal moderation was not supported for any of the study’s demographic identifier variables in the predictive relationship between administrative support and teacher self-efficacy in teaching students with disabilities.

The following tables contain a summary of finding for the comparison of the non-interaction and interaction models associated with moderation analyses using the study’s identifier variables.

**Table 14**

*Linear Model Comparison Table: Non-Interaction and Interaction Model for Community SES*

Model	$R^2$	$F$	$df$	$p$
Non-Interaction	0.50			
Interaction	0.50	0.21	2	.81

**Table 15***Linear Model Comparison Table: Non-Interaction and Interaction Model for Community Type*

Model	$R^2$	$F$	$df$	$p$
Non-Interaction	0.48			
Interaction	0.50	0.62	2	.54

**Table 16***Linear Model Comparison Table: Non-Interaction and Interaction Model for Gender*

Model	$R^2$	$F$	$df$	$p$
Non-Interaction	0.47			
Interaction	0.47	0.00	1	.96

**Table 17***Linear Model Comparison Table: Non-Interaction and Interaction Model for Educational Degree*

Model	$R^2$	$F$	$df$	$p$
Non-Interaction	0.51			
Interaction	0.56	1.17	4	.33

**Table 18***Linear Model Comparison Table: Non-Interaction and Interaction Model for Years of Professional Experience*

Model	$R^2$	$F$	$df$	$p$
Non-Interaction	0.50			
Interaction	0.57	1.31	6	.27

**Table 19***Linear Model Comparison Table: Non-Interaction and Interaction Mode for Undergraduate ESE Course Hours*

Model	$R^2$	$F$	$df$	$p$
Non-Interaction	0.51			
Interaction	0.53	0.78	3	.51

**Table 20**

*Linear Model Comparison Table: Non-Interaction and Interaction Model for Graduate ESE Course Hours*

Model	$R^2$	$F$	$df$	$p$
Non-Interaction	0.47			
Interaction	0.52	1.61	3	.20

**Table 21**

*Linear Model Comparison Table: Non-Interaction and Interaction Model for Family Relative LD Status*

Model	$R^2$	$F$	$df$	$p$
Non-Interaction	0.48			
Interaction	0.48	0.01	1	.93

### Summary

An exceptional level of survey completion rate was achieved in the study. Research instrument validation was conducted using CFA modeling and evaluations of internal reliability using Cronbach's alpha. Excellent levels of internal reliability were achieved for the constructs of administrative support and teacher self-efficacy. CFA modeling for the construct of teacher self-efficacy indicated that the CFA model fit the study's data well. The sample size was a limiting factor in producing a reliable model with the study's data for the construct of administrative support. However, the ten observed variables associated with the construct of administrative support contributed significant levels of explained variance to the construct itself.

Study participant perceptions of self-efficacy, or confidence in educating students with disabilities, were statistically significant, reflecting a very large response effect. Perceptions of administrative support were statistically significantly predictive of study participant perceptions of self-efficacy. Formal moderation was not supported using the study's demographic identifier

variables for the predictive relationship between perceptions of administrative support and teacher self-efficacy.



## V. DISCUSSION

The purpose of this non-experimental quantitative study was to measure the self-efficacy of teachers who work with students with disabilities in the inclusive classroom at private Christian schools. Previous research indicated that a teacher's pre-service education and in-service professional development left them underprepared to successfully teach SWDs in an inclusive setting (Cooc, 2019; Krämer et al., 2021). Kirk et al. (2021) noted that school administrators also possessed inadequate knowledge in the education of SWDs, which limited the administrator's ability to train and support the underprepared inclusive classroom teachers appropriately. Research specific to the number of SWDs enrolled in Christian schools was limited, making it difficult to determine the specific number of SWDs who attended Christian schools, but data indicated that one in five students nationwide struggle with a learning delay, difficulty, or disability (Burke & Griffin, 2016; Galiatsos et al., 2019).

Self-efficacy or confidence was defined as an outcome expectancy, which was the individual's belief that a specific action will or will not accomplish a specific task (Bandura, 1977). For Christian school teachers who teach in an inclusive setting, the questions this study explored involved the level of confidence held by the teacher when asked to teach SWDs and whether a supportive school administrator would affect teacher efficacy.

### **Review of Methodology**

The following represents a discussion of the findings achieved in this non-experimental, quantitative study. Utilizing the Teaching Students with Disabilities Efficacy Scale (TSDDES), the researcher investigated the extent to which Christian school teachers assigned to inclusive

classrooms perceive themselves as confident in their ability to teach SWDs. The study was also designed to explore additional factors that may influence teacher efficacy while working with SWDs, such as supportive school administration and demographic identifiers relating to training specific to working with SWDs. The researcher hypothesized that teacher confidence when working in an inclusive setting would be lacking due to limited training specific to working with SWDs and insufficient resource allocation. Further hypotheses predicted that a supportive school administration and key demographic identifiers would also affect teacher efficacy.

The purposive sample population ( $n = 68$ ) was obtained via a partnership with ACSI's graduate research program, and data were collected through a survey of Christian school teachers. Statistical techniques of frequencies ( $n$ ) and percentages (%) were used to evaluate the extent of missing survey data. The missing data within the survey responses were minimal, inconsequential, and sufficiently random in nature.

The researcher explored two constructs within the study: teacher self-efficacy and administrator support. The construct of teacher self-efficacy was analyzed using descriptive statistical techniques. Within the teacher self-efficacy construct, the sample size was sufficient to conduct a confirmatory factor analysis (CFA), and an evaluation of the model's fitness indicated that the model sufficiently fit the data. All survey response items within the efficacy construct contributed significantly. The data produced by the research instrument appropriately addressed the construct, and the internal reliability of the responses across all 17 survey items relating to the efficacy construct was excellent.

A confirmatory factor analysis model was established to determine how the construct of administrative support described the study's data. However, the sample size was insufficient for CFA modeling. Although CFA modeling was not used to evaluate the administrative support

construct, the relationships between the indicator variables and the administrative support construct were evaluated using the observed variable's  $R^2$  values. Upon review, all 10 observed variables in the administrative support construct reflected  $R^2$  values well beyond the minimum required threshold value of .20, indicating a substantial link between each indicator variable and the latent variable of administrative support. The internal reliability of the survey items relating to the supportive administrator construct was evaluated using Cronbach's alpha statistical technique and was found to be excellent.

Upon initial review, the possibility of a gender-based limiting factor was considered, with 78% of the respondents being female. However, the data were similar to a nationwide gender-based demographic in both public schools (77% female teachers) and private schools (75% female teachers (Taie & Lewis, 2022)). Most respondents had successfully earned an undergraduate degree (42.7%) or a graduate degree (45.6%). Still, the researcher was surprised to note that 4.4% of the respondents held only a high school diploma/GED, and 2.2% of the respondents were teaching in an inclusive setting with only a two-year degree. As Lane (2017) noted, Christian schools often lack teachers with substantial special education training, and the study findings concur, noting that 41.8% of the respondents have not completed any pre-service coursework specific to special education, and 26.9% have completed between one and three hours (approximately one class) specific to special education.

## **Discussion by Research Question**

### **Research Question 1**

The first research question explored in the study considered the extent that Christian school teachers working in an inclusive setting perceive themselves as confident in their ability

to teach students with disabilities. The statistical significance of research question one was assessed using a one sample *t*-test. An inspection of the dependent variable skew and kurtosis values was conducted to evaluate the assumption of data normality. Both skew and kurtosis values were well within the required parameters. After analyzing the information collected from the study survey, the data indicated that the perception of the teacher's confidence in their ability to teach students with disabilities was statistically significant ( $p < .001$ ), and the effect size was considered very large at  $d = 1.37$ .

Auhl and Bain (2021) stated that to meet the needs of all learners successfully, pre-service teachers must specifically be taught how to differentiate instruction and lesson plans. However, Auhl and Bain (2021) indicated that when given 30 minutes to create a well-designed lesson plan that included differentiation to meet the needs of all learners, 66% of the pre-service teachers were unsuccessful. The research conducted by Nwoko et al. (2021) concurred with Auhl & Bain (2021) noting that pre-service teachers enter the teaching field possessing only basic skills relating to special education.

The findings of this study corroborated with contemporary professional literature. Survey questions one, three, and five focused on the level of efficacy possessed by an inclusive classroom teacher when asked to plan for differentiated instruction to meet the needs of SWDs. Question one focused on the teachers' confidence in their ability to meet the academic needs of SWDs with broad, long-term unit plans, and 18.3% of respondents indicated that they had the ability to do a "great deal" to develop SWD-appropriate curriculum plans. However, 38% of the respondents indicated they had only "some" or "little influence" when creating an appropriate SWD curriculum.

Question two narrowed the scope of survey question one and moved from global curriculum planning to the teacher integrating specific teaching strategies to meet the learning needs of SWDs. The number of respondents who believed they could do a “great deal” to implement teaching strategies beneficial to SWDs increased to 23.9%. Still, the respondents who thought that they held only “some” or “little influence” were substantial (35.2%).

Survey question three was the most narrowly focused of the three questions relating to teacher efficacy and pedagogical skills specific to SWDs and asked the respondents to consider their ability to break down a skill into component parts to allow for better understanding by SWDs in the classroom. The data were similar to question two, with 22.5% of respondents indicating they could do a “great deal,” which suggested high confidence in this skill. However, similar to the responses in question two, 28% of respondents indicated possessing only “some” or “little” ability to break skills into component parts.

The ability to develop differentiated lesson plans that meet the needs of all learners, including SWDs, was limited as a substantial number of respondents indicated a troubling level of confidence in this area. The most effective method of increased efficacy was through the successful completion of a singular task, creating a basis whereby a second task, similar to the first, was also completed (Schunk & DiBenedetto, 2016). A substantial number of respondents possessed a limited ability to differentiate lesson plans, which reduced the potential for enhancing teacher efficacy as the respondents were unlikely to experience the necessary initial successful lesson plan experience. The findings aligned with contemporary research regarding teacher efficacy in an inclusive public school setting, and the data analysis added to the efficacy research specific to Christian schools, which was limited to a small number of recent studies.

Although the items in the first section of the survey were about academic instruction, survey items in the later sections focused on meeting teacher needs through collaboration with peers and specialists as well as through other available resources. Question six focused on the respondents' ability to collaborate with fellow teachers, paraprofessionals, and school administrators to better meet the academic needs of SWDs. The data were encouraging as 69% of respondents indicated they can do a "great deal" or "quite a bit" in relation to professional collaboration. However, a disheartening number of respondents (7%) indicated their ability to collaborate was limited and could do "very little," and an additional 7% of respondents indicated they could do "nothing."

Many school administrators possess only a basic understanding of how to meet the academic learning needs of SWDs and, thereby, can offer limited support to inclusive classroom teachers (Kirk et., 2021). Previous research indicated that Christian schools often enroll SWDs but lack teachers with pre-service or in-service training in special education (e.g., Bartholio 2020; Clausen et al. 2022; Lane 2017).

The data analysis of the questions relating to the ability to collaborate aligned with the responses relating to the ability to develop differentiated lesson plans, as a similar number of respondents indicated access and ability in the two areas. However, the ability to enhance efficacy in the inclusive Christian school environment was again limited, as experiencing success vicariously through peer observation is another crucial method of efficacy growth (Bandura, 1977). The data analysis offered encouraging information as multiple teachers indicated that collaborative planning and discussions were available. However, a concerning number of respondents indicated that the skill to develop a differentiated lesson plan and the opportunity to collaborate with a more knowledgeable peer needed to be improved.

In question seven, the respondents were asked if they had the ability to consult with an SWD specialist, and 60.6% indicated that consultation with a specialist was available. Again, however, the data indicated a substantial difference among respondents, as 28.2% indicated “little” or “no” ability to consult with a specialist.

Many Christian schools view the education of all children as a spiritual calling and have embraced the education of SWDs as a component of the school’s mission. The survey data corroborates the findings of Lane et al, (2019) as questions eight through 11 focused on the creation and development of a safe learning space and the meaningful relationships for SWDs. When asked about their ability to praise SWDs regardless of academic progress, 91.6% of respondents indicated they could do a “great deal” or “quite a bit,” and only 1.4% of respondents indicated they could do “very little” or “nothing.” The number of respondents who believe in their ability to create meaningful relationships with SWDs increased, as 95.8% indicated they could do a “great deal” or “quite a bit,” and 0% of respondents indicated they had “very little” or “no” ability to build meaningful relationships. The positive data trend continued, with respondents indicating a substantial desire and ability to create a safe and welcoming learning environment for SWDs, with 91.6% of respondents indicating an ability to create a welcoming learning environment.

The final survey questions, which related to the ability of the Christian school teacher to teach in an inclusive classroom effectively, focused on managing the emotional and physical needs of SWDs. Question 12 focused on the teacher’s ability to manage disruptive classroom behavior, and a high percentage of respondents believed they could do a “great deal” (19.7%), “quite a bit” (50.7%), or had “some influence” (26.8%) in this area. Question 13 was similar in that it also asked a classroom behavior management question; however, the question added an

additional layer of specificity with the addition of an “emotional outburst” qualifier.

Interestingly, the percentage of teachers who believed they could do a “great deal” increased to 22.5%, but the number of teachers who believed they could do “quite a bit” fell to (45.1%). The movement within the response data between two similar questions, with the only difference being the introduction of emotional misbehavior, is intriguing and warrants further study.

The survey asked two questions specific to meeting an SWD’s physical needs. Less than half of the respondents (46.6%) indicated they could do a “great deal” or a “quite a bit” when focused on meeting specific physical needs, such as transporting a student from a wheelchair to a desk, and 34.3% of respondents indicated they could do “very little” or “nothing.” The data indicated even less belief in respondent ability to meet additional physical needs, such as assisting with restroom use, with 11.9% of respondents able to do a “great deal” or “quite a bit” and 71.6% able to do “very little” or “nothing.” The study data indicated that a substantial number of respondents believed in their ability to meet the academic and emotional needs of SWDs, but the responses to the meeting of physical needs indicated a change. The findings of this study suggest that inclusive Christian school teachers possess only limited ability to meet the needs of SWDs with physical disabilities.

## **Research Question 2**

The first construct of the study was focused on teacher efficacy, and respondents were asked how confident they were, as individual teachers, to meet the academic, emotional, and physical needs of SWDs assigned to their classrooms. The second construct pivoted away from the individual skills or abilities the Christian school classroom teacher possessed and considered the degree to which a supportive Christian school administrator predicted the efficacy of the inclusive classroom teacher.



The research team conducted a simple linear regression to evaluate the predictive relationship between perceptions of supportive school administration and efficacy of the teacher. Perceptions of a supportive administration were statistically significant ( $p < .001$ ) in the prediction of teacher efficacy, and the predictive effect was considered huge ( $R^2 = .48$ ).

Christian schools are not required by law to follow federal education mandates, such as IDEA, which pertain to the education of SWDs. Nor are Christian schools under any legal obligation to enroll SWDs or develop specific policies or procedures if SWDs are admitted (Bonfiglio & Kroh, 2020). Should a Christian school determine that the enrollment of SWDs is in alignment with the school's mission, the potential for an inefficient, or worse, ineffective inclusive classroom exists. As previously noted, numerous teachers enter the field of education with minimal pre-service education specific to SWDs (Friesen & Cuning, 2020; Nwoko et al., 2022; Young, 2018). Research also indicated that school administrators are not immune to the lack of SWD-specific education. White et al. (2021) noted that it was uncommon for school administrators to have sufficient pre-service education specific to SWDS and that professional development opportunities were limited.

Contemporary research indicated that in many inclusive schools, the teachers and the administrators lacked sufficient pre-service training to educate SWDs appropriately. Unfortunately, quality SWD-specific, in-service professional development was also lacking (Cooc, 2019). In this study, the data analysis for the administrative support construct largely corroborated contemporary professional literature. Within the supportive administration construct, three survey questions were related to the availability and quality of in-service professional development for inclusive Christian school teachers, and the data were encouraging. When asked about the regularity of available professional development, 81.7% of respondents

indicated that professional development was regularly offered. The encouraging data continued with a follow-up question about the availability of professional development specific to teaching SWDs, and nearly three-quarters of the respondents (73.2%) indicated that SWD-specific professional development was regularly offered.

Research has indicated that professional development that is relevant at the classroom level and teaches immediately actionable skills had the greatest ability to increase teacher efficacy (Edinger & Edinger, 2018; Sancar et al., 2021). The data analysis of this survey indicated a high likelihood of increased teacher efficacy, with 73.2% of respondents indicating that the professional development received offered new SWD-specific teaching strategies that could be implemented in the classroom. The survey responses continued in a consistent pattern with a similar number of respondents who indicated the possession of the skills to differentiate lesson plans, the ability to collaborate with peers, and access to quality professional development. The positive data trends were encouraging; however, the similar yet opposite negative trend also continued as 26.8% of respondents noted minimal access to professional development. The data aligned with a similar number of respondents who indicated a limited ability to plan lessons appropriate for SWDs and also indicated a minimal ability to collaborate with peers.

Scanlan (2017) indicated a critical need for Christian schools that enroll SWDs to develop clear policies and procedures that guide admissions decisions, the process for identifying possible disabilities, and the organization of student academic information such as grades and attendance. The survey data indicated that 68.1% of respondents had a “great deal” or “quite a bit” of access to written school policies relating to SWDs. However, a small but still notable

number of respondents (13.1%) indicated that they had “very little” or “no” access to written SWD policies.

Teachers rely on written policy and procedures to guide decision-making, and if the policies are limited or non-existent, the potential for inconsistent classroom practices increases. Throughout the study, the data analysis indicated troubling trend where a substantial number of Christian schools are enrolling SWDs, hiring underprepared teachers, offering limited access to collaboration or professional development, and offer only minimal access to school policy. The combination of each of these weaknesses continues to reduce the opportunity for increased teacher efficacy and raises the question as to the overall quality of the educational experience being offered to the SWDs assigned to these inclusive classrooms.

Along with quality professional development and written SWD-specific policies, a third area of administrative support that improves teacher efficacy is the overall environment created by a supportive school administrator (Wilson et al., 2020). The survey data indicated that Christian school administrators understand the importance of a positive and supportive school culture and corroborate the existing professional literature, as 75.4% of the survey respondents indicated that the school administration enhanced their ability to teach SWDs. Additionally, 85.7% of respondents indicated that the school administration was available and willing to listen to teacher concerns relating to a specific SWD, and 79.7% of respondents indicated that the school administration was willing to receive general feedback regarding the teaching of SWDs.

Anglim (2018) noted that teachers expressed frustration with school administrators who did not provide appropriate resources, feeling that the already complex task of successful inclusive teaching increased substantially without sufficient resources. The survey data indicated that inclusive Christian schools might align with the frustration expressed in the Anglim (2018)

study, as 14.5% of respondents indicated access to a “great deal” of resource availability, and 62.3% of respondents indicated having only “some,” “very little,” or “no” access to appropriate resources.

The supportive administration construct data indicated a mixture of positive and negative responses that generally aligned with current research on inclusive Christian schools. However, the data were encouraging and in contrast with current research in that many respondents were regularly offered quality professional development specific to SWDs. Contemporary research and the data collected in this study underscore the importance of written policies and appropriate allocation of critical resources and indicate that inclusive Christian school administrators must be aware of the need for resource allocation and further develop SWD-specific written policy manuals.

### **Research Question 3**

The final research question of the study explored the interactions with demographic identifiers from the sample population and teacher efficacy in an inclusive classroom environment. The hypothesis for research question three predicted a statistically significant increase in teacher efficacy when demographic identifiers were introduced, but upon completion of the data analysis, the findings were non-significant.

The study’s demographic information was evaluated using descriptive statistical techniques. Formal moderation analysis was conducted to determine if the study’s demographic variables could moderate the relationship between a supportive school administration and teacher efficacy. The formal moderation analysis found that the interaction effects of any of the study’s demographic identifiers were not statistically significant, which determined that formal moderation was not supported. However, while the interaction between the demographic

identifiers and the relationship between a supportive school administrator and teacher efficacy were not significant, the findings were novel and contributed to professional research. The earning of undergraduate and graduate degrees, years of teaching experience, and the completion of graduate-level coursework specific to SWDs affected teacher efficacy. However, the findings were not statistically significant, so a reliable conclusion could not be reached. The predictive relationships for the three demographic identifiers could benefit from future study with a sample size that could sufficiently power the moderation analysis.

### **Implications for Future Practice**

Though public schools are required by law to place students in the least restrictive environment, Christian schools are not obligated to follow IDEA and can implement their own admissions procedures and SWD-related school policy. The number of programs that offer pre-service education to Christian school administrators and educators related to teaching SWDs is limited (Lane, 2017). Coupled with the lack of federal requirements and inconsistent Christian school policies pertaining to SWDs, Christian school administrators may unintentionally create an environment where the responsibility of meeting the needs of all learners in an inclusive classroom falls upon an underprepared teacher (Lane & Jones, 2015). Due to being underprepared and offered limited school guidance, many general education classroom teachers in Christian schools face challenges when asked to teach students with disabilities (Kirk et al., 2021).

The study's findings corroborate the existing professional literature in two critical areas and indicate that Christian school teachers working in an inclusive classroom are underprepared and under-resourced to meet the academic, emotional, and physical needs of SWDs. Although most of the sample held undergraduate or graduate degrees, a minority of the respondents had

earned only a high school diploma or two-year degree. Within the study framework, however, all respondents, regardless of degree held, indicated a limiting factor in the necessary knowledge to appropriately educate SWDs assigned to their classrooms. Though Christian school administrators cannot affect the pre-service coursework required by programs offering an educational degree or teaching license, the resourceful administrator can recognize the potential for hiring an underprepared teacher and fill the knowledge gap with a robust professional development program. The study findings indicated a limited amount of knowledge relative to the appropriate education of SWDs, but a vast majority of the respondents also indicated that their respective schools also offer ongoing professional development that improves classroom instruction.

To create a productive environment where the needs of all learners are sufficiently met, the administrators and teachers who work in an inclusive Christian school would benefit from a collaborative approach to professional development where gaps in teacher knowledge could be expressed, specific SWD-related questions could be explored, and realistic improvement plans could be developed. The simplistic approach to professional development involves attending a conference or listening to a guest speaker, which is often ineffective (Sancar et al., 2021; Yang, 2020). However, research indicates that hands-on, collaborative professional development, where new knowledge is offered in easily understandable and manageable component pieces, is the most effective (Edinger & Edinger, 2018; Sancar et al., 2018; Young, 2018). Collaborative and actionable professional development does require a substantial budgetary expense, and all teachers working in an inclusive Christian school would benefit from this learning opportunity.

Contemporary research indicated that inclusive Christian schools must explore two other critical areas besides improved professional development. First is the implementation of a

comprehensive set of school policies and procedures that guide SWD-related enrollment decisions, as well as policies that explain the implementation of student accommodations, grading expectations, and student behavior management (Bonfiglio & Kroh, 2020; Scanlan, 2017). The findings from this study indicated that access to easily understandable school policies was limited and could hinder the effectiveness of inclusive classroom teachers due to the lack of consistent practices throughout the school. To improve upon this area, Christian school administrators, in collaboration with teachers, should evaluate existing policy and procedure manuals and consider development or expansion in critical areas that would enhance the inclusive educational experience offered.

Second, Christian school administrators must offer the inclusive classroom teacher appropriate resources. The findings of this study indicated that resource allocation is lacking, with the respondents noting that a lack of educational resources was a limiting factor. Although many educators and administrators may picture physical items, such as classroom technology or student manipulatives, when considering resources, research indicates that time is the most important resource that can be offered to an inclusive classroom teacher (Hagaman & Casey, 2018). Future research designed to explore specific types of resources believed necessary to a successful inclusive Christian school classroom would be beneficial.

### **Significance**

With approximately 20% of children in the United States possessing some type of learning difficulty or disability, it is likely that Christian schools, regardless of admissions standards, will need to recognize the academic needs of SWDs, and the professional needs of the school's faculty (Burke & Griffin, 2016; Cooc, 2019; Galiatsos et al., 2019; Krämer et al., 2021). The purpose of the study was first to explore and understand the prevalent professional literature

relating to underprepared inclusive classroom teachers and underprepared schools and its effect on teacher efficacy from the public school perspective. Second, while contemplating the information gathered relating to inclusive classroom teacher efficacy in the public school, consider whether similar issues were present in the inclusive Christian school.

The professional literature specific to teacher self-efficacy in the inclusive Christian school environment was limited and offered minimal suggestions for improvement. The study's findings indicated that, like public schools, many inclusive classroom teachers were underprepared and under-resourced to meet the needs of the SWDs enrolled in the school. One key difference, however, between public and inclusive Christian schools was the limited availability of special education experts who possess both pre-service knowledge and practical in-service experience (Kirk et al., 2021; Lane, 2017). With Christian school teachers facing the gap in SWD-specific knowledge, the school administration must develop adequate programs and resources to augment existing knowledge and improve any recognized weaknesses.

The efficacy or confidence level of the inclusive Christian school classroom teacher is critical to the longevity of the teacher's career and the SWDs ability to learn. If Christian school administrators intend to develop inclusive classrooms, the teachers must believe in their ability to succeed. The responsibility to encourage and enhance teacher efficacy rests on the school administrator as no one else could enact SWD-specific policy, create a collaborative learning environment, and offer the resources necessary for classroom success.

### **Study Limitations**

The initial study sample population ( $n = 71$ ) was sufficient for much of the survey analysis; however, the overall sample size was a limiting factor and contributed to the inability to reach a statistically significant finding for research question three. Though the partnership with



the ACSI research department was invaluable and integral to the study's success, the distant nature of an electronically distributed survey distributed to school administrators who had no prior link to the study may have contributed to a smaller than necessary sample. Additionally, the survey asked multiple questions relating to an inclusive classroom teacher's ability to speak with a specialist regarding SWDs, the ability of the teacher to access and implement SWD-specific school policy, and the availability of SWD-specific professional development. One question not asked was whether the schools where each respondent teaches had any formalized program for SWD education. The response data may have presented an interesting link between teacher efficacy in schools with a formalized SWD program and schools without.

### **Recommendations for Future Research**

Within the public school system, studies relating to pre-service and in-service teacher efficacy are common and have occurred for many years allowing for a greater depth of knowledge and understanding of the relationship between teacher efficacy and the inclusive classroom environment. Student-focused studies on the academic, emotional, and social growth of SWDs are also common in public schools and somewhat common in the religious school environment. However, professional research relating specifically to inclusive Christian schools and teacher efficacy is quite limited. Although it appears that a growing number of Christian schools are enrolling SWDs, the research pertaining to how the increasing population of SWDs affects the classroom teacher is an area for future study.

To gather data with greater depth, a mixed methods study, which incorporated the survey questions utilized with this research and questions that explored an inclusive teacher's lived experience, would be valuable. Future research may present novel and significant findings

should the study approach be targeted at inclusive Christian schools that do not have formalized SWD programs.

Finally, the data indicated a slight difference in responses when exploring the relationship between the successful management of disruptive classroom behavior and classroom management when the variable of emotional outbursts was introduced. The survey data indicated a substantial change in response when the variable of major physical disabilities was introduced. Future research that isolated academic instruction and individually explored teacher efficacy related to SWD emotional concerns and SWDs with physical needs would be intriguing and would offer a benefit to inclusive classroom teachers and the SWDs in their classrooms.

### **Conclusion**

Research indicated that many Christian schools believe that the education of all students, including SWDs, was integral to the school's ministry and mission, but Christian schools were often not adequately prepared to fulfill this mission (Bartholio, 2020; Lane et al., 2019). However, the often-limited ability to develop a quality inclusive Christian school should not become an accepted status quo. All students have the ability to learn; the puzzle that the inclusive classroom teacher must solve is how that learning will occur. If a Christian school believes that the education of all children is a part of the school's mission, then administrators, teachers, parents, and even the students must embrace this mission wholeheartedly. The school stakeholders must develop an environment where challenges are addressed, failure becomes an accepted part of the learning process, and collaboration throughout the whole school is encouraged and embraced. When a mindset that all students can and will learn becomes a critical component of school culture, the question is no longer can the students learn, but becomes the question of how.

## References

- ACSI Tuition & Salary Survey*. (n.d.). Retrieved December 8, 2022, from [https://www.acsi.org/docs/default-source/website-publishing/research/acsi\\_tuitionsalary\\_report\\_august2021-final.pdf](https://www.acsi.org/docs/default-source/website-publishing/research/acsi_tuitionsalary_report_august2021-final.pdf)
- Alnahdi, G. H., & Schwab, S. (2021). Special education major or attitudes to predict teachers' self-efficacy for teaching in inclusive education. *Frontiers in Psychology, 12*, 680909. <https://doi.org/10.3389/fpsyg.2021.680909>
- Anglim, J., Prendeville, P., & Kinsella, W. (2018). The self-efficacy of primary teachers in supporting the inclusion of children with autism spectrum disorder. *Educational Psychology in Practice, 34*(1), 73–88.
- Auhl, G., & Bain, A. (2021). Do pre-service teachers develop a schema for inclusive classroom practice? *Asia-Pacific Journal of Teacher Education, 49*(4), 370–386. <https://doi.org/10.1080/1359866X.2020.1777530>
- Bachrach, T. (2021). Venturing outside the bounds of IDEIA in search of inclusive christian education: An autoethnographic Account. *Journal of Research on Christian Education, 30*(1), 4–19. <https://doi.org/10.1080/10656219.2021.1883490>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191–215. <https://doi.org/10.1037/0033-295X.84.2.191>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory* (pp. xiii, 617). Prentice-Hall, Inc.

- Bartholio, C. (2020). Special education services in private faith-based and nonsectarian elementary schools. *The Journal of Faith, Education, and Community*, 4(1).  
<https://scholarworks.sfasu.edu/jfec/vol4/iss1/2>
- Bentler, P. M., & Chou, C. P. (1987). *Practical issues in structural equation modeling*.  
[https://www.researchgate.net/publication/200824055\\_Practical\\_Issues\\_in\\_Structural\\_Equation\\_Modeling](https://www.researchgate.net/publication/200824055_Practical_Issues_in_Structural_Equation_Modeling)
- Bonfiglio, C., & Kroh, K. (2020). *Inclusion in catholic schools: From inception to implementation*. 30.
- Brown v. Board of Education (1954)*. (2021, September 29). National Archives.  
<https://www.archives.gov/milestone-documents/brown-v-board-of-education>
- Burke, M. M., & Griffin, M. M. (2016). Students with developmental disabilities in catholic schools: Examples in primary and secondary settings. *Élèves Atteints de Troubles Du Développement Dans Les Écoles Catholiques : Exemples Dans Des Situations Primaires et Secondaires.*, 19(3), 197–220. <https://doi.org/10.15365/joce.1903102016>
- Carter, E. W., Tuttle, M., Spann, E., Ling, C., & Jones, T. B. (2022). Addressing accessibility within the church: Perspectives of people with disabilities. *Journal of Religion & Health*, 1–22. <https://doi.org/10.1007/s10943-022-01508-6>
- Carver-Thomas, D., & Darling-Hammond, L. (2019). The trouble with teacher turnover: How teacher attrition affects students and schools. *Education Policy Analysis Archives*, 27(36).  
<https://eric.ed.gov/?id=EJ1213629>
- Clark-Howard, K. (2019). Inclusive education: How do new zealand secondary teachers understand inclusion and how does this understanding influence their practice? *Kairaranga*, 20(1), 46–57.

- Clausen, A. M., Wakeman, S., Johnson, H., & Reyes, E. N. (2022). Professional development needs reported by general education teachers at inclusive private christian schools. *Journal of Research on Christian Education*, 1–18.  
<https://doi.org/10.1080/10656219.2022.2096274>
- Cooc, N. (2019). Teaching students with special needs: International trends in school capacity and the need for teacher professional development. *Teaching and Teacher Education*, 83, 27–41. <https://doi.org/10.1016/j.tate.2019.03.021>
- Darling-Hammond, L. (2021). Defining teaching quality around the world. *European Journal of Teacher Education*, 44(3), 295–308. <https://doi.org/10.1080/02619768.2021.1919080>
- Darling-Hammond, L., Sutchter, L., & Carver-Thomas, D. (2018). *Teacher shortages in california: Status, sources, and potential solutions*.
- Edinger, S. K., & Edinger, M. J. (2018). Improving teacher job satisfaction: The roles of social capital, teacher efficacy, and support. *The Journal of Psychology*, 152(8), 573–593.  
<https://doi.org/10.1080/00223980.2018.1489364>
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics: North American edition* (5th edition). SAGE Publications Ltd.
- Galiatsos, S., Kruse, L., & Whittaker, M. (2019). *Forward together*.  
<https://www.nclt.org/research/forward-together/>
- GBAO. (2022). *Poll Results: Stress and burnout pose threat of educator shortages*.  
<https://www.nea.org/sites/default/files/2022-02/NEA%20Member%20COVID-19%20Survey%20Summary.pdf>
- George, D., & Mallery, P. (2020). *IBM SPSS statistics 26 step by step: A simple guide and reference* (16th edition). Routledge.

- Gilmour, A. F., & Wehby, J. H. (2020). The Association between teaching students with disabilities and teacher turnover. *Journal of Educational Psychology, 112*(5), 1042–1060. <https://doi.org/10.1037/edu0000394>
- Gottfried, M. A., Hutt, E. L., & Kirksey, J. J. (2019). New teachers' perceptions on being prepared to teach students with learning disabilities: Insights from california. *Journal of Learning Disabilities, 52*(5), 383–398. <https://doi.org/10.1177/0022219419863790>
- Hagaman, J. L., & Casey, K. J. (2018). Teacher attrition in special education: Perspectives from the field. *Teacher Education and Special Education, 41*(4), 277–291.
- Hayes, A. F. (2020). *Introduction to mediation, moderation, and conditional process analysis: Third edition: A regression-based approach*. Guilford Press. <https://www.guilford.com/books/Introduction-to-Mediation-Moderation-and-Conditional-Process-Analysis/Andrew-Hayes/9781462549030>
- Hellmich, F., Löper, M. F., & Görel, G. (2019). The role of primary school teachers' attitudes and self-efficacy beliefs for everyday practices in inclusive classrooms—A study on the verification of the “theory of planned behaviour.” *Journal of Research in Special Educational Needs, 19*, 36–48.
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Evaluating model fit: A synthesis of the structural equation modelling literature. *Conference Papers*. <https://doi.org/10.21427/D79B73>
- IDEA LRE requirements*. (2017). Individuals with Disabilities Education Act. <https://sites.ed.gov/idea/regs/b/b/300.114>
- Individuals with Disabilities Education Act (IDEA)*. (2022). Individuals with Disabilities Education Act. <https://sites.ed.gov/idea/>

- Kirk, S. H., Farmer, A. W., & Vires, C., Jr. (2021). An examination of the correlation between administrator teacher support and teacher self-efficacy level. *Journal of the American Academy of Special Education Professionals*, 133–156.
- Krämer, S., Möller, J., & Zimmermann, F. (2021). *Inclusive education of students with general learning difficulties: A meta-analysis*. <https://doi.org/10.3102/0034654321998072>
- Lane, J. M. (2017). Special education staffing and service models in christian schools. *Journal of Research on Christian Education*, 26(3), 225–236.  
<https://doi.org/10.1080/10656219.2017.1384709>
- Lane, J. M., & Jones, D. R. (2015). Child find practices in christian schools. *JRCE*, 24(3), 212–223. <https://doi.org/10.1080/10656219.2015.1100566>
- Lane, J. M., Kinnison, Q. P., & Ellard, A. (2019). Creating inclusive and hospitable christian schools: Three case studies. *Journal of Disability & Religion*, 23(1), 37–58.  
<https://doi.org/10.1080/23312521.2019.1570832>
- Lüke, T., & Grosche, M. (2018). What do I think about inclusive education? It depends on who is asking. Experimental Evidence for a Social Desirability Bias in Attitudes towards Inclusion. *International Journal of Inclusive Education*, 22(1), 38–53.
- Maddux, J. E., & Stanley, M. A. (1986). Self-efficacy theory in contemporary psychology: An overview. *Journal of Social and Clinical Psychology*, 4(3), 249–255.  
<https://doi.org/10.1521/jscp.1986.4.3.249>
- Meyers, L. S., Gamst, G. C., & Guarino, A. J. (2017). *Applied multivariate research: Design and interpretation* (Third edition). SAGE Publications, Inc.
- National Center for Education Statistics. (n.d.). National Center for Education Statistics.  
Retrieved February 19, 2023, from <https://nces.ed.gov/>

- Netemeyer, R., Bentler, P., Bagozzi, R., Cudeck, R., Cote, J., Lehmann, D., McDonald, R., Heath, T., Irwin, J., & Ambler, T. (2001). Structural equations modeling. *Journal of Consumer Psychology - J CONSUM PSYCHOL*, *10*, 83–100.  
[https://doi.org/10.1207/S15327663JCP1001&2\\_08](https://doi.org/10.1207/S15327663JCP1001&2_08)
- Nwoko, J. C., Crowe, M. J., Malau-Aduli, A. E. O., & Malau-Aduli, B. S. (2022). Exploring private school teachers' perspectives on inclusive education: A case study. *International Journal of Inclusive Education*, *26*(1), 77–92.  
<https://doi.org/10.1080/13603116.2019.1629122>
- Piper, W. (1930). *The little engine that could* (Board Book edition). Grosset & Dunlap.
- Ramirez, A. Y. "Fred," & Stymeist, M. (2019). Bible theory or biblical living: What are christian schools providing for families with children with special needs? *International Christian Community of Teacher Educators Journal*, *14*(2). <https://doi.org/>-
- Sancar, R., Atal, D., & Deryakulu, D. (2021). A new framework for teachers' professional development. *Teaching and Teacher Education*, *101*, 103305.  
<https://doi.org/10.1016/j.tate.2021.103305>
- Savolainen, H., Malinen, O.-P., & Schwab, S. (2022). Teacher efficacy predicts teachers' attitudes towards inclusion—A longitudinal cross-lagged analysis. *International Journal of Inclusive Education*, *26*(9), 958–972.
- Sawilowsky, S. S. (2009). New effect size rules of thumb. *Journal of Modern Applied Statistical Methods*, *8*(2), 597–599. <https://doi.org/10.22237/jmasm/1257035100>
- Scanlan, M. (2017). Meeting students' special needs in Catholic schools: A report from the USA. *International Studies in Catholic Education*, *9*(1), 58–75.  
<https://doi.org/10.1080/19422539.2017.1286911>



- Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, 7, 147–177. <https://doi.org/10.1037/1082-989X.7.2.147>
- Schreiber, J. B., Stage, F. K., King, J., Nora, A., & Barlow, E. A. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, 99, 323–337. <https://doi.org/10.3200/JOER.99.6.323-338>
- Schunk, D., & DiBenedetto, M. (2016). Self-Efficacy theory in education. In *Handbook of Motivation at School* (pp. 34–54). Routledge. <https://doi.org/10.4324/9781315773384-4>
- Solomon, H., & Scott, L. (2013). Teaching students with disabilities efficacy scale: Development and validation. *Inclusion*, 1, 181–196. <https://doi.org/10.1352/2326-6988-1.3.181>
- Specht, J. A., & Metsala, J. L. (2018). Predictors of teacher efficacy for inclusive practice in pre-service teachers. *Exceptionality Education International*, 28(3), 67–82.
- Sproles, K. Z. (2018). The emotional balancing act of teaching: A burnout recovery plan. *New Directions for Teaching & Learning*, 2018(153), 99–107. <https://doi.org/10.1002/tl.20285>
- Taie, S., & Lewis, L. (2022). *National teacher and principal survey—National teacher and principal survey (NTPS)/Schools and Staffing Survey (SASS)*. Characteristics of 2020-21 Public and Private K-12 Schools in the United States; National Center for Education Statistics. <https://nces.ed.gov/surveys/ntps/>
- U.S. Constitution—Tenth Amendment | Resources | Constitution Annotated | Congress.gov | Library of Congress.* (n.d.). Retrieved February 16, 2023, from <https://constitution.congress.gov/constitution/amendment-10/>
- Wilson, C., Marks Woolfson, L., & Durkin, K. (2020). School environment and mastery experience as predictors of teachers’ self-efficacy beliefs towards inclusive teaching. *International Journal of Inclusive Education*, 24(2), 218–234.

- Woodcock, S., & Faith, E. (2021). Am I to blame? Teacher self-efficacy and attributional beliefs towards students with specific learning disabilities. *Teacher Development, 25*(2), 215–238. <https://doi.org/10.1080/13664530.2020.1863256>
- Yang, H. (2020). The effects of professional development experience on teacher self-efficacy: Analysis of an international dataset using bayesian multilevel models. *Professional Development in Education, 46*(5), 797–811. <https://doi.org/10.1080/19415257.2019.1643393>
- Yell, M. L., Rogers, D., & Rogers, E. L. (1998). The legal history of special education: What a long, strange trip it's been! *Remedial and Special Education, 19*(4), 219–228. <https://doi.org/10.1177/074193259801900405>
- Young, K. (2018). CO-CREATE: Teachers' voices to inform special education teacher education. *Issues in Educational Research, 28*(1), 220–236.

## Appendix A

### TSDDES Instrument Permission for Use



**Mudrow, Jeff** <jmudrow@seu.edu>

Dec  
1, 2022,  
5:58 AM

to LaRon

Good Morning Dr. Scott,

I was hoping that your calendar might still allow for a brief conversation sometime next week? I believe the TSDDES would work well with my dissertation and would like to request permission to use it in my study. I would like to briefly discuss the possibility of adding a few questions to the TSDDES, as I am also interested in investigating the self-efficacy impact relating to school administration and the role they play on the teachers who are teaching students with disabilities.

My schedule is usually very flexible!

Thanks,  
Jeff Mudrow



**Scott, LaRon A. (ysv3ps)** <ysv3ps@virginia.edu>

Dec  
2, 2022,  
9:11 AM

to me

Hi Jeff,

Yes, you have permission to use the scale. I'm a bit backed up at the moment with meetings. Could we schedule a time in January? How about the week of the 17th?

LaRon

---

**Dr. LaRon A. Scott**  
Associate Dean for Diversity, Equity, & Inclusion  
Associate Professor, Special Education  
Co-Editor, [Inclusion](#)

Department of Curriculum, Instruction & Special Education  
Ridley Hall, 278 | 417 Emmet Street South | P.O. Box 400260 | Charlottesville, VA 22904

Ph | 434-924-2646 Email | [ysv3ps@virginia.edu](mailto:ysv3ps@virginia.edu)

If you are interested, I would be happy to share any edits to the instrument and the findings of my research when it is completed.

Respectfully,  
Jeff Mudrow



**Scott, LaRon A. (ysv3ps) <ysv3ps@virginia.edu>**

Jan  
13, 2023,  
7:14 AM

to me

Happy New Year, Jeff!

Yes, let's plan a time to chat. I can be flexible on the 28th. Are there times that work for you?

Yes, feel free to modify the instrument based on your needs. I'm sure you are talking about a possible pilot with your chair, but happy to talk more about that with you also.

LaRon

---

**Dr. LaRon A. Scott**

Associate Dean for Diversity, Equity, & Inclusion  
Associate Professor, Special Education  
Co-Editor, [Inclusion](#)

Department of Curriculum, Instruction & Special Education  
Ridley Hall, 278 | 417 Emmet Street South | P.O. Box 400260 | Charlottesville, VA 22904

Ph | 434-924-2646 Email | [ysv3ps@virginia.edu](mailto:ysv3ps@virginia.edu)