

A STUDY OF K-12 CLASSROOM TEACHERS' CONCERNS AND PERCEIVED SELF-EFFICACY IN IMPLEMENTING INCLUSIVE TEACHING PRACTICES TO INSTRUCT STUDENTS WITH DISABILITIES

by

Pankaj Khazanchi

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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ABSTRACT

Research over the past decade suggests teachers have low instructional self-efficacy/confidence and more concerns about implementing inclusive teaching practices. This quantitative correlational study explored whether reported concerns and demographic variables (gender, age, education, and years of teaching experience) predicts teachers' instructional self-efficacy with students with disabilities. The *Concerns about Inclusive Education* and the *Teachers' Efficacy in Implementing Inclusive Practices* scales were administered to 123 K-12 classroom teachers in Georgia. Data were subjected to hierarchical linear multiple regression to examine whether systematically adding select demographic variables and teachers' concern scores to the overall model significantly improved the model's ability to predict teachers' self-efficacy in implementing inclusive instruction. Analysis revealed a nonsignificant predictive relationship between all the demographic variables and self-efficacy, where these predictors accounted for only 2.9% of the variance with the criterion variable. A significant inverse relationship was found between the concern predictor and self-efficacy variables ($\beta = -0.414$, $t = -4.58$, $p < .001$) with the concern variable accounting for an additional 15.80% of variance with self-efficacy, $p = .009$, $R^2 = 0.216$. Results suggest gender, age, educational qualification, and years of teaching experience contribute scant explanatory power to teachers' reported self-efficacy in implementing inclusive education. However, teachers' concerns about inclusive education offer some meaningful explanation about their instructional self-efficacy with students with disabilities. Future research studies need to replicate this study on a different sample population region, using quantitative, qualitative, or mixed research methods to understand better teachers' concerns and their PSE in implementing inclusive teaching practices to instruct students with disabilities.

Keywords: inclusive teaching practices, K-12 classroom teachers, teachers' concerns about inclusive education, teachers' perceived self-efficacy

Dedication

This dissertation is dedicated to my wife Rashmi Khazanchi, our son Dhananjay and our daughter Harshita. They gave me the needed moral, spiritual, and emotional support and motivated me at every step to reach the finish line. Without the help of Rashmi, I could not have faced all the hurdles of graduate school life. She stayed awake with me, provided good meals, and cared for all the little things. I also dedicate this dissertation to my father, Late Shree Paras Mal Khazanchi, a great engineer, mathematician, and educator who showed me the dream of completing my higher studies, and to my mother, Ms. Usha Khazanchi. She always reminded me about completing it on my long-distance phone calls to India. I am thankful to my doctoral friends and family members who motivated me to complete this dissertation. I am especially thankful to Dr. Rollen C. Fowler, Dr. Glenn Holzman, and Dr. Melissa McCart, who helped me complete all the milestones successfully and finally reach the finish line. Lastly, I dedicate this dissertation to Him, our Almighty God, whose blessings showed the right direction.

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Table of Contents

ABSTRACT	3
Dedication	5
Acknowledgments.....	6
List of Tables	10
List of Figures	11
List of Abbreviations	12
CHAPTER ONE: INTRODUCTION.....	13
Overview.....	13
Background.....	13
Problem Statement	18
Purpose Statement.....	20
Significance of the Study	22
Research Questions	23
Definitions.....	23
Summary	25
CHAPTER TWO: REVIEW OF THE LITERATURE.....	26
Overview.....	26
Theoretical Framework.....	26
Self-Efficacy Theory.....	27
Vicarious Experiences	28
Social Persuasions.....	28
Physiological and Affective States	29
Related Literature.....	33
Search Methods.....	35
Historical Context.....	36

Prevalence	42
Inclusive Teaching Practices in K-12 Classrooms.....	42
Co-Teaching.....	44
Teacher Collaboration.....	45
Peer-Tutoring	45
Cooperative Learning.....	46
Differentiated Instruction.....	46
Universal Design of Learning	46
Teacher Characteristics Affecting Inclusion.....	48
Teachers’ Concerns.....	49
Teacher Training and Knowledge.....	54
Teachers’ Efficacy in Managing Student’s Behavior	57
Relationship Between Teachers’ Concerns, PSE, and Other Factors.....	58
Gender.....	59
Summary	61
CHAPTER THREE: METHODS	64
Overview.....	64
Design	64
Research Questions.....	66
Null Hypotheses.....	66
Participants and Setting.....	67
Instrumentation	69
Procedures.....	71
Operationalization of Constructs	73
Ethical Considerations	74
Data Analysis	75
Summary	77
CHAPTER FOUR: FINDINGS	78
Overview.....	78
Research Questions.....	78

Null Hypotheses	79
Descriptive Statistics.....	79
Summary	94
CHAPTER FIVE: CONCLUSIONS	96
Overview.....	96
Discussion.....	96
Results for the Research Question	97
Implications.....	102
Limitations	105
Recommendations for Future Research	107
Summary.....	109
REFERENCES	112
APPENDIX A.....	186
APPENDIX B	187
APPENDIX C	188
APPENDIX D.....	190
APPENDIX E	192

List of Tables

Table 1. <i>Demographic Characteristics of K-12 Classroom Teachers in the State of Georgia ..</i>	68
Table 2. <i>Frequency Table for Nominal Variables</i>	80
Table 3. <i>Summary Statistics Table for Age</i>	81
Table 4. <i>Summary Statistics Table for Concerns and Self-Efficacy</i>	81
Table 5. <i>Summary Statistics Table for Concerns and Self-Efficacy</i>	82
Table 6. <i>VIFs for Predictor Variables</i>	85
Table 7. <i>Results for Hierarchical Linear Regression with Gender, Age, Educational Qualifications, Years of Experience, and Concerns Predicting Self-Efficacy.....</i>	87

List of Figures

Figure 1. <i>Relationship showing the Predictor Variables and the Outcome Variable</i>	22
Figure 2. <i>Three interrelated forces impacting people’s capabilities (Bandura, 2012)</i>	30
Figure 3. <i>Normal P-P Scatterplot.</i>	83
Figure 4. <i>Residuals Scatterplot</i>	84
Figure 5. <i>Self-Efficacy by Gender</i>	89
Figure 6. <i>Self-Efficacy by Education Level</i>	89
Figure 7. <i>Self-Efficacy by Experience</i>	90
Figure 8. <i>Histogram for Teacher Concerns Scores</i>	90
Figure 9. <i>Histogram for Self-Efficacy Scores</i>	91
Figure 10. <i>Scatterplot of Self-Efficacy by Gender</i>	92
Figure 11. <i>Scatterplot of Self-Efficacy by Age</i>	92
Figure 12. <i>Scatterplot of Self-Efficacy by Educational Qualifications</i>	93
Figure 13. <i>Scatterplot of Self-Efficacy by Years of Experience</i>	93
Figure 14. <i>Scatterplot of Self-Efficacy by Teacher Concerns</i>	94

List of Abbreviations

Autism Spectrum Disorder (ASD)

Center for Applied Special Technology (CAST)

Concerns about Inclusive Education Scale (CIES)

Education for All Handicapped Children Act (EAHCA)

Emotional and Behavioral Difficulties (EBD)

Every Student Succeeds Act (ESSA)

Georgia Department of Education (GaDOE)

Individualized Education Program (IEP)

Individuals with Disabilities Education Act (IDEA)

Institutional Review Board (IRB).

Intellectual Disability (ID)

Learning Disability (LD)

National Center for Education Statistics (NCES)

No Child Left Behind (NCLB)

Perceived Self-Efficacy (PSE)

Students with Disabilities (SWDs)

Teachers' Efficacy in Implementing Inclusive Practices (TEIP)

The Individuals with Disabilities Education Improvement Act (IDEIA)

United States (U.S.)

Universal Design for Learning (UDL)

CHAPTER ONE: INTRODUCTION

Overview

Chapter One contains a brief description of the problem, purpose, and significance of this study, which explores the concerns and perceived self-efficacy (PSE) of K-12 classroom teachers regarding their ability to effectively teach students with disabilities (SWD) in the general education setting. This chapter also presents the background to the issues, problem and purpose statements, research questions, and potential significance of the study.

Background

Since the early to mid-1990s, schools across the United States (U.S.) have adopted the political concept of inclusion whereby students with and without disabilities are educated together in the regular classroom (Armstrong et al., 2016; Brock, 2018). One of the enduring issues related to the concept of “inclusion” and related inclusive practices is the multiple interpretations of inclusion found across education, with models that (a) fully include all SWDs in general education classrooms regardless of their severity level; (b) involve regular class placement for some SWDs, but on a part-time basis for others; and (c) only include students for whom it is instructionally appropriate, even suggesting that separate, special schools should be part of the student’s inclusion plan (Crockett & Kauffman, 1998). At the policy level, full inclusion falls short of the Individuals with Disabilities Education Act (IDEA, 2004) provisions and mandates. At the educational level, the concept of inclusion means full inclusion of all students in the general setting regardless of severity level, and then its adoption requires the abolition of IDEA’s mandated continuum of alternative placements. If inclusion is meant to include some SWDs but not others, then “inclusion” has been available since the Education for All Handicapped Children Act of 1975 was passed, so the profession does not need the special

term “inclusion” (Kauffman et al., 2005; MacMillan et al., 1996). As Martin (1995), former director of the Bureau for the Education of the Handicapped, pointed out, state governments and local schools “cannot responsibly adopt ‘inclusion’ without defining its proposed program” (p. 193). Schools need to clearly define/explain the instructional supports and strategies that will facilitate the relationship between students’ specific learning needs and what will be done in the classroom (in terms of specially designed instruction, as required by IDEA) to address those needs (Kauffman & Badar, 2017).

These issues have also created problems for teachers who are now expected to teach all students regardless of the nature/severity of the disability. This expectation is worrisome because “advocating that all teachers should be prepared to teach all students reflect serious underestimation of the complexity of teaching effectively and an almost total lack of understanding of the educational implications of the full range of disabilities” (Kauffman et al., 2019, p. 159). Because of this expectation, public schools have found it challenging to retain quality teachers in K-12 classrooms, with teachers reporting a low PSE (or lack of confidence) in being able to work successfully with SWDs in an inclusive classroom setting (Derosier & Soslau, 2014; Dimopoulou, 2013; Poulou, 2017; Urton et al., 2014).

For decades, researchers have acknowledged that teachers have concerns and face challenges in implementing inclusive teaching practices (Beasley & Bernadowski, 2019; Burstein et al., 2004; Carrington et al., 2016; Hwang & Evans, 2011; Scott et al., 1998). Several factors, such as availability of resources, the expertise of stakeholders, appropriate adaptations of curriculum and instructions, attitudes, concerns, and PSE of teachers are thought to influence the success of inclusive education in K-12 classrooms (de Boer et al., 2011; Deng et al., 2017; Forlin & Chambers, 2011; Kim & Rouse, 2011; Shogren et al., 2015; Yan & Deng, 2019).

Coupled with the concern teachers have been expressing about their teaching practices is the importance of teachers' PSE, which helps facilitate motivation, affects coping with stress, and provides the confidence needed for accomplishing challenging tasks (Bandura, 1986), especially in relation to teaching students who struggle to learn at school. For this reason, Bandura's (1986) theory related to PSE was the guiding framework for this study. Teachers' PSE is influenced by four major sources: cognitive, motivational, affective, and selection processes (Bandura, 1993). PSE refers to "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (Bandura, 2010, p. 3). Teachers' PSE refers to the beliefs they have about desired instructional outcomes, the judgment of what one can do with their skills, perceived ability to plan, organize, and successfully implement activities needed to attain educational goals, or deal with the prospective situation (Bandura, 1982; Skaalvik & Skaalvik, 2007). Teachers' PSE plays a crucial role in determining significant outcomes for students (Pantić & Florian, 2015). Teaching experience, acquisition of teaching knowledge, and skills are important predictors of variation in teachers' PSE (Kosko & Wilkins, 2009; Malinen et al., 2013).

Teachers' concerns and PSE are important indicators of how well they meet the challenges in K-12 classrooms in successfully implementing inclusive teaching practices. Teachers' concerns are defined as issues, questions, feelings, or resistance they have in teaching students in response to new situations, such as implementing inclusive education (Hall & Hord, 2014; van den Berg & Ros, 1999; Yan & Deng, 2019). Some teachers may have concerns teaching SWD in their classrooms (Forlin & Chambers, 2011; Forlin & Cooper, 2013; Horne & Timmons, 2009; Kim, 2016; Starr et al., 2014). Some teachers may show low PSE, lack confidence, be unprepared to teach SWDs, and struggle to implement inclusive practices in K-12

classrooms (Kim, 2016; Kosko & Wilkins, 2009; Stephenson & Carter, 2014). Therefore, there is a need to reform teacher training programs to successfully improve and implement inclusive education in K-12 classrooms (Forlin et al., 2014; Sharma et al., 2015).

There is overwhelming empirical evidence that demonstrates that effective/efficient teaching is a powerful intervention/means for increasing student achievement, and teachers' actions in the classroom directly impact students' learning (Finkelstein et al., 2021; Kauffman & Hornby, 2020). SWDs need to receive "meaningful benefit" per IDEA's FAPE mandate as demonstrated by measurable academic and functional progress. SWDs will benefit from effective education, including special education strategies and approaches in an inclusive classroom so long as those interventions are intensive in nature (Fuchs et al., 2015).

Unfortunately, many SWDs do not receive an intensive/explicit instructional programming as general education classrooms are not equipped to provide these services (Calhoon et al., 2019). The relationship between K-12 classroom teachers' concerns and their PSE needs to be studied as those highly self-efficacious teachers have few concerns in teaching SWDs and effectively implement effective teaching practices in inclusion classroom settings (Gebbie et al., 2012; You et al., 2019). In an inclusive classroom, general and special education teachers share the responsibility of educating the students (Allday et al., 2013). Even with the shared responsibility, the increased placement of SWDs in inclusive classrooms has resulted in classroom teachers experiencing increased difficulty providing effective specially designed instruction to address these students' skill deficits due to the wide-ranging learner characteristics, behavior problems, and severity of the disability as well as the lack of pre-service preparation (Dimopoulou, 2013; Koegal et al., 2011; MacFarlane & Woolfson, 2013).

Teachers come with varied educational backgrounds, training, and experiences (Grant et al., 2008; Haimour & Obaidat, 2013). Researchers have posited that the more teachers had concerns teaching their students, the less PSE they had in teaching (Boz & Boz, 2010; Dunn et al., 2013; Fives & Buehl, 2010). The concerns expressed by teachers and their PSE may impact teachers' teaching practices in effectively implementing inclusive teaching practices in K-12 classrooms.

Most teacher education programs do not adequately prepare teachers on instructional modifications, collaboration with other professionals, and management of students' behavior (Dicke et al., 2015; Dunbar, 2004; Forte & Flores, 2014; Griffin et al., 2009; Loreman et al., 2005; Morgan, 2014; Westling, 2010). Teachers have reported their concerns in managing challenging behaviors of students with specific disabilities, such as Autism (Koegal et al., 2011), Emotional and Behavior Disability (EBD) (Butler & Monda-Amaya, 2016), Learning Disability (LD), and Intellectual Disability (ID) (Stoesz et al., 2014). Student's behavioral problems may cause educational concerns and stress for teachers (Fulmer & Turner, 2014; Griffin et al., 2009; Koegal et al., 2011; Matson et al., 2009; Probst & Leppert, 2008; Westling, 2010).

The success of SWDs depends on the effectiveness of teachers in the classrooms (Jones & Brownell, 2014). Research regarding the willingness of teachers to include SWDs in general education classrooms is mixed (Gersten et al., 1988; Treder et al., 2000). Some of the teachers who were more efficacious and knowledgeable were more open to new ideas and willing to experiment with new methods to meet the needs of SWDs (Schunk et al., 2008; Woolfolk & Hoy, 1990).

Some general classroom teachers show concerns such as class size, variation in student skills, and teaching SWDs with a variety of needs (Knight, 1999; Wolery et al., 1994). Some

teachers who do not get proper support and training regarding their concerns show difficulties in effectively meeting the challenges of students (Carrington et al., 2016; Chao et al., 2017; Derosier & Soslau, 2014). K-12 general education teachers have little or no training to serve SWDs, whereas special education teachers lack the content-area expertise that the general education teachers have (Flower et al., 2017; Laarhoven et al., 2007; Loreman et al., 2007). K-12 special education teachers felt more prepared than general education teachers in pacing the instructions and adapting the curriculum content for SWDs in inclusive classrooms (Zagona et al., 2017).

Teacher attitudes, concerns, and PSE are variables that may impact the delivery of reasonable instructional and effective inclusive practices (Sharma et al., 2018; Zee & Koomen, 2016). Currently, there is substantial research that studies attitudes, concerns, and PSE in pre-service teachers (Ahsan et al., 2012; Beacham & Rouse, 2012; Dunn et al., 2013; Sharma & Sokal, 2015; Woodcock et al., 2012). This study may add to the knowledge base by examining if K-12 teachers' concerns and demographic characteristics (gender, age, education, and years of teaching experience) predict their PSE in implementing inclusive teaching practices.

Problem Statement

The problem investigated was that while K-12 teachers have concerns about successfully implementing inclusive teaching practices with SWDs in the inclusive classroom environment, the relationship between those concerns and their PSE is unclear. It is also not well understood what role certain demographic variables (e.g., gender, age, education level, and years of teaching experience) may play in that relationship between teachers' concerns and PSE. As indicated earlier, many teachers do not feel confident in teaching SWDs in K-12 classrooms (Dixon et al., 2014; Jordan et al., 2009; Jordan & Stanovich, 2003; Kamens et al., 2003). Authorities in the

profession who studied this issue suggest a need to document teachers' concerns regarding issues involved in successfully including and teaching SWDs in their K-12 classrooms (see Sharma et al., 2012; Starr et al., 2014).

K-12 classroom teachers may lack the training to effectively deal with the problem behaviors of SWDs (Eikeseth & Klintwall, 2014; Hart & Malian, 2013; Hart & More, 2013). SWDs sometimes show challenging behaviors and academic needs, requiring proper intervention from a trained professional or specialist, such as a special education teacher or school psychologist (Chu et al., 2020; Pandolfi & Magyar, 2014). Teachers' main concern is how best to effectively manage students' classroom behavior (Chen, 2014; Dhanapal et al., 2017). Because of these issues, it was important to study the relationship between K-12 classroom teachers' concerns, demographic characteristics, and PSE in implementing inclusive teaching practices (Sheer et al., 2015). While numerous research studies have focused on identifying and describing the attitudes, concerns, and PSE of preservice and in-service teachers in implementing inclusive teaching practices (see, for example, Doulkeridou et al., 2011; Shah et al., 2016; Sharma et al., 2006; Sharma & Sokal, 2016; Sokal & Sharma, 2014; Tümkaya & Miller, 2020; Vashistha & Priya, 2013; Yada & Savolainen, 2017), few studies have actually examined the relationship between those expressed concerns and PSE, specifically whether teachers' level of PSE can be predicted by the degree of concern they report. The problem was that the literature had not fully addressed the relationship between teachers' concerns, demographic variables (i.e., gender, age, education level, and years of teaching experience), and PSE in implementing inclusive teaching practices.

Purpose Statement

The purpose of this quantitative correlational study was to examine whether K-12 classroom teachers' concerns and demographic characteristics (i.e., gender, age, education, and years of teaching experience) predict their PSE to implement inclusive teaching practices.

The predictor variables were four demographic characteristics of K-12 classroom teachers, including gender (X_1), age (X_2), educational qualifications (X_3), years of teaching experience (X_4), and the variable related to teacher's concerns (X_5). *Gender* (X_1) was defined as male or female; *age* (X_2) was defined as how old participants are; *educational qualifications* (X_3) relate to the attainment of a post-secondary associate, bachelor's, master's, specialist, or doctoral degree; *years of teaching experience* (X_4) was defined as the number of years a participant worked as a teacher, ranging from less than one year, 1 to 10 years, 11 to 20 years, 21 to 30 years, and greater than 30 years; and *teacher's concerns* (X_5) relate to issues that teachers are worried or anxious about (Kellner & Attorps, 2015). The outcome variable (\hat{Y}) was the K-12 classroom teachers' reported PSE in implementing inclusive teaching practices.

Survey methods were used for gathering data on the criterion and predictive variables. The survey approach involves gathering information from a sample or the entire population of a community (Gay & Airasian, 2000). The survey method is especially useful when: (a) the sample size is large; (b) the interrelationship between the variables is examined; and (c) the differences between the samples in their response patterns are investigated (Gall et al., 1996).

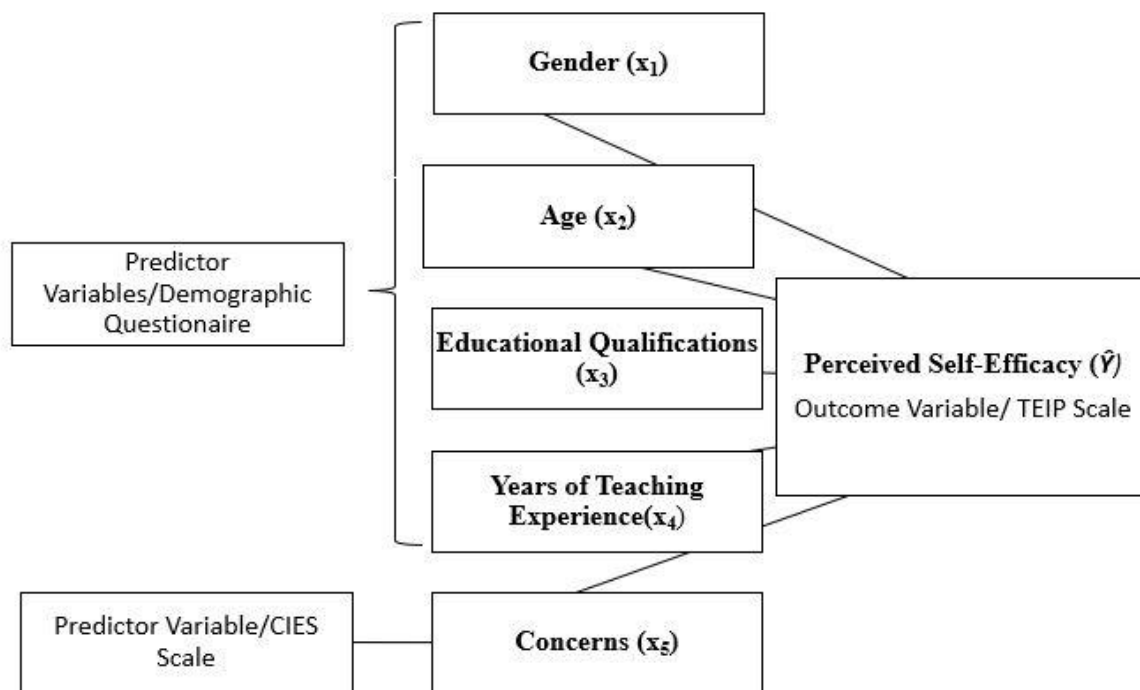
Data regarding concerns of K-12 classroom teachers and their PSE in implementing inclusive teaching practices were collected using pre-validated surveys. Multiple regression analysis was used to answer whether statistically significant correlations exist between variables.

Multiple regression analysis equations were used to indicate how the predictive variables (PVs) were related to the outcome variable (OV).

The literature has indicated that teachers expressed several concerns in teaching SWDs (Berry, 2010; Starr et al., 2014; Villegas et al., 2017; Walther-Thomas, 1997). It was, therefore, vital to gain a full understanding of teachers' concerns and their predictive relationship to the PSE of K-12 classroom teachers in implementing inclusive teaching practices. Predictive models for PSE of K-12 classroom teachers in implementing inclusive teaching practices were developed based on multiple hierarchical linear regression analysis results. The further analysis investigated the relationships between predictor variables (teachers' concerns and demographic variables- gender, age, educational qualifications, and years of teaching experience) and a criterion variable (teachers' PSE). Figure 1 below describes the predictor variables and the other variables.

Figure 1

Relationship Showing the Predictor Variables and the Outcome Variable



Significance of the Study

The purpose of this study was to extend the existing body of knowledge on K-12 teachers' concerns and their PSE in implementing inclusive teaching practices to instruct students with disabilities. Understanding teachers' concerns and their relationship with PSE may help address issues within the teacher preparation programs for inclusive practices and may ensure the successful inclusion of SWDs in general education classrooms (Florian, 2012; Skaalvik & Skaalvik, 2017). The research findings may reinforce current best practices, highlight the need for the increased emphasis on the education of SWDs in teacher training programs, and support K-12 classroom teachers for promoting inclusion. K-12 teachers are important components of student learning (Darling-Hammond, 2000, 2016; Darling-Hammond & Youngs, 2002). As K-12 classroom teachers become familiar with their concerns and PSE, meeting the

needs of SWDs may become less challenging. The study of teachers' concerns, demographic characteristics, and PSE may help stakeholders better understand the effectiveness and pedagogical knowledge of K-12 classroom teachers. Given the emphasis on educating SWDs in K-12 classroom settings and the lack of previous research studies investigating the predictive relationship between teachers' concerns, demographic characteristics, and their PSE in the U.S., it seems especially important to investigate the relationship between these constructs. The result of this quantitative correlational study may add to the small body of literature highlighting the need for more research as to how teachers' concerns, demographic characteristics, and their PSE in implementing inclusive are integral to effective teaching practices.

Research Questions

The following research questions guided the current study:

RQ 1: Does a K-12 classroom teacher's gender predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?

RQ 2: Does a K-12 classroom teacher's age predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?

RQ 3: Does a K-12 classroom teacher's educational qualifications/level predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?

RQ 4: Does a K-12 classroom teacher's years of teaching experience predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?

RQ 5: Does a K-12 classroom teacher's level of concerns predict their sense of PSE in implementing inclusive teaching practices, as measured by the CIES and the TEIP?

Definitions

This study used the following definitions:

1. *Perceived self-efficacy (PSE)* - “PSE is concerned with judgments of how well one can execute courses of action required to deal with prospective situations” (Bandura, 1982, p. 122).
2. *Teacher efficacy* - “Teacher efficacy is a judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated” (Tschannen-Moran & Hoy, 2001, p. 783).
3. *Disability* - “A condition characterized by functional limitations that impede typical development as the result of a physical or sensory impairment or difficulty in learning and social adjustment” (Heward et al., 2018, p. 10).
4. *Teacher concerns* - Teacher concerns refer to a set of feelings, thoughts, considerations, contentment, preoccupations, and frustration peculiar to an individual, specific issue or task (Hall, 2013; Hall et al., 1977; Hall et al., 1986; Hall & Hord, 2014).
5. *Inclusion* - Inclusion is defined as SWDs spending most (i.e., 80% or more) of the school day in general classes (Janney & Snell, 2003; Powell, 2016; Sailor & Skrtic, 1995).
6. *Inclusive teaching practices* - Inclusive teaching practices refer to the task of modifying instructions and assessment based on students’ needs, managing disruptive student behavior, collaborating with parents, and involving parents in school activities (Malinen et al., 2013).

Summary

In addressing the concerns and PSE of teachers in implementing inclusive teaching practices to support SWDs in their classrooms, this chapter described the purpose of this quantitative correlational study. The background information in this chapter is descriptive in justifying further research to resolve the study's problem and to add to the literature regarding teachers' concerns and their PSE. The outcomes of this research study were to extend the existing body of knowledge on teachers' concerns and PSE in implementing inclusive teaching practices.

CHAPTER TWO: REVIEW OF THE LITERATURE

Overview

The purpose of this literature review was to present an overview of literature and research findings related to the study of teachers' concerns, demographic variables (gender, age, educational qualifications, and years of teaching experience), and their PSE in implementing inclusive teaching practices. The chapter opens with the theoretical framework. This study is grounded in Bandura's (1977) SE theory which is the "belief in one's capabilities to organize and execute the course of action required to produce given attainments" (Bandura, 1997, p. 31). A thorough review of the literature pertinent to the history of inclusion in the U.S., inclusive teaching practices in K-12 classrooms, teachers' characteristics affecting inclusion, and the relationship between teachers' concerns, PSE, and demographic factors completes the chapter, which ends with a summary.

Theoretical Framework

The following section provides the theoretical framework for this study. The theoretical framework that directly impacts this quantitative correlational study is Bandura's SE theory (Bandura, 1986). It explains how one's belief in one's ability to succeed in specific situations or competence to accomplish a task can play a significant role in the way one approaches goals, responsibilities, tasks, and challenges. "In quantitative research, theories provide a proposed explanation for the relationships among variables being tested by the investigator" (Creswell, 2014, p. 22). Teachers' concerns and their PSE gain importance in research and have implications in helping teachers choose effective classroom management strategies and how it impacts children's learning, achievement, attitudes, and affective growth (Boz & Boz, 2010; Chacon, 2005; Woolfolk et al., 1990).

Self-Efficacy Theory

Bandura (1977) took a leading role in studying the impact of SE. Bandura's SE theory provides a theoretical framework for understanding how teachers' PSE guides them in managing students' behavior. The term "self-efficacy," introduced in 1977, is based on the cognitive theory of social learning (Bandura, 1977, 1982, 1984, 1997).

The term "teacher SE" was introduced in the late 1990s (Tschannen-Moran, Hoy, & Hoy, 1998). Teacher efficacy is defined as the judgement of one's capability to implement the needed inclusive teaching practices in classrooms (Bandura, 2006; Gibbs, 2007). Teacher SE influences educational attainment, teacher growth, and achievement (Pajares, 1997; Ross, 1992; Skaalvik & Skaalvik, 2007). Teachers' actions, thoughts, and behaviors form their courses of action.

Teachers may have the skills and capability to implement inclusive practices to manage their students (Cameron, 2017). Teachers, when they feel they can bring desired outcomes by their effort, are more confident and more likely to be motivated to overcome the obstacles (Bandura, 1986; Soto & Goetz, 1998). However, if they do not perceive themselves as capable, they may fail to attempt the practices (Morris et al., 2017). Some teachers with low PSE give insufficient effort to reduce behavior problems in their students (Mojavezi & Tamiz, 2012). Some teachers with high PSE may show high levels of expectations for student achievement, can have excellent classroom management skills, and handle students well (Pendergast et al., 2011; Wong & Wong, 2009). Teachers often may not feel efficacious in teaching using a new instructional method in a new environment (Wyatt, 2016). The teaching context and personal competence are key factors when evaluating teachers' PSE (Sharma & George, 2016).

A strong sense of SE comes from four sources: mastery experiences (e.g., past teaching experiences), vicarious experience, social persuasion, and physiological and affective states (Bandura, 1977).

The Mastery Experiences

The mastery experiences let teachers understand about one's successes and failures. Mastery experiences are important for predicting teachers' PSE (Tschannen-Moran, & Hoy, 2007; Tschannen-Moran & McMaster, 2009). Successful experiences enable teachers to have increased SE beliefs, while unsuccessful experiences lead to lower SE beliefs. Teachers who have been successful with the students in the past are more likely to view themselves as highly self-efficacious, and those who saw failures in the classroom had lower SE beliefs (Kosko & Wilkins, 2009; Ruble et al., 2011).

Vicarious Experiences

Through vicarious experiences, teachers learn by modeling other teachers' behaviors. Teachers' have increased PSE beliefs in the classroom when colleagues, supervisors, and administrators convince them about their capabilities through verbal persuasion (Woodcock & Woolfson, 2019). Teachers may look at others' actions and behaviors to judge their relative capabilities (Ruble et al., 2011). Teachers may learn by observing other teachers implement inclusive practices in their classrooms and effectively deal with challenging behaviors of SWDs (Gibbs, 2007).

Social Persuasions

Social persuasions boost teachers' SE. The evaluative feedback that teachers receive from students, teachers, parents, and administrators, makes them judge their capability in completing the task (Ruble et al., 2011). Positive messages improve teachers' SE, whereas criticism and

failures tend to lower their capability. Teachers who received support from their administrators felt more encouraged and less stressed on their job, were efficacious in managing disruptive behavior, implemented inclusive practices, and engaged in teacher collaboration (Billingsley & Cross, 1992; Billingsley et al., 2014; Hosford & O'Sullivan, 2016).

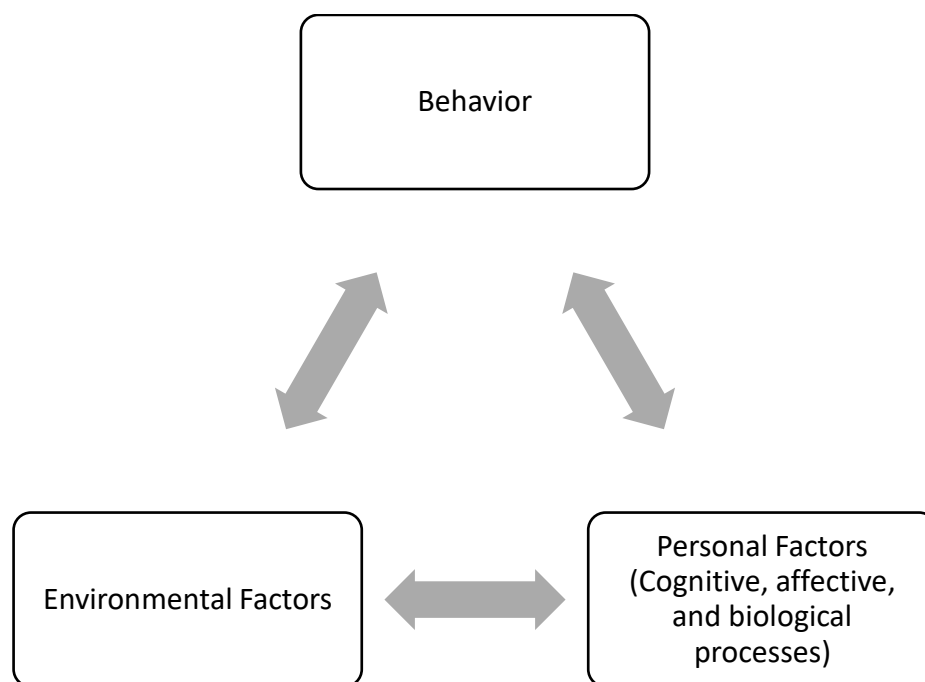
Physiological and Affective States

Teachers' physiological and affective states determine their negative and positive reactions to their classroom environment. The level of anxiety or excitement determines the feeling of mastery or incompetence (Hoy & Spero, 2005). When teachers feel relaxed or excited, before performing a new task, they tend to increase their SE towards the task. Teachers may feel nervous when they have tension, rapid heartbeats, or sweaty palms, which undermines their confidence (Bandura, 1986; Siegle & McCoach, 2007).

Figure 2 describes the triadic reciprocal relationship between the forces that impact people's behaviors. The social cognitive theory explains that people's behaviors are determined by three interrelated forces: behavior, personal factors, and environmental influences, such as cognitive, affective, and biological processes (Henson, 2001). The person engages in the behavior because of his/her social environment in which he/she performs the behavior. In an optimal environment, the SE beliefs will have a greater role in shaping a person's behavior and his /her outcomes.

Figure 2

Three Interrelated Forces Impacting People's Capabilities (Bandura, 2012)



Researchers and practitioners have studied the role of teacher PSE and its impact on teacher's performance for the last two decades (Bandura, 1977; Clayson & Sheffett, 2006; Muijs & Reynolds, 2002; Podell & Soodak, 1993; Schütze et al., 2017). Increased PSE leads to increased positive attitudes towards the tasks (Bandura, 1993). SE influences cognitive development and functioning through cognitive, motivational, affective, and selection processes. SE helps people adjust to challenging realities and proactively sets realistic goals and behavioral change (Bandura, 1997). The social cognitive theory offers guidance about sources of teachers' sense of SE, such as the fact that people learn by observing others and verbal persuasion by a social group helps to sustain increased beliefs of PSE (Bandura, 1977, 1993).

Given the increasing diversity in K-12 classrooms, teachers are tasked to teach all students (Clarke et al., 2016; Sinclair et al., 2018). Both international literature and the U.S.

educational system support that teachers should be well equipped to teach all students, including SWDs, in inclusive classrooms (Cameron, 2017; Chitiyo & Brinda, 2018; Chong et al., 2007; Cooc, 2019; Forlin & Chambers, 2011)

The trend towards inclusive education has resulted in a growing body of research on teachers' PSE for inclusive education (Almog & Shechtman, 2007; Leyser et al., 2011; Romi & Leyser, 2006). However, there is a lack of research on the predictive relationship between teachers' concerns and teachers' PSE in implementing inclusive practices in U.S. schools. Teachers' PSE (a) helps teachers to think, feel, motivated, and behave (Hoy, Hoy, & Davis, 2009); (b) is related to students' achievement and motivation, classroom management skills, the value of educational innovations, and teacher stress (Bandura, 1997; Bandura, 1986, 2001; Fives, 2003; Musti-Rao & Haydon, 2011); and (c) is the perception of their effect on the motivation and learning of all students, including students who show problem behavior (Guskey, 1988). SE is "the judgment of his or her capabilities to bring about desired outcomes of student engagement and learning including students who may be difficult or unmotivated" (Tschannen-Moran & Hoy, 2007, p. 783). SE was first developed by researchers who examined teacher characteristics, teacher growth, student learning, and the change process as related to PSE (Rotter, 1966). People seek out a positive environment and avoid an unpleasant situation. Teachers who believed that they could teach unmotivated and difficult students had internal control. In contrast, teachers who believed the environment to have more control over students' learning did not believe in their competence (Rotter, 1966). Teachers' PSE promotes learning by bringing the required changes in the learning environment so that students learn (Bandura, 1993).

The two components of teacher PSE are general teaching efficacy and personal teaching efficacy. The general teaching efficacy refers to teachers' general beliefs (external factors that

limit what teachers can accomplish). The personal teaching efficacy relates to teachers' perceived ability to bring change in their students (Gibson & Dembo, 1984; Lin & Gorrell, 1998). Teachers who are highly self-efficacious, devote more time to academic learning, providing the help that students need, and praising students appropriately (Bandura, 1986; Durlak et al., 2015; Humphrey, 2013). Teachers who possess strong PSE tend to include students in their inclusive settings and show more confidence in dealing with difficult situations in the classroom (Weisel & Dror, 2006).

A growing body of research studies corroborated that PSE relates to teachers' readiness in meeting students' needs and their motivation to perform (see Chong & Kong, 2012; Ekstam et al., 2018; Mahler et al., 2018; Ruppert et al., 2016). Teachers who perceived themselves as highly effective are more satisfied with their job and may express greater motivation to teach their students (Bandura, 1986, 2001; Skaalvik & Skaalvik, 2007). This higher level of motivation may help teachers deal with SWDs more effectively, which may also lead to a more accepting, positive attitude about instructing SWDs in an inclusive classroom environment (Hen & Goroshit, 2014; Sharma & Jacobs, 2016; Subban et al., 2019). When teachers believe that inclusion is beneficial, they may have a positive attitude towards SWDs (Idol, 2006; Kraska & Boyle, 2014; Sharma & Jacobs, 2016).

High PSE may prepare some teachers to meet the challenging needs of SWDs, and they tend to work, plan, and organize themselves better (Allinder, 1994). Teachers who perceive themselves as highly confident show less anxiety in teaching SWDs in their classrooms. Some teachers with high PSE may seek improved teaching methods, use instructional materials appropriately, and tend to support struggling students (Caprara et al., 2006; Gibson & Dembo, 1984; Türkoğlu et al., 2017). Some teachers with high levels of PSE bring high-quality standards

to the classroom, effectively manage students' behavior, and adequately fulfill the varied needs of SWDs (see Chacon, 2005; Weisel & Dror, 2006; Woolfolk et al., 1990; Ysseldyke et al., 1992; Zee & Koomen, 2016). Teachers with low PSE may show more stress and burnout when dealing with behavioral problems of SWDs (Boujut et al., 2017; Brunsting et al., 2014; Gaudreu et al., 2012; Ruble et al., 2011).

Related Literature

The importance of bringing changes to teachers' knowledge, skills, and competencies, to successfully implement inclusive education for SWDs, has been recognized for many years (Ballard, 2016; Forlin et al., 2014; Gilberts & Lignugaris-Kraft, 1997; Keefe & Moore, 2004; Knight, 1999; Lewis, 1999; McLeskey et al., 2014). The term "inclusive education" refers to the practice of assisting SWDs to access the standard curriculum in the general education classroom (Bryant et al., 2016). Inclusive education is a provision of providing appropriate curriculum, supports, and services to SWDs in general education classrooms (Choate, 2004; Idol, 2006). Currently, it is difficult to define inclusion, as there is no one universally accepted definition. The term "inclusion" is not used in federal law and regulations. Inclusion is an attempt to "establish collaborative, supportive, and nurturing communities of learners that are based on giving all students the services and accommodations they need to learn, as well as respecting and learning from each other's individual differences" (Salend, 2001, p. 5). The goal of inclusion is to educate each student, regardless of ability or disability, in a place appropriate for, and dedicated to his or her needs (Gonzalez et al., 2005). SWDs show improved outcomes when taught in general education settings (Kurth et al., 2015; Mastropieri & Scruggs, 2001; McMahon et al., 2016).

Studies conducted on the topic of inclusion reveal the importance of studying teachers' concerns and PSE in K-12 classrooms (Dembo & Gibson, 1985; Montgomery & Mirenda, 2014; Sharma & Jacobs, 2016; Sharma et al., 2017; Sharma & Nuttal, 2016). Most of the studies in the field of teachers' concerns and PSE around inclusion focused on preservice teachers and in-service teachers (see Forlin et al., 2009; Savolainen et al., 2012; Shah et al., 2016; Sharma & Nuttal, 2016; Sharma et al., 2008; Sharma et al., 2015; Sokal & Sharma, 2014). In recent years, researchers struggled to identify the predictive relationship between teachers' concerns and their SE (Ahsan et al., 2012; Aloe et al., 2013; Boz & Boz, 2014; Forlin et al., 2011; Sokal & Sharma, 2014). Teachers' main concerns in implementing inclusive teaching practices are related to inadequate support from the administration and paraprofessionals, lack of planning and instructional time, and an increase in class load (Ahsan et al., 2012; Berry, 2010; Brydges & Mkandawire, 2016; Hammond & Ingalls, 2003; Horne & Timmons, 2009; Woodcock & Woolfson, 2019).

In 2018-2019, the National Center for Education Statistics (NCES, 2019) identified 7.1 million students (14% of the students attending public schools), between the age of 3 to 21, as having disabilities. The standardized testing requirement expected through the Every Student Succeed Act (ESSA, 2015) and the Common Core State Standards resulted in increased challenges for the successful inclusion of SWDs in general classrooms (Gregory et al., 2018; Hastings & Oakford, 2003). Stakeholders failed to set high expectations to improve the learning outcomes of SWDs. Inclusive classrooms in schools need teachers who are self-efficacious, well prepared, competent, and knowledgeable in implementing inclusive teaching practices (Chitiyo & Brinda, 2018; Jordan et al., 2009; Katz, 2015). Teachers' concerns and their PSE are two

important constructs that play a fundamental role in inclusive teaching practices (Odongo & Davidson, 2016; Sokal & Sharma, 2014).

To better understand teachers' concerns and their PSE, examining the inclusive practices implemented in inclusive settings is important. Teachers' knowledge in implementing inclusive teaching practices is becoming an important topic of research (Chao et al., 2017; Robinson, 2017; Srivastava et al., 2017). In recent discussions of teachers' concerns and PSE, a controversial issue has been whether teachers' concerns predict teachers' PSE (Sharma et al., 2018; Sharma et al., 2012). This study examined whether K-12 classroom teachers' concerns and demographic characteristics (gender, age, education, and years of teaching experience) predict their PSE to implement inclusive teaching practices. Findings from the present study could support the need for additional training and professional development in inclusion and may have direct implications for the quality of students' education.

Search Methods

This literature review critically examined the available research on teachers' concerns and their PSE. The following information for this study came from various databases such as ERIC, EBSCO, Academic Search, Liberty University online library databases, PsycARTICLES, Research Gate, and Google Scholar. Some criteria for the selection of the research articles included full text and peer-reviewed articles. A comprehensive search of these databases revealed a lack of published literature on this topic. Thus, the extended search criteria covered an in-depth perspective on this research. The Liberty University library online search engines and the Google search database generated relevant full-text peer-reviewed articles. The keywords used to locate the literature for this review included but were not limited to *teachers' concerns*, *teachers' PSE*, *inclusion*, *SWDs in general education classrooms*, *concerns in teaching SWDs*,

and inclusive teaching practices. Social sciences citation index search methods were used to search for relevant research articles for the extensive literature review, a technique that enables researchers to trace an earlier document (e.g., published in 2000) forward to current publications (e.g., between 2015 and 2020) who cited the original source.

This literature review includes the background information, history of inclusion, the definition of SWDs, theoretical framework, teachers' knowledge, teachers' concerns, and PSE in implementing inclusive teaching practices. The literature review provides an in-depth synthesis of research on teachers' concerns and PSE in implementing inclusive teaching practices and justifies why this topic should be studied.

Historical Context

Over the last several decades, the education of SWDs has seen significant transformation (McLeskey et al., 2011). Special education has shifted from segregation, mainstreaming, integrated education to inclusive education (Hettiarachchi & Das, 2014). Historically, between the 1950s and 1970s, most SWDs were educated in a segregated setting. They were denied access to the mainstream educational environment and placed in settings excluded from public schools (Mastropieri & Scruggs, 2010). After the end of World War II, increased opportunity for all led to the rise of the civil rights movement of the 1960s, and the advocacy for people with disabilities during the 1970s (Aron & Loprest, 2012; Meyer et al., 2010; Nagel et al., 2015). The concept of educating SWDs in inclusive settings and giving them equal access to schooling resulted from a federal district court rulings and landmark cases such as *Brown v Board of Education* (1954), *Pennsylvania Association for Retarded Children v Commonwealth of Pennsylvania* (1972), and *Mills v Board of Education of the District of Columbia* (1972). It laid the framework for special education (Bartlett et al., 2007). *Brown v Board of Education* (1954)

removed segregation in schools based on race, and sixteen years later, it provided the basis for landmark cases involving SWDs (Joseph et al., 2019). In the case of *Pennsylvania v. Pennsylvania Association of Retarded Children* (1971), the court ruled to provide children with special needs a right to a free and appropriate public education (FAPE) in the least restrictive environment (LRE), as much as possible (Horrocks et al., 2008).

Between the 1980s and 1990s, the most significant discussion was about the schools and classrooms SWDs should attend, whereas how and what to teach was of least importance (Crockett & Kauffman, 1999). When there was a push for inclusion in the 1990s, some SWDs were never wholly accepted into the system, as general education teachers and administrators lacked the knowledge to manage students' behavior problems (Landrum, 1992; Scruggs & Mastropieri, 1996).

Social changes provided an impetus to an influential model of full inclusion by several advocacy groups like *The Association of Persons with Severe Handicaps* (TASH), *Council for Exceptional Children* (CEC), and *The Arc of the United States*. The TASH movement claimed that special education instructional services and the LRE continuum of placements services should be completely removed, and all SWDs need to be placed in general classrooms. Those in TASH wanted their students/population in general education classrooms for social benefit reasons. TASH claimed that SWDs need more opportunities to interact with their peers to develop their positive self-identities (Fuchs & Fuchs, 1994). The concept of inclusion, which started from the *Regular Education Initiative* (REI) in the 1980s, supported mainstreaming and partial inclusion (Lipsky & Gartner, 1989; Osgood, 2005, 2008; Stainback & Stainback, 1992). The REI promoted the idea of serving SWDs in general classrooms.

Inclusion was proposed by some parent advocates, disability activists, civil rights policymakers, and educators both within and outside the field of special education, who were against the segregation and isolation of SWDs (Blake et al., 2003; Danforth & Naraian, 2015; Göransson & Nilholm, 2014). The field of special education called it full inclusion, and suddenly general educators started to accept/adopt the inclusion principles (Amado et al., 2013; Kauffman, 1996; Kauffman & Badar, 2017; Sapon-Shevin, 2013). Those opposed to the radical full inclusion movement reminded the profession that, “to make a placement decision that all students will be in the general education classroom is just as illegal as placing all SWDs in special schools” (Yell, 1998, p. 73). Bateman and Linden (1998) rightly stated, “there is not now and has never been a requirement in the IDEA that all children with disabilities be included or mainstreamed in the regular class” (p.13). The placements of SWDs must be based, not on disability group identity but on their Individualized Education Program (IEP). SWDs should be placed in an instructional setting where reasonably calculated progress can be made with any additional supplementary aids and related services (Kauffman & Badar, 2014; Yell, 1998).

The tenets of full inclusion and its promised outcomes are much more challenging to implement and are mostly achieved at higher grade levels (Mock & Kauffman, 2005). The focus of schools should be to create strategies for improving instructional inclusion, by including effective instruction, which is sometimes challenging in general education classrooms (Kauffman et al., 2018; Kauffman, 2020).

The passage of The Education for All Handicapped Children Act (EAHCA; P.L. 94-142, 1975) provided guidelines for the placement of SWDs. The EAHCA mandated that SWDs should be placed in the LRE environment to the maximum extent possible. The EAHCA was reauthorized several times and was renamed the Individual with Disabilities Education Act

(IDEA) in 1990 and reauthorized again in 1997 and 2004. The Individuals with Disabilities Education Improvement Act (IDEIA) of 2004 still requires that SWDs have access to the LRE, to the maximum extent appropriate (see IDEA, 20 U.S.C. Section 1412). The original EAHCA's goal surrounding the LRE was to prevent the social segregation of SWDs from typically developing peers (Yell, 2006). That preference was maintained in the 2004 reauthorization of IDEA, thereby providing SWDs more opportunities to interact with students without disabilities (Cushing et al., 2009).

The federal laws since 1975 and with the advent of the radical full inclusion movement in the 1990s, there has been a rise in the number of SWDs being given special education placements solely in the general setting (McLeskey et al., 2012). The debate over inclusion has shifted to how best to implement inclusive practices so that SWDs have appropriate access to the general education curriculum (Kirby, 2017; Mastropieri & Scruggs, 2001). Inclusion is the belief and practice that all students have the rightful opportunity to meaningfully access the general education setting, both academically and socially (Ryndak, Moore, & Orlando, 2009; Ryndak, Jackson, & White, 2013). The current ESSA of 2015 (20 U.S.C. §§ 6311) emphasizes schools' accountability for giving SWDs greater access to the general education curriculum in general classrooms (Klein, 2016; Zinskie & Rea, 2016) and removes the requirement of assessments based on modified academic assessments.

Globally speaking, international human rights declarations identify education as an essential and fundamental right and must provide equal opportunities, despite inter-individual differences in ability (Powell, 2016).

The international human rights agreement between The Salamanca Statement and Framework for Action (UNESCO, 1994) and the United Nations Convention on

the Rights of Persons with Disabilities (United Nations, 2006) framed the guidelines for inclusive education as (a) all children learning together regardless of differences they may have; (b) equal access to inclusive education within the home communities; (c) understanding individual differences through appropriate curriculum, instruction, and resources; and (d) provision of support as needed within the general education system. (Lyons et al., 2016, p. 889)

These agreements focus on equity, access, opportunity, and rights. “Inclusive education represents a whole-school concern and works to align special education and general education in a manner that most effectively and efficiently imparts quality education to all students” (Grima-Farrell et al., 2011, p. 118). Globally, countries worldwide have endorsed this convention and have passed legislation that aims to create inclusive educational environments where the individual needs of all students are successfully met (Kormos & Nijakowska, 2017). Göransson and Nilholm (2014) critically analyzed research on inclusive education, from 2004 to 2012, a complementary idea developed globally in different parts of the world. They identified four different perspectives of inclusive education: (a) inclusion in terms of placement of SWDs in general education classrooms, (b) inclusion meeting the social/academic outcomes of SWDs, (c) inclusion meeting the needs of all students, and (d) inclusion as creation of communities with specific characteristics. Corbett and Slee (2000) described inclusion as a philosophy of acceptance.

It is about providing a framework within which all children- regardless of ability, gender, language, ethnic or cultural origin- can be valued equally, treated with respect, and provided with equal opportunities at school.... is an un- abashed announcement, a public and political declaration and celebration of difference

which requires continual proactive responsiveness to foster an inclusive educational culture. (Corbett & Slee, 2000, p. 134)

Public Law (PL) 94-142 and subsequent reauthorizations under the IDEA give guidelines for providing a continuum of alternative placements ranging from the least to the most restrictive environments, with various placement options in between. Under IDEA, an IEP is written first, as special instruction is the priority, and then LRE is chosen from a continuum of alternative placements. The assumption underlying a full continuum of alternative placements is that the LRE for learning will differ from student to student and from time to time for an individual student (Crockett & Kauffman, 1999, 2013). The LRE must be one in which the student's IEP can be implemented. The IEP team makes decisions for placements of SWDs based on the individual needs of the students. When including SWDs in inclusive classrooms, teachers must consider students' individualized goals and objectives, as matched with the state's standards (Danforth & Naraian, 2015). School personnel should determine whether the placements they recommend are appropriate and a FAPE can be delivered in a regular classroom with supplemental aids and services. Most public-school systems follow the concept of a continuum of placements of services, in a sequence, namely, from least restrictive (in the general education classroom with necessary supports) to most restrictive for SWDs to succeed. Many times, students are removed out of the general education settings, when the IEP team determines that SWDs may not do well in the general education settings, and when a student has failed to achieve satisfactorily despite documented use of supplemental support of aids and services (Villa & Thousand, 2003).

Prevalence

There is reportedly an increase in the number of students diagnosed with disabilities in both the U.S. and other parts of the world (Villegas et al., 2017). For more than 35 years, SWDs have been educated with their typical peers (National Center for Education Statistics [NCES], 2016). The number of SWDs in the U.S. has grown from 8.3 % ($N = 3,694$) to 13.7% ($N = 6,964$) between 1976 to 2018 (NCES, 2019). As per the U.S. Department of Education (2017), most SWDs (i.e., 95%) between 6 to 21 years of age were enrolled in regular public schools, while around 63.4% of students with special needs, ages 6 to 21, spent 80% or more of their time in general classes. Three percent of students served under IDEA were in separate schools for SWDs, one percent in the regular private schools, and less than one percent in the homebound or other facilities.

As the number of children diagnosed with disabilities increases in the U.S., there will be a corresponding increase in the number of students with varied disabilities in inclusive classrooms (Rogers & Johnson, 2018). Teachers are responsible for creating a supportive learning environment for their students in inclusive classrooms (Gray et al., 2017; Jennings, 2014). Schools face challenges of improving student learning, providing equitable access and opportunities, and fostering inclusive learning environments for all, because of increased enrollment of SWDs in inclusive classrooms (Mastropieri & Scruggs, 2001; McLeskey et al., 2012; Williamson et al., 2020).

Inclusive Teaching Practices in K-12 Classrooms

The placement of SWDs in the LRE has been the focus of special education. IDEA (1997) and No Child Left Behind (2001) gave directions on how best to educate SWDs, but neither law explained inclusion explicitly. State-funded public-school programs expanded and

created more opportunities to identify and serve SWDs in the LREs (Barnett & Carolan, 2013; Kahn & Lewis, 2014). As per the new data, a greater number of SWDs are receiving education in the general education environment than before (McLeskey et al., 2012; Rogers & Johnson, 2018). Teachers need careful planning to teach SWDs in general education classrooms effectively. Inclusive education is a general education initiative where teachers use a variety of inclusive practices in their classrooms to meet the diverse needs of all students, including SWDs (Lin & Lin, 2015). Inclusive teaching practices are based on the reality that students vary in their abilities, and teachers need to adapt their teaching based on students' needs (Kauffman et al., 2018; Tümkaya & Miller, 2020).

When inclusion practices are promoted in classrooms, students are engaged in all facets of the educational process (Kershner, 2009; Waldron & McLeskey, 1998). Decades of research findings corroborate that inclusive education settings benefit both students with and without disabilities (Ainscow et al., 2006; Bakken, 2016; Choi et al., 2017; Demeris et al., 2007; Hehir & Katzman, 2012; Kalambouka et al., 2007; Kurth et al., 2015; McDonnell et al., 2003; McLeskey et al., 2014). Several research studies have found better academic, social, and behavioral benefits when SWDs are served in inclusion classrooms, where they get an opportunity to interact with their peers (Bakken, 2016; Bond & Castagnera, 2006; Mastropieri & Scruggs, 2001; McLeskey et al., 2018; Salend & Duhaney, 1999; Vitalaki et al., 2018). SWDs learn social and emotional skills and have a more positive understanding of themselves and others. At the same time, students without disabilities show personal growth, learn life skills (e.g., taking care of others), follow directions, and develop more patience towards others (Bakken, 2016; Gilmour, 2018; Griffin et al., 2016; Leatherman & Niemeyer, 2005).

There are five themes for successful inclusive practices: (a) collaboration, (b) determining progress, (c) instructional support, (d) organizational practices, and (e) social/emotional/behavioral support (Finkelstein et al., 2019). The challenges in implementing inclusive practices in classrooms are for the teachers to recognize students' diversity, consider students' strengths and weaknesses, and identify the need for share responsibilities (Lehtonen et al., 2017). Inclusive teaching practices that make inclusion successful includes co-teaching, teacher collaboration, peer-assisted instruction, differentiated instructions, universal design of learning (UDL), positive behavior support, adapting tasks according to the students' needs, dividing tasks into several steps, giving repetition of tasks, interactive forms of cooperation, and providing additional tasks (Bešić et al., 2017; Coubergs et al., 2017; Deshmukh, 2017; Kirby, 2017; Parsons et al., 2018; Strogilos, 2018; Tomlinson et al., 2003). Advocates of inclusion corroborate that evidenced-based practices can be effectively integrated into inclusion classroom settings (Brock, 2018; Jackson et al., 2008; Taub et al., 2017). Some of the evidenced-based inclusive practices teachers integrate into K-12 classrooms are discussed further.

Co-Teaching

In the U. S., co-teaching has become a prevalent inclusive teaching practice since 1975, in which, two or more professionals share responsibilities to teach in constructive and coordinated ways, to a diverse group of students in a single physical space (Cook & Friend, 1995; Chitiyo & Brinda, 2018). In the co-teaching model, one teacher designs and delivers a lesson, while another teacher provides individualized support to SWDs (Lehane & Senior, 2019; Pancsofar & Petroff, 2016). Co-teaching helps provide more resources in the inclusion classroom to meet students' academic and social-emotional needs (Allodi, 2002; Bešić et al., 2017). The

success of the inclusion programs depends on general education and special education teachers working together in inclusion classrooms (Kahn & Lewis, 2014).

Teacher Collaboration

In inclusive classrooms, the teachers collaborate to create a supportive and positive classroom environment where all students feel valued, welcomed, and respected (Brame, 2019; Idol, 2006). Teacher collaboration is an integral part of adequate inclusion to meet the demands of a diverse group of learners in inclusive classrooms (Chao et al., 2018; Jurkowski & Müller, 2018; Kleyn & Valle, 2014; Mulholland & O'Connor, 2016). The inclusion of SWDs in general education classrooms requires the collaboration of general education and special education teachers in planning for implementing an adapted curriculum that meets each student's individualized needs (Kwon, 2016; Lipsky & Gartner, 1996; Mulholland & O'Connor, 2016; Nel et al., 2014). K-12 classroom teachers tend to collaborate and act inclusively to overcome challenging tasks (Idol, 2006). General and special education teachers often collaborate to modify curriculum goals, make changes in learning-task requirements, adapt specialized teaching methods and materials, alter testing procedures, decide on assistive technology, and alter the physical environment to benefit SWDs (Janney & Snell, 2006; Mastropieri & Scruggs, 2001; Yan & Deng, 2019). Teachers often showed a positive attitude towards cooperation and collaboration but lacked knowledge and training in inclusive teaching practices (Ayaya et al., 2020; Jurkowski & Müller, 2018).

Peer-Tutoring

Class-wide peer tutoring and cross-age tutoring supports inclusive education, where students receive extra credits for supporting and teaching SWDs (Bond & Castagnera, 2006). In peer-tutoring, one student acts as a teacher to provide instruction to peer students. The peer tutor

helps the student learn the needed skills, provides opportunities for practice and gives feedback when appropriate (Fisher et al., 1995).

Cooperative Learning

Cooperative learning allows students to work together and achieve a common learning goal. Cooperative learning strategies help to include all students, regardless of their differences, including SWDs. Students work on their social and emotional competencies, reflect on the group progress, and provide constructive feedback (Carter et al., 2016; Gillies, 2016; Muñoz-Martínez et al., 2020).

Differentiated Instruction

In an inclusive classroom setting, it is important to personalize and differentiate instructions (Sharma et al., 2017). Differentiated instruction support teachers in planning instructions matching with specific needs of students in inclusion classrooms (Algozzine & Anderson, 2007). K-12 classroom teachers face challenges to meet the differing needs of students with the increased demand for adhering to state standards accountability and high-stakes testing (Gonzalez et al., 2017; Westwood, 2018). Students show improvement when they are taught based on their readiness, interests, and learning profiles (Coubergs et al., 2017). Differentiated instruction lets teachers plan by differentiating the content (things students will learn), process (ways students will learn), product (assessments), affect (thoughts and feelings), and learning environments (classroom function and feelings) based on students' learning profile (van Garderen & Wittaker, 2006).

Universal Design of Learning

The UDL framework, developed by the Center for Applied Special Technology (CAST), is designed to improve and create universal education for all students, including SWDs, by

removing learning barriers (CAST, 2018). The UDL principles include multiple means of engagement (the “why” of learning), representation (the “what” of learning), and action and expression (the “how” of learning). Teachers have reported an increase in PSE in reaching students with diverse needs by using UDL principles and overcoming barriers in instruction in inclusion classrooms (Crevecoeur et al., 2014; Lowery et al., 2017). Self-efficacious teachers use UDL principles to proactively plan and create motivating and accessible instructions for all students, including SWDs (Spencer, 2011).

Many teachers agree that students need differentiated instructions and adapted curriculum, but teachers do not implement inclusive practices with enthusiasm (O’Rourke, 2014). Teachers who are more confident in their abilities apply differentiated instructions, collaborate with others, and provide inclusive education to all (Gregory et al., 2018; Idol, 2006; Strogilos, 2018). Both special education and general education teachers’ roles have changed considerably because of the implementation of a multi-tiered Response to Intervention and co-teaching model to address the needs of all students (Friend, 2014). Many of the higher education teacher training institutions responsible for improving teacher quality and teaching the concept of differentiated instructions, collaboration, and inclusive education do not receive adequate funding (Allday et al., 2013; Blanton & Pugach 2017; Blanton et al., 2011). Researchers have recommended implementing professional learning programs to improve inclusive education (Avramidis, 2006; Crispel & Kasperski, 2019; Woodcock & Woolfson, 2019). Greater professional development in inclusive practices, such as the process of differentiation, improved teacher’s PSE in integrating it in inclusion classrooms (Dixon et al., 2014). Promoting teacher learning equips teachers to facilitate inclusive teaching practices in their classrooms (Acedo, 2011; Opiyo, 2019).

Teacher Characteristics Affecting Inclusion

K-12 classroom teachers are key players in the education of SWDs in general classrooms and are responsible for implementing inclusive teaching practices to improve learning for all students. Some of the teachers' characteristics that affect the implementation of inclusive teaching practices include their teaching experience, preparation/training, educational qualification, concerns, and PSE. Since SWDs continue to underperform on standardized assessments (NCES, 2013), K-12 classroom teachers need to be highly prepared and receptive to implement inclusive teaching practices.

Most general education teachers are well versed in the content subject area but lacked specialized training and knowledge to integrate accommodations and modifications needed to teach SWDs (Alexander & Byrd, 2020). Special education teachers may lack the knowledge and understanding of academic subjects to teach in inclusion classrooms (Flower et al., 2017; Kahn & Lewis, 2014; Mackey, 2014). General education and special education teachers report a lack of training in behavior management, with only 10 % receiving field-based practical training (Moore et al., 2017; Oliver & Reschly, 2010). Teacher preparation programs need to equip teachers in field-based training on inclusive practices, such as co-planning, co-teaching, and collaboration (Blanton et al., 2011; Rodriguez, 2019; Tümkaya & Miller, 2020; Zagona et al., 2017).

Teachers' PSE influences their commitment to teaching and their effort in implementing inclusive teaching practices, which determines the failure and success of inclusive education. Some of the efficacious teachers may show knowledge and skills to deal with the behavioral problems of SWDs (Eikeseth, 2010; Koegel et al., 2011). Teachers with high PSE set realistic goals for their students, teach with increased self-confidence, ensure safe learning environments,

and show more patience in working with SWDs (Ozder, 2011; Sharma et al., 2012; Yeo et al., 2008). Teachers with low PSE show lower implementation of inclusive education in adapting instruction for SWDs with different learning styles and achievement levels, engage in less collaboration, and are less supportive of managing disruptive classroom behaviors (Kiel et al., 2019; Kosko & Wilkins, 2009).

Teachers' Concerns

Teachers' thoughts and emotions influence their concerns and PSE towards effectively teaching and including SWDs in their classrooms (Cassady, 2011; Dunn et al., 2013). K-12 classroom teachers face difficulties teaching SWDs because of students' deficits in cognitive, behavioral, and social skills (Schonert-Reichl, 2017). Teachers' concerns are perceived problems or issues that are often the focus of thought and action (Miksza & Berg, 2013). The concept of 'concern' relates to something teachers worry about (Cho et al., 2011). Addressing teachers' concerns could enhance their PSE and attitudes about teaching students in inclusive classrooms (Kuyini et al., 2020; Sokal & Sharma, 2014).

Researchers have corroborated that the concerns of beginning teachers significantly vary from that of experienced teachers in terms of managing students' behavior in the classroom (Melnick & Meister, 2008). According to Fuller's (1969) concerns model, most teachers initially show concerns about self (concerns about adequacy and survival as a teacher), which changes to concern about the task (concern about instructional duties), and concerns about the impact (concern about pupil learning). In the first stage (concerns about self), some beginning teachers have concerns about their teaching and self-adequacy related to their preparation, knowledge of resources, awareness of methods, and survival during the first few weeks of teaching. The teachers in the second stage (concerns about the task) are more concerned about classroom

management, materials, duties, caseload, and how they assess their students' progress. Teachers in the third stage (concerns about impact) are more concerned about the learning needs of their students (Boz, 2008; Fuller & Brown, 1975).

Teachers' concerns negatively correlate with teachers' PSE (Kormos & Nijakowska, 2017; Kuyini et al., 2020; Sharma et al., 2012; Sharma et al., 2018). General education teachers with more concerns showed less PSE (Boz & Boz, 2010). Some K-12 classroom teachers may show concerns about having SWDs in their classrooms and feel uncomfortable when tasked with taking care of students' needs (Mulvey et al., 2016; Norman et al., 1998; Scruggs & Mastropieri, 1994).

In teaching SWDs in an inclusive classrooms, some teachers show concerns about (a) physical accessibility; (b) managing student's behavior and classroom planning (Cook et al., 2016; Forlin & Chambers, 2011; Klassen & Chiu, 2010; Närhi et al., 2015; Rose & Gallup, 2005; Ross et al., 2012); (c) increased class size (Blatchford et al., 2011; Oswald & Swart, 2011), (d) quality of student's work and meeting the educational needs of all students (Giangreco et al., 2014; Göransson & Nilholm, 2014); (e) lack of knowledge of evidence-based practices, clarity of instructions, way the instructions are delivered, and students evaluation and grades (Buli-Holmberg & Jeyaprabhan, 2016; Harvey et al., 2010; Kurniawati, 2014); (f) inadequate resources and poor funding (Agbenyega, 2007; Hughes & Valle-Riestra, 2014; Sharma et al., 2006; Sharma et al., 2009; Skaalvik & Skaalvik, 2010; Woodcock et al., 2012); (g) more time needed to teach SWDs in inclusive classrooms (Cook, 2001; Donohue & Bornman, 2014; Hettiarachchi & Das, 2014, Mulholland & O'Connor, 2016); and (h) lack of support from administrators. Some teachers may have concerns about teaching the content well, motivating students to learn, and adapting content with the needs of SWDs (Buli-Holmberg &

Jeyaprabhan, 2016; Kim, 2016). Each of these concerns is discussed further in the following sections.

Concerns about Physical Accessibility

Several studies revealed that teachers have concerns about the physical accessibility of SWDs in inclusion classrooms (Dvir, 2015; Egilson & Traustadottir, 2009). Students with physical disabilities caused by cerebral palsy, myelomeningocele, or neuromuscular disorder may demonstrate limitations in their movement, sensation, and cognition, which impact their full participation in classroom activities. Teachers may have concerns regarding distances within the school premises, cluttered hallways, and classrooms that often create a challenge in promoting the optimal performance of SWDs within the school.

Concerns about Behavior Problems

The behaviors of SWDs in school settings are a significant cause of concern, which may cause interruption of instructions in K-12 classrooms (Armstrong & Hallett, 2012; Caldarella et al., 2012; Capizzi, 2017; Chesley & Jordan, 2012; Freeman et al., 2014; McKenna et al., 2015; Stough, 2006). Students' non-compliance, verbal disruptions, and being off task are the most frequently identified challenging behaviors by teachers (Alter et al., 2013; Rose & Gallup, 2005). Teachers perceive SWDs differently from typical students and may more likely avoid teaching students with a specific disability such as autism spectrum disorder (Chung et al., 2015; Hart & Malian, 2013; Humphrey & Symes, 2013; Roberts & Simpson, 2016; Segall & Campbell, 2012), intellectual disability, multiple disabilities, and EBD (Carrington et al., 2016; Round et al., 2016; Yada & Savolainen, 2017) because of behavioral challenges. In the State of Georgia, teachers only used 10% of the evidenced-based behavioral strategies with SWDs (Hess et al., 2008). Teachers need experience in delivering evidence-based inclusive practices to effectively support

SWDs in K-12 classrooms (Sheth et al., 2012; Symes & Humphrey, 2011). Some beginning teachers felt unprepared to manage students' behavior and were concerned about day-to-day survival (Danielson, 2007; Freeman et al., 2014; Stough, 2006). The more concerned the teachers were about the students' behavioral needs, the less confident they were in managing behaviors, and the less time they spent on quality instructions (Cooc, 2019; Martin et al., 1999; Montgomery & Mirenda, 2014).

Concerns about Class Size

One of the barriers to implementing inclusive teaching practices is the larger class size. Reasonable class sizes enable teachers to meet the needs of all the students in their classes (Materechera, 2020). Some teachers complain that they may not be able to look after all the children in the classroom and manage the behavior needs of SWDs simultaneously (Bhatnagar & Das, 2014; Singal, 2008). Large caseloads may pose challenges for general education and special education teachers to collaborate for the delivery of adequate instructions (Kilanowski-Press et al., 2010; McLeskey et al., 2014). Teachers gave fewer instructions when they had a greater number of SWDs in their classrooms (Cooc, 2019). Researchers have recommended using technology to support the hurdles imposed by large class sizes (Tam et al., 2006).

Meeting the Educational Needs of Everyone

Federal laws such as ESSA (2015) made schools accountable for meeting the educational needs and ensuring adequate yearly progress on academic achievement measures of all students. Some teachers show concerns about meeting the needs of all the students and making them successful (McLeskey et al., 2014). Several studies have revealed that effective inclusive schools meet the needs of all students by providing evidence-based instruction in general education classrooms (Farrell et al., 2007; Kirby, 2017; McDonnell et al., 2003).

Concerns About Evaluation and Grades

There are a set of academic tasks and skills that students without disabilities are to master. SWDs need to acquire these skills to pass the state-mandated competency tests in many states. Some teachers may be concerned about too much time spent evaluating students, applying accommodations and modifications, and assigning grades using formative and summative assessments (Hargrove, 2000; Lin & Lin, 2015; Shah et al., 2016). General education teachers show limited understanding of students' IEP and referral processes (Forlin & Chambers, 2011; Kahn & Lewis, 2014; Lauderdale-Littin & Brennan, 2018; Loreman et al., 2005; O'Connor et al., 2016; Pennington, 2017).

Concerns About Teaching Materials and Equipment

Though all learners need opportunities to learn in K-12 classrooms, teachers face challenges finding adequate resources to support students teaching, which results in learning barriers (Engelbrecht et al., 2015; Leatherman & Niemeyer, 2005; Leatherman, 2007; Mastropieri & Scruggs, 2001). Many general education teachers who never worked with SWDs before showed concerns in matching the available resources with students' varying needs (Engelbrecht & Savolainen, 2018; Kim, 2016). Teachers who had less concerned about resources showed a positive attitude towards including SWDs in K-12 classrooms (Bešić et al., 2017; Sokal & Sharma, 2014). Teachers have concerns finding resources for differentiated instructions, such as multi-leveled books, hands-on materials, modified curriculum, updated technology, and adapted curriculum (Graham et al., 2008; Katz, 2015; Kurth & Keegan, 2012; Leyser & Tappendorf, 2001; McLeskey & Waldron, 2002).

Concerns About Lack of Time

In inclusion classrooms, teachers need more time to discuss academic and functional curriculum, plan instructional activities, and assess students' learning (Round et al., 2016; Scruggs & Mastropieri, 2017). Some teachers have concerns about the lack of time for teacher collaboration (Blatchford et al., 2009; Horne & Timmons, 2009; Lohrmann & Bambara, 2006; Symes & Humphrey, 2011). Teachers find it challenging to deliver intensive instruction in a limited time frame needed to improve the academic achievement of SWDs across ability levels (Hardman & Dawson, 2008; Lohrmann & Bambara, 2006).

Teacher Training and Knowledge

The U.S. Department of Education documents concerns related to teacher preparation, teacher qualifications, and teacher shortages (Aragon, 2016; Sutchter et al., 2019). In recent years, teacher training has increasingly focused on the debate of teacher retention, mainly because of the increasing prevalence of SWDs in general education settings. The major arguments on training and retaining quality teachers relate to teachers leaving the teaching profession, the nature of the current teacher training programs, teacher quality, the impact of teacher education on student achievement, and strategies to improve teaching (Goldhaber et al., 2013; Loughran, 2016; Reyes et al., 2017).

Several researchers studied variables, such as teacher's SE, teacher's knowledge, and their training, and found positive correlations (e.g., Bourdieu, 1976; Corona et al., 2017; Hettiarachchi & Das, 2014; Park et al., 2010; Shogren et al., 2015; Wilson et al., 2016; Yada & Savolainen, 2017). There is a gap between the beliefs, skills, and practices of K-12 teachers when it comes to working with SWDs (O'Rourke, 2014; Schumm & Vaughn, 1991; Zagona et al., 2017). Teachers need to have comprehensive knowledge of behavior management, evidence-

based practices, and academic content (Freeman et al., 2014; Hart & Malian, 2013; Hart & More, 2013; Kirby, 2016).

Teachers expert in dealing with students with specific disabilities show adequate knowledge of teaching SWDs and PSE (Boucher, 2008; Brookman-Frazee et al., 2012; Dönger et al., 2016; Stone & Rosenbaum, 1988). Even though qualified special educators are more likely responsible for effectively teaching SWDs, it seems that many are not skilled and confident enough to provide the necessary support to their students (McLeskey et al., 2018; Stephenson & Carter, 2014). Many classroom teachers show inadequate knowledge and training in inclusive practices, therefore are underprepared to educate SWDs in general education classrooms (de Boer et al., 2011; Jenkins & Ornelles, 2009; Haegele et al., 2018; Hornby, 2015; Kim, 2016; Loiacono & Valenti, 2010; Segall & Campbell, 2012). School leaders have indicated the need for more competent educators and additional training to work with SWDs (Salisbury, 2006; Symes & Humphrey, 2011). Adequate training of teachers may increase their sense of competency, PSE, knowledge, and skills to deal with SWDs (Chao et al., 2016; Das et al., 2013; Kormos & Nijakowska, 2017; Sharma & Sokal, 2015). Teachers need to show appropriate knowledge of teaching SWDs and implement specific inclusive practices as intended to facilitate students' learning (Flower et al., 2017).

Some general education teachers' goals and expectations vary based on their perceptions of students' disabilities. Teachers focused more on social development goals for students with a severe disability, whereas when teaching students with mild disabilities, the behavior skills, academic performance, and self-confidence training components were more important (Cameron & Cook, 2013). Some teachers' lack of adequate quality education leads to poor student learning outcomes. General education teachers lacked knowledge about special education laws, policies,

and disability characteristics (Jenkins & Ornelles, 2009; O'Connor et al., 2016). Classroom teachers need to have a working knowledge of special education laws to provide appropriate services to SWDs (O'Connor et al., 2016). Limited knowledge of teachers to appropriately adapt content to enhance student achievement also negatively impacts students' achievements (Darling-Hammond et al., 2020).

There is an increasing need for training teachers in inclusive practices (Alexiadou & Essex, 2016; Das et al., 2013; Livingston, 2016; Loreman et al., 2007; Morrier et al., 2011; Strieker et al., 2013). There are problems with many teacher preparation programs that fail to train teachers based on their new roles and responsibilities in inclusive classrooms (Harvey et al., 2010; Shepherd et al., 2016). The teacher preparation programs need to prepare teachers on high-quality inclusive practices based on a tiered system of support, high-stakes accountability requirements, enhancements in technology, and changing needs of diverse students populations in today's classrooms (Shepherd et al., 2016). Teacher education and professional development programs positively influenced teachers' SE and reduced concerns to implement inclusive practices in inclusive classrooms (Aiello & Sharma, 2018; Beacham & Rouse, 2012; Sharma & Sokal, 2013). Teachers who spent a greater number of hours in professional development programs showed more ability to adapt the curriculum for SWDs (Dixon et al., 2014; Kosko & Wilkins, 2009; Woodcock & Woolfson, 2019). Teachers increased their SE and showed fewer concerns in implementing inclusive practices when provided with support through training and experience (Bruggink et al., 2015; Forlin et al., 2014; Leyser et al., 2011; Sharma & Nuttal, 2016; Sokal & Sharma, 2014).

Teachers' Efficacy in Managing Student's Behavior

Preparing teachers for their responsibilities in inclusion classrooms has been more demanding. In contemporary classrooms, there has been an increased need for evidence-based inclusive practices to improve students' learning (Maciver et al., 2018). Most teacher preparation programs in higher education do not offer training on evidence-based best practices and ways to effectively deal with problem behaviors in SWDs (Cooper et al., 2018; Fink et al., 2019; Leko et al., 2015).

Researchers argued that managing student behavior needs a repertoire of techniques and preventive strategies (Snowman et al., 2009). Functional Behavior Assessment (FBA), Social Skills Training (SST), Discrete Trial Training (DTT), and Positive Behavior Support (PBS) are some practical, evidence-based approaches, designed to reduce problem behavior in SWDs (MacLeod et al., 2016). Teachers with a high level of teaching PSE may learn more than others and may use evidence-based strategies with their students (Schütze et al., 2017). Teachers need to be highly self-efficacious in choosing interventions and evaluating the effectiveness of these approaches to meet the unique needs of SWDs. Some classroom teachers stay unprepared to effectively manage their class, as they lack knowledge, skills, and disposition of classroom management and procedures (Akdağ & Haser, 2016; Aloe et al., 2013; Gable et al., 2012; Lane et al., 2015; Lindsay et al., 2013; Melnick & Meister, 2008). Teachers seem to be practically and emotionally under-equipped to support children and young students with Social, Emotional, and Behavioral Difficulties (Armstrong & Hallett, 2012). Teacher preparation programs teach universal management strategies but lack specific skills and strategies needed to manage students' behaviors (Flower et al., 2017; Moore et al., 2017). Many teachers are not taught to

develop classroom rules and routines, reinforce students, and teach skills to communicate with parents (Flower et al., 2017).

Some teachers feel more accomplished when they have a higher sense of efficacy in managing their classrooms (Aloe et al., 2013). Teachers with well-developed classroom management skills effectively manage classrooms with proper planning (Cooper et al., 2018; Gettinger & Kohler, 2006). Educators must choose the right intervention strategies and continuously evaluate the effectiveness of their efforts. Highly efficacious teachers work harder with struggling students, show more persistence in overcoming obstacles, and assume greater responsibility for meeting the needs of students by consistently implementing inclusive teaching practices (Boz & Boz, 2010; Hosford & O'Sullivan, 2016; Tümkaya & Miller, 2020). Teachers with high SE are more committed to student learning and set higher goals for students (Tschannen-Moran & Hoy, 2001). PSE helps teachers overcome their daily challenges and predict students' success in inclusive classrooms (Park et al., 2016; Tschannen-Moran et al., 1998).

Relationship Between Teachers' Concerns, PSE, and Other Factors

This section of the literature review describes interrelationships between teachers' concerns, demographic characteristics (age, gender, educational qualifications, and years of teaching experience), and their PSE. Many factors are associated with teachers' PSE. Most quantitative research studies on inclusion focus on the PSE of general and special education teachers towards SWDs. Literature review shows the availability of research limited to inclusion and teachers' PSE (Almog & Shechtman, 2007; Leyser et al., 2011; Malinen et al., 2012; Romi & Leyser, 2006; Sze, 2009). Factors such as gender, age, educational qualifications, and years of

teaching experience affect the ability of teachers to teach their students (Klassen & Chiu, 2010; Tschannen-Moran et al., 1998).

Gender

Male teachers showed higher PSE than female teachers for managing behavior (Ahsan et al., 2012; Hussien & Al-Qaryouti, 2015) and were more willing to include SWDs with challenging behaviors in their classrooms (Specht et al., 2016; Tsakiridou & Polyzopoulou, 2014). Male teachers were less efficacious in assigning learning tasks to students to accommodate the individual needs of SWDs (Lai et al., 2016). In general, female teachers showed a higher level of SE, positive attitude, and were more supportive towards inclusion (Adedoyin & Okere, 2017; Boyle et al., 2013; Fackler & Malmberg, 2016; Romi & Leyser, 2006; Saloviita, 2019; Shaukat et al., 2018; Tsakiridou & Polyzopoulou, 2014; Vaz et al., 2015).

Teachers' Age

Younger teachers showed more positive perceptions of inclusion than older teachers (Asres, 2019; Forlin et al., 2008; Salovitta, 2020; Smith, 2000). The reason is, younger teachers took more college courses in special education and are abreast of their training (Asres, 2019; Hwang & Evans, 2011; Monsen et al., 2014). Younger teachers showed more concern about enhancing teacher collaboration to improve students' learning in inclusion classrooms (Yan & Deng, 2019). The older teachers showed more concerns and increased reluctance towards inclusion with their age (Avramidis & Norwich, 2002; Forlin et al., 2008; Monsen et al., 2014; Yan & Sin, 2014). The older teachers seem to have limited training in inclusive teaching compared to younger teachers and suffer from more work pressure (Avramidis & Norwich, 2002; Lauermann & Konig, 2016; Vaz et al., 2015).

Educational Qualification

Education and training are essential constructs in determining the success of teaching SWDs in K-12 classrooms (Engelbrecht, 2013; Engelbrecht & Savolainen, 2018). Previous training in special education and a higher level of education impacts teachers' PSE (Loreman et al., 2013). Some teachers with a specialized certification and more professional development courses show a positive correlation with teacher efficacy (Chu & Garcia, 2014; Dixon et al., 2014; Guo et al., 2010). Teachers completing special education coursework were more willing to include SWDs in inclusion settings (Kraska & Boyle, 2014; Kim, 2011). Higher teaching qualifications were positively related to high PSE and low teachers' concerns (Lancaster & Bain, 2007; Sharma & Sokal, 2015). Prior research suggests that pre-service and in-service teachers, who took courses on inclusive education, showed an increase in their concerns regarding teaching SWDs in inclusive classrooms (Forlin & Chambers, 2011; Romi & Leyser, 2006; Swackhamer et al., 2009).

Years of Teaching Experience

Several researchers validated that years of teaching experience and training in inclusive education determines teachers' PSE in successfully teaching SWDs (see Allinder, 1994; Bandura, 1993; Brownell & Pajares, 1999; Everett, 2017; Porakari et al., 2015; Sharma & Sokal, 2016; Skaalvik & Skaalvik, 2017; Yada & Savolainen, 2017). Teachers need to have practical hands-on experiences in inclusive classrooms (Skrtic & Sailor, 1996; You et al., 2019). Teachers who participate in hands-on practicum training, adopt inclusive teaching practices (Mitchell & Hedge, 2007). Teachers with more experience show less concern about self, more concern about student achievement, and a higher level of PSE when working with SWDs (Ruble et al., 2011). Teachers with more experience show an increased level of PSE in teaching SWDs, show more

patience and flexibility, provide more instructional efforts, and implement greater adaptation of curriculum (Fisher et al., 2003; Janney & Snell, 2003; Klassen & Chiu, 2010; Skaalvik & Skaalvik, 2010; Wilkins & Nietfield, 2004; Yeo et al., 2008). Teachers who had more experience teaching in inclusion classrooms showed positive perceptions of inclusion than teachers who did not teach in inclusion classrooms. Organized classrooms with a positive environment are vital for conducive teaching and learning environment for students in K-12 classrooms (Skiba et al., 2016).

Researchers found an absence of a relationship between teaching experience and teachers' PSE in understanding children's language and literacy gains in inclusive classroom settings (Guo et al., 2010). Most beginning teachers show low PSE and have concerns about their daily performance and organizing their classrooms to manage students' behavior needs (Florian & Spratt, 2013; Melnick & Meister, 2008; Olsen, 2016; Scott et al., 2007; Skiba et al., 2016). New teachers who lack experience do not have the requisite knowledge to understand the relationship between the behavior, its management, and academic tasks.

Summary

The IDEA favors placing and instructing SWDs in the general setting as specified under the LRE provision of 20 U.S.C., Section 1412. However, this must be carefully balanced by the IDEA's regulatory mandate under 34 C.F.R., Section 300.551, to ensure that a continuum of alternative placements is available to address the educational needs of SWDs for special education and related services (Yell, 2018). Legally, educational placement is not supposed to base on the setting, but on the SWD's educational needs, as tailored to and addressed on the IEP, and where those needs can be met so that the student benefits from specially designed instruction, related services, and accommodations; under the IDEA, diverse skills and knowledge

require a diversity of instructional arrangements (Kauffman et al., 2005; Mastropieri & Scruggs, 2001; Yell et al., 2008). Even with this understanding, there is confusion about the issues related to the instruction and placement of SWDs in the general classroom setting, caused in large part by the full inclusion movement that occurred in the last several decades of the 20th century where proponents of that movement demanded 100% placement in the LRE (Kauffman, 2020; Kauffman et al., 2005). The inclusion movement shifted the nature and focus of teacher pre-service training and in-service professional development, whereby general educators are now expected to play a more significant role in managing and instructing SWDs in their classroom (Mock & Kauffman, 2002; Rock et al., 2008). As a result of this shift, an increased number of novice, even veteran, teachers have expressed concerns about being able to teach SWDs effectively and with confidence, indicating that they do not feel they received adequate training to do so (Berry, 2011; Fuchs, 2010; Lai et al., 2016; Robinson, 2017; Shoulders & Krei, 2015).

For school districts in the U.S. to teach SWDs in general education classrooms, there is a need to better understand teachers' concerns and their PSE in implementing inclusive teaching practices that support SWDs inclusion in the general classroom. To teach in inclusive classrooms successfully and effectively, teachers need to have a lower degree of concern and a higher degree of PSE in teaching using inclusive teaching practices (Sharma & Sokal, 2015). Although several studies find relationships between years of experience, classroom management, and PSE of teachers, very few studies have been conducted on the predictive relationship between teachers' concerns and PSE (Wilson et al., 2016). Many researchers have (a) investigated teachers' attitudes, concerns, and efficacy in inclusive classrooms (see Round et al., 2016; Sharma et al., 2008; Sharma & Sokal, 2016; Sokal & Sharma, 2014; Woodcock et al., 2012); (b) examined the PSE of preservice teachers (see Beacham & Rouse, 2012; Leko et al., 2015; Sharma & Sokal,

2015); and (c) studied teachers' PSE related to SWDs and instructional practices. However, there appears to be limited research focusing on how teachers' concerns predict their PSE in implementing inclusive teaching practices (Bruggink et al., 2015; Jordan et al., 2009; Jordan & Stanovich, 2003). The present study may make a practical contribution to the profession by investigating the predictive relationship between K-12 classroom teachers' concerns, demographic characteristics (age, gender, educational qualifications, and years of teaching experience), and their PSE in implementing inclusive teaching practices.

Chapter Three highlights the methodology used to collect and analyze the data. A description of the sample, sampling method, setting, instruments, research questions, hypotheses are also be presented.

CHAPTER THREE: METHODS

Overview

The focus of this study was to determine the strength of the relationship between teachers' concerns and demographic characteristics (i.e., gender, age, educational qualifications, and years of teaching experience) and PSE of K-12 classroom teachers in implementing inclusive teaching practices. This section describes the research design, settings, the population surveyed, the instruments used to study the sample, the data collection, and analysis methods. The teachers' concerns and PSE were assessed using two previously validated instruments. Identifying the predictive relationship between teachers' concerns and their demographic characteristics on PSE may aid in understanding the capabilities of teachers in implementing inclusive teaching practices in K-12 classrooms.

Design

This study employs a quantitative, predictive correlational design. "Predictive correlational research predicts scores on one or more variables from a participant's scores on one or more other variables" (Martella & Nelson, 2013, p. 208). Because the research aims to examine statistically significant effects of numerically measurable concepts, this is the most appropriate method (Howell, 2010). In correlational research design, the level of a relationship between the two variables is studied (Cohen et al., 2013; Gall et al., 2007). Correlational design is an umbrella term that incorporates two-way correlational analyses and regression (predictive) analyses (Howell, 2013). Correlational research simply examines whether a relationship exists between variables of interest but does not imply cause and effect (Simon & Francis, 2004). Besides, Gall et al. (2007) recommend using correlational design when the researcher does not have the opportunity or means to manipulate the independent variables.

The purpose of the research was to examine whether K-12 classroom teachers' concerns and demographic characteristics (gender, age, education, and years of teaching experience) predict their PSE in implementing inclusive teaching practices. PSE is defined as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391). The predictive variables are gender (defined as male or female), age (how old teachers are?), educational qualifications (the academic degree that the teachers have achieved), years of teaching experience (number of years that teachers have worked), and teacher's concerns which relates to issues that teachers are worried or anxious about (Kellner & Attorps, 2015). The outcome variable (\hat{Y}) is the K-12 classroom teachers' reported PSE in implementing inclusive teaching practices.

Threats to External Validity

Key threats to external validity include aspects of the sample that provide potential bias to the measured results, specifics regarding the site where study data was collected, or effects that result from the use of specific settings. Also, there may be confounding variables that may alter the relationships between the research variables (Howell, 2010). Because it is impossible to control for every potential covariate, this is noted and accepted in interpreting the results.

Another threat to external validity corresponds to selection bias, in which the selection of individuals is not generated through proper randomization methods. Thus, the researcher will take special caution in interpreting the results of this study and will not assume that these results may be perfectly extrapolated to the entire population of interest (Creswell, 2005).

Threats to Internal Validity

Several limitations exist within the scope of quantitative studies. Quantitative methods can address the research question and hypotheses but cannot examine the depth and underlying

experiences and perceptions. Consequently, this study will trade the qualitative degree of richness within the results for a degree of statistical certainty that these associations did not occur by chance alone.

Causal inferences will have to be demonstrated to attain validity. Such causal inferences can occur when the cause precedes the effect. Inferences like these can also happen when cause and effect are related in some way to each other and when no plausible alternative explanations for the effect exist. Thus, key threats to internal validity can occur if the temporal sequence of cause and effect are mistaken, or when there are unaccounted alternative causes, and if there is selection bias in gathering the sample.

Research Questions

The research questions for this study correspond to:

RQ 1: Does a K-12 classroom teacher's gender predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?

RQ 2: Does a K-12 classroom teacher's age predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?

RQ 3: Does a K-12 classroom teacher's educational qualifications/level predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?

RQ 4: Does a K-12 classroom teacher's years of teaching experience predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?

RQ 5: Does a K-12 classroom teacher's level of concerns predict their sense of PSE in implementing inclusive teaching practices, as measured by the CIES and the TEIP?

Null Hypotheses

The null hypotheses for this study are:

H₀1: K-12 classroom teacher's gender does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP.

H₀2: K-12 classroom teacher's age does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP.

H₀3: K-12 classroom teacher's educational qualifications/level does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP.

H₀4: K-12 classroom teacher's years of teaching experience does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP.

H₀5: K-12 classroom teacher's level of concern does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the CIES and the TEIP.

Participants and Setting

The population of interest for this study corresponds to K-12 classroom teachers in the State of Georgia. As per the Georgia Department of Education (GaDOE, 2016), there is 114,244 total number of teachers teaching 1,764,215 public school students, including 209,106 SWDs (11.9%) in the State of Georgia. Among these teachers, 35.5% have bachelor's degrees; 43.8% have master's degrees; 19.1 % have a specialist degree; 2.5 % have a doctorate, and 0.4 % have other types of degrees (GaDOE, 2016). According to GaDOE (2015), 44% of the public-school teachers leave the teaching profession within the first five years of employment. As per the GaDOE (2018), there are 2,299 schools, including 1,323 elementary, 484 middle, and 479 high schools. In the State of Georgia, 65.5 % of SWDs, ages 6 through 21, spend greater than 80% of their day in general classrooms compared to 62.6% in the nation (GaDOE, 2016). The demographic characteristics for K-12 classroom teachers in the State of Georgia are shown in Table 1.

Table 1*Demographic Characteristics of K-12 Classroom Teachers in the State of Georgia*

Characteristic	Number of Teachers	Percent
Highest Degree achieved		
Bachelor's degree	40,505	35.5%
Master's degree	50,070	43.8%
Specialist degree	21,832	19.1%
Doctorate degree	2,900	2.5%
Other types of degrees	485	0.4%
Experience		
>1 year	6,991	6.1%
1-10 Years	42,920	37.6%
11-20 Years	40,718	35.6%
21-30 Years	21,058	18.4%
30+ Years	4,105	3.6%

Those employed as K-12 classroom teachers in the public school system in the State of Georgia with more than one year of experience met the criteria for participation in this study. A power analysis was conducted using G*Power 3.1.7 to determine the minimum sample size for the research (Faul, Erdfelder, Buchner, & Lang, 2014). Multiple hierarchical linear regression was used as the primary inferential analysis. Using six predictor variables, the statistical power of .80, a medium effect size ($f^2 = .15$), and an alpha level of .05 – the minimum sample size was calculated to be 98 participants. Therefore, the researcher target was at least 98 K-12 classroom teachers employed in public schools in the State of Georgia.

A convenience sampling method was employed to recruit participants for the study. A convenience sample corresponds to a non-probability sampling method in which subjects are selected due to their proximity and accessibility to the researcher (Creswell, 2005). K-12 classroom teachers were identified using the available electronic records obtained from the GaDOE and the selected district's education department. Prospective participants were redirected to the Qualtrics link to complete the survey. Two survey instruments were used for

this study. The first is the *Concerns about Inclusive Education Scale* (CIES), developed by Sharma and Desai (2002), which was used to determine K-12 classroom teachers' concerns (predictive variable). The second is the *Teachers' Efficacy in Implementing Inclusive Practices* (TEIP) survey scale designed by Sharma et al. (2012), which measured K-12 classroom teachers' PSE (outcome variable) in implementing inclusive teaching practices. The demographic questionnaire collected demographic data on the teachers' gender, age, educational qualifications, and years of teaching experience before participants completed the surveys.

Instrumentation

The instrumentation contained three separate surveys: a demographic questionnaire, CIES, and the TEIP. Demographic data on the teachers' gender, age, educational qualifications, and years of teaching experience were collected from the demographic questionnaire at the beginning of the survey. The demographic checklist included questions, such as gender (male or female); age with the following categories: (1) < 25 years, (2) 25 to 35 years, (3) 35 to 50 years, and (4) >50 years; the highest degree earned with the following categories: (1) Bachelor's degree, (2) Master's degree, (3) Specialist degree (e.g., EdS), (4) Doctorate, and (5) Other; and years of teaching experience for working in inclusion settings had the following choices: (1) < 1 year, (2) 1 to 10 years, (3) 11-20 years, (4) 21 to 30 years, or (5) > 30 years.

Teachers' concerns were measured by the *Concerns about Inclusive Education Scale* (CIES) (Sharma & Desai 2002). This scale measures the four levels of concerns (concern about resources, concern about acceptance, concern about academic standards, and concern about workload) experienced by teachers as they include SWDs in their classrooms. The CIES consists of 23 items (Likert-type scale) ranging from 0 (Not at All Concerned) to 4 (Extremely Concerned).

The instrument has been utilized and validated across different contexts (Bradshaw & Mundia, 2006; Chhabra, Srivastava, & Srivastava, 2010). The content validity of the scale was addressed through a panel of experts. The explanatory factor analysis by Sokal and Sharma (2014) supported the validity and the four-factor structure of the questionnaire. Sokal and Sharma (2014) conducted their study in a central Canadian city totaling 99 schools. The four factors measured in the survey correspond to (a) Teachers' concerns for resources (Factor I), (b) Teachers' concerns for acceptance of SWDs (Factor II), (c) Teachers' concerns for the academic standard of the classrooms (Factor III), and (d) Teachers' concerns for the workload in inclusive settings (Factor IV). Alpha coefficients for these factors were above 0.70 (concerns for resources = 0.82, concerns for acceptance = 0.70, concerns for academic standards = 0.84, and concerns for workload = 0.74), indicating that the CIES scale has adequate internal consistency reliability. CIES yields a total score by adding the value of responses from each item, which varies from a minimum score of 23 to the maximum score of 92, a higher score indicating higher levels of concern. The Cronbach alpha coefficient for the overall scale was measured to be .91. The construct validity of the CIES scale seems to be acceptable, with the factor loadings of the lowest one being .49 (Sharma et al., 2012). For the study, the overall scale was utilized.

The outcome variable in the study, teacher's PSE, was measured by *Teachers' Efficacy in Implementing Inclusive Practices* (TEIP) developed by Sharma et al. (2012). This scale was specially chosen as it was designed to measure teachers' PSE specific in implementing inclusive teaching practices. TEIP is based on 23 statements used for measuring teachers' perception of their ability to carry out inclusive practices. This instrument measures teachers' SE on three subscales: (a) efficacy to use inclusive instruction, (b) efficacy in collaboration, and (c) efficacy in managing behavior. Sharma et al. (2012) determined the internal reliability of the scale using

exploratory factor analysis with a three-factor structure from the data on 607 preservice teachers from four countries (Canada, Australia, China, and Indonesia). The Cronbach's alpha for the TEIP scale was .89, and its subscales were .93, .85, and .85, respectively, indicating strong internal consistency. The TEIP scale seems to have good construct validity with the reported factor loadings of most items above 0.7 (high) except for two items with the score of 0.52 and 0.59 (Sharma et al., 2012). For the study, the overall scale was utilized.

Procedures

This quantitative correlational study followed clear and specific procedures to be replicated for future research. This research proposal was submitted for review and approval to the Institutional Review Board (IRB) at Liberty University. Proper procedures to collect the data were followed to ensure the ethics of this research are based on the IRB regulations. The number of K-12 classroom teachers serving in the State of Georgia was identified based on the electronic records of GaDOE and from the school district education office. Permission was sought from the director or the program coordinator from the respective districts. Online searches from the school websites explored K-12 classroom teachers' email contact information. The school principal and district superintendent were requested to forward the Qualtrics online survey link to K-12 classroom teachers in their respective schools. A follow-up reminder email was sent to school principals and the district superintendents at the end of 2 weeks.

In the first email, the participants were sent a brief explanation of the study with a link for online Qualtrics to fill out a demographic survey, the CIES, and TIEP survey questionnaires. Participants were given the option of not participating in the study. Participants were asked to complete the survey within two to three weeks. Participants clicked on the survey link to acknowledge their understanding of the research and consent to participate. After two

weeks, a follow-up email was resent with a link to the Qualtrics online survey. The participants of this study were those K-12 classroom teachers who responded to the survey within one month.

To get enough participants for this study, the researcher took permission from the group administrator/moderator and posted the Qualtrics online survey link to Georgia educator groups on social sites such as Facebook, Twitter, and LinkedIn. The researcher sought permission from the school district to post the flier with a brief explanation of the study and a link to Qualtrics online survey on the notice board of public schools in the State of Georgia. The participants were eligible to enter a drawing for an opportunity to win \$20.00 Amazon gift cards through a random name generator. The surveys were submitted anonymously; however, those participants who wished to win a gift card were directed to submit their names and email in a separate link at the end of the survey. No compensation was provided to the participants.

After providing consent, the prospective participants completed and submitted the Qualtrics online survey that was provided in the email through the generated URL. The participants were then be directed to the cover letter containing the necessary explanation about this research. The researcher used a password-protected computer file to keep the data confidential and secure. Data collection occurred when teachers completed the survey in the following order: Demographic survey, CIES, and TEIP surveys.

Informed Consent

The researcher administered informed consent documentation as the discussion framework for obtaining verbal or written consent from study participants. While establishing a relationship with the participants, the researcher introduced the study to the participant by explaining the purpose of the study, describing the procedures, disclosing the risks and benefits,

establishing the participant's role, and estimating the time involved. The researcher informed all subjects that participation is voluntary. Study participants were explained that no identifiable data will be used in the study and that participants can drop out of the study at any time without penalty.

The participants joining this study were given a copy of the informed consent document. This document includes contact information for the researcher, the dissertation advisor, and the IRB. Without written consent, the proposed participants were not allowed to participate in the study. However, after the approval from IRB, survey participants were waived from providing written consent. They indicated voluntary participation by completing the survey after being advised of the details of informed consent, as described in the paragraphs.

Data Storage, Retention, and Destruction to Protect Confidentiality

The survey instrument for this study was designed to reduce the need to collect identifiable data. Following IRB and federal guidelines, the researcher protected all data and information from protecting confidentiality. The safeguard measure for data storage is a locked file in the researcher's residence, where the data will be retained securely for five years after the research is complete. Upon the expiration of the five-year retention period, the researcher will permanently destroy all research-related data and information on this study.

Operationalization of Constructs

The key variables used in this quantitative correlational study are teachers' concerns, PSE, gender, age, educational qualifications, and years of teaching experience. The operationalization of these variables is defined below.

- *Teacher's concerns*: Continuous level variable corresponding to teachers' concerns, as measured by the *Concerns about Inclusive Education Scale*.

- *Teacher's PSE*: Continuous level variable corresponding to the teacher's PSE, as measured by the *Teacher's Efficacy in Implementing Inclusive Practices* instrument.
- *Gender*: Categorical (nominal) variable corresponding to participants' gender (male/female), as measured by the demographical portion of the survey.
- *Age*: Categorical (ordinal) variable corresponding to participants' age, as measured by the demographical portion of the survey.
- *Educational qualification*: Ordinal variable corresponding to participants' highest level of education as measured by the demographical portion of the survey.
- *Years of teaching experience*: Ordinal variable corresponding to participants' employment experience, as measured by the demographical portion of the survey.

Ethical Considerations

A researcher who conducts studies that involve human subjects has a responsibility to inform and protect participants (Bloomberg & Volpe, 2012). Researchers are responsible for informing and protecting participants throughout the data collection process and subsequent analyses. While conducting this study, the researcher strictly followed the moral and ethical guidelines indicated by federal mandates and the Institutional Review Board (IRB). Ethical principles were maintained throughout the study.

Areas for ethical consideration include providing participants with the purpose of the study, a voluntary participation statement to ensure participants' confidentiality, and an electronic consent form. Participants were assured that there were no anticipated risks from participating, and they could exit from participation at any time. No physical risk existed from participating in this study. The benefits of participating include extending the research into the concerns and PSE of K-12 classroom teachers. The following paragraphs provide the proposed

approach to informed consent and a brief discussion on data storage, retention, and destruction to protect confidentiality.

Data Analysis

Multiple hierarchical linear regression was used to analyze the data collected in this study. Data were entered using SPSS version 28.0 for Windows. Descriptive statistics were conducted to describe the sample demographics and the research variables used in the analysis. In descriptive statistics, the researcher describes the sample, defines variables, measures them, and computes central tendency and measures of variability (Gall et al., 2007). Frequencies and percentages were calculated for any nominal (i.e., categorical and ordinal) variables of interest, while means and standard deviations were calculated for any continuous (i.e., interval or ratio) data of interest (Howell, 2010).

Pre-Analysis Data Screening

Before analyzing the data, the researcher conducted several assumption tests based on the nature of the multiple regression model. The assumption of the absence of multicollinearity will ensure that predictor variables do not have a high correlation with one another (Tabachnick & Fidell, 2012). The assumption of normality was assessed through scatterplot matrices, visually evaluating the multivariate normal distribution, and identifying the presence of any bivariate outliers. Data were screened for missing cases and outliers. Descriptive statistics and frequency distributions were conducted to determine that responses are within a possible range of values, and outliers do not distort that data. The calculation of standardized values tested the presence of outliers. Standardized values represent the number of standard deviations an individual score falls from the mean of those scores. Participants with scores of more than 3.29 standard deviations or less than -3.29 standard deviations from the mean are considered outliers and were

potentially removed from the data set (Tabachnick & Fidell, 2012). Participants with any missing responses were excluded from further inferential analysis.

Reliability

Cronbach's alpha test of reliability and internal consistency were conducted on the two scales: teachers' concerns and teachers' PSE. The Cronbach's alpha identified how closely the items correspond to a singular construct based on the participant's consistency in responses. Cronbach's alpha provides mean correlation coefficients between each pair of items and the number of items in a scale (Brace et al., 2016). The alpha values were interpreted using the guidelines suggested by George and Mallery (2010) where $\alpha \geq .9$ = Excellent, $\alpha \geq .8$ = Good, $\alpha \geq .7$ = Acceptable, $\alpha \geq .6$ = Questionable, $\alpha \geq .5$ = Poor, and $\alpha < .5$ = Unacceptable.

Multiple Hierarchical Linear Regression

To address the hypotheses, a multiple hierarchical linear regression was used to determine whether K-12 classroom teachers' demographic characteristics (gender, age, education, and years of teaching experience) and concerns predict their PSE in implementing inclusive teaching practices. Multiple hierarchical linear regression is the appropriate analysis when the research goal is to examine the degree to which independent (predictor) variables have an individual or collective effect on a continuous outcome variable (Grimm & Yarnold, 1995; Pedhazur, 1997). Prior to analysis, the assumptions of normality, homoscedasticity, and absence of multicollinearity were assessed. Normality and homoscedasticity were tested through the examination of scatterplots. The absence of multicollinearity was assessed through variance inflation factors (VIFs).

The predictor variables correspond to gender (RQ1), age (RQ2), educational qualifications (RQ3), years of teaching experience (RQ4), and teacher's concerns (RQ5). The

OV corresponds to PSE. The F test was used to make the overall calculation on whether a significant predictive relationship exists between the variables of interest. The coefficient of determination, or R^2 , measured the amount of variance in PSE that the predictor variables can explain. The individual predictors were examined for unique significance through two-tailed t -tests and interpretation of the beta values. Statistical significance was evaluated at the generally accepted level, $\alpha = .05$.

Summary

Chapter Three provided an overview of the purpose of the study and the research that was conducted to arrive at solutions to the study's problem. The quantitative correlational design selected for this study provided further data analysis related to teachers' concerns and PSE in implementing inclusive teaching practices. The participation selection procedure to identify authentic participant responses was described. The research questions, setting, and procedures provided the steps needed to understand research involving teachers' concerns and PSE in implementing inclusive teaching practices. Finally, data analysis procedures were discussed.

Chapter Four presents the results of the study. Chapter Five highlights the findings, implications, limitations of this study, and future recommendations for further research on the topic of teachers' PSE beliefs and concerns in implementing inclusive teaching practices in K-12 classrooms.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this quantitative correlational study was to examine whether K-12 classroom teachers' concerns and demographic characteristics (i.e., gender, age, education, and years of teaching experience) predict their PSE to implement inclusive teaching practices. The predictor variable was teachers' concerns and demographic variables- gender, age, educational qualifications, and years of teaching experience. The criterion variable was the teachers' PSE.

Chapter Four began with the reintroduction of the study's research question and null hypothesis. In this chapter, the findings of the data analyses were reported. Frequencies and percentages were examined for the nominal-level variables. Means and standard deviations were used for the continuous-level data. To address the research questions, a multiple hierarchical linear regression was conducted.

Research Questions

RQ 1: Does a K-12 classroom teacher's gender predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?

RQ 2: Does a K-12 classroom teacher's age predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?

RQ 3: Does a K-12 classroom teacher's educational qualifications/level predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?

RQ 4: Does a K-12 classroom teacher's years of teaching experience predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?

RQ 5: Does a K-12 classroom teacher's level of concerns predict their sense of PSE in implementing inclusive teaching practices, as measured by the CIES and the TEIP?

Null Hypotheses

H₀₁: K-12 classroom teacher's gender does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP.

H₀₂: K-12 classroom teacher's age does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP.

H₀₃: K-12 classroom teacher's educational qualifications/level does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP.

H₀₄: K-12 classroom teacher's years of teaching experience does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP.

H₀₅: K-12 classroom teacher's level of concern does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the CIES and the TEIP.

Descriptive Statistics

Data were obtained for the predictor variables, teacher's gender, age, educational qualifications, years of teaching experience, concerns, and the criterion variable overall teacher perceived self-efficacy regarding implementing inclusive teaching practices. Data were analyzed using the SPSS 28.0 software. A total of 123 participants responded to the survey questionnaire. All the participants responded to a majority of the questionnaire. Potential outliers were identified through the standardization of the scores. Outliers correspond to scores of more than 3.29 standard deviations or less than -3.29 standard deviations from the mean (Tabachnick & Fidell, 2012). Upon examination of the data, no participants had outlying scores for teacher concerns or self-efficacy. The final sample consisted of 123 participants.

The sample consisted of 102 females (82.9%) and 21 males (17.1%). Almost half of the participants had obtained a Master's degree ($n = 52$, 42.28%), followed by Bachelors ($n = 30$,

24.39%) and Specialist degrees ($n = 33$, 26.83%). Very few of the sample participants had a Doctorate ($n = 6$, 4.88%). Experience widely ranged between less than five years to more than 31 years of experience. The sample consisted of 15 elementary school teachers (12.2%), 38 middle school teachers (30.9%), and 70 high school teachers (56.9%). Frequencies and percentages are presented in Table 2.

Table 2

Frequency Table for Nominal Variables

Variable	<i>n</i>	%
Gender		
Female	102	82.9
Male	21	17.1
Educational qualifications		
Bachelors	30	24.39
Masters	52	42.28
Doctorate	6	4.88
Specialist	33	26.83
Missing	2	1.63
Experience		
Less than 5 years	16	13.01
6 to 10 years	26	21.14
11 to 15 years	29	23.58
16 to 20 years	14	11.38
21 to 25 years	15	12.20
26 to 30 years	18	14.63
31+ years	5	4.07
Teachers by School level		
Elementary school	15	12.2
Middle School	38	30.9
High School	70	56.9

Note. Due to rounding errors, percentages may not equal 100%.

Summary Statistics

The ages of participants ranged from 26 to 77 years, with $M = 46.10$ years and $SD = 10.43$. The summary statistics can be found in Table 3.

Table 3

Summary Statistics Table for Age

Variable	<i>n</i>	Min	Max	<i>M</i>	<i>SD</i>
Age	119	26.00	77.00	46.10	10.43

Note. Four participants did not report their age.

Composite scores were developed for concerns and self-efficacy through an average of the respective items comprising the scales. Possible concerns composite scores could range from 1.00 to 4.00. For the current sample concerns composite scores ranged from 1.00 to 3.70, with $M = 2.01$, $Mdn = 1.91$, and $SD = 0.55$. Possible self-efficacy composite scores could range from 1.00 to 6.00. For the current sample, self-efficacy composite scores ranged from 3.57 to 6.00, with $M = 4.75$, $Mdn = 4.74$, and $SD = 0.57$. Kline (2010) indicates that data follow an approximate normal distribution if the skew and kurtosis fall between -2.0 and 2.0. Both skewness and kurtosis for the concerns and self-efficacy composite scores fell in the acceptable range of normality. Table 4 presents the summary statistics for concerns and self-efficacy.

Table 4

Summary Statistics Table for Concerns and Self-Efficacy

Variable	<i>n</i>	Min	Max	<i>M</i>	<i>Mdn</i>	<i>SD</i>	Skew	Kurtosis
Concerns	123	1.00	3.70	2.01	1.91	0.55	0.64	0.21
Self-Efficacy	123	3.57	6.00	4.75	4.74	0.567	0.23	-0.29

The Cronbach alpha values were interpreted using the guidelines suggested by George and Mallery (2016) where $\alpha \geq .9 =$ Excellent, $\alpha \geq .8 =$ Good, $\alpha \geq .7 =$ Acceptable, $\alpha \geq .6 =$ Questionable, $\alpha \geq .5 =$ Poor, and $\alpha < .5 =$ Unacceptable. Both scales met the acceptable threshold

for internal consistency reliability. These findings align with previous literature, which indicated that the Cronbach alpha coefficient for concerns and self-efficacy were .91 and .89, respectively (Sharma et al., 2021; Srivastava & Srivastava, 2010). Table 5 presents the descriptive statistics for concerns and self-efficacy.

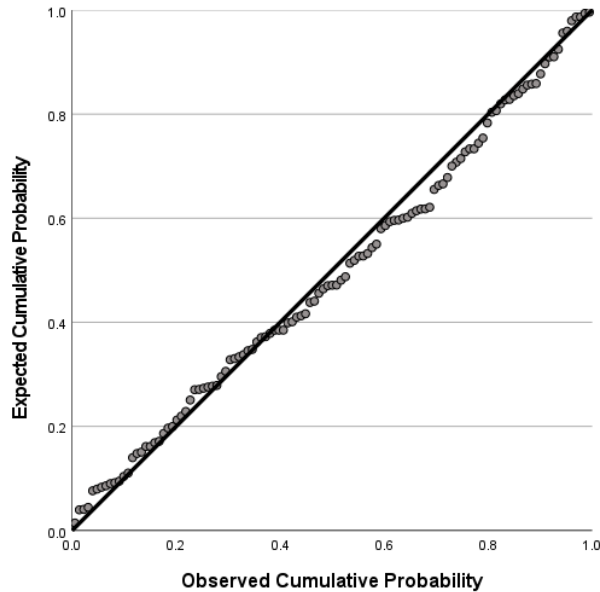
Table 5

Summary Statistics Table for Concerns and Self-Efficacy

Variable	Number of items	α
Concerns	23	.93
Self-efficacy	23	.92

A multiple hierarchical linear regression was conducted to address the five research questions. The predictor variables of gender, age, educational qualifications, years of teaching experience, and level of concern were entered into separate steps of the regression model. Gender was a dichotomous variable, coded 0 = females and 1 = males. Age was entered as a continuous variable. Educational qualifications were an ordinal-level variable, with bachelor's being treated as the reference group. Years of teaching experience was an ordinal-level variable, with less than five years of experience being treated as the reference. Self-efficacy was entered as a continuous variable. The continuous dependent variable corresponded to self-efficacy.

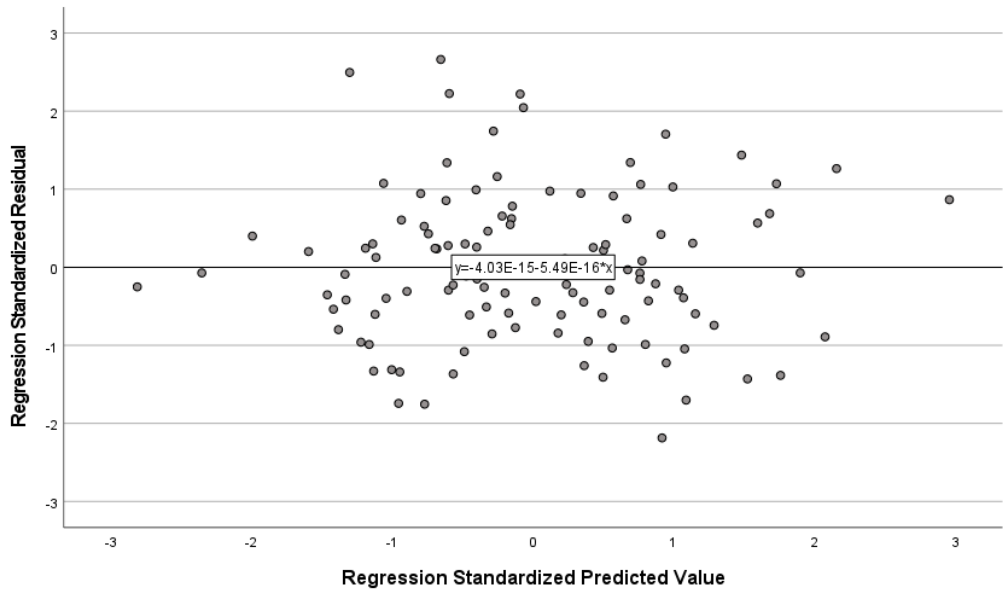
Prior to analysis, the assumptions of a multiple linear regression were tested. A normal-P-P scatterplot was used to examine the normality assumption. The data closely followed the normality trend line, indicating that the assumption was supported (see Figure 3).

Figure 3*Normal P-P Scatterplot*

Homoscedasticity was tested with a residuals scatterplot. Homoscedasticity refers to the variance of the residuals being the same for all combinations of the independent variable (Ernst & Albers, 2017). The data in the scatterplot did not depict a recurring trend, and there appeared to be random scatter, indicating that the data were homoscedastic (see Figure 4). Therefore, the assumption for homoscedasticity was supported.

Figure 4

Residuals Scatterplot



The absence of multicollinearity was tested by examining variance inflation factors (VIFs). According to Stevens (2009), VIFs larger than 10 indicate a strong association among the predictor variables. All the VIFs were below 10, identifying that the absence of multicollinearity was supported (see Table 6).

Table 6*VIFs for Predictor Variables*

Variable	VIF
Gender (reference: female)	
Male	1.11
Age	1.83
Educational qualifications (reference: Bachelors)	
Masters	1.59
Doctorate	1.29
Other	1.70
Years of experience (reference: less than five years)	
6-10 years	2.23
11-15 years	2.52
16-20 years	2.05
21-25 years	2.18
26-30 years	2.28
31-35 years	1.78
Concerns	1.08

Hierarchical Linear Regression Analysis

The findings of the first step of the model were not statistically significant, $F(1, 115) = 0.01$, $p = .922$, $R^2 = 0.000$, indicating that there was not a significant relationship between gender and self-efficacy. Less than 0.1% of the variance in self-efficacy could be explained by gender. The null hypothesis for research question one (H_{01}) was not rejected.

The findings of the second step of the model were not statistically significant, $F(2, 114) = 0.55$, $p = .581$, $R^2 = 0.009$, indicating that there was not a significant relationship between gender, age, and self-efficacy. The addition of age into the regression model explains an additional 0.9% of variance in self-efficacy. The null hypothesis for research question two (H_{02}) was not rejected.

The findings of the third step of the model were not statistically significant, $F(5, 111) = 0.65$, $p = .661$, $R^2 = 0.028$, indicating that there was not a significant relationship between gender, age, educational qualifications, and self-efficacy. Educational qualifications explained an additional 1.90% of the variance in self-efficacy. The null hypothesis for research question three (H₀₃) was not rejected.

The findings of the fourth step of the model were not statistically significant, $F(11, 105) = 0.59$, $p = .836$, $R^2 = 0.058$, indicating that there was not a significant relationship between gender, age, educational qualifications, experience, and self-efficacy. Experience explained an additional 2.90% of the variance in self-efficacy. The null hypothesis for research question four (H₀₄) was not rejected.

The findings of the fifth step of the model were statistically significant, $F(12, 104) = 2.39$, $p = .009$, $R^2 = 0.216$, indicating that there was a significant relationship between gender, age, educational qualifications, experience, teacher concerns, and self-efficacy. Teacher concerns explains an additional 15.80% of variance in self-efficacy. Teacher concerns had a significant inverse association with self-efficacy ($\beta = -0.414$). The unstandardized beta value indicates that with every one-unit increase in teacher concerns, self-efficacy scores decreased by 0.436 units ($B = -0.436$, $t = -4.58$, $p < .001$). The null hypothesis for research question five (H₀₅) was rejected. Table 7 summarizes the results of the regression model.

Table 7

Results for Hierarchical Linear Regression with Gender, Age, Educational Qualifications, Years of Experience, and Concerns Predicting Self-Efficacy

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
Step 1:					
Gender (reference: female)					
Male	-.014	.144	-.009	-.099	.922
Step 2:					
Gender (reference: female)					
Male	-.014	.144	-.009	-.094	.925
Age	-.005	.005	-.097	-1.039	.301
Step 3:					
Gender (reference: female)					
Male	-.047	.148	-.030	-.317	.752
Age	-.005	.005	-.090	-.957	.341
Educational qualifications (reference: Bachelors)					
Masters	.114	.133	.099	.859	.392
Doctorate	.369	.263	.143	1.405	.163
Other	.087	.148	.067	.588	.558
Step 4:					
Gender (reference: female)					
Male	-.023	.154	-.015	-.149	.882
Age	-.009	.007	-.159	-1.246	.216
Educational qualifications (reference: Bachelors)					
Masters	.095	.137	.082	.690	.492
Doctorate	.331	.276	.128	1.197	.234
Other	.013	.157	.010	.085	.932
Years of experience (reference: less than five years)					
6-10 years	-.019	.196	-.013	-.095	.925
11-15 years	.195	.200	.146	.976	.332
16-20 years	.142	.237	.081	.597	.552
21-25 years	.288	.236	.169	1.216	.227
26-30 years	.194	.244	.114	.795	.428
31-35 years	.042	.355	.015	.118	.906
Step 5:					
Gender (reference: female)					
Male	-.086	.141	-.056	-.609	.544
Age	-.007	.006	-.128	-1.093	.277
Educational qualifications (reference: Bachelors)					
Masters	.099	.126	.086	.788	.432
Doctorate	.466	.255	.181	1.829	.070
Other	.119	.146	.092	.814	.418

Years of experience (reference: less than five years)					
6-10 years	-.041	.180	-.029	-.227	.821
11-15 years	.119	.184	.089	.649	.518
16-20 years	.072	.218	.041	.329	.743
21-25 years	.176	.218	.103	.805	.423
26-30 years	.205	.223	.121	.919	.360
31-35 years	.024	.326	.008	.073	.942
Concerns	-.436	.095	-.414	-4.583	<.001

Note. Step 1: $F(1, 115) = 0.01, p = .922, R^2 = 0.000$;

Step 2: $F(2, 114) = 0.55, p = .581, R^2 = 0.009$;

Step 3: $F(5, 111) = 0.65, p = .661, R^2 = 0.028$;

Step 4: $F(11, 105) = 0.59, p = .836, R^2 = 0.058$;

Step 5: $F(12, 104) = 2.39, p = .009, R^2 = 0.216$.

A series of histograms were developed to examine self-efficacy ratings by the demographic characteristics. As evidenced in Figure 5, there was not a high level of variance in self-efficacy between males and females; however, this observation is tempered by the fact that males are significantly underrepresented in the study sample. There was also not a large disparity in self-efficacy based on education level (see Figure 6). However, participants with more education tended to have higher levels of self-efficacy. There was not a significant variation in self-efficacy based on experience (see Figure 7). Two histograms were developed to examine the distribution of self-efficacy scores and teacher concerns (see Figures 8-9). Both distributions appeared to resemble a bell-shaped distribution, with teacher concerns demonstrating a slight positive skew to the right.

Figure 5

Self-Efficacy by Gender

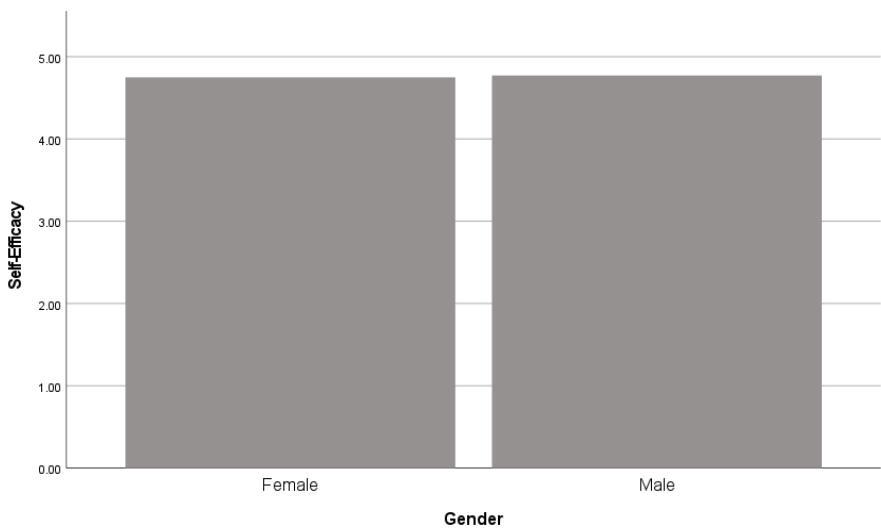


Figure 6

Self-Efficacy by Education Level

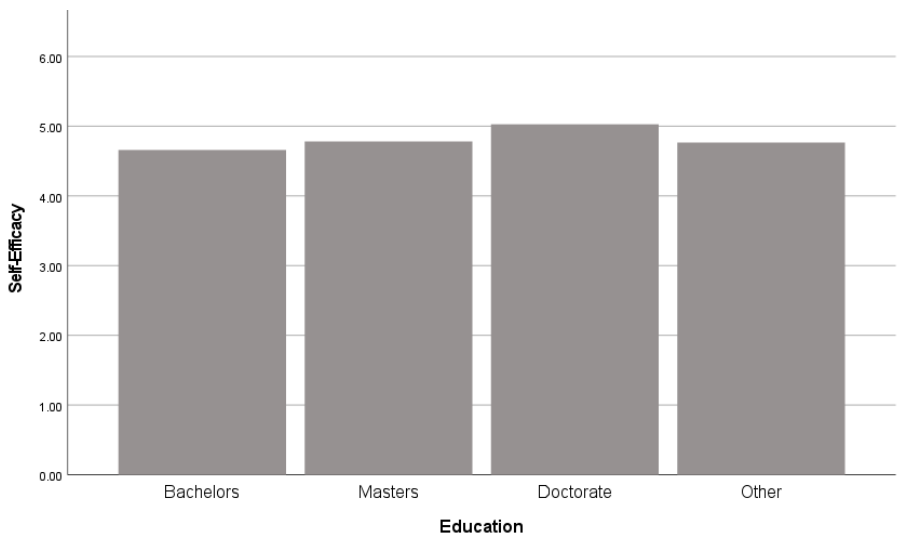


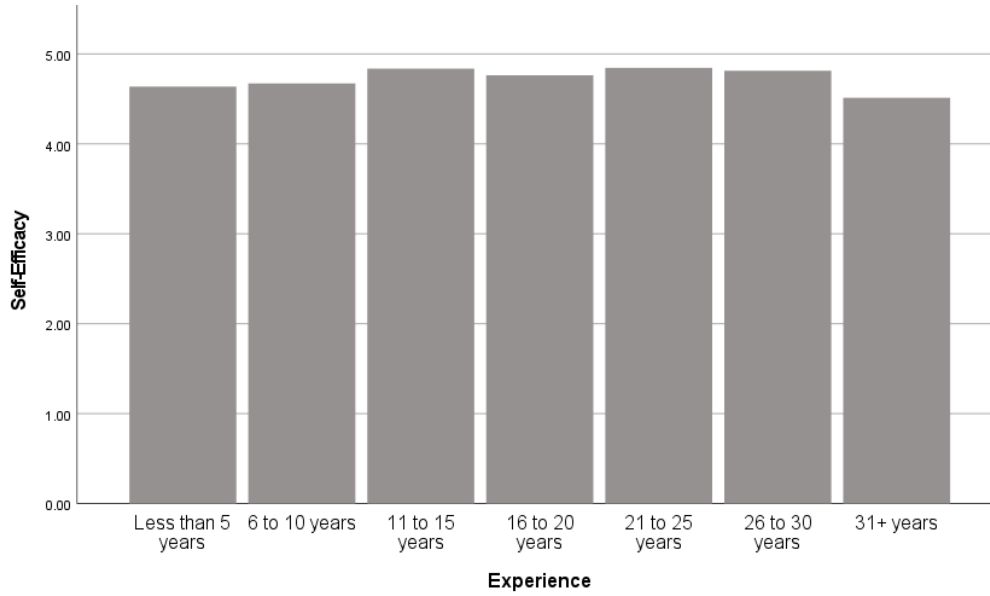
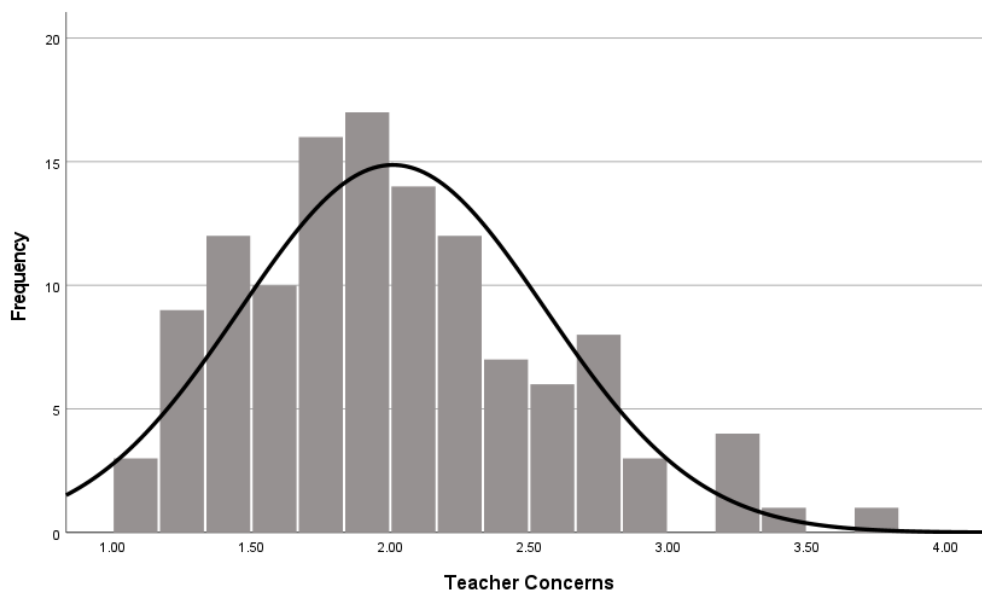
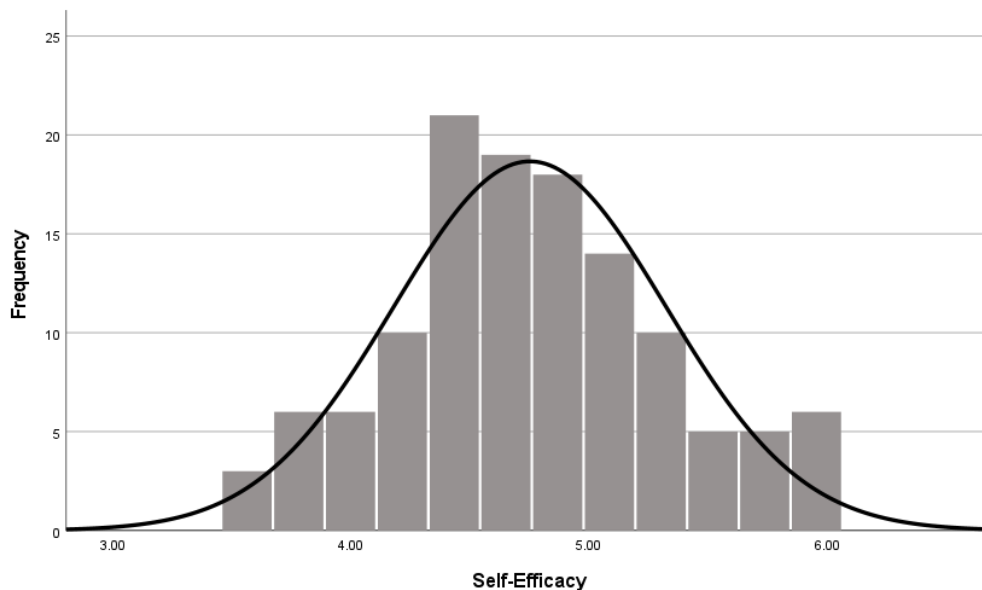
Figure 7*Self-Efficacy by Experience***Figure 8***Histogram for Teacher Concerns Scores*

Figure 9*Histogram for Self-Efficacy Scores*

A series of scatterplots were developed to examine self-efficacy ratings by the demographic characteristics. As evidenced in Figure 10, there was not a high level of variance in self-efficacy between males and females. There was no trend to the data as evidenced in Figure 11, indicative of no correlation in self-efficacy based on age. There was also not a large difference in self-efficacy based on education level (see Figure 12). However, participants with more education tended to have higher levels of self-efficacy. There was not a significant variation in self-efficacy based on experience (see Figure 13). As evidenced in Figure 14, there was a strong negative relationship between self-efficacy and concerns.

Figure 10

Scatterplot of Self-Efficacy by Gender

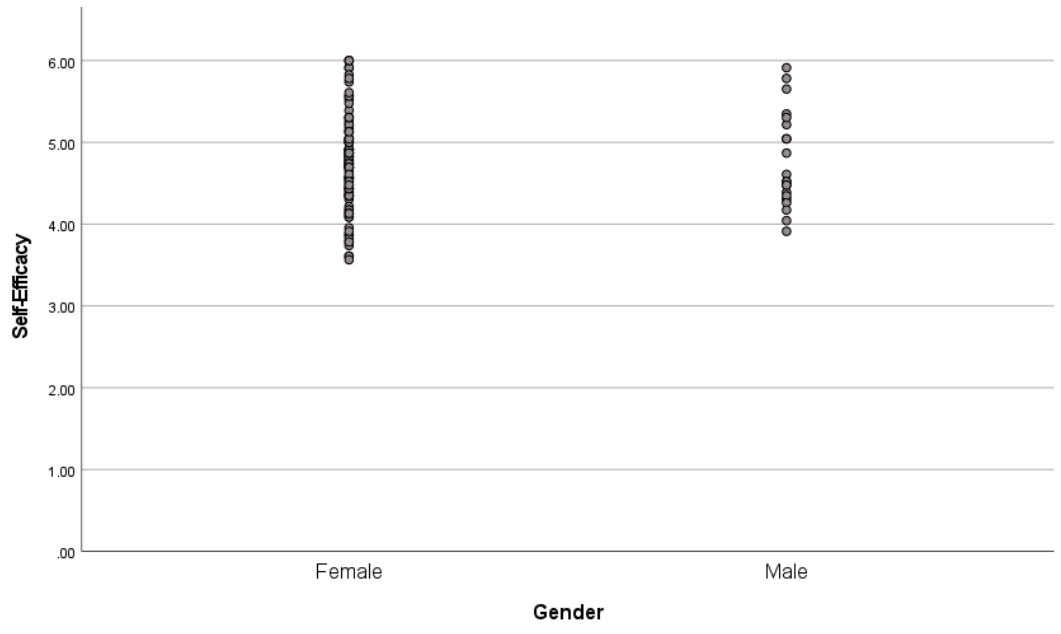


Figure 11

Scatterplot of Self-Efficacy by Age

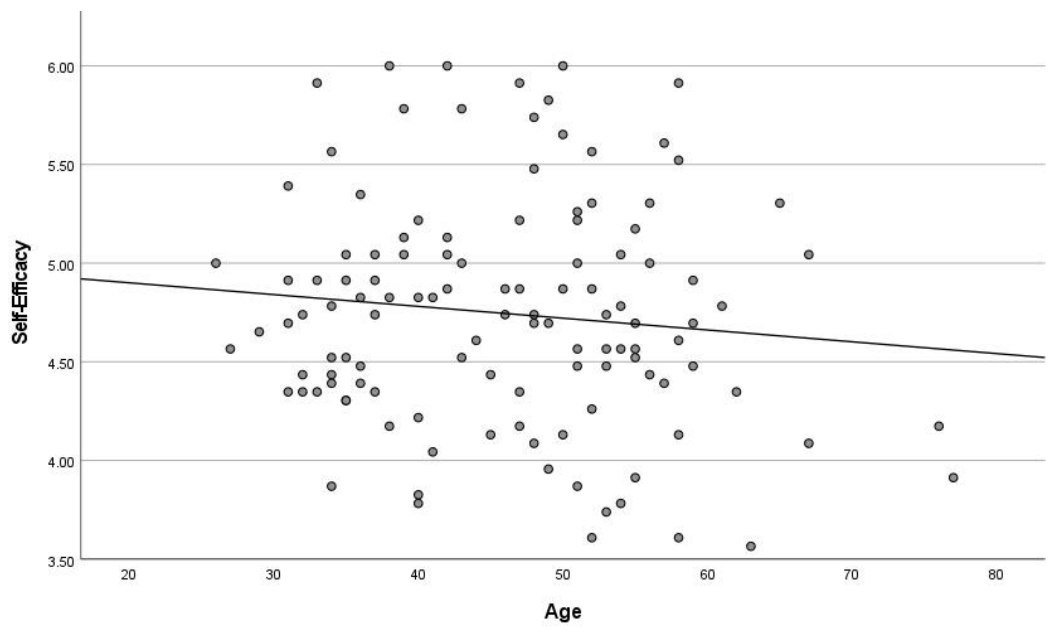


Figure 12

Scatterplot of Self-Efficacy by Educational Qualifications

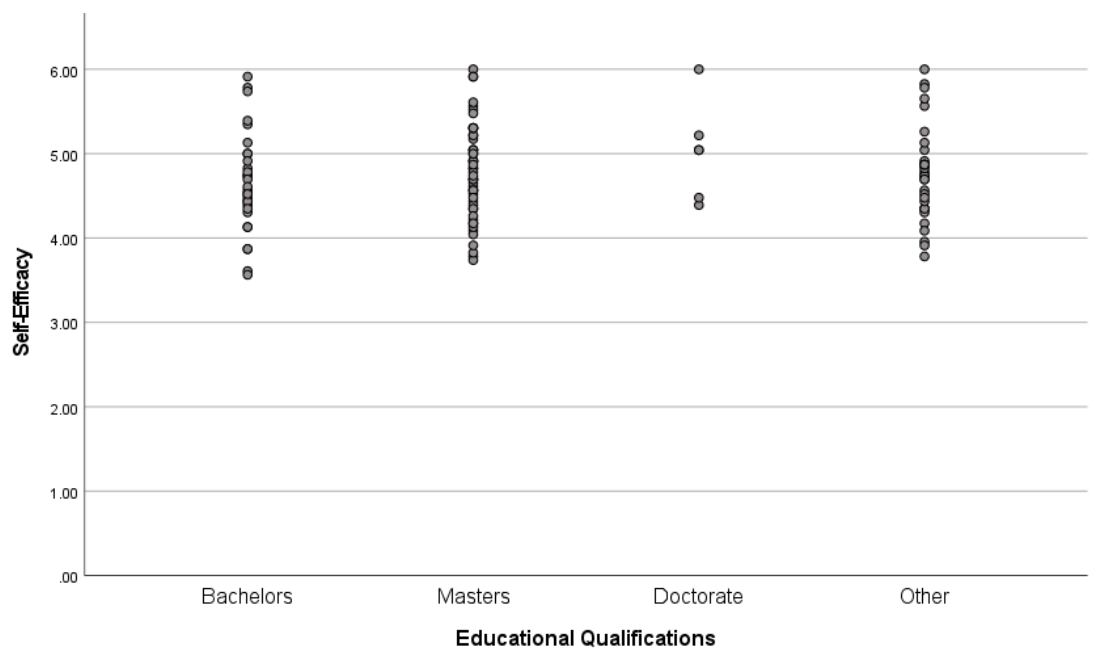


Figure 13

Scatterplot of Self-Efficacy by Years of Experience

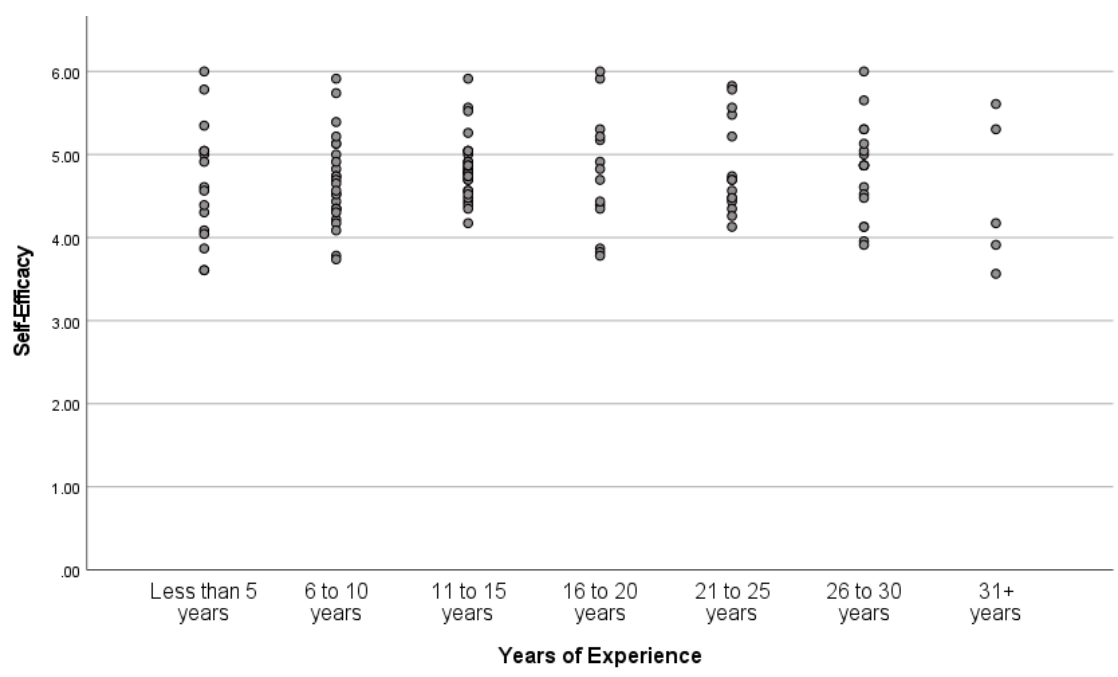
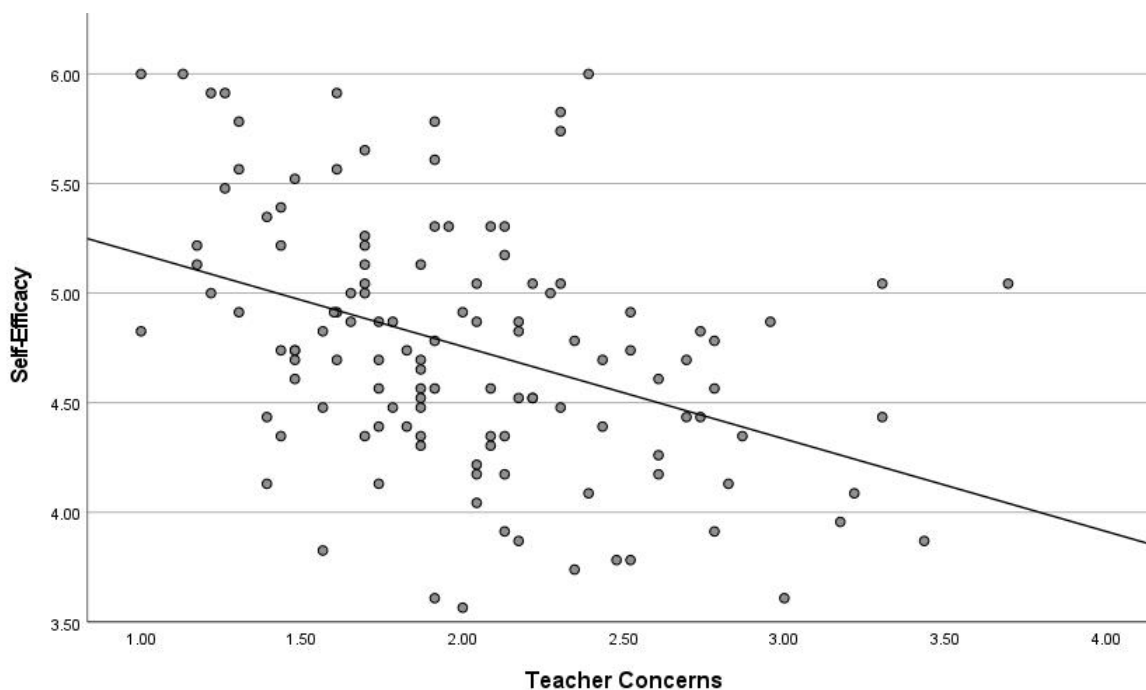


Figure 14

Scatterplot of Self-Efficacy by Teacher Concerns



Summary

The purpose of this quantitative correlational study was to examine whether K-12 classroom teachers' concerns and demographic characteristics (i.e., gender, age, education, and years of teaching experience) predict their PSE to implement inclusive teaching practices. In this chapter, the findings of the data analyses were reported. Frequencies and percentages were examined for the nominal-level variables. Means and standard deviations were used for the continuous-level data. The instruments used to measure the constructs of teacher concerns and self-efficacy met the acceptable threshold for internal consistency reliability, an index indicating that items are consistent with one another and measure the same construct. To address the research questions, a multiple hierarchical linear regression was conducted. Gender, age, educational qualifications, and experience explained a scant amount of the overall variance with

self-efficacy, nor was there any significant relationship with self-efficacy. The concerns variable had a significant inverse relationship with self-efficacy and explained 15.80% of the variance with perceived self-efficacy. In the next chapter, the findings of the data analyses were explored with connections to the literature. Recommendations for future research were provided.

CHAPTER FIVE: CONCLUSIONS

Overview

This final chapter describes the results of the quantitative correlational study that analyzed the predictive relationship between K-12 classroom teachers' concerns and their PSE to implement inclusive teaching practices. Teachers' concerns, the predictor variable was measured using the 23 items CIES Likert-type scale. Teachers' PSE, the outcome variable, was measured by the 23 items TEIP survey instrument. After discussing the study results, implications, limitations, and recommendations for future research are presented.

Discussion

The purpose of this quantitative correlational study was to examine whether K-12 classroom teachers' concerns and demographic characteristics (i.e., gender, age, education, and years of teaching experience) predict their PSE to implement inclusive teaching practices. The original data collection included 138 K-12 classroom teachers, but the final sample included 123 teachers after 15 participants were removed due to incomplete data. All participants were K-12 classroom teachers working in the public school system in the state of Georgia with more than one year of teaching experience. Data were gathered using three separate surveys: a demographic questionnaire, CIES, and the TEIP. The CIES and the TEIP survey instruments have high reliability and validity to measure teachers' concerns and PSE in implementing inclusive teaching practices. Examining this relationship may help and equip the school districts to understand the effectiveness and pedagogical knowledge of K-12 classroom teachers, identify and address issues within the teacher preparation programs for inclusive teaching practices, and implement training programs that promote inclusion.

Results for the Research Question

RQ 1. “Does a K-12 classroom teacher’s gender predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?”

The multiple hierarchical linear regression analysis addressed this research question. It tested the null hypothesis that K-12 classroom teacher’s gender does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP. The R^2 for the independent variable of gender was 0.00. The gender variable explained less than 0.01% of the variance in self-efficacy. The lack of statistical significance indicates that gender does not predict PSE. Thus, there is not enough evidence to reject the null hypothesis.

Previous studies report varied findings related to teachers’ gender and their PSE. For example, some studies indicate that female teachers had a higher level of SE and are more supportive of inclusive education (e.g., Adedoyin & Okere, 2017; Ashan et al., 2012; Boyle et al., 2013; de Boer et al., 2011; Saloviita, 2019; Vaz et al., 2015). Several studies have shown that male teachers had a higher PSE than female teachers when including SWDs with challenging behaviors (e.g., Ahsan et al., 2012; Forlin et al., 2014; Klassen & Chiu, 2010). Several researchers had documented differences in PSE towards inclusive education based on gender (e.g., Ahsan et al., 2012; Hussien & Al-Qaryouti, 2015; Specht et al., 2016; Tsakiridou & Polyzopoulou, 2014). No significant differences were noted between male and female teachers on their PSE towards inclusive education in teaching SWDs (Loreman et al., 2013; Tejada-Delgado, 2009), consistent with the result of this study. Even though the teachers in the state of Georgia have concerns regarding common planning time, inadequate resources for their classrooms, and inadequate support from the school administration, both male and female teachers show almost equal PSE towards the implementation of inclusive practices in their

classrooms. However, it should be noted that 82.9% of the participants in this study were female, whereas 17.1% were males. The skew towards females over males presents a limitation in generalizing males' PSE in implementing inclusive practices.

RQ 2. "Does a K-12 classroom teacher's age predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?"

A multiple hierarchical linear regression analysis addressed this research question. It tested the null hypothesis that K-12 classroom teachers' age does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP. The total adjusted R^2 for the independent variables of gender and age was 0.009. The lack of statistical significance indicates that age does not predict PSE. Thus, there is not enough evidence to reject the null hypothesis. The addition of age explained 0.9 % of the variance in self-efficacy. This study's lack of predictive relationship between age and PSE contradicts previous studies showing a relationship between teachers' age and their PSE towards inclusive teaching practices. Some research evidence suggests that younger teachers tend to take more courses in special education, update themselves with training, and have increased PSE towards the inclusion of SWDs in their classrooms (e.g., Asres, 2019; Forlin et al., 2008; Hwang & Evans, 2011; Monsen et al., 2014; Salovitta, 2020; Smith, 2000). The lack of a significant predictive relationship between teachers' age and their PSE could be because, in the state of Georgia, the school district provides in-service teacher training on effective instructional inclusive teaching practices to all of its teachers.

RQ 3. "Does a K-12 classroom teacher's educational qualifications/level predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?"

A multiple hierarchical linear regression analysis addressed this research question. It tested the null hypothesis that K-12 classroom teacher's educational qualifications/level does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP. The total adjusted R^2 for the independent variables of gender, age, and educational qualifications was 0.028. The lack of statistical significance indicates that the addition of teachers' educational qualifications/level did not predict the PSE. Thus, there is not enough evidence to reject the null hypothesis. The addition of educational qualifications/level explained 1.90 % of the variance in self-efficacy. While not statistically significant, participants with a higher education level tended to have slightly greater PSE than those with less education (e.g., Bachelor's vs. Doctorate). Despite the findings related to the educational qualifications variable, research evidence suggests there is a positive correlation between teachers' higher level of education and their PSE towards implementing inclusive teaching practices (e.g., Chu & Garcia, 2014; Dixon et al., 2014; Guo et al., 2010; Kraska & Boyle, 2014; Kim, 2011; Lancaster & Bain, 2007; Sharma & Sokal, 2015).

This study's findings indicate that teachers with graduate degrees reported being slightly more confident in their preparedness to teach SWDs in inclusive education than teachers with undergraduate degrees. It was expected that teachers with a higher level of education would have more knowledge of legislation and policies, increased knowledge to work with SWDs, and are better prepared to implement inclusive teaching practices. However, the findings of this study did not show that there was a significant relationship between teachers' level of education and PSE scores. This study's findings between the level of education and PSE aligns with the work of Alnahdi and Schwab (2021), who postulated that the level of teachers' education does not significantly predict teachers' PSE towards implementing inclusive teaching practices.

RQ 4. “Does a K-12 classroom teacher’s years of teaching experience predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP?”

A multiple hierarchical linear regression analysis addressed this research question. It tested the null hypothesis that K-12 classroom teacher’s years of teaching experience does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP. The total adjusted R^2 for the independent variables of gender, age, educational qualifications, and experience was 0.058. The lack of statistical significance indicates that adding teachers’ years of teaching experience did not predict the PSE. Thus, there is not enough evidence to reject the null hypothesis. The addition of years of teaching experience explained 2.90 % of the variance in self-efficacy. The findings of Dimopoulou (2014) and Guo et al. (2010) similarly found a lack of statistically significant relationship between years of teaching experience and teachers’ PSE, similar to the result of this study. However, the result of this study also contradicts previous investigations into the relationship between these variables. For example, evidence points to a positive relationship between years of teaching experience and teachers’ PSE (e.g., Allinder, 1994; Everett, 2017; Mitchell & Hedge, 2007; Ruble et al., 2011; Skaalvik & Skaalvik, 2017; Yada et al., 2018; Yada & Savolainen, 2017). Moreover, mastery teaching experiences and vicarious learning may also improve teachers’ PSE (Sharma & Nuttal, 2016; Sharma et al., 2021). The findings of this research suggest that teachers with increased mastery teaching experiences and more opportunity for learning from others (vicarious learning) may show an increased PSE in teaching SWDs. If the teachers successfully implement inclusive teaching practices, they tend to be more confident in teaching SWDs. To improve teachers’ PSE, the schools should give more opportunities to learn and collaborate by observing each other's

work. Teachers may need to discuss and reflect on their past performance working with SWDs in inclusive classrooms.

RQ 5. “Does a K-12 classroom teacher’s level of concerns predict their sense of PSE in implementing inclusive teaching practices, as measured by the CIES and the TEIP?”

A multiple hierarchical linear regression analysis addressed this research question. It tested the null hypothesis that K-12 classroom teacher’s level of concerns does not predict their sense of PSE in implementing inclusive teaching practices, as measured by the TEIP. The total adjusted R^2 for the independent variables of gender, age, educational qualifications, experience, and concerns was 0.216. The presence of statistical significance indicates that the teacher’s level of concerns did predict the PSE. Thus, there is enough evidence to reject the null hypothesis. The addition of the teacher’s level of concerns explained 15.80 % of the variance in self-efficacy. The findings suggest that teachers’ concerns are an important variable explaining teachers’ PSE and are consistent with studies mentioned in the literature review (e.g., Kormos & Nijakowska, 2017; Kuyini et al., 2020; Sharma et al., 2012; Sharma et al., 2018).

Teachers with lower concerns show greater PSE towards implementing inclusive practices and are more willing to teach SWDs in their classrooms effectively, consistent with the research evidence (e.g., Forlin et al., 2014; Savolainen et al., 2020; Sharma et al., 2012). The higher the teachers’ PSE, the less they experience stress, are more able to handle classroom workload, with less burnout, and effectively teach SWD’s meeting their learning needs (Boujut et al., 2017; Brunsting et al., 2014; Gaudreu et al., 2012; Ruble et al., 2011). Teachers’ lower concerns are associated with greater confidence to deal with increased stress levels, workload, and behavioral challenges of SWDs in inclusive settings (Savolainen et al., 2012; Zee & Koomen, 2016). Teachers’ concerns score (i.e., Mean = 2.01) from the current study showed that

teachers were somewhat concerned about implementing inclusive teaching practices in their classrooms. To improve self-efficacy and reduce concerns, previous research studies have recommended districts provide more intensive, ongoing professional training programs on effective and inclusive teaching practices that may help to address teachers' concerns so that they may help improve the learning experiences of SWDs as evidenced by students meeting their IEP goals (Acedo, 2011; Opiyo, 2019; Sharma et al., 2008; Sokal & Sharma, 2014; Swain et al., 2021). The results of this study corroborate the need to form professional training programs addressing teachers' concerns to implement inclusive teaching practices in teaching SWDs in K-12 classrooms.

Implications

Students with disabilities (SWDs) are increasingly enrolled in general education settings in public schools across the United States (McLeskey et al., 2012; NCES, 2019). With these increasing numbers, K-12 classroom teachers may show concerns about knowing what instructional practices to implement with SWDs to ensure they are included and meet their IEP goals in the general classroom (Chataika et al., 2017; Sharma & Nuttal, 2016; Woodcock & Woolfson, 2019). Meeting the legislative and policy initiative, all students should participate in statewide assessments, and teachers are required to promote the progress of SWDs in the general curriculum (Cushing et al., 2005). Even with teachers' increasing knowledge and skill diversity, they must still teach all students effectively (Clarke et al., 2016; Kiel et al., 2019; Sinclair et al., 2018). SWDs improve their academic, social, and behavioral skills when taught in inclusive settings (Bakken, 2016; McLeskey et al., 2018; Vitalaki et al., 2018). The findings from previous research studies indicate that teachers lack the skills to teach in inclusion settings effectively to appropriately meet the needs of SWDs (Kirby, 2017; Kuyini et al., 2018; Lin & Lin, 2015;

Williamson et al., 2020). There is a need to study teachers' concerns and their PSE in K-12 classrooms to help students learn since the more efficacious the teachers are in implementing inclusive teaching practices, students show growth in their learning (Chao et al., 2018; Kiel et al., 2019; Mohamed Emam & Al-Mahdy, 2020; Sharma et al., 2012; Wilson et al., 2020).

The findings of this study support Bandura's self-efficacy theory, which is rooted in the social cognitive theory (1977, 1986). In this model, behavior, cognitive, and environmental events all interact bidirectionally to influence each other (Bandura, 1988). A teacher's competency requires skills and self-belief in one's capability to use those skills adequately. Individuals with a higher sense of PSE may commit to a task and successfully handle difficult situations. At the same time, those with low self-efficacy often feel stressed and see these situations as threats (Bandura, 1977). Teachers' concerns and PSE play an important role in implementing inclusive teaching practices in inclusion classrooms (Montgomery & Miranda, 2014; Ozokcu, 2018). Classroom teachers' concerns may be addressed by modeling and developing competencies through appropriate professional training programs based on efficient, inclusive teaching practices. The findings from this study present valuable information and recommendations for improving teacher training programs to address teachers' concerns in inclusive settings.

Teacher training programs may center on training teachers on how to support SWDs in inclusive classroom settings based on teachers' concerns in inclusive classrooms. Special education and general education teachers will benefit from the training programs that include specific courses to improve inclusive teaching practices in teaching SWDs in inclusive classrooms (Crispel & Kasperski, 2019; Sokal & Sharma, 2017). These results may be useful for the school districts and help target professional development programs to address teachers'

concerns about teaching students in inclusive settings. Developing training programs for teachers based on pedagogical best practices will help successfully teach students in inclusive settings. Teachers with low PSE need to be identified and supported by the school districts through special training focused on evidence-based inclusive teaching practices.

This study is one of the first in the state of Georgia that examine the predictive relationship between teacher demographic variables and concerns and a PSE outcome criterion related to implementing inclusive teaching practices in K-12 classrooms. To improve students learning in inclusive settings, teachers need a high sense of PSE and competence, which can be improved when their concerns are addressed (Forlin et al., 2013; Sharma et al., 2012). Many teachers with a high sense of PSE strongly believe in their students and provide extra support to teach them (Bandura, 1977; Kosko & Wilkins, 2009). A decrease in teachers' concerns will support teachers' willingness to implement evidence-based inclusive practices (Forlin et al., 2011; Sokal & Sharma, 2014; Sharma et al., 2018). Teachers who possess greater instructional self-efficacy tend to exclude fewer students with challenging behaviors. Teachers with strong PSE show lower burnout, better planning and organization, increased persistence in working with struggling students, and openness to new ideas (Allinder, 1994; Aloe et al., 2014; Brunsting et al., 2014; Kosko & Wilkins, 2009; Sarıçam & Sakiz, 2014; Stein & Wang, 1988). Based on the findings of this research study, SWDs are likely to get effective instruction from teachers who have significantly less concern about inclusive teaching practices.

Previous studies suggest implementing inclusive practices based on strategies, such as collaborative problem solving, heterogeneous grouping, cooperative learning, effective teaching, data-driven assessment for learning, and universal design of learning (see, for example, Ainscow, 2020; Basham et al., 2020; Finkelstein et al., 2021; Jordan, 2018; Salend, 2016; Stehle & Peters-

Burton, 2019). Some of the barriers to successful inclusion of SWDs include teachers who show concerns related to inadequate support from school administrators, lack of common planning and instructional time, increase in class size, and meeting the needs of everyone (Bhatnagar & Das, 2014; Brydges & Mkandawire, 2015; McLeskey et al., 2014; Woodcock & Woolfson, 2019). With more professional development programs geared toward the teachers' concerns, schools could enhance teachers' efficacy by improving the inclusion of effective instructions, which sometimes becomes difficult in general education classrooms (Crispel & Kasperski, 2019; Kauffman et al., 2018; Kauffman, 2020; Tschannen-Moran & Woolfolk-Hoy, 2007). State education agencies should continue to assist local school districts with resources for their professional learning opportunities in inclusive practices and efficient teaching strategies so that SWDs have access to appropriate educational programs.

Limitations

There are several limitations to this study. One limitation is the disparity in male participants compared to female participants, as male participants are underrepresented in this study. In this study, there were more female participants ($n=109$) than male participants ($n=21$). In the state of Georgia, for example, out of 119,492 teachers, 79.6% of the teachers' workforce are female, and 20.4% are male (Pelfrey & Flamini, 2020). Given that there are more women in the field of education/teaching than men, this could have contributed to self-selection/volunteer bias in this study, especially if women might have stronger opinions/concerns about working with SWDs than men. Evidence related to rates of volunteering does suggest that there are gender differences between men and women in which, across all age groups, women tend to volunteer for events, roles, organizations, and research significantly more than men (see, for example, Wilson, 2000; Wymer, 2011). With a large proportion of female participants in this

study compared to men, the results may not be generalized to male teachers. The participants for this study were invited via email. Those who elected to respond to the survey may have provided an extreme range of responses, including positive and negative, which may have influenced the results. This study used a non-experimental predictive correlational design to identify the relationship between dependent and independent variables. However, the findings do not indicate the cause-and-effect relationship, may lack internal/ external validity, and do not provide a conclusive reason for a correlation between two variables (Gall et al., 2007; Queirós et al., 2017; Tabachnick & Fidell, 2008). This study did not find a statistically significant relationship between teachers' gender, age, level of education, years of teaching experience, and PSE. However, it is still possible a different study may find a significant relationship between these variables and better explain teachers' self-efficacy towards inclusive teaching practices. The teachers' responses to a survey could be biased or untruthful as it includes self-reported responses. It is assumed that the teacher participants were honest with their responses when completing the survey. The participant scores obtained on the two survey instruments may lack temporal stability over time (i.e., test-retest reliability); there was no opportunity to examine how stable teachers' concerns and self-efficacy are over time and how that may affect the overall predictive model.

This research study was limited to only a small geographical region in the state of Georgia, which does not provide an overall representation for the United States. Though inferences can be made from the results of this study to other states, this study is specific to teacher participants teaching in the state of Georgia with 1 and more years of teaching experience. This study may be replicated to include different teacher participants from different districts, regions, states, and countries. This study used a Likert scale which may be a limiting

factor, as many participants may avoid selecting the extreme measures “strongly disagree” and “strongly agree” and prefer to choose the middle measure like “agree” and “disagree” to look more socially desirable, which may mask the true perceptions/feelings of the participants (Theofanidis & Fountouki, 2018). Another limitation in this study may be the threats to construct validity in survey instruments based on inclusive practices. There has been inconsistency in how inclusion and inclusive practices are defined and viewed from various perspectives.

Since the data was collected during the COVID-19 pandemic of 2021, there is a possibility that the stressors and preventive measures that resulted from the COVID-19 pandemic may have affected the data. COVID-19 pandemic may have increased teachers' stress and workload, affecting teachers' concerns and PSE towards inclusive teaching practices. Therefore, scores reported on CIES and TEIP instruments may differ outside the pandemic. Results from this study do not account for teachers at the schools who chose not to participate due to district research policies that prohibited participation or schools who chose not to participate for other reasons. The response rate for this study remained low as the survey was sent via email with a follow-up reminder. The non-response bias of males needs to be considered when interpreting and generalizing the results of this research.

Recommendations for Future Research

Based on this research and the literature review findings, future studies are recommended to understand further the predictive relationships between teachers' demographics, concerns, and PSE in implementing inclusive teaching practices. Future research studies must evaluate the current classroom dynamics in inclusive settings to improve teacher training programs to equip teachers with good quality teaching practices and reduce teacher concerns to teach SWDs effectively. Other researchers should replicate this study to expand on its findings in the future

with a large number of samples (including more male participants) and in other states in the United States. The analysis of this research is only based on submitted responses from teachers who volunteered to participate and may not be generalized to all the teachers in the U.S. A larger sample size with balanced gender participation in future studies may result in more effective/insightful statements about generalization. This study may be replicated and analyzed to identify how the variables are predicted within the subgroups relative to one another (educators with 0-15 years vs. 16-31+ years or by elementary, middle, and high school) and in different school types (private and charter schools). Since the findings of this study revealed teachers' concerns as the contributing factor for the variation in PSE, future research studies could investigate a closer relationship between teachers' concerns and PSE. To ensure construct validity and reliability in future studies, the data should be collected in a large and appropriately representative sample or the target population. A longitudinal study may help to capture how predictions between demographic variables, teachers' concerns, and self-efficacy change over time. The number of professional development training teachers received in their district should be considered as a demographic variable in future studies. Future research is commended for exploring other stakeholders (e.g., principals, administrators, leaders, parents) on their concerns and PSE towards inclusive teaching practices in instructing SWDs in inclusion classrooms.

Different research methods, instruments, and research designs would give different results and broaden the understanding of how teachers' concerns impact PSE in implementing inclusive teaching practices. Mixed methods or qualitative research should be undertaken to understand better teachers' concerns and PSE in implementing inclusive teaching practices and how they handle and feel the challenging situations when teaching SWDs in inclusive classroom settings. Further research in understanding teachers' concerns and their PSE towards inclusive

teaching practices will support and improve the inclusive education classrooms and ensure the success of every student, including SWDs. Future research needs to identify how much professional development training teachers may need to reduce their concerns and increase PSE towards inclusive teaching practices. Despite the limitations, the findings of this study offer an understanding of teachers' concerns, demographic variables (gender, age, educational qualifications, and years of teaching experience), and their PSE in implementing inclusive teaching practices to instruct SWDs in inclusion classrooms.

Summary

This quantitative correlational research investigated the predictive relationship between K-12 classroom teachers' concerns, demographic characteristics (age, gender, educational qualifications, and years of teaching experience), and their PSE in implementing inclusive teaching practices to instruct SWDs. The data gathered for this study came from K-12 classroom teachers with one or more years of teaching experience teaching in the public school system in the state of Georgia. The findings of this study indicated that there was not a significant relationship between gender, age, educational qualifications, experience, and self-efficacy. Statistically, a significant inverse association was found between teacher concerns and PSE.

K-12 classroom teachers are an important part of implementing inclusive teaching practices to instruct SWDs in inclusion classrooms. Lower teachers' concerns and higher PSE towards inclusive teaching practices are imperative for improving the learning of SWDs in inclusion classrooms (Forlin et al., 2014; Kiel et al., 2019; Malinen et al., 2012; Sharma et al., 2012; Sharma & Nuttal, 2016; Sharma & Sokal, 2016). The findings of this study acknowledge the central role of teachers in delivering inclusive teaching practices to instruct SWDs. Teachers may have higher concerns about the successful implementation of inclusive teaching practices.

Since the findings of this study identify a significant negative relationship between teachers' concerns and their PSE, it is important to assess these constructs and develop programs to reduce the concerns. Previous research studies have corroborated that teachers may show concerns, such as lack of support from administrators, inadequate resources, increased workload, lack of adequate teacher training, difficulty in managing students' behavior, increased class size, lack of planning time, and decline in teaching quality (Ashan et al., 2012; Brydges & Mkandawire, 2016; Kiel et al., 2019; Klibthong & Agbenyega, 2020; Woodcock & Woolfson, 2019; Yu, 2019).

This study's result may add to the small body of literature highlighting the need for more research on how teachers' concerns, demographic characteristics, and PSE in implementing inclusive teaching practices are integral to effective teaching pedagogy. Teachers may show higher concerns to appropriately instruct all students and effectively meet the needs of SWDs in inclusive classrooms. In conclusion, the review of the literature and this study's findings indicate that teachers need professional development training programs based on their concerns and PSE towards inclusive teaching practices to instruct SWDs in inclusive classrooms. For the success of SWDs in inclusive classrooms, the school district may need to focus on increasing teachers' PSE towards inclusive teaching practices, such as co-teaching, teacher-collaboration, peer tutoring, cooperative learning, differentiated instruction, and the principles of UDL (Bešić et al., 2017; Coubergs et al., 2017; Deshmukh, 2017; Kirby, 2017; Parsons et al., 2018; Strogilos, 2018; Tomlinson et al., 2003; Walton et al., 2022).

A better understanding of teachers' concerns and PSE toward inclusive teaching practices could help school districts focus their training and support to benefit K-12 classrooms and positively impact students' learning. Teachers with reduced concerns and a high sense of PSE

may provide necessary supports and services to SWDs in general education classrooms and effectively implement inclusive teaching practices, thus reducing the need for separate placements (Forlin et al., 2014; Malinen et al., 2012; Sharma et al., 2012; Sharma & Sokal, 2016). Understanding teachers' concerns and their PSE towards inclusive teaching practices to instruct SWDs will assist in the overall success of inclusion. The findings of this study highlight the need for teachers to implement effective teaching practices in inclusive settings. There is a need to improve teacher training and provide teachers with the instructional teaching practices to instruct all students, including SWDs. The findings show that the less concerns teachers have, the greater efficacy teachers show in implementing inclusive teaching practices in inclusion classrooms.

REFERENCES

- Acedo, C. (2011). Preparing teachers for inclusive education. *Prospects*, 41(3), 301-302.
<https://doi.10.1007/s11125-011-9198-2>
- Adedoyin, O., & Okere, E. (2017). The significance of inclusion concept in the educational system as perceived by junior secondary school teachers: Implications for teacher training programmes in Botswana. *Global Journal of Social Sciences*, 3(1), 13-28.
<https://doi.10.20448/807.3.1.13.28>
- Agbenyega, J. (2007). Examining teachers' concerns and attitudes to inclusive education in Ghana. *International Journal of Whole Schooling*, 3(1), 41-56.
<https://files.eric.ed.gov/fulltext/EJ847471.pdf>
- Ahsan, M. T., Sharma, U., & Deppeler, J. M. (2012). Challenges to prepare pre-service teachers for inclusive education in Bangladesh: Beliefs of higher educational institutional heads. *Asia Pacific Journal of Education*, 32(2), 241–257.
<https://doi:10.1080/02188791.2012.655372>
- Aiello, P., & Sharma, U. (2018). Improving intentions to teach in inclusive classrooms: The impact of teacher education courses on future learning support teachers. *Form@ re-Open Journal per la Formazione in Rete*, 18(1), 207-219. <https://doi:10.13128/formare-22605>
- Ainscow, M. (2020). Promoting inclusion and equity in education: Lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1), 7-16.
<https://doi.org/10.1080/20020317.2020.1729587>
- Ainscow, M., Booth, T., & Dyson, A. (2006). Inclusion and the standards agenda: Negotiating policy pressures in England. *International Journal of Inclusive Education*, 10(4-5), 295-308. <https://doi:10.1080/13603110500430633>

- Akdağ, Z., & Haser, Ç. (2016). Beginning early childhood education teachers' classroom management concerns. *Teachers and Teaching*, 22(6), 700–715.
[https://doi:10.1080/13540602.2016.1158959](https://doi.org/10.1080/13540602.2016.1158959)
- Alexander, M., & Byrd, D. (2020). Investigating special education teachers knowledge and skills: Preparing general teacher preparation for professional development. *Journal of Pedagogical Sociology and Psychology*, 1-11. [https://doi:10.33902/JPR.2020059790](https://doi.org/10.33902/JPR.2020059790)
- Alexiadou, N. & Essex, J. (2016). Teacher education for inclusive practice - responding to policy. *European Journal of Teacher Education*, 39(1), 5-19.
[https://doi:10.1080/02619768.2015.1031338](https://doi.org/10.1080/02619768.2015.1031338).
- Algozzine, B., & Anderson, K. M. (2007). Tips for teaching: Differentiating instruction to include all students. *Preventing School Failure: Alternative Education for Children and Youth*, 51(3), 49-54. [https://doi:10.3200/PSFL.51.3.49-54](https://doi.org/10.3200/PSFL.51.3.49-54)
- Allday, R. A., Neilsen-Gatti, S., & Hudson, T. M. (2013). Preparation for inclusion in teacher education pre-service curricula. *Teacher Education and Special Education*, 36(4), 298-311. [https://doi:10.1177/0888406413497485](https://doi.org/10.1177/0888406413497485)
- Allinder, R. M. (1994). The relationship between efficacy and the instructional practices of special education teachers and consultants. *Teacher Education and Special Education*, 17(2), 86-95. [https://doi:10.1177/088840649401700203](https://doi.org/10.1177/088840649401700203)
- Allodi, M. W. (2002). A two-level analysis of classroom climate in relation to social context, group composition, and organization of special support. *Learning Environments Research*, 5(3), 253-274. [https://doi:10.1023/A:1021972206111](https://doi.org/10.1023/A:1021972206111)

- Almog, O., & Shechtman, Z. (2007). Teachers' democratic and efficacy beliefs and styles of coping with behavioral problems of pupils with special needs. *European Journal of Special Needs Education, 22*(2), 115-129. <https://doi:10.1080/08856250701267774>
- 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*. <https://doi.org/10.3389/fpsyg.2021.680909>
- Aloe, A. M., Amo, L. C., & Shanahan, M. E. (2013). Classroom management self-efficacy and burnout: A multivariate meta-analysis. *Educational Psychology Review, 26*(1), 101–126. <https://doi:10.1007/s10648-013-9244-0>
- Alter, P. J., Walker, J., Landers, E. (2013). Teacher perceptions of students' challenging behavior. *Education and Treatment of Children, 36*(4), 51-69. <https://doi:10.1353/etc.2013.0040>
- Amado, A. N., Stancliffe, R. J., McCarron, M., & McCallion, P. (2013). Social inclusion and community participation of individuals with intellectual/developmental disabilities. *Intellectual and Developmental Disabilities, 51*(5), 360-375. <https://doi:10.1352/1934-9556-51.5.360>
- Aragon, S. (2016). Teacher shortages: What we know. Teacher shortage series. *Education Commission of the States, 1-12*. <https://files.eric.ed.gov/fulltext/ED565893.pdf>
- Armstrong, D., & Hallett, F. (2012). Private knowledge, public face: Conceptions of children with SEBD by teachers in the UK: A case study. *Educational & Child Psychology, 29*(4), 77-87. <https://doi:10.1037/e734362011-029>
- Armstrong, F., Armstrong, D., & Barton, L. (2016). *Inclusive education: Policy contexts and comparative perspectives*. Routledge.

- Aron, L., & Loprest, P. (2012). Disability and the education system. *The Future of Children*, 22(1), 97-122. <https://doi:10.1353/foc.2012.0007>
- Ashan, A., Sharma, U., & Deppeler, J. (2012). Exploring pre-service teachers' perceived teaching-efficacy, attitudes and concerns about inclusive education in Bangladesh. *International Journal of Whole Schooling*, 8(2), 1–20. <https://files.eric.ed.gov/fulltext/EJ975715.pdf>
- Asres, G. W. (2019). Teachers' attitude towards the inclusion of students with disabilities in the regular classroom: The case of selected primary schools in South Godar administrative towns-Ethiopia. *Journal of Education and Training Studies*, 7(12), 66-75. <https://doi:10.11114/jets.v7i12.4636>
- Avramidis, E. (2006). Promoting inclusive education: From 'expertism' to sustainable inclusive practices. In R. Webb, (Ed). "*Changing teaching and learning in the primary school*", (pp. 132-146). Open University Press
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129-147. <https://doi:10.1080/08856250210129056>
- Ayaya, G., Makoelle, T. M., & van der Merwe, M. (2020). Participatory action research: A tool for enhancing inclusive teaching practices among teachers in South African full-service schools. *Sage Open*, 10(4), 1–13. <https://doi.org/10.1177/2158244020963576>
- Bakken, J. (2016). General and special education inclusion in an age of change: An introduction. In Jeffrey P. Bakken & Festues E. Obiakor (Eds.), *General and special education inclusion in an age of change impact on students with disabilities* (Vol. 31, pp. 1-12). Emerald. <https://doi:10.1108/S0270-401320160000031001>

- Ballard, K. (2016). Children and disability: Special or included. *Waikato Journal of Education*, 10(1). <https://doi:10.15663/wje.v10i1.349>
- Bandura, A. (1977). Self-efficacy. Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. <https://doi:10.1037/0033-295x.84.2.191>
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *The American Psychologist*, 37(2), 122-147. <https://doi:10.1037/0003-066x.37.2.122>
- Bandura, A. (1984). Recycling misconceptions of perceived self-efficacy. *Cognitive Therapy and Research*, 8(3), 231-255. <https://doi:10.1007/bf01172995>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social & Clinical Psychology*, 4, 359-373. <https://doi:10.1521/jscp.1986.4.3.359>
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148. https://doi:10.1207/s15326985ep2802_3
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman & Company.
- Bandura, A. (2001). Social Cognitive Theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26. <https://doi:10.1146/annurev.psych.52.1.1>
- Bandura, A. (2010). Self-efficacy. *The Corsini Encyclopedia of Psychology*, 1-3. <https://doi:10.1002/9780470479216.corpsy0836>
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38(1), 9-44. <https://doi:10.1177/0149206311410606>

- Barnett, S., & Carolan, M. (2013). Trends in state-funded preschool in the United States: Findings from 10 years of policy surveys. *International Journal of Child Care and Education Policy*, 7(1), 5-23. <https://doi:10.1007/2288-6729-7-1-5>
- Bartlett, L. D., Etscheidt, S. L., & Weisenstein, G. R. (2007). *Special education law and practice in public schools*. Pearson Education, Merrill Prentice Hall.
- Basham, J. D., Blackorby, J., & Marino, M. T. (2020). Opportunity in Crisis: The Role of Universal Design for Learning in Educational Redesign. *Learning Disabilities: A Contemporary Journal*, 18(1), 71-91. <https://files.eric.ed.gov/fulltext/EJ1264277.pdf>
- Bateman, B., & Linden, M. (1998). *Better IEPs* (3rd ed.). Sopris West.
- Beacham, N., & Rouse, M. (2012). Student teachers' attitudes and beliefs about inclusion and inclusive practice. *Journal of Research in Special Education Needs*, 12(1), 3-11. <https://doi:10.1111/j.1471-3802.2010.01194.x>
- Beasley, K. T., & Bernadowski, C. (2019). An examination of reading specialist candidates' knowledge and self-efficacy in behavior and classroom management: An instrumental case study. *Education Sciences*, 9(2), 76. <https://doi:3390/educsci9020076>
- Berry, R. (2010). Preservice and early career teachers' attitudes toward inclusion, instructional accommodations, and fairness: Three profiles. *The Teacher Education*, 45(2), 75-95. <https://doi:10.1080/08878731003623677>
- Berry, R. A. (2011). Voices of experience: General education teachers on teaching students with disabilities. *International Journal of Inclusive Education*, 15(6), 627-648. <https://doi:10.1080/13603110903278035>

- Bešić, E., Paleczek, L., Krammer, M., & Gasteiger-Klicpera, B. (2017). Inclusive practices at the teacher and class level: The experts' view. *European Journal of Special Needs Education, 32*(3), 329–345. <https://doi:10.1080/08856257.2016.1240339>
- Bhatnagar, N., & Das, A. (2014). Regular school teachers' concerns and perceived barriers to implement inclusive education in New Delhi, India. *International Journal of Instruction, 7*(2), 89-102. <https://files.eric.ed.gov/fulltext/EJ1085257.pdf>
- Billingsley, B. S., McLeskey, J., & Crockett, J. B. (2014). *Principal leadership: Moving toward inclusive and high-achieving schools for students with disabilities* (Document No. IC-8). <http://cedar.education.ufl.edu/tools/innovation-configurations/>
- Billingsley, B., & Cross, L. (1992). Predictors of commitment, job satisfaction, and intent to stay in teaching: A comparison of general and special educators. *The Journal of Special Education, 25*(4), 453–471. <https://doi:10.1177/002246699202500404>
- Blake, N., Smeyers, P., Smith, R., & Standish, P. (2003). *The Blackwell guide to the philosophy of education* (Eds.) Oxford: Blackwell.
- Blanton, L.P., Pugach, M.C., Florian, L. (2011). Preparing general education teachers to improve outcomes for students with disabilities. *AACTE/NCLD Policy Brief*. https://secure.aacte.org/apps/rl/res_get.php?fid=508&ref=rl
- Blanton, L. P., & Pugach, M. C. (2017). A dynamic model for the next generation of research on teacher education for inclusion. In *Teacher education for the changing demographics of schooling* (pp. 215-228). Springer, Cham.
- Blatchford, P., Baines, E., Kutnick, P., & Martin, C. (2001). Classroom contexts: Connections between class size and within class grouping. *British Journal of Educational Psychology, 71*(2), 283-302. <https://doi:10.1348/000709901158523>

- Bloomberg, L. D., & Volpe, M. (2012). *Completing your dissertation: A roadmap from beginning to end* (2nd ed.). Sage.
- Bond, R., & Castagnera, E. (2006). Peer supports and inclusive education: An underutilized resource. *Theory into Practice*, 45(3), 224-229. https://doi:10.1207/s15430421tip4503_4
- Boucher, J. (2008). *The autistic spectrum: Characteristics, causes, and practical issues*. Sage.
- Boujut, E., Popa-Roch, M., Palomares, E. A., Dean, A., & Cappe, E. (2017). Self-efficacy and burnout in teachers of students with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 36, 8-20. <https://doi.org/10.1016/j.rasd.2017.01.002>
- Bourdieu, P. (1976). *Outline of a theory of practice*. Cambridge University Press.
- Boyle, C., Topping, K., & Jindal-Snape, D. (2013). Teachers' attitudes towards inclusion in high schools. *Teachers and Teaching*, 19(5), 527-542.
<https://doi:10.1080/13540602.2013.827361>
- Boz, N., & Boz, Y. (2014). Are pre-service mathematics teachers' teaching concerns related to their epistemological beliefs? *Croatian Journal of Education*, 16(2), 335-362.
http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=184595
- Boz, Y. (2008). Turkish student teachers' concerns about teaching. *European Journal of Teacher Education*, 31(4), 367-377. <https://doi:10.1080/02619760802420693>
- Boz, Y., & Boz, N. (2010). The nature of the relationship between teaching concerns and sense of efficacy. *European Journal of Teacher Education*, 33(3), 279-291.
<https://doi:10.1080/02619768.2010.490910>
- Brace, N., Snelgar, R., & Kemp, R. (2016). *SPSS for psychologists: And everybody else*. Palgrave Macmillan.

- Bradshaw, L., & Mundia, L. (2006). Attitudes and concerns about inclusive education: Bruneian in-service and pre-service teachers. *International Journal of Special Education*, 21(1), 35–41. <http://www.internationaljournalofspecialeducation.com/>
- Brame, C. J. (2019). *Science teaching essentials: Short guides to good practice*. Elsevier.
- Brock, M. E. (2018). Trends in the educational placement of students with intellectual disability in the United States over the past 40 years. *American Journal on Intellectual Disabilities*, 123(4), 305-314. <https://doi:10.1352/1944-7558-123.4.305>
- Brookman-Frazer, L. I., Drahota, A., & Stadnick, N. (2012). Training community mental health therapists to deliver a package of evidence-based practice strategies for school-age children with autism spectrum disorders: A pilot study. *Journal of Autism and Developmental Disorders*, 42(8), 1651-1661. <https://doi:1007/s10803-011-1406-7>
- Brownell, M. T., & Pajares, F. (1999). Teacher efficacy and perceived success in mainstreaming students with learning and behavior problems. *Teacher Education and Special Education*, 22(3), 154-164. <https://doi:10.1177/088840649902200303>
- Bruggink, M., Goei, S. L., & Koot, H. M. (2015). Teachers' capacities to meet students' additional support needs in mainstream primary education. *Teachers and Teaching*, 22(4), 448-460. <https://doi:10.1080/13540602.2015.1082727>
- Brunsting, N. C., Screckovic, M.A., & Lane, K. L. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and Treatment of Children*, 37(4), 681-711. <https://doi:10.1353/etc.2014.0032>
- Bryant, D. P., Bryant, B. R., & Smith, D. D. (2016). *Teaching students with special needs in inclusive classrooms*. SAGE Publications.

- Brydges, C., & Mkandawire, P. (2016). Perceptions and concerns about inclusive education among students with visual impairments in Lagos, Nigeria. *International Journal of Disability, Development, and Education*, 64(2), 211–225.
<https://doi.org/10.1080/1034912x.2016.1183768>
- Buli-Holmberg, J., & Jeyaprabhan, S. (2016). Effective practice in inclusive and special needs education. *International Journal of Special Education*, 31(1), 119-134.
<https://eric.ed.gov/?id=EJ1099986>
- Burstein, N., Sears, S., Wilcoxon, A., Cabello, B., & Spagna, M. (2004). Moving toward inclusive practices. *Remedial and Special Education*, 25(2), 104-116.
<https://doi.org/10.1177/07419325040250020501>
- Butler, A., & Monda-Amaya, L. (2016). Preservice teachers' perceptions of challenging behavior. *Teacher Education and Special Education*, 39(4), 276-292.
<https://doi.org/10.1177/0888406416654212>
- Caldarella, P., Page, N. W., & Gunter, L. (2012). Early childhood educators' perceptions of conscious discipline. *Education*, 132(3), 589-599. <https://consciousdiscipline.com/early-childhood-educators-perceptions-of-conscious-discipline/>
- Calhoon, M. B., Berkeley, S., & Scanlon, D. (2019). The erosion of FAPE for students with LD. *Learning Disabilities Research & Practice*, 34(1), 6-13.
<https://doi.org/10.1111/ldrp.12188>
- Cameron, D. (2017). Teacher preparation for inclusion in Norway: A study of beliefs, skills, and intended practices. *International Journal of Inclusive Education*, 21(10), 1028–1044.
<https://doi.org/10.1080/13603116.2017.1326177>

- Cameron, D., & Cook, B. (2013). General education teachers' goals and expectations for their included students with mild and severe disabilities. *Education and Training in Autism and Developmental Disabilities, 48*(1), 18-30. <http://www.jstor.org/stable/23879883>
- Capizzi, A. M. (2017). Start the year off right: Designing and evaluating a supportive classroom management plan. *Focus on Exceptional Children, 42*(3).
<https://doi:10.17161/foec.v42i3.6902>
- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of school psychology, 44*(6), 473-490. <https://doi:10.1016/j.jsp.2006.09.001>
- Carrington, S. B., Berthelsen, D. C., Nickerson, J., Nicholson, J., Walker, S., Meldrum, K. (2016). Teachers' experiences of inclusion of children with developmental disabilities across the early years of school. *Journal of Psychologists and Counsellors in Schools, 26*(2), 139-154. <https://doi:10.1017/jgc.2016.19>
- Carter, E. W., Asmus, J., Moss, C. K., Amirault, K. A., Biggs, E. E., ... Weir, K. (2016). Randomized evaluation of peer support arrangements to support the inclusion of high school students with severe disabilities. *Exceptional Children, 82*, 209-233.
<https://doi:10.1177/0014402915598780>
- Cassady, J. M. (2011). Teachers' attitudes toward the inclusion of students with autism and emotional behavioral disorder. *Electronic Journal for Inclusive Education, 2*(7), 1-23.
<https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?article=1127&context=ejie>
- CAST. (2018). Universal design for learning guidelines. *Center for Applied Special Technology*.
<http://udlguidelines.cast.org>

- Chacon, C. T. (2005). Teachers' perceived efficacy among English as a foreign language teachers in middle schools in Venezuela. *Teaching and Teacher Education*, 21, 257-272. <https://doi:10.1016/j.tate.2005.01.001>
- Chataika, L. E. M., Kamchedzera, E. T., & Semphere, N. K. (2017). An exploration of the challenges faced by regular primary school teachers in planning instructional strategies for inclusive classrooms. *African Journal of Special and Inclusive Education*, 2(1), 12-21. <https://www.mzuni.ac.mw/wp-content/uploads/2020/06/ChataikaKamchedzeraSemphere.pdf>
- Chao, C. N. C., Lai, F. T. T., Ji, M., Lo, S. K., & Sin, K. F. (2018). Which inclusive teaching tasks represent the highest level of teacher efficacy in primary and secondary schools? *Teaching and Teacher Education*, 75, 164-173. <https://doi:10.1016/j.tate.2018.06.014>
- Chao, C. N. G., Forlin, C., & Ho, F. C. (2016). Improving teaching self-efficacy for teachers in inclusive classrooms in Hong Kong. *International Journal of Inclusive Education*, 20(11), 1142-1154. <https://doi:10.1080/13603116.2016.1155663>
- Chao, C. N. G., Sze, W., Chow, E., Forlin, C., & Ho, F. C. (2017). Improving teachers' self-efficacy in applying teaching and learning strategies and classroom management to students with special education needs in Hong Kong. *Teaching and Teacher Education*, 66, 360-369. <https://doi:10.1016/j.tate.2017.05.004>
- Chen, Y.H. (2014). Interrelationship between stages of concern and technological, pedagogical, and content knowledge: A study on Taiwanese senior high school in-service teachers. *Computers in Human Behavior*, 32, 79-91. <https://doi:10.1016/j.chb.2013.11.011>
- Chesley, G. M., & Jordan, J. (2012). What's missing from teacher preparation. *Educational Leadership*, 69, 41-45.

<https://www.teacherscollegesj.edu/Content/pdfs/mentor/Whats%20Missing%20From%20Teachers%20Prep.pdf>

- Chhabra, S., Srivastava, R., & Srivastava, I. (2010). Inclusive education in Botswana: The perceptions of school teachers. *Journal of Disability Policy Studies, 20*(4), 219-228. [https://doi: 10.1177/1044207309344690](https://doi:10.1177/1044207309344690)
- Chitiyo, J., & Brinda, W. (2018). Teacher preparedness in the use of Co-teaching in inclusive classrooms. *Support for Learning, 33*(1), 38-51. <https://doi:10.1111/1467-9604.12190>
- Cho, Y. J., Kim, M., Svinicki, M. D., & Decker, M. L. (2011). Exploring teaching concerns and characteristics of graduate teaching assistants. *Teaching in Higher Education, 16*(3), 267-279. <https://doi:10.1080/13562517.2010.524920>
- Choate, J. S. (2004). *Successful inclusive teaching: Proven ways to detect and correct special needs* (4th ed.). Pearson Education, Inc.
- Choi, J. H., Meisenheimer, J. M., McCart, A. B., & Sailor, W. (2017). Improving learning for all students through equity-based inclusive reform practices: Effectiveness of a fully integrated schoolwide model on student reading and math achievement. *Remedial and Special Education, 38*(1), 28-41. <https://doi:10.1177/0741932516644054>
- Chong, S., Forlin, C., & Au, M. L. (2007). Attitudes and concerns about inclusive education on attitude change of pre-secondary teachers in Hong Kong. *Asia-Pacific Journal of Teacher Education, 35*(2), 161-79. <https://doi:10.1080/13598660701268585>
- Chong, W. H., & Kong, C. A. (2012). Teacher collaborative learning and teacher self-efficacy: The case of lesson study. *The Journal of Experimental Education, 80*(3), 263-283. <https://doi:10.1080/00220973.2011.596854>

- Chu, M. W., Craig, H. L., Yeworiew, L. B., & Xu, Y. (2020). Teachers' unpreparedness to accommodate student needs. *Canadian Journal of School Psychology, 35*(3), 210-224.
<https://doi:10.1177/0829573520916610>
- Chu, S., & Garcia, S. (2014). Culturally responsive teaching efficacy beliefs of inservice special education teachers. *Remedial and Special Education, 35*(1), 218-233.
<https://doi:10.1177/0741932513520511>
- Chung, W., Chung, S., Edgar-Smith, S., Palmer, R. B., DeLambo, D., & Huang, W. (2015). An examination of in-service teacher attitudes toward students with autism spectrum disorder: Implications for professional practice. *Current Issues in Education, 18*(2).
<http://cie.asu.edu/ojs/index.php/cieatasu/article/view/1386>
- Clarke, L. S., Haydon, T., Bauer, A., & Epperly, A. C. (2016). Inclusion of students with an intellectual disability in the general education classroom with the use of response cards. *Preventing School Failure, 60*(1), 35–42.
<https://doi:10.1080/1045988X.2014.966801>
- Clayson, M., & Sheffet, M. (2006). Personality and the student evaluation of teaching. *Journal of Marketing Evaluation, 28*, 149-160. <https://doi:10.1177/0273475306288402>
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Routledge.
- Cooc, N. (2019). Do teachers spend less time teaching in classrooms with students with special needs? Trends form international data. *Educational Researcher, 48*(5), 273-286.
<https://doi:10.3102/0013189X19852306>

- Cook, B. G. (2001). A comparison of teachers' attitudes toward their included students with mild and severe disabilities. *The Journal of Special Education, 34*(4), 203-213.
<https://doi.org/10.1177/002246690103400403>
- Cook, B. G., & Cameron, D. L. (2010). Inclusive teachers' concern and rejection toward their students: Investigating the validity of ratings and comparing student groups. *Remedial and Special Education, 31*(2), 67-76. <https://doi:10.1177/0741932508324402>
- Cook, C. R., Grady, E. A., Long, A. C., Renshaw, T., Coddling, R. S., Fiat, A., & Larson, M. (2016). Evaluating the impact of increasing general education teachers' ratio of positive-to-negative interactions on students' classroom behavior. *Journal of Positive Behavior Interventions, 19*(2), 67-77. <https://doi:10.1177/1098300716679137>
- Cook, L., & Friend, M. (1995). Co-teaching: Guidelines for creating effective practices. *Focus on Exceptional Children, 28*(3), 1-16. <https://doi:10.17161/fec.v28i3.6852>
- Cooper, J. T., Gage, N. A., Alter, P. J., LaPolla, S., MacSuga-Gage, A. S., & Scott, T. M. (2018). Educators' self-reported training, use, and perceived effectiveness of evidence-based classroom management practices. *Preventing School Failure, 62*(1), 13-24.
<https://doi:10.1080/1045988X.2017.1298562>
- Corbett, J. & Slee, R. (2000). An international conversation on inclusive education. In Armstrong, F., Armstrong, D. and Barton, L. (Eds.) *Inclusive education: Policy, contexts and comparative perspectives*. David Fulton.
- Corona, L. L., Christodulu, K. V., & Rinaldi, M. L. (2017). Investigation of school professionals' self-efficacy for working with students with ASD: Impact of prior experience, knowledge, and training. *Journal of Positive Behavior Interventions, 19*(2), 90-101.
<https://doi:10.1177/1098300716667604>

- Coubergs, C., Struyven, K., Vanthournout, G., & Engels, N. (2017). Measuring teachers' perceptions about differentiated instruction: The DI-Quest instrument and model. *Studies in Educational Evaluation, 53*, 41-54. <https://doi:10.1016/j.stueduc.2017.02.004>
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). Pearson Education, Inc.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Crevecoeur, Y. C., Sorenson, S. E., Mayorga, V., & Gonzalez, A. P. (2014). Universal design for learning in K-12 educational settings: A review of group comparison and single-subject intervention studies. *The Journal of Special Education Apprenticeship, 3*(2), 1-1. <https://doi:10.1016/j.edurev.2014.01.002>
- Crispel, O., & Kasperski, R. (2019). The impact of teacher training in special education on the implementation of inclusion in mainstream classrooms. *International Journal of Inclusive Education, 1-12*. <https://doi:10.1080/13603116.2019.1600590>
- Crockett, J. B., & Kauffman, J. M. (1998). Taking inclusion back to its roots. *Educational Leadership, 56*(2), 74–77. <http://www.ascd.org/publications/educational-leadership/oct98/vol56/num02/Taking-Inclusion-Back-to-Its-Roots.aspx>
- Crockett, J. B., & Kauffman, J. M. (1999). *The least restrictive environment: Its origins and interpretations in special education*. Erlbaum
- Crockett, J. B., & Kauffman, J. M. (2013). *The least restrictive environment: Its origins and interpretations in special education*. Routledge.
- Cushing, L.S., Carter, E. W., Clark, N., Wallis, T., & Kennedy, C.H. (2009). Evaluating inclusive educational practices for students with severe disabilities using the program

- quality measurement tool. *The Journal of Special Education*, 42(4), 195-208.
<https://doi.org/10.1177/0022466907313352>
- Cushing, L. S., Clark, N. M., Carter, E. W., & Kennedy, C. H. (2005). Access to the general education curriculum for students with significant cognitive disabilities. *Teaching Exceptional Children*, 38(2), 6-13. <https://doi.org/10.1177/004005990503800201>
- Danforth, S., & Narayan, S. (2015). This new field of inclusive education: Beginning a dialogue on conceptual foundations. *Intellectual and Developmental Disabilities*, 53(1), 70-85.
<https://doi.org/10.1352/1934-9556-53.1.70>
- Danielson, C. (2007). *Enhancing professional practice: A framework for teaching* (2nd ed.). Association for Supervision and Curriculum Development.
- Darling-Hammond, L. (2000). Teacher quality and student achievement. *Educational Policy Analysis Archives*, 8(1). <https://doi.org/10.14507/epaa.v8n1.2000>
- Darling-Hammond, L. (2016). Research on teaching and teacher education and its influences on policy and practice. *Educational Researcher*, 45(2), 83-91.
<https://doi.org/10.3102/0013189x16639597>
- Darling-Hammond, L., & Youngs, P. (2002). Defining "highly qualified teachers": What does "scientifically-based research" actually tell us? *Educational Researcher*, 31(9), 13-25.
<https://doi.org/10.3102/0013189x031009013>
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97-140. <https://doi.org/10.1080/10888691.2018.1537791>
- Das, A., A. K., Gichuru, M., & Singh, A. (2013). Implementing inclusive education in Delhi, India: Regular school teachers' preferences for professional development delivery modes.

Professional Development in Education, 39(5), 698-711.

[https://doi:10.1080/19415257.2012.747979](https://doi.org/10.1080/19415257.2012.747979)

de Boer, A., Pijl, S. J., & Minnaert, A. (2011). Regular primary schoolteachers' attitudes towards inclusive education: A review of the literature. *International Journal of Inclusive Education*, 15(3), 331–353. [https://doi:10.1080/13603110903030089](https://doi.org/10.1080/13603110903030089).

Dembo, M. H., & Gibson, S. (1985). Teachers' sense of efficacy: An important factor in school improvement. *The Elementary School Journal*, 86(2), 173-184.

[https://doi:10.1086/461441](https://doi.org/10.1086/461441)

Demeris, H., Childs, R. A., & Jordan, A. (2007). The influence of students with special needs included in grade-3 classrooms on the large-scale achievement scores of students without special needs. *Canadian Journal of Education*, 30(3), 609-627.

[https://doi:10.2307/20466655](https://doi.org/10.2307/20466655)

Deng, M., Wang, S., Guan, W., & Wang, Y. (2017). The development and initial validation of a questionnaire of inclusive teachers' competency for meeting special educational needs in regular classrooms in China. *International Journal of Inclusive Education*, 21(4), 416-427. [https://doi:10.1080/13603116.2016.1197326](https://doi.org/10.1080/13603116.2016.1197326)

Derosier, S., & Soslau, E. (2014). Teacher candidates speak out: Exploring concerns related to pupil learning and efficacy when learning to teach. *Education*, 134(4), 488-496.

<https://www.researchgate.net/publication/295107375>

Deshmukh, D. (2017). Inclusion-evidence based strategies. *International Journal of Education and Management Studies*, 7(3), 290-293. <http://www.i-scholar.in/index.php/injems>

- Dhanapal, S., Balasingam, U., Subramanian, M. S., & Lin, T. M. (2017). A study to identify the common stressor and coping strategies adopted by teachers in an inclusive classroom. *Advanced Science Letters*, 23(9), 9065-9071. <https://doi:10.1166/asl.2017.10024>
- Dicke, T., Elling, J., Schmeck, A., & Leutner, D. (2015). Reducing reality shock: The effects of classroom management skills training on beginning teachers. *Teaching and Teacher Education*, 48, 1-12. <https://doi:10.1016/j.tate.2015.01.013>
- Dimopoulou, E. (2014). Self-efficacy and collective efficacy beliefs of teachers for children with autism. *Literacy Information and Computer Education Journal*, 3(1), 609-620. <https://doi:10.20533/licej.2040.2589.2012.0082>
- Dixon, F. A., Yssel, N., McConnell, J. M., & Hardin, T. (2014). Differentiated instruction, professional development, and teacher efficacy. *Journal for the Education of the Gifted*, 37(2), 111-127. <https://doi:10.1177/0162353214529042>
- Dönger, A., Özkartal, Z., & Sarigöz, O. (2016). An investigation into variables that affect self-efficacy beliefs of people working in educational institutions. *IIB International Refereed Academic Social Sciences Journal*, 7(24), 1. <https://doi:10.17364/IIB.20162423324>
- Donohue, D., & Bornman, J. (2014). The challenges of realizing inclusive education in South Africa. *South African Journal of Education*, 34(2), 1-14. <https://doi:10.15700/201412071114>
- Doulkeridou, A., Evaggelinou, C., Mouratidou, K., Koidou, E., Panagiotou, A., & Kudlacek, M. (2011). Attitudes of Greek physical education teachers towards inclusion of students with disabilities in physical education classes. *International Journal of Special Education*, 26(1), 1-11. <http://files.eric.ed.gov/fulltext/EJ921174.pdf>

- Dunbar, C. (2004). *Best practices in classroom management*. Michigan State University.
<https://www.msu.edu/~dunbarc/dunbar3.pdf>
- Dunn, K. E., Airola, D. T., Lo, W., & Garrison, M. (2013). Becoming data driven: The influence of teachers' sense of efficacy on concerns related to data-driven decision making. *Journal of Experimental Education, 81*(2), 222-241. <https://doi:10.1080/00220973.2012.699899>
- Durlak, J. A., Domitrovich, C. E., Weissberg, R. P., & Gullotta, T. P. (2015). *Handbook on social and emotional learning: Research and Practice*. Guilford Press.
- Dvir, N. (2015). Does physical disability affect the construction of professional identity? Narratives of student teachers with physical disabilities. *Teaching and Teacher Education, 52*, 56-65. <https://doi:10.1016/j.tate.2015.09.001>
- Egilson, S. T., & Traustadottir, R. (2009). Participation of students with physical disabilities in the school environment. *American Journal of Occupational Therapy, 63*(3), 264-272.
<https://doi:10.5014/ajot.63.3.264>
- Eikeseth, S. (2010). Examination of qualifications required of an EIBI professional. *European Journal of Behavior Analysis, 11*(2), 239-246.
<https://doi:10.1080/15021149.2010.11434348>
- Eikeseth, S., & Klintwall, L. (2014). Educational interventions for young children with autism spectrum disorders. *Comprehensive Guide to Autism, 2101*–2123.
https://doi:10.1007/978-1-4614-4788-7_128
- Ekstam, U., Korhonen, J., Linnanmäki, K., & Aunio, P. (2018). Special education and subject teachers' self-perceived readiness to teach mathematics to low-performing middle school students. *Journal of Research in Special Educational Needs, 18*(1), 59-69.
<https://doi:10.1111/1471-3802.12393>

- Engelbrecht, P. (2013). Teacher education for inclusion, international perspectives. *European Journal of Special Needs Education, 28*(2), 115-118.
<https://doi.org/10.1080/08856257.2013.778110>
- Engelbrecht, P., & Savolainen, H. (2018). A mixed-methods approach to developing an understanding of teachers' attitudes and their enactment of inclusive education. *European Journal of Special Needs Education, 33*(5), 660-676.
<https://doi.org/10.1080/08856257.2017.141037>
- Engelbrecht, P., Nel, M., Nel, N., & Tlale, D. (2015). Enacting understanding of inclusion in complex contexts: classroom practices of South African teachers. *South African Journal of Education, 35*(3). <https://doi.org/10.15700/saje.v35n3a1074>
- Ernst, A. F., & Albers, C. J. (2017). Regression assumptions in clinical psychology research practice—a systematic review of common misconceptions. *PeerJ, 5*, e3323.
<https://doi.org/10.7717/peerj.3323>
- Everett, D. (2017). Helping new general education teachers think about special education and how to help their students in an inclusive class: The perspective of a secondary mathematics teacher. *International Journal of Whole Schooling, 13*(3), 1-13.
http://www.wholeschooling.net/Journal_of_Whole_Schooling/articles/13-3%20Everett.pdf
- Every Student Succeeds Act (ESSA). (2015). <https://www.ed.gov/ESSA>
- Fackler, S., & Malmberg, L. E. (2016). Teachers' self-efficacy in 14 OECD countries: Teacher, student group, school, and leadership effects. *Teaching and Teacher Education, 56*(5), 185-195. <https://doi.org/10.1016/j.tate.2016.03.002>

- Farrell, P., Dyson, A., Polat, F., Hutcheson, G., & Gallannaugh, F. (2007). Inclusion and achievement in mainstream schools. *European Journal of Special Needs Education, 22*, 131-145. <https://doi:10.1080/08856250701267808>
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2014). *G* Power* (Version 3.1. 9.2) [software].
- Fink Chorzempa, B., Smith, M. D., & Sileo, J. M. (2019). Practice-based evidence: A model for helping educators make evidence-based decisions. *Teacher Education and Special Education, 42*(1), 82–92. <https://doi:10.1177/0888406418767254>
- Finkelstein, S., Sharma, U., & Furlonger, B. (2019). The inclusive practices of classroom teachers: a scoping review and thematic analysis. *International Journal of Inclusive Education, 1*-28. <https://doi:10.1080/13603116.2019.1572232>
- Finkelstein, S., Sharma, U., & Furlonger, B. (2021). The inclusive practices of classroom teachers: a scoping review and thematic analysis. *International Journal of Inclusive Education, 25*(6), 735-762. <https://doi.org/10.1080/13603116.2019.1572232>
- Fisher, D., Frey, N., & Thousand, J. (2003). What do special educators need to know and be prepared to do for inclusive schooling to work? *Teacher Education and Special Education, 26*, 42-50. <https://doi:10.1177/088840640302600105>
- Fisher, J. B., Schumaker, J. B., & Deshler, D. D. (1995). Searching for validated inclusive practices: A review of the literature. *Focus on Exceptional Children, 28*(4), 1-20. <https://doi:10.17161/fec.v28i4.6853>
- Fives, H. (2003). What is teacher efficacy and how does it relate to teachers' knowledge? A theoretical review. *American Educational Research Association, 1*-60. https://msuweb.montclair.edu/~fivesh/Research_files/Fives_AERA_2003.pdf

- Fives, I. T., & Buehl, M. (2010). Examining the factor structure of the teachers' sense of efficacy scale. *Journal of Experimental Education, 78*(1), 118-134.
[https://doi:10.1080/00220970903224461](https://doi.org/10.1080/00220970903224461)
- Florian, L. (2012). Preparing teachers to work in inclusive classrooms: Key lessons for the professional development of teacher educators from Scotland's inclusive practice project. *Journal of Teacher Education, 63*(4), 275-285.
[https://doi:10.1177/0022487112447112](https://doi.org/10.1177/0022487112447112)
- Florian, L., & Spratt, J. (2013). Enacting inclusion: A framework for interrogating inclusive practice. *European Journal of Special Needs Education, 28*(2), 119-135.
[https://doi:10.1080/08856257.2013.778111](https://doi.org/10.1080/08856257.2013.778111)
- Flower, A., McKenna, J., & Haring, C. (2017). Behavior and classroom management: Are teacher preparation programs really preparing our teachers? *Preventing School Failure, 61*(2), 163–169. <https://doi.org/10.1080/1045988X.2016.1231109>
- Forlin, C., & Chambers, D. (2011). Teacher preparation for inclusive education: Increasing knowledge but raising concerns. *Asia-Pacific Journal of Teacher Education, 39*(1), 17-32. [https://doi:10.1080/1359866x.2010.540850](https://doi.org/10.1080/1359866x.2010.540850)
- Forlin, C., & Cooper, P. (2013). Student behavior and emotional challenges for teachers and parents in Hong Kong. *British Journal of Special Education, 40*(2), 58-64.
[https://doi:10.1111/1467-8578.12022](https://doi.org/10.1111/1467-8578.12022)
- Forlin, C., Douglas, G., & Hattie, J. (1996). Inclusive practices: How accepting are teachers? *International Journal of Disability, Development, and Education, 43*(2), 119-133.
[https://doi:10.1080/0156655960430203](https://doi.org/10.1080/0156655960430203)

- Forlin, C., Earle, C., Loreman, T., & Sharma, U. (2011). The sentiments, attitudes, and concerns about inclusive education revised (SACIE-R) scale for measuring pre-service teachers' perceptions about inclusion. *Exceptionality Education International*, 21(3), 50-65. <https://doi:10.1037/t69317-000>
- Forlin, C., Keen, M., & Barrett, E. (2008). The concerns of mainstream teachers: Coping with inclusivity in an Australian context. *International Journal of Disability, Development and Education*, 55, 251-164. <https://doi:10.1080/10349120802268396>
- Forlin, C., Sharma, U., & Loreman, T. (2014). Predictors of improved teaching efficacy following basic training for inclusion in Hong Kong. *International Journal of Inclusive Education*, 18(7), 718-730. <https://doi.org/10.1080/13603116.2013.819941>
- Forlin, C., Loreman, T., & Sharma, U. (2014). A system-wide professional learning approach about inclusion for teachers in Hong Kong. *Asia-Pacific Journal of Teacher Education*, 42(3), 247-260. <https://doi:10.1080/1359866x.2014.906564>
- Forlin, C., Loreman, T., Sharma, U., & Earle, C. (2009). Demographic differences in changing pre-service teachers' attitudes, sentiments, and concerns about inclusive education. *International Journal of Inclusive Education*, 13(2), 195-209. <https://doi:10.1080/13603110701365356>
- Forte, A. M., & Flores, M. A. (2014). Teacher collaboration and professional development in the workplace: a study of Portuguese teachers. *European Journal of Teacher Education*, 37(1), 91-105. <https://doi:10.1080/02619768.2013.763791>
- Freeman, J., Simonsen, B., Briere, D. E., & MacSuga-Gage, A. S. (2014). Pre-service teacher training in classroom management: A review of state accreditation policy and teacher

- preparation programs. *Teacher Education and Special Education*, 37(2), 106-120.
[https://doi:10.1177/0888406413507002](https://doi.org/10.1177/0888406413507002)
- Friend, M. (2014). *Co-Teach! Creating and sustaining effective classroom partnerships in inclusive schools* (2nd ed.). Marilyn Friend, Inc.
- Fuchs, D., & Fuchs, L. S. (1994). Inclusive schools movement and the radicalization of special education reform. *Exceptional Children*, 60(4), 294-309. [https://doi: 10.1177/001440299406000402](https://doi.org/10.1177/001440299406000402)
- Fuchs, L. S., Fuchs, D., Compton, D. L., Wehby, J., Schumacher, R. F., Gersten, R., & Jordan, N. C. (2015). Inclusion versus specialized intervention for very-low-performing students: What does access mean in an era of academic challenge?. *Exceptional Children*, 81(2), 134-157. <https://doi.org/10.1177/0014402914551743>
- Fuchs, W. W. (2010). Examining teachers' perceived barriers associated with inclusion. *The Southeastern Regional Association of Teacher Educators Journal*, 19(1), 30-35.
<https://files.eric.ed.gov/fulltext/EJ948685.pdf>
- Fuller, F. F. (1969). Concerns of teachers: A developmental characterization. *American Educational Research Journal*, 6, 207-226. [https://doi:10.3102/00028312006002207](https://doi.org/10.3102/00028312006002207)
- Fuller, F., & Brown, O. (1975). Becoming a teacher. In K. Ryan (Ed.), *Teacher education: Seventy fourth yearbook of the National Society for the Study of Education*. University of Chicago Press.
- Fulmer, S. M., & Turner, J. C. (2014). The perception and implementation of challenging instruction by middle school teachers: Overcoming pressures from students. *The Elementary School Journal*, 114(3), 303-326. [https://doi:10.1086/674053](https://doi.org/10.1086/674053)

- Gable, R. A., Tonelson, S. W., Sheth, M., Wilson, C., & Park, K. L. (2012). Importance, usage, and preparedness to implement evidence-based practices for students with emotional disabilities: A comparison of knowledge and skills of special education and general education teachers. *Education and Treatment of Children, 35*(4), 499-520.
<https://doi:10.1353/etc.2012.0030>
- Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research* (6th ed.). Longman Publishers.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction* (8th ed.). Allyn & Bacon.
- Gaudreau, N., Royer, É., Beaumont, C., & Frenette, É. (2012). Le sentiment d'efficacité personnelle des enseignants et leurs pratiques de gestion de la classe et des comportements difficiles des élèves. *Canadian Journal of Education/Revue canadienne de l'éducation, 35*(1), 82-101. <https://doi.org/10.7202/1012124ar>
- Gay, L.R., & Airasian, P. (2000). *Educational research. Competencies for analysis and application*. (6th ed.). Merrill.
- Gebbie, D., Ceglowski, D., Taylor, L., & Miels, J. (2012). The role of teacher efficacy in strengthening classroom support for preschool children with disabilities who exhibit challenging behaviors. *Early Childhood Education Journal, 40*(1), 35-46.
<https://doi:10.1007/s10643-011-0486-5>
- George, D., & Mallery, P. (2010). *SPSS for Windows step by step: A simple guide and reference, 18.0 update* (11th ed.). Allyn and Bacon.
- Georgia Department of Education. (2015). Georgia's teacher dropout crisis: A look at why nearly half of Georgia public school teachers are leaving the profession.

<https://www.gadoe.org/External-Affairs-and-Policy/communications/Documents/Teacher%20Survey%20Results.pdf>

Georgia Department of Education. (2015). *Quick facts about Georgia public education*.

<http://www.gadoe.org/External-Affairs-and-Policy/AskDOE/Pages/Schools-and-Districts.aspxf>

Georgia Department of Education. (2016). *Quick facts about Georgia public education*.

<https://www.gadoe.org/External-Affairs-and-Policy/communications/Documents/Quick%20Facts%20About%20Georgia%20Public%20Education%202016.pdf>

Georgia Department of Education. (2018). *School count by type*.

<http://www.gadoe.org/Technology-Services/Data-Collections/Pages/FY2018-Data-Conference---Data-Collection-Presentations.aspx>

Gersten, R., Walker, H. & Darch, C. (1988). Relationship between teachers' effectiveness and their tolerance for handicapped students. *Exceptional Children*, 54(5), 433-438.

<https://doi:10.1177/001440298805400506>

Gettinger, M., & Kohler, K. M. (2006). Process-outcome approaches to classroom management and effective teaching. In C. M. Evertson & C. S. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 73-95). Lawrence Erlbaum.

Giangreco, M. F., Doyle, M. B., & Suter, J. C. (2014). Italian and American progress toward inclusive education: Common concerns and future directions. *Life Span and Disability*, 17(1), 119-136. http://www.lifespan.it/client/abstract/ENG283_6%20Giangreco.pdf

- Gibbs, S., (2007). Teachers' perceptions of efficacy: Beliefs that may support inclusion or segregation. *Educational and Child Psychology*, 24(3), 47-53.
<https://www.bps.org.uk/publications/educational-child-psychology>
- Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76(4), 569-582. <https://doi:10.1037/0022-0663.76.4.569>
- Gilberts, G. H., & Lignugaris-Kraft, B. (1997). Classroom management and instruction competencies for preparing elementary and special education teachers. *Teaching and Teacher Education*, 13(6), 597-610. [https://doi:10.1016/S0742-051X\(97\)80003-0](https://doi:10.1016/S0742-051X(97)80003-0)
- Gillies, R. M. (2016). Cooperative learning: Review of research and practice. *Australian Journal of Teacher Education*, 41(3), 3. <https://doi:10.14221/ajte.2016v41n3.3>
- Gilmour, A. F. (2018). Has inclusion gone too far? Weighing its effects on students with disabilities, their peers, and teachers. *Education Next*, 18(4), 8.
<https://www.educationnext.org/>
- Goldhaber, D., Liddle, S., & Theobald, R. (2013). The gateway to the profession: Assessing teacher preparation programs based on student achievement. *Economics of Education Review*, 34, 29-44. <https://doi:10.1016/j.econedurev.2013.01.011>
- Gonzalez, A., Peters, M., Gliona, M. F., Gonzales, A. K., & Jacobson, E. S. (2005). Dedicated, not segregated: Suggested changes in thinking about instructional environments and the language of special education. In J. M. Kauffman & D. P. Hallahan (Eds.), *The illusion of full inclusion: A comprehensive critique of a current special education bandwagon* (2nd ed., pp. 135–146). Pro-Ed.

- Gonzalez, A., Peters, M. L., Orange, A., & Grigsby, B. (2017). The influence of high-stakes testing on teacher self-efficacy and job-related stress. *Cambridge Journal of Education*, 47(4), 513-531. <https://doi:10.1080/0305764X.2016.1214237>
- Göransson, K., & Nilholm, C. (2014). Conceptual diversities and empirical shortcomings-a critical analysis of research on inclusive education. *European Journal of Special Needs Education*, 29(3), 265-280. <https://doi:10.1080/08856257.2014.933545>
- Graham, S., Morphy, P., Harris, K. R., Fink-Chorzempa, B., Saddler, B., Moran, S., & Mason, L. (2008). Teaching spelling in the primary grades: A national survey of instructional practices and adaptations. *American Educational Research Journal*, 45, 796–825. <https://doi:10.3102/0002831208319722>.
- Grant, L., Stronge, J. H., & Popp, P. (2008). Effective teaching and at-risk/highly mobile students: What do award-winning teachers do? *National Center for Homeless Education*. http://www.schoolturnaroundsupport.org/sites/default/files/resources/eff_teach.pdf.
- Gray, C., Wilcox, G., & Nordstokke, D. (2017). Teacher mental health, school climate, inclusive education, and student learning: A review. *Canadian Psychology*, 58(3), 203-210. <https://doi:10.1037/cap0000117>
- Gregory, J. L., Gregory, J. L., & Noto, L. A. (2018). Attitudinal instrument development: Assessing cognitive, affective, and behavioral domains of teacher attitudes toward teaching all students. *Cogent Education*, 5(1) <https://doi:10.1080/2331186X.2017.1422679>
- Griffin, C., Kilgore, K., Winn, J., Otis-Wilborn, A., Hou, W., & Garvan, C. (2009). First-year special educators: The influence of school and classroom context factors on their

- accomplishments and problems. *Teacher Education and Special Education*, 32(1), 45-63.
[https://doi:10.1177/0888406408330870](https://doi.org/10.1177/0888406408330870)
- Griffin, M. M., Mello, M. P., Glover, C. A., Carter, E. W., & Hodapp, R. M. (2016). Supporting students with intellectual and developmental disabilities in postsecondary education: The motivations and experiences of peer mentors. *Inclusion*, 4(2), 75-88.
[https://doi:10.1352/2326-6988-4.2.75](https://doi.org/10.1352/2326-6988-4.2.75)
- Grima-Farrell, C. R., Bain, A., & McDonagh, S. H. (2011). Bridging the research-to-practice gap: A review of the literature focusing on inclusive education. *Australasian Journal of Special Education*, 35(2), 117-136. [https://doi:10.1375/ajse.35.2.117](https://doi.org/10.1375/ajse.35.2.117)
- Grimm, L. G., & Yarnold, P. R. (1995). *Reading and understanding multivariate statistics*. American Psychological Association.
- Guo, Y., Piasta, S., Justice, L. & Kaderavek, J. (2010). Relations between preschool teachers' self-efficacy, classroom quality, and children's language and literacy gains. *Teaching and Teacher Education*, 26, 1094-1103. [https://doi:10.1016/j.tate.2009.11.005](https://doi.org/10.1016/j.tate.2009.11.005)
- Guskey, T. R. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education*, 4(1), 63-69.
[https://doi:1016/0742-051X\(88\)90025-X](https://doi.org/10.1016/0742-051X(88)90025-X)
- Haegle, J. A., Hodge, S., Filho, P. J. B. G., & de Rezende, A. L. G. (2018). Brazilian physical education teachers' attitudes toward inclusion before and after participation in a professional development workshop. *European Physical Education Review*, 24(1), 21-38.
[https://doi:10.1177/1356336X16662898](https://doi.org/10.1177/1356336X16662898)
- Haimour, A. I., & Obaidat, Y. F. (2013). School teachers' knowledge about autism in Saudi Arabia. *World Journal of Education*, 3(5), 45-56. [https://doi:10.5430/wje.v3n5p45](https://doi.org/10.5430/wje.v3n5p45)

- Hall, G. E. (2013). Evaluating change process: Assessing the extent of implementation (constructs, methods, and implications). *Journal of Educational Administration, 51*(3), 264-289. <https://doi:10.1108/09578231311311474>
- Hall, G. E., & Hord, S. M. (2014). *Implementing change: Patterns, principles, and potholes* (4th ed.). Allyn & Bacon.
- Hall, G. E., George, A. A., & Rutherford, W. L. (1977). *Measuring stages of concern about the innovation: A manual for use of the SoC questionnaire*. Research and Development Center for Teacher Education, The University of Texas at Austin.
- Hall, G., George, A., & Rutherford, W. (1986). *Measuring stages of concern about the innovation*. Southwest Educational Developmental Laboratory.
- Hammond, H., & Ingalls, L. (2003). Teachers' attitudes toward inclusion: Survey results from elementary school teachers in three southwestern rural school districts. *Rural Special Education Quarterly, 22*(2), 24-30. <https://doi:10.1177/875687050302200204>
- Hardman, M., & Dawson, S. (2008). The impact of federal public policy on curriculum and instruction for students with disabilities in the general classroom. *Preventing School Failure, 52*(2), 5-11. <https://doi:10.3200/PSFL.52.2.5-11>
- Hargrove, L. J. (2000). Assessment and inclusion: A teacher's perspective. *Preventing School Failure, 45*, 18-21. <https://doi:10.1080/10459880109599810>
- Hart, J. E., & Malian, I. (2013). A statewide survey of special education directors on teacher preparation and licentiate in autism spectrum disorders: A model for university and state collaboration. *International Journal of Special Education, 28*(1), 4-13. <http://files.eric.ed.gov/fulltext/EJ1013692.pdf>

- Hart, J. E., & More, C. M. (2013). Investigating the impact of technology on pre-service teacher knowledge of autism spectrum disorder. *Education and Training in Autism and Developmental Disabilities, 48*(4), 504-513.
[http://www.daddcec.org/Portals/0/CEC/Autism_Disabilities/Research/Publications/Education_Training_Development_Disabilities/Full_Journals/ETADD_48\(4\)_504-513.pdf](http://www.daddcec.org/Portals/0/CEC/Autism_Disabilities/Research/Publications/Education_Training_Development_Disabilities/Full_Journals/ETADD_48(4)_504-513.pdf)
- Harvey, M. W., Yssel, N., Bauserman, A. D., & Merbler, J. B. (2010). Preservice teacher preparation for inclusion: An exploration of higher education teacher-training institutions. *Remedial and Special Education, 31*(1), 24-33. <https://doi:10.1177/0741932508324397>
- Hastings, R. P., & Oakford, S. (2003). Student teachers' attitudes towards the inclusion of children with special needs. *Educational Psychology, 23*(1), 87-94.
<https://doi:10.1080/01443410303223>
- Hehir, T., & Katzman, L. (2012). *Effective inclusive schools: Designing successful schoolwide programs*. Jossey-Bass.
- Hen, M., & Goroshit, M. (2014). Academic procrastination, emotional intelligence, academic SE, and GPA: A comparison between students with and without learning disabilities. *Journal of Learning Disabilities, 47*(2), 116-124. <https://doi:10.1177/0022219412439325>
- Henson, R. (2001). Teacher self-efficacy: Substantive implications and measurement dilemmas. *Education Research Exchange, 1-24*. www.uky.edu/~eushe2/Pajares/EREkeynote.PDF
- Hess, K. L., Morrier, M. J., Heflin, L. J., & Ivey, M. L. (2008). Autism treatment survey: Services received by children with autism spectrum disorders in public school classrooms. *Journal of Autism Developmental Disorder, 38*(5), 961-971.
<https://doi:10.1007/s10803-007-0470-5>

- Hettiarachchi, S., & Das, A. (2014). Perceptions of 'inclusion' and perceived preparedness among school teachers in Sri Lanka. *Teaching and Teacher Education, 43*, 143-153. <https://doi:10.1016/j.tate.2014.07.003>
- Heward, W.L., Alber-Morgan, S.R., & Konrad, M. (2018). *Exceptional children: An introduction to special education* (11th ed.). Pearson.
- Hornby, G. (2015). Inclusive special education: Development of a new theory for the education of children with special educational needs and disabilities. *British Journal of Special Education, 42*(3), 225-256. <https://doi:10.1111/1467-8578.12101>
- Horne, P. E., & Timmons, V. (2009). Making it work: Teachers' perspectives on inclusion. *International Journal of Inclusive Education, 13*(3), 273-286. <https://doi:10.1080/13603110701433964>
- Horrocks, J. L., White, G., & Roberts, L. (2008). Principals' attitudes regarding the inclusion of children with autism in Pennsylvania public schools. *Journal of Autism and Developmental Disorders, 38*(8), 1462-1473. <https://doi:10.1007/s10803-007-0522-x>
- Hosford, S., & O'Sullivan, S. (2016). A climate for self-efficacy: the relationship between school climate and teacher efficacy for inclusion. *International Journal of Inclusive Education, 20*(6), 604–621. <https://doi:10.1080/13603116.2015.1102339>
- Howell, D. C. (2010). *Statistical methods for psychology* (7th ed.). Wadsworth Cengage Learning.
- Howell, D.C. (2013). *Fundamental statistics for the behavioral sciences* (8th ed.). Wadsworth, Cengage Learning.
- Hoy, A. W., Hoy, W. K., & Davis, H. A. (2009). Teachers' self-efficacy beliefs. In K. Wentzel & A. Wigfield (Eds.), *Handbook of motivation at school* (pp. 627-54). Routledge.

- Hoy, A., & Spero, R. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education*, 21(4), 343-356.
<https://doi:10.1016/j.tate.2005.01.007>
- Hughes, M. T., & Vale-Riestra, D. M. (2014). Examining the perceptions of families, teachers, and administrators of preschool programs meeting the needs of young children with disabilities. *Journal of Education and Human Development*, 3(4), 21-32.
<https://doi:10.15640/jehd.v3n4a2>
- Humphrey, N. (2013). *Social and emotional learning: A critical appraisal*. Sage.
- Humphrey, N., & Symes, W. (2013). Inclusive education for pupils with autistic spectrum disorders in secondary mainstream schools: Teacher attitudes, experience, and knowledge. *International Journal of Inclusive Education*, 17(1), 32-46.
<https://doi:10.1080/13603116.2011.580462>
- Hussien, J. H., & Al-Qaryouti, I. (2015). General education teachers perceived self-efficacy in teaching students with disabilities in Oman. *Asian Journal of Inclusive Education*, 3, 3-13. <https://pdfs.semanticscholar.org/88dc/8b37d6bb130b296c7fd7dc82f20fa0478dac.pdf>
- Hwang, Y. S., & Evans, D. (2011). Attitudes towards inclusion: Gaps between belief and practice. *International Journal of Special Education*, 26(1), 136-146.
<https://eprints.qut.edu.au/34074/>
- Idol, L. (2006). Toward inclusion of special education students in general education: A program evaluation of eight schools. *Remedial and Special education*, 27(2), 77-94. <https://doi:10.1177/07419325060270020601>
- Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004).
<https://sites.ed.gov/idea/statute-chapter-33/subchapter-i/1400>

- Jackson, L. B., Ryndak, D. L., & Wehmeyer, M. L. (2008). The dynamic relationship between context, curriculum, and student learning: A case for inclusive education as a research-based practice. *Research and Practice for Persons with Severe Disabilities, 34*, 175-195. <https://doi:10.2511/rpsd.33.4.175>
- Janney, R. E., & Snell, M. E. (2003). How teachers include students with moderate and severe disabilities in elementary classes: The means and meanings of inclusion. In D. L. Ryndak & D. Fisher (Eds.), *The foundations of inclusive education: A compendium of articles on effective strategies to achieve inclusive education* (pp. 95-105). Paul H. Brookes.
- Janney, R. E., & Snell, M. E. (2006). Modifying schoolwork in inclusive classrooms. *Theory into Practice, 45*(3), 215-223. https://doi:10.1207/s15430421tip4503_3
- Jenkins, A., & Ornelles, C. (2009). Determining professional development needs of general educators in teaching students with disabilities in Hawai'i. *Professional Development in Education, 35*, 635-654. <https://doi:10.1080/13674580802568930>
- Jennings, P. A. (2014). Early childhood teachers' well-being, mindfulness, and self-compassion in relation to classroom quality and attitudes towards challenging students. *Mindfulness, 6*(4), 732-743. <https://doi:10.1007/s12671-014-0312-4>
- Jones, N. D., & Brownell, M. T. (2014). Examining the use of classroom observations in the evaluation of special education teachers. *Assessment for Effective Intervention, 39*(2), 112-124. <https://doi:10.1177/1534508413514103>
- Jordan, A. (2018). The supporting effective teaching project: 1. Factors influencing student success in inclusive elementary classrooms. *Exceptionality Education International, 28*(3). <https://doi.org/10.5206/eei.v28i3.7769>

- Jordan, A., & Stanovich, P. (2003). Teachers' personal epistemological beliefs about students with disabilities as indicators of effective teaching practices. *Journal of Research in Special Education Needs*, 3(1), 1-12. <https://doi:10.1111/j.1471-3802.2003.00184.x>
- Jordan, A., Schwartz, E., & McGhie-Richmond, D. (2009). Preparing teachers for inclusive classrooms. *Teaching and Teacher Education*, 25(4), 535-542. <https://doi:10.1016/j.tate.2009.02.010>
- Joseph, B., Kearney, K. B., & Wilson, C. L. (2019). The role of educational leaders: A case for inclusion in institutions of higher education. *Journal of Cases in Educational Leadership*, 1-13. <https://doi:10.1177/1555458919847245>
- Jurkowski, S., & Müller, B. (2018). Co-teaching in inclusive classes: The development of multi-professional cooperation in teaching dyads. *Teaching and Teacher Education*, 75, 224-231. <https://doi:10.1016/j.tate.2018.06.017>
- Kahn, S., & Lewis, A. R. (2014). Survey on teaching science to K-12 students with disabilities: Teacher preparedness and attitudes. *Journal of Science Teacher Education*, 25(8), 885-910. <https://doi:10.1007/s10972-014-9406-z>
- Kalambouka, A., Farrell, P., Dyson, A., & Kaplan, I. (2007). The impact of placing pupils with special educational needs in mainstream schools on the achievement of their peers. *Educational Research*, 49(4), 365-382. <https://doi:10.1080/00131880701717222>
- Kamens, M. W., Loprete, S. J., & Slostad, F. A. (2003). Inclusive classrooms: What practicing teachers want to know. *Action in Teacher Education*, 25(1), 20-26. <https://doi:10.1080/01626620.2003.10463289>
- Katz, J. (2015). Implementing the three block model of universal design for learning: Effects on teachers' self-efficacy, stress, and job satisfaction in inclusive classrooms K-12.

- International Journal of Inclusive Education*, 19(1), 1-20.
<https://doi.org/10.1080/13603116.2014.881569>
- Kauffman, J. M. (1996). The challenge of nihilism. *Teacher Education and Special Education*, 19(3), 205-206. <https://doi.org/10.1177/088840649601900305>.
- Kauffman, J. M., & Badar, J. (2014). Instruction, not inclusion, should be the central issue in special education: An alternative view from the USA. *Journal of International Special Needs Education*, 17(1), 13-20. <https://doi.org/10.9782/2159-4341-17.1.13>
- Kauffman, J., & Badar, J. (2016). It's instruction over place — not the other way around! *The Phi Delta Kappan*, 98(4), 55–59. <https://doi.org/10.1177/0031721716681778>
- Kauffman, J. M., & Badar, J. (2017). Extremism and disability chic. *Exceptionality*, 26(1), 46-61. <https://doi.org/10.1080/09362835.2017.1283632>
- Kauffman, J. M., Bantz, J., & McCullough, J. (2002). Separate and better: A special public-school class for students with emotional and behavioral disorders. *Exceptionality*, 10(3), 149-170. https://doi.org/10.1207/s15327035ex1003_1
- Kauffman, J.M. (Ed.) (2020). *On educational inclusion: Meanings, history, issues, and international perspectives*. Routledge.
- Kauffman, J. M., Felder, M., Ahrbeck, B., Badar, J., Schneiders, K. (2018). Inclusion of all students in general education? International appeal for a more temperate approach to inclusion. *Journal of International Special Needs Education*, 21(2), 1-10.
<https://doi.org/10.9782/17-00009>
- Kauffman, J. M., Hallahan, D. P., Pullen, P. C., & Badar, J. (2018). *Special education: What it is and why we need it*. Routledge.

- Kauffman, J. M., & Hornby, G. (2020). Inclusive vision versus special education reality. *Education Sciences, 10*(9), 258. <https://doi.org/10.3390/educsci10090258>
- Kauffman, J.M., Landrum, T.J., Mock, D., Sayeski, B., & Sayeski, K.L. (2005). Diverse knowledge and skills require a diversity of instructional groups: A position statement. *Remedial and Special Education, 26*(1), 2-6. <https://doi:10.1177/07419325050260010101>
- Kauffman, J., Schumaker, J., Badar, J., & Hallenbeck, B. (2019). Where special education goes to die. *Exceptionality, 27*(2), 149–166. <https://doi:10.1080/09362835.2017.1414699>
- Keefe, E. B., & Moore, V. (2004). The challenge of co-teaching in inclusive classrooms at the high school level: What the teachers told us. *American Secondary Education, 32*(3), 77-88. <http://www.jstor.org/stable/41064524>
- Kellner, E., & Attorps, I. (2015). Primary school teachers' concerns and needs in biology and mathematics teaching. *Nordic Studies in Science Education, 11*(3), 282-292. <https://doi:10.5617/nordina.964>
- Kershner, R. (2009). Learning in inclusive classrooms. In P Hick, R Kershner, & P Farrell (eds). *Psychology for inclusive education: New directions in theory and practice*. Routledge.
- Kiel, E., Braun, A., Muckenthaler, M., Heimlich, U., & Weiss, S. (2020). Self-efficacy of teachers in inclusive classes. How do teachers with different self-efficacy beliefs differ in implementing inclusion? *European Journal of Special Needs Education, 35*(3), 333–349. <https://doi.org/10.1080/08856257.2019.1683685>
- Kilanowski-Press, L., Foote, C. J., & Rinaldo, V. J. (2010). Inclusion classrooms and teachers: A survey of current practices. *International Journal of Special Education, 25*(3), 43-56. <http://files.eric.ed.gov/fulltext/EJ909035.pdf>

- Kim, C.Y. & Rouse, M. (2011). Reviewing the role of teachers in achieving education for all in Cambodia. *Prospects*, 41(3), 415-428. <https://doi:10.1007/s11125-011-9201-y>
- Kim, J. (2011). Influence of teacher preparation programmes on preservice teachers' attitudes toward inclusion. *International Journal of Inclusive Education*, 15(3), 355-377. <https://doi:10.1080/13603110903030097>
- Kim, R. K. (2016). Does practicum experience influence preservice general education teachers' efficacy and concerns about inclusive education? A case of South Korea. *International Information Institute (Tokyo), Information*, 19(7), 2477-2486. <https://ci.nii.ac.jp/naid/40020967330/>
- Kirby, M. (2017). Implicit assumptions in special education policy: Promoting full inclusion for students with learning disabilities. *Child Youth Care Forum*, 46, 175-191. <https://doi:10.1007/s10566-016-9382-x>
- Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741-756. <https://doi:10.1037/a0019237>
- Klein, A. (2016). The every student succeeds act: An ESSA overview. *Education Week*, 31. <http://www.edweek.org/ew/issues/every-student-succeeds-act/>
- Kleyn, T., & Valle, J. (2014). Modelling collaborative teaching in teacher education: Preparing pre-service teachers to teach all students. *In Research on Preparing Teachers to Work Effectively with Emergent Bilinguals*, 21, 137-164. https://doi:10.1108/s1479-3687_2014_0000021005

- Klibthong, S., & Agbenyega, J. S. (2020). Assessing issues of inclusive education from the perspectives of Thai early childhood teachers. *International Journal of Early Years Education*, 1-16. <https://doi.org/10.1080/09669760.2020.1823205>
- Knight, B. A. (1999). Towards inclusion of students with special educational needs in the regular classroom. *Support for Learning*, 14(1), 3-7. <https://doi:10.1111/1467-9604.00091>
- Koegel, L., Fredeen, R. M, Lang, R., & Koegel, R. (2011). Interventions for children with autism spectrum disorders in inclusive school settings. *Cognitive and Behavioral Practice*, 9(3), 401-412. <https://doi:10.1016/j.cbpra.2010.11.003>
- Kormos, J., & Nijakowska, J. (2017). Inclusive practices in teaching students with dyslexia: Second language teachers' concerns, attitudes, and self-efficacy beliefs on a massive open online learning course. *Teaching and Teacher Education*, 68, 30–41. <https://doi:10.1016/j.tate.2017.08.005>
- Kosko, K., & Wilkins, J. L. (2009). General educators' in-service training and their self-perceived ability to adapt instruction for students with IEPs. *Professional Educator*, 33(2), 1-10. <https://files.eric.ed.gov/fulltext/EJ988196.pdf>
- Kraska, J., & Boyle, C. (2014). Attitudes of preschool and primary school pre-service teachers towards inclusive education. *Asia-Pacific Journal of Teacher Education*, 42(3), 228-246. <https://doi:10.1080/1359866x.2014.926307>
- Kurniawati, F. (2014). *Teachers' attitudes, knowledge, and teaching strategies towards students with special educational needs in primary inclusive education in Indonesia*. The University of Groningen.

- Kurth, J. A., & Keegan, L. (2012). Development and use of curricular adaptations for students receiving special education services. *Journal of Special Education, 48*, 191–203.
[https://doi:10.1177/0022466912464782](https://doi.org/10.1177/0022466912464782)
- Kurth, J. A., Lyon, K. J., & Shogren, K. A. (2015). Supporting students with severe disabilities in inclusive schools: A descriptive account from schools implementing inclusive practices. *Research and Practice for Persons with Severe Disabilities, 40*(4), 261-274.
[https://doi:10.1177/1540796915594160](https://doi.org/10.1177/1540796915594160)
- Kuyini, A. B., Desai, I., & Sharma, U. (2020). Teachers' self-efficacy beliefs, attitudes and concerns about implementing inclusive education in Ghana. *International Journal of Inclusive Education, 24*(14), 1509-1526. <https://doi.org/10.1080/13603116.2018.1544298>
- Kwon, H. (2016). Secondary inclusive school teachers' perceptions about inclusion, inclusive classroom, and teachers' role for inclusion. *Journal of Special Education: Theory and Practice, 17*(3), 263-282. [https://doi:10.19049/jsped.2016.17.3.11](https://doi.org/10.19049/jsped.2016.17.3.11)
- Laarhoven, T., Munk, D., Lynch, K., Bosma, J., & Rouse, J. (2007). A model for preparing special and general education preservice teachers for inclusive education. *Journal of Teacher Education, 58*, 440-455. [https://doi:10.1177/0022487107306803](https://doi.org/10.1177/0022487107306803)
- Lai, F. T., Li, E. P., Ji, M., Wong, W. W., & Lo, S. K. (2016). What are the inclusive teaching tasks that require the highest self-efficacy? *Teaching and Teacher Education, 59*, 338-346. [https://doi:10.1016/j.tate.2016.07.006](https://doi.org/10.1016/j.tate.2016.07.006)
- Lancaster, J. & Bain, A. (2007). The design of inclusive education courses and the self-efficacy of preservice teacher education students. *International Journal of Disability, Development, and Education, 54*(2), 245-256. [https://doi:10.1080/10349120701330610](https://doi.org/10.1080/10349120701330610)

- Landrum, T. J. (1992). Teachers as victims: An interactional analysis of the teacher's role in educating atypical learners. *Behavioral Disorders, 17*(2), 135-144.
[https://doi:10.1177/019874299201700203](https://doi.org/10.1177/019874299201700203)
- Lane, K. L., Oakes, W. P., Powers, L., Diebold, T., Germer, K., Common, E. A., & Brunsting, N. (2015). Improving teachers' knowledge of functional assessment-based interventions: Outcomes of a professional development series. *Education and Treatment of Children, 38*(1), 93-120. [https://doi:10.1353/etc.2015.0001](https://doi.org/10.1353/etc.2015.0001)
- Lauderdale-Littin, S., & Brennan, M. (2018). Evidence-based practices in the public school: The role of preservice teacher training. *International Electronic Journal of Elementary Education, 10*(3), 369-375. [https://doi:10.26822/iejee.2018336195](https://doi.org/10.26822/iejee.2018336195)
- Lauermann, F., & König, J. (2016). Teachers' professional competence and wellbeing: Understanding the links between general pedagogical knowledge, self-efficacy, and burnout. *Learning and Instruction, 45*, 9-19.
[https://doi:10.1016/j.learninstruc.2016.06.006](https://doi.org/10.1016/j.learninstruc.2016.06.006)
- Leatherman, J. M. (2007). "I just see all children as children": Teachers' perceptions about inclusion. *The Qualitative Report, 12*(4), 594-611.
<https://nsuworks.nova.edu/tqr/vol12/iss4/5/>
- Leatherman, J. M., & Niemeyer, J. A. (2005). Teachers' attitudes toward inclusion: Factors influencing classroom practice. *Journal of Early Childhood Teacher Education, 26*(1), 23-36. [https://doi:10.1080/10901020590918979](https://doi.org/10.1080/10901020590918979)
- Lehane, P., & Senior, J. (2019). Collaborative teaching: Exploring the impact of co-teaching practices on the numeracy attainment of pupils with and without special educational

- needs. *European Journal of Special Needs Education*, 35(3), 303-317.
<https://doi:10.1080/08856257.2019.1652439>
- Lehtonen, J., Toom, A., & Husu, J. (2017). Uncovering moral aspects in inclusive co-teaching. In C. Forlin & A. Gajewski (Eds.), *Ethics, equity, and inclusive education* (pp.165-188). Emerald Publishing Limited.
- Leko, M. M., Brownell, M. T., Sindelar, P. T., & Kiely, M. T. (2015). Envisioning the future of special education personnel preparation in a standards-based era. *Exceptional Children*, 82(1), 25-43. <https://doi:10.1177/0014402915598782>
- Lewis, R. (1999). Teachers' support for inclusive forms of classroom management. *International Journal of Inclusive Education*, 3(3), 269-285. <https://doi:10.1080/136031199285048>
- Leyser, Y., & Tappendorf, K. (2001). Are attitudes regarding mainstreaming changing? A case of teachers in two rural school districts. *Education*, 121(4), 751-761.
<https://elibrary.ru/item.asp?id=4142473>
- Leyser, Y., Zeiger, T., & Romi, S. (2011). Changes in self-efficacy of prospective special and general education teachers: Implication for inclusive education. *International Journal of Disability, Development and Education*, 58(3), 241-255.
<https://doi:10.1080/1034912x.2011.598397>
- Lin, H., & Gorrell, J. (1998). Pre-service teachers' efficacy beliefs in Taiwan. *Journal of Research and Development in Education*, 32, 17-25.
<https://files.eric.ed.gov/fulltext/ED429733.pdf>
- Lin, P., & Lin, Y. (2015). Identifying Canadian teacher candidates' needs for training in the use of inclusive classroom assessment. *International Journal of Inclusive Education*, 19(8), 771-786. <https://doi:10.1080/13603116.2014.970669>

- Lindsay, S., Proulx, M., Thomson, N., & Scott, H. (2013). Educators' challenges of including children with autism spectrum disorder in mainstream classrooms. *International Journal of Disability, Development and Education*, 60(4), 347-362.
[https://doi:10.1080/1034912x.2013.846470](https://doi.org/10.1080/1034912x.2013.846470)
- Lipsky, D. K., & Gartner, A. (1989). Overcoming school failure: A vision for the future. *Proceedings of the Academy of Political Science*, 37, 149-158.
[https://doi:10.2307/1173958](https://doi.org/10.2307/1173958)
- Lipsky, D. K., & Gartner, A. (1996). Inclusion, school restructuring, and the remaking of American society. *Harvard Educational Review*, 66(4), 762-797.
<https://doi.org/10.17763/haer.66.4.3686k7x734246430>
- Livingston, K. (2016). Teacher education's role in educational change. *European Journal of Teacher Education*, 39(1), 1-4. [https://doi:10.1080/02619768.2016.1135531](https://doi.org/10.1080/02619768.2016.1135531)
- Lohrmann, S., & Bambara, L. M. (2006). Elementary education teachers' beliefs about essential supports needed to successfully include students with developmental disabilities who engage in challenging behaviors. *Research and Practice for Persons with Severe Disabilities*, 31(2), 157-173. [https://doi:10.1177/154079690603100208](https://doi.org/10.1177/154079690603100208)
- Loiacono, V., & Valenti, V. (2010). General education teachers need to be prepared to co-teach the increasing number of children with autism in inclusive settings. *International Journal of Special Education*, 25(3), 24-32. <http://files.eric.ed.gov/fulltext/EJ909033.pdf>
- Loreman, T., Deppeler, J., & Harvey, D. (2005). *Inclusive education: A practical guide to supporting diversity in the classroom*. Allen & Unwin.
- Loreman, T., Earle, C., Sharma, U., & Forlin, C. (2007). The development of an instrument for measuring pre-service teachers' sentiments, attitudes, and concerns about inclusive

- education. *International Journal of Special Education*, 22(2), 150-159.
<https://files.eric.ed.gov/fulltext/EJ814498.pdf>
- Loreman, T., Sharma, U., & Forlin, C. (2013). Do pre-service teachers feel ready to teach in inclusive classrooms? A four country study of teaching self-efficacy. *Australian Journal of Teacher Education*, 38(1). <https://doi:10.14221/ajte.2013v38n1.10>
- Loughran, J. J. (2016). Teaching and teacher education: The need to go beyond rhetoric. In R. Brandenburg, S. McDonough, J. Burke & S. White (Eds.), *Teacher education: Innovation, intervention and impact* (pp. 253-264). Springer Science & Business Media.
- Lowery, K. A., Hollingshead, A., Howery, K., & Bishop, J. B. (2017). More than one way: Stories of UDL and inclusive classrooms. *Research and Practice for Persons with Severe Disabilities*, 42(4), 225-242.
- Lyons, W., Thompson, S., & Timmons, V. (2016). “We are inclusive. We are a team. Let’s just do it”: Commitment, collective efficacy, and agency in four inclusive schools. *International Journal of Inclusive Education*, 20(8), 889-907.
<https://doi:10.1080/13603116.2015.1122841>
- MacFarlane, K., & Woolfson, L. M. (2013). Teacher attitudes and behavior toward the inclusion of children with social, emotional, and behavioral difficulties in mainstream schools: An application of the theory of planned behavior. *Teaching and Teacher Education*, 29, 46-52. <https://doi:10.1016/j.tate.2012.08.006>
- MacIver, D., Hunter, C., Adamson, A., Grayson, Z., Forsyth, K., & McLeod, I. (2018). Supporting successful inclusive practices for learners with disabilities in high schools: a multisite, mixed method collective case study. *Disability and Rehabilitation*, 40(14), 1708-1717. <https://doi:10.1080/09638288.2017.1306586>

- Mackey, M. (2014). Inclusive education in the United States: Middle school general education teachers' approaches to inclusion. *International Journal of Instruction*, 7(2), 5-20.
<https://eric.ed.gov/?id=EJ1085271>
- MacLeod, K. S., Hawken, L. S., O'Neill, R. E., & Bundock, K. (2016). Combining tier 2 and tier 3 supports for students with disabilities in general education settings. *Journal of Educational Issues*, 2(2), 331-351. <https://doi:10.5296/jei.v2i2.10183>
- MacMillan, D.L., Gresham, F.M., & Forness, S.L. (1996). Full inclusion: An empirical perspective. *Behavioral Disorders*, 21, 145-159. <https://journals.sagepub.com/home/bhd>
- Mahler, D., Grossschedl, J., & Harms, U. (2018). Does motivation matter? –The relationship between teachers' self-efficacy and enthusiasm and students' performance. *PloS one*, 13(11), 1. <https://doi:10.1371/journal.pone.0207252>
- Malinen, O. P., Savolainen, H., Engelbrecht, P., Xu, J., Nel, M., Nel, N., & Tlale, D. (2013). Exploring teacher self-efficacy for inclusive practices in three diverse countries. *Teaching and Teacher Education*, 33, 34-44. <https://doi:10.1016/j.tate.2013.02.004>
- Malinen, O., Savolainen, H., & Xu, J. (2012). Beijing in-service teachers' self-efficacy and attitudes towards inclusive education. *Teaching and Teacher Education*, 28(4), 526-534.
<https://doi:10.1016/j.tate.2011.12.004>
- Martella, R. C., & Nelson, R. J. (2013). *Understanding and interpreting educational research*. Guilford.
- Martin, E.W. (1995). Case studies on inclusion: Worst fears realized. *The Journal of Special Education*, 29(2), 192-199. <https://journals.sagepub.com/home/sed>

- Martin, A., Linfoot, K., & Stephenson, J. (1999). How teachers respond to concerns about misbehavior in their classroom. *Psychology in the Schools, 36*, 247-358.
[https://doi.org/10.1002/\(SICI\)1520-6807\(199907\)36:4<347::AID-PITS7>3.0.CO;2-G](https://doi.org/10.1002/(SICI)1520-6807(199907)36:4<347::AID-PITS7>3.0.CO;2-G)
- Mastropieri, M. A., & Scruggs, T. E. (2001). Promoting inclusion in secondary classrooms. *Learning Disability Quarterly, 24*(4), 265. <https://doi.org/10.2307/1511115>
- Mastropieri, M., and Scruggs, R. (2010). *The inclusive classroom: Strategies for effective differentiated instruction*. (7th ed). Merrill
- Materchera, E. (2020). Inclusive education: Why it poses a dilemma to some teachers. *International Journal of Inclusive Education, 24*(7), 771-786.
<https://doi.org/10.1080/13603116.2018.1492640>
- Matson, J. L., Wilkins, J., & Macken, J. (2009). The relationship of challenging behaviors to severity and symptoms of autism spectrum disorders. *Journal of Mental Health Research, 2*(1), 29-44. <https://doi.org/10.1080/19315860802611415>
- McDonnell, J., Thorson, N., Disher, S., Mathot-Buckner, C., Mendal, J., and Ray, L. (2003). The achievement of students with developmental disabilities and their peers without disabilities in inclusive settings: An exploratory study. *Education and Treatment of Children, 26*(3), 224-236. <http://www.jstor.org/stable/42899751>
- McKenna, J. W., Muething, C., Flower, A., Bryant, D. P., & Bryant, B. (2015). Use and relationships among effective practices in co-taught inclusive high school classrooms. *International Journal of Inclusion Education, 19*(1), 53-70.
<https://doi.org/10.1080/13603116.2014.906665>

- McLeskey, J., & Waldron, N. L. (2002). Inclusion and school change: Teacher perceptions regarding curricular and instructional adaptations. *Teacher Education and Special Education, 25*, 41–54. <https://doi:10.1177/088840640202500106>
- McLeskey, J., Billingsley, B., & Ziegler, D. (2018). Using high-leverage practices in teacher preparation to reduce the research-to-practice gap in inclusive settings. *Australasian Journal of Special and Inclusive Education, 42*(1), 3-16. <https://doi:10.1017/jsi.2018.3>
- McLeskey, J., Landers, E., Hoppey, D., & Williamson, P. (2011). Learning disabilities and the LRE mandate: An examination of national and state trends. *Learning Disabilities Research & Practice, 26*(2), 60-66. <https://doi:10.1111/j.1540-5826.2011.00326.x>
- McLeskey, J., Landers, E., Williamson, P., & Hoppey, D. (2012). The Least Restrictive Environment mandate of IDEA: Are we moving towards educating students with disabilities in less restrictive settings? *Journal of Special Education, 36*, 131–140. <https://doi:10.1177/0022466910376670>
- McLeskey, J. L., Rosenberg, M. S., & Westling, D. L. (2017). *Inclusion: Effective practices for all students*. (3rd ed.). Pearson.
- McLeskey, J., Waldron, N. L., & Redd, L. (2014). A case study of a highly effective, inclusive elementary school. *The Journal of Special Education, 48*(1), 59-70. <https://doi:10.1177/0022466912440455>
- McMahon, S. D., Keys, C. B., Berardi, L., Crouch, R., & Coker, C. (2016). School inclusion: A multidimensional framework and links with outcomes among urban youth with disabilities. *Journal of Community Psychology, 44*(5), 656-673. <https://doi:10.1002/jcop.21793>

- Melnick, S. A., & Meister, D. G. (2008). A comparison of beginning and experienced teachers' concerns. *Educational Research Quarterly*, 31(3), 39-56.
<http://files.eric.ed.gov/fulltext/EJ788428.pdf>
- Meyer, J. W., Bromley, P., & Ramirez, F. O. (2010). Human rights in social science textbooks: Cross-national analyses, 1970-2008 a magazine of theory and practice. *Sociology of Education*, 83(2), 111-134. <https://doi:10.1177/0038040710367936>
- Miksza, P., & Berg, M. H. (2013). A longitudinal study of preservice music teacher development: Application and advancement of the Fuller and Brown teacher-concerns model. *Journal of Research in Music Education*, 61(1), 44-62.
<https://doi:10.1177/0022429412473606>.
- Mitchell, L. C., & Hegde, A. (2007). Beliefs and practices of in-service preschool teachers in inclusive settings: Implications for personnel preparation. *Journal of Early Childhood Teacher Education*, 28(4), 353-366. <https://doi:10.1080/10901020701686617>
- Mock, D. R., & Kauffman, J. M. (2005). The delusion of full inclusion. In *Controversial therapies for developmental disabilities* (pp. 135-150). Routledge.
- Mock, D.R., & Kauffman, J.M. (2002). Preparing teachers for full inclusion: Is it possible? *The Teacher Educator*, 37(3), 202-215. <https://doi:10.1080/08878730209555294>
- Mohamed Emam, M., & Al-Mahdy, Y. F. H. (2020). Teachers' efficacy for inclusive practices in the Sultanate of Oman: Effect of gender and teaching experience. *School Psychology International*, 41(2), 170-192. <https://doi.org/10.1177/0143034319895062>
- Mojavezi, A., & Tamiz, M. P. (2012). The impact of teacher self-efficacy on the students' motivation and achievement. *Theory and Practice in Language Studies*, 3(2), 483-491.
<https://doi:10.4304/tpls.2.3.483-491>

- Monsen, J. J., Eving, D. L., & Kwoka, M. (2014). Teachers' attitudes towards inclusion, perceived adequacy of support and classroom learning environment. *Learning Environments Research, 17*(1), 113-126. <https://doi:10.1007/s10984-013-9144-8>
- Montgomery, A., & Mirenda, P. (2014). Teachers' self-efficacy, sentiments, attitudes, and concerns about the inclusion of students with disabilities. *Exceptionality Education International, 24*(1), 18-32. <http://ir.lib.uwo.ca/eei/vol24/iss1/3/>
- Moore, T. C., Wehby, J. H., Oliver, R. M., Chow, J. C., Gordon, J. R., & Mahany, L. A. (2017). Teachers' reported knowledge and implementation of research-based classroom and behavior management strategies. *Remedial and Special Education, 38*(4), 222-232. <https://doi:10.1177/0741932516683631>
- Morgan, H. (2014). Maximizing student success with differentiated learning. *The Clearing House: A Journal of Educational Strategies, Issues, and Ideas, 87*(1), 34-38. <https://doi:10.1080/00098655.2013.832130>
- Morrier, M. J., Hess, K. L., & Heflin, L. J. (2011). Teacher training for implementation of teaching strategies for students with autism spectrum disorders. *Teacher Education and Special Education, 34*(2), 119-132. <https://doi:10.1177/0888406410376660>
- Morris, D. B., Usher, E. L., & Chen, J. A. (2017). Reconceptualizing the sources of teaching self-efficacy: A critical review of emerging literature. *Educational Psychology Review, 29*(4), 795-833. <https://doi:10.1007/s10648-016-9378-y>
- Muijs, R. D., & Reynolds, D. (2002). Teachers' beliefs and behaviors: What really matters. *Journal of Classroom Interaction, 37*(2), 3-15. <http://www.jstor.org/stable/23870407>
- Mulholland, M., & O'Connor, U. (2016). Collaborative classroom practice for inclusion: Perspectives of classroom teachers and learning support/resource teachers. *International*

Journal of Inclusive Education, 20(10), 1070-1083.

<https://doi.org/10.1080/13603116.2016.1145266>

Mulvey, B. K., Chiu, J. L., Ghosh, R., & Bell, R. L. (2016). Special education teachers' nature of science instructional experiences. *Journal of Research in Science Teaching*, 53(4), 554-578. <https://doi.org/10.1002/tea.21311>

Muñoz-Martínez, Y., Monge-López, C., & Torrego Seijo, J. C. (2020). Teacher education in cooperative learning and its influence on inclusive education. *Improving Schools*, 1-14. <https://doi.org/10.1177/1365480220929440>

Musti-Rao, S., & Haydon, T. (2011). Strategies to increase behavior-specific teacher praise in an inclusive environment. *Intervention in School and Clinic*, 47(2), 91-97. <https://doi.org/10.1177/1053451211414187>

Nagel, C., Inwood, J., Alderman, D., Aggarwal, U., Bolton, C., Holloway, S., . . . Derickson, K. (2015). The legacies of the U.S. civil rights act, fifty years on. *Political Geography*, 48, 159-168. <https://doi.org/10.1016/j.polgeo.2015.06.004>

Närhi, V., Kiiski, T., Peitso, S., & Savolainen, H. (2015). Reducing disruptive behaviors and improving learning climates with class-wide positive behavior support in middle schools. *European Journal of Special Needs Education*, 30(2), 274-285.

<https://doi.org/10.1080/08856257.2014.986913>

National Association of School Psychologists. (2009). *Appropriate academic supports to meet the needs of all students* (Position Statement). Author.

<https://www.nasponline.org/assets/Documents/Research%20and%20Policy/Position%20Statements/AppropriateAcademicSupport.pdf>

- National Center for Education Statistics. (2019). *Digest of education statistics*.
https://nces.ed.gov/programs/digest/d18/tables/dt18_204.60.asp
- National Center for Education Statistics. (2016). *Children and youth with disabilities*.
http://nces.ed.gov/programs/coe/indicator_cgg.asp
- Nel, M., Engelbrecht, P., Nel, N., & Tlale, D. (2014). South African teachers' views of collaboration within an inclusive education system. *International Journal of Inclusive Education*, 18(9), 903-917. <https://doi:10.1080/13603116.2013.858779>
- No Child Left Behind (NCLB) Act of 2001, Pub. L. No. 107-110, § 115, Stat. 1425 (2002).
- Norman, K., Caseau, D., & Stefanich, G. P. (1998). Teaching students with disabilities in inclusive science classrooms: Survey results. *Science Education*, 82(2), 127-146.
[https://doi:10.1002/\(SICI\)1098-237X\(199804\)82:2<127::AID-SCE1>3.0.CO;2-G](https://doi:10.1002/(SICI)1098-237X(199804)82:2<127::AID-SCE1>3.0.CO;2-G)
- O'Connor, E. A., Yasik, A. E., & Horner, S. L. (2016). Teachers' knowledge of special education laws: What do they know? *Insights into Learning Difficulties*, 13(1), 7-18.
- O'Rourke, J. (2014). Inclusive schooling: If it's so good – Why is it so hard to sell? *International Journal of Inclusive Education*, 19(5), 1-17. <https://doi:10.1080/13603116.2014.954641>
- Odongo, G., & Davidson, R. (2016). Examining the attitudes and concerns of the Kenyan teachers toward the inclusion of children with disabilities in the general education classroom: A mixed methods study. *International Journal of Special Education*, 31(2),
<http://files.eric.ed.gov/fulltext/EJ1111087.pdf>
- Oliver, R. M., & Reschly, D.J. (2010). Special education teacher preparation in classroom management: Implications for students with emotional and behavioral disorders. *Behavioral Disorders*, 35, 188-199. <https://doi:10.1177/019874291003500301>

- Olsen, B. (2016). *Teaching for success: Developing your teacher identity in today's classroom*. Paradigm.
- Opiyo, R. A. (2019). Inclusive practice and transformative leadership are entwined. *Global Journal of Transformative Education*, 1(1), 52-67. <https://doi:10.14434/gjte.v1i1.25981>
- Osgood, R. L. (2005). *The history of inclusion in the United States*. Gallaudet University Press.
- Osgood, R. L. (2008). *The history of special education: A struggle for equality in American public schools*. Praeger Publishers.
- Oswald, M., & Swart, E. (2011). Addressing South African pre-service teachers' sentiments, attitudes, and concerns regarding inclusive education. *International Journal of Disability Development and Education*, 58(3), 287-302. <https://doi:10.1080/1034912X.2011.626665>
- Ozder, H. (2011). Self-efficacy beliefs of novice teachers and their performance in the classroom. *Australian Journal of Teacher Education*, 36(5). <https://doi:10.14221/ajte.2011v36n5.1>.
- Pajares, F. (1997). Current directions in self-efficacy research. *Advances in Motivation and Achievement*, 10(149), 1-49. <https://www.dynaread.com/current-directions-in-self-efficacy-research>
- Pancsofar, N., & Petroff, J. (2016). Teachers' experiences with co-teaching as a model for inclusive education. *International Journal of Inclusive Education*, 20(10), 1043-1053. <https://doi:10.1080/13603116.2016.1145264>
- Pandolfi, V., & Magyar, C. I. (2014). Assessment of co-occurring emotional and behavioral disorders in youth with ASD using the child behavior checklist 6-18. *Comprehensive Guide to Autism*, 2799-2812. https://doi:10.1007/978-1-4614-4788-7_166

- Pantić, N., & Florian, L. (2015). Developing teachers as agents of inclusion and social justice. *Education Inquiry*, 6(3), 332-351. <https://doi:10.3402/edui.v6.27311>
- Park, M. H., Dimitrov, D. M., Das, A., & Gichuru, M. (2016). The teacher efficacy for inclusive practices (TEIP) scale: dimensionality and factor structure. *Journal of Research in Special Educational Needs*, 16(1), 2-12. <https://doi:10.1111/1471-3802.12047>
- Park, M., Chitiyo, M., & Choi, Y. (2010). Examining pre-service teachers' attitude towards children with autism in the USA. *Journal of Research in Special Educational Needs*, 10(2), 107-114. <https://doi:10.1111/j.1471-3802.2010.01150.x>
- Parsons, S. A., Vaughn, M., Scales, R. Q., Gallagher, M. A., Parsons, A. W., Davis, S. G., Pierczynski, M., & Allen, M. (2018). Teachers' instructional adaptations: A research synthesis. *Review of Educational Research*, 88(2), 205-242. <https://doi:10.3102/0034654317743198>
- Pedhazur, E. J. (1997). *Multiple regression in behavioral research* (3rd ed.). Harcourt Brace.
- Pelfrey, R., & Flamini, M. (2020). Georgia K-12 teacher leader workforce report. *Governor's Office of Student Achievement*, 1-40. <https://gosa.georgia.gov/document/document/2020georgia-k-12-teacher-and-leader-workforce-reportpdf/download>
- Pendergast, D., Garvis, S., & Keogh, J. (2011). Pre-service student-teacher self-efficacy beliefs: An insight into the making of teachers. *Australian Journal of Teacher Education*, 36(12), 45-58. <https://doi:10.14221/ajte.2011v36n12.6>
- Pennington, R. C. (2017). An IEP for me: Program improvement for rural teachers of students with moderate to severe disability and autism spectrum disorder. *Rural Special Education Quarterly*, 36(3), 146-154. <https://doi:10.1177/8756870517717950>

- Podell, D., & Soodak, L. (1993). Teacher efficacy and bias in special education referrals. *Journal of Educational Research*, 86(4), 247-253. <https://doi:10.1080/00220671.1993.9941836>
- Porakari, J., Sevala, B., Miniti, P., Saemane, G., Sharma, U., & Forlin, C. (2015). Solomon Islands school leaders' readiness for inclusive education. *International Journal of Inclusive Education*, 19(8), 863-874. <https://doi:10.1080/13603116.2015.1013999>
- Poulou, M. S. (2017). An examination of the relationship among teachers' perceptions of social-emotional learning, teaching efficacy, teacher-student interactions, and students' behavioral difficulties. *International Journal of School & Educational Psychology*, 5(2), 126-136. <https://doi:10.1080/21683603.2016.1203851>
- Powell, J. J. (2016). *Barriers to inclusion: Special education in the United States and Germany*. Routledge.
- Probst, P., & Leppert, T. (2008). Brief report: Outcomes of a teacher training program for autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 38(9), 1791-1796. <https://doi:10.1007/s10803-008-0561-y>
- Queirós, A., Faria, D., & Almeida, F. (2017). Strengths and limitations of qualitative and quantitative research methods. *European Journal of Education Studies*, 3(8), 369-387. <https://doi:10.5281/zenodo.887089>
- Reyes, M. E., Hutchinson, C. J., & Little, M. (2017). Preparing educators to teach effectively in inclusive settings. *Southeastern Regional Association of Teacher Educators Journal*, 26(1), 21-29. <https://files.eric.ed.gov/fulltext/EJ1134393.pdf>
- Roberts, J., & Simpson, K. (2016). A review of research into stakeholder perspectives on inclusion of students with autism in mainstream schools. *International Journal of Inclusion Education*, 20(10), 1084-1096. <https://doi:10.1080/13603116.2016.1145267>

- Robinson, D. (2017). Effective inclusive teacher education for special educational needs and disabilities: Some more thoughts on the way forward. *Teaching and Teacher Education, 61*, 164-178. <https://doi:10.1016/j.tate.2016.09.007>
- Rock, M.L., Gregg, M., Ellis, E., & Gable, R.A. (2008). REACH: A framework for differentiating classroom instruction. *Preventing School Failure, 52*(2), 31-47. <https://doi:10.3200/PSFL.52.2.31-47>
- Rogers, W., & Johnson, N. (2018). Strategies to include students with severe/multiple disabilities within the general education classroom. *Physical Disabilities: Education and Related Services, 37*(2), 1-12. <https://doi:10.14434/pders.v37i2.24881>
- Romi, S., & Leyser, Y. (2006). Exploring inclusion preservice training needs: A study of variables associated with attitudes and self-efficacy beliefs. *European Journal of Special Needs Education, 21*(1), 85-105. <https://doi:10.1080/08856250500491880>
- Rose, L. C., & Gallup, A. M. (2005). The 37th annual Phi Delta Kappa/ Gallup poll of the public's attitudes toward the public schools. *Phi Delta Kappan, 87*(1), 41-57. <https://doi:10.1177/003172170508700110>
- Ross, S. W., Romer, N., & Horner, R. H. (2012). Teacher well-being and the implementation of school-wide positive behavior interventions and supports. *Journal of Positive Behavior Interventions, 14*(2), 118-128. <https://doi:10.1177/1098300711413820>
- Rotter, J. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied, 80*(1), 1-28. <https://doi:10.1037/h0092976>
- Round, P. N., Subban, P. K., & Sharma, U. (2016). "I don't have time to be this busy." Exploring the concerns of secondary school teachers towards inclusive education. *International*

Journal of Inclusive Education, 20(2), 185-198.

<https://doi.org/10.1080/13603116.2015.1079271>

- Ruble, L. A., Usher, E. L., & McGrew, J. H. (2011). Preliminary investigation of the sources of self-efficacy among teachers of students with autism. *Focus on Autism and Other Developmental Disabilities*, 26(2), 67-74. <https://doi.org/10.1177/1088357610397345>
- Ruppar, A. L., Neeper, I. S., & Dalsen, J. (2016). Special education teachers' perceptions of preparedness to teach students with severe disabilities. *Research and Practice for Persons with Severe Disabilities*, 4(14), 273-286. <https://doi.org/10.1177/1540796916672843>
- Ryndak, D. L., Moore, M. A., & Orlando, A. (2009). Access to general curriculum: The mandate and role of context in research-based practice for students with extensive support needs. *Research and Practice for Persons with Severe Disabilities*, 33(4), 199-213. <https://doi.org/10.2511/rpsd.33.4.199>
- Ryndak, D. L., Jackson, L. B., & White, J. M. (2013). Involvement and progress in the general curriculum for students with extensive support needs: K-12 inclusive-education research and implications for the future. *Inclusion*, 1(1), 28-49. <https://doi.org/10.1352/2326-6988-1.1.028>
- Sailor, W. T., & Skrtic, T. (1995). Modern and postmodern agendas in special education: Implications for teacher education, research, and policy development. In J. Paul, H. Roselli, & D. Evans (Eds.), *Integrating school restructuring and special education reform* (pp. 418-433). Harcourt Brace.
- Salend, S. J. (2001). *Creating inclusive classrooms: Effective and reflective practices*. Merrill.

- Salend, S., & Duhaney, L.G (1999). The impact of inclusion on students with and without disabilities and their educators. *Remedial and Special Education, 20*(2), 114-125.
<https://doi.org/10.1177/0741932599902000209>
- Salisbury, C. (2006). Principals' perspectives on inclusive elementary schools. *Research and Practice for Persons with Severe Disabilities, 31*(1), 70-82.
<https://doi.org/10.2511/rpsd.31.1.70>
- Saloviita, T. (2019). Teacher attitudes towards the inclusion of students with support needs. *Journal of Research in Special Educational Needs, 20*(1), 64-73.
<https://doi.org/10.1111/1471-3802.12466>
- Sapon-Shevin, M. (2013). Inclusion as if we meant it: A social justice perspective. *Revista de Investigación en Educación, 11*(3), 57-70.
<https://dialnet.unirioja.es/descarga/articulo/4735233.pdf>
- Sarıçam, H., & Sakız, H. (2014). Burnout and teacher self-efficacy among teachers working in special education institutions in Turkey. *Educational Studies, 40*(4), 423-437.
<https://doi.org/10.1080/03055698.2014.930340>
- Savolainen, H., Engelbrecht, P., Nel, M., & Malinen, O. P. (2012). Understanding teachers' attitudes and self-efficacy in inclusive education: Implications for pre-service and in-service teacher education. *European Journal of Special Needs Education, 27*(1), 51-68.
<https://doi.org/10.1080/08856257.2011.613603>
- Savolainen, H., Malinen, O. P., & Schwab, S. (2020). Teacher efficacy predicts teachers' attitudes towards inclusion—a longitudinal cross-lagged analysis. *International Journal of Inclusive Education, 1-15*. <https://doi.org/10.1080/13603116.2020.1752826>

- Schonert-Reichl, K. A. (2017). Social and emotional learning and teachers. *The Future of Children*, 27(1), 137-155. <https://doi:10.1353/foc.2017.0007>
- Schumm, J., & Vaughn, S. (1995). Getting ready for inclusion: Is the stage set? *Learning Disabilities Research & Practice*, 10, 169–179. <https://psycnet.apa.org/record/1996-18516-001>
- Schunk, D.H., Pintrich, P.R., & Meece, J. L. (2008). *Motivation in education: Theory, research, and applications* (3rd ed.). Pearson Prentice Hall.
- Schütze, B., Rakoczy, K., Klieme, E., Besser, M., & Leiss, D. (2017). Training effects on teachers' feedback knowledge and the moderating role of self-efficacy. *International Reviews on Mathematical Education*, 49(3), 475–489. <https://doi:10.1007/s11858-017-0855-7>
- Scott, B. J., Vitale, M. R., & Masten, W. G. (1998). Implementing instructional adaptations for students with disabilities in inclusive classrooms: A literature review. *Remedial and Special Education*, 19(2), 106-119. <https://doi:10.1177/074193259801900205>
- Scott, T. M., Park, K. L., Swain-Bradley, J., & Landers, E. (2007). Positive behavior support in the classroom: Facilitating behaviorally inclusive learning environments. *International Journal of Behavioral Consultation and Therapy*, 3(2), 223-235. <https://doi:10.1037/h0100800>
- Scruggs, T. E., & Mastropieri, M. A. (1994). The construction of scientific knowledge by students with mild disabilities. *The Journal of Special Education*, 28(3), 307-321. <https://doi:10.1177/002246699402800306>

- Scruggs, T. E., & Mastropieri, M. A. (1996). Teacher perceptions of mainstreaming/inclusion, Teacher perceptions of mainstreaming/inclusion, 1958-1995: A research synthesis. *Exceptional Children, 63*(1), 59-74. <https://doi:10.1177/001440299606300106>
- Scruggs, T., & Mastropieri, M. (2017). Making inclusion work with co-teaching. *Teaching Exceptional Children, 49*(4), 284-293. <https://doi:10.1177/0040059916685065>
- Segall, M. J., & Campbell, J. M. (2012). Factors relating to education professionals' classroom practices for the inclusion of students with autism spectrum disorders. *Research in Autism Spectrum Disorders, 6*, 1156-1167. <https://doi:10.1016/j.rasd.2012.02.007>
- Shah, R., Das, A., Desai, I., & Tiwari, A. (2016). Teachers' concerns about inclusive education in Ahmedabad, India. *Journal of Research in Special Educational Needs, 16*(1), 34-45. <https://doi:10.1111/1471-3802.12054>
- Sharma, U., & Desai, I. (2002). Measuring concerns about integrated education in India. *Asia and Pacific Journal on Disability, 5*(1), 2-14. <https://www.dinf.ne.jp/doc/english/asia/resource/z00ap/004/z00ap00401.html>
- Sharma, U. & George, S. (2016). Understanding teacher self-efficacy to teach in inclusive classrooms. *Asia-Pacific Perspectives on Teacher Self-Efficacy, 37-51*. https://doi:10.1007/978-94-6300-521-0_3
- Sharma, U., & Jacobs, D. K. (2016). Predicting in-service educators' intentions to teach in inclusive classrooms in India and Australia. *Teaching and Teacher Education, 55*, 13-23. <https://doi:10.1016/j.tate.2015.12.004>
- Sharma, U., & Nuttal, A. (2016). The impact of training on pre-service teacher attitudes, concerns, and efficacy towards inclusion. *Asia-Pacific Journal of Teacher Education, 44*(2), 142-155. <https://doi:10.1080/1359866x.2015.1081672>

- Sharma, U., & Sokal, L. (2015). The impact of a teacher education course on pre-service teachers' beliefs about inclusion: An international comparison. *Journal of Research in Special Educational Needs, 15*(4), 276-284. <https://doi:10.1111/1471-3802.12043>
- Sharma, U., & Sokal, L. (2016). Can teachers' self-reported efficacy, concerns, and attitudes toward inclusion scores predict their actual inclusive classroom practices? *Australasian Journal of Special Education, 40*(1), 21-38. <https://doi:10.1017/jse.2015.14>
- Sharma, U., Aiello, P., Pace, E. M., Round, P., & Subban, P. (2018). In-service teachers' attitudes, concerns, efficacy, and intentions to teach in inclusive classrooms: an international comparison of Australian and Italian teachers. *European Journal of Special Needs Education, 33*(3), 437-446. <https://doi:10.1080/08856257.2017.1361139>
- Sharma, U., Forlin, C., & Loreman, T. (2008). Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities. *Disability & Society, 23*(7), 773-785. <https://doi:10.1080/09687590802469271>
- Sharma, U., Forlin, C., Loreman, T., & Earle, C. (2006). Pre-service teacher's attitudes, concerns, and sentiments about inclusive education: An international comparison of novice pre-service teachers. *International Journal of Special Education, 21*(1), 80-93. <http://files.eric.ed.gov/fulltext/EJ843609.pdf>
- Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teaching efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs, 12*(1), 12-21. <https://doi:10.1111/j.1471-3802.2011.01200.x>

- Sharma, U., Loreman, T., & Simi, J. (2017). Stakeholder perspectives on barriers and facilitators of inclusive education in the Solomon Islands. *Journal of Research in Special Educational Needs, 17*(2), 143-151. <https://doi:10.1111/1471-3802.12375>
- Sharma, U., & Nuttal, A. (2016). The impact of training on pre-service teacher attitudes, concerns, and efficacy towards inclusion. *Asia-Pacific Journal of teacher education, 44*(2), 142-155. <https://doi.org/10.1080/1359866X.2015.1081672>
- Sharma, U., Simi, J., & Forlin, C. (2015). Preparedness of pre-service teachers for inclusive education in the Solomon Islands. *Australian Journal of Teacher Education, 40*(5), 103-116. <https://doi:10.14221/ajte.2015v40n5.6>
- Sharma, U., Sokal, L., Wang, M., & Loreman, T. (2021). Measuring the use of inclusive practices among pre-service educators: A multi-national study. *Teaching and Teacher Education, 107*, 103506. <https://doi.org/10.1016/j.tate.2021.103506>
- Shaukat, S., Vishnumolakala, V., & Al Bustami, G. (2019). The impact of teachers' characteristics on their self-efficacy and job satisfaction: A perspective from teachers engaging students with disabilities. *Journal of Research in Special Educational Needs, 19*(1), 68-76. <https://doi:10.1111/1471-3802.12425>
- Shepherd, K. G., Fowler, S., McCormick, J., Wilson, C. L., & Morgan, D. (2016). The search for role clarity: Challenges and implications for special education teacher preparation. *Teacher Education and Special Education, 39*(2), 83-97. <https://doi:10.1177/0888406416637904>
- Shogren, K. A., Gross, J. M., Forber-Pratt, A. J., Francis, G. L., Satter, A. L., Blue-Banning, M., & Hill, C. (2015). The perspectives of students with and without disabilities on inclusive

- schools. *Research and practice for persons with severe disabilities*, 40(4), 243-260.
[https://doi:10.1177/1540796915583493](https://doi.org/10.1177/1540796915583493)
- Shoulders, T. L., & Krei, M. S. (2016). Rural secondary educators' perceptions of their efficacy in the inclusive classroom. *Rural Special Education Quarterly*, 35, 23-30.
[https://doi:10.1177/875687051603500104](https://doi.org/10.1177/875687051603500104)
- Siegle, D., & McCoach, D. B. (2007). Increasing student mathematics self-efficacy through teacher training. *Journal of Advanced Academics*, 18(2), 278-312.
[https://doi:10.4219/jaa-2007-353](https://doi.org/10.4219/jaa-2007-353)
- Simon, M. K. & Francis, B. J. (2004). *The dissertation cookbook: From soup to nuts, a practical guide to start and complete your dissertation* (3rd. ed.). Kendall/Hunt.
- Sinclair, J., Hansen, S. G., Machalicek, W., Knowles, C., Hirano, K. A., Dolata, J. K., ... Murray, C. (2018). A 16-year review of participant diversity in intervention research across a selection of 12 special education journals. *Exceptional Children*, 84(3), 312-329.
[https://doi:10.1177/0014402918756989](https://doi.org/10.1177/0014402918756989)
- Singal, N. (2008). Working towards inclusion: Reflections from the classroom. *Teaching and Teacher Education*, 24, 1516-1529. [https://doi:10.1016/j.tate.2008.01.008](https://doi.org/10.1016/j.tate.2008.01.008)
- Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of educational psychology*, 99(3), 611. [https://doi:10.1037/0022-0663.99.3.611](https://doi.org/10.1037/0022-0663.99.3.611)
- Skaalvik, E. M., & Skaalvik, S. (2017). Motivated for teaching? Associations with school goal structure, teacher self-efficacy, job satisfaction and emotional exhaustion. *Teaching and Teacher Education*, 67, 152-160. [https://doi:10.1016/j.tate.2017.06.006](https://doi.org/10.1016/j.tate.2017.06.006)

- Skaalvik, E.M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout. *Teaching and Teacher Education*, 26(4), 1059-1069. <https://doi:10.1016/j.tate.2009.11.001>
- Skiba, R., Ormiston, H., Martinez, S., & Cummings, J. (2016). Teaching the social curriculum: Classroom management as behavioral instruction. *Theory into Practice*, 55(2), 120-128. <https://doi:10.1080/00405841.2016.1148990>
- Skrtic, T. M., & Sailor, W. (1996). Voice, collaboration, and inclusion: Democratic themes in educational and social reform initiatives. *Remedial and Special Education*, 17(3), 142-158. <https://doi:10.1177/074193259601700304>
- Smith, M. G. (2000). Secondary teachers' perceptions toward inclusion of students with severe disabilities. *National Association of Secondary School Principals. NASSP Bulletin*, 84(613), 54-60. <https://doi:10.1177/019263650008461309>
- Snowman, J., Dobozy, E., Scevak, J., Bryer, F., Bartlett, B., & Biehler, R. (2009). *Psychology: Applied to teaching*. John Wiley & Sons.
- Sokal, L., & Sharma, U. (2014). Canadian in-service teachers' concerns, efficacy, and attitudes about inclusive teaching. *Exceptionality Education International*, 23(1), 59-71. <http://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=1021&context=eei>
- Soto, G., & Goetz, L. (1998). Self-efficacy beliefs and the education of students with severe disabilities. *Journal of the Association for Persons with Severe Handicaps*, 23, 134-143. <https://doi:10.2511/rpsd.23.2.134>
- Specht, J., McGhie-Richmond, D., Loreman, T., Mirenda, P., Bennett, S., Gallagher, T., ... & Lyons, W. (2016). Teaching in inclusive classrooms: efficacy and beliefs of Canadian preservice teachers. *International Journal of Inclusive Education*, 20(1), 1-15. <https://doi:10.1080/13603116.2015.1059501>

- Spencer, S. A. (2011). Universal design for learning: Assistance for teachers in today's inclusive classrooms. *Interdisciplinary Journal of Teaching and Learning*, 1(1), 10-22.
<https://files.eric.ed.gov/fulltext/EJ1055639.pdf>
- Srivastava, M., de Boer, A. A., & Pijl, S. J. (2017). Preparing for the inclusive classroom: changing teachers' attitudes and knowledge. *Teacher Development*, 21(4), 561–579.
<https://doi:10.1080/13664530.2017.1279681>
- Stainback, S. E., & Stainback, W. E. (1992). *Curriculum considerations in inclusive classrooms: Facilitating learning for all students*. Paul H. Brookes Publishing.
- Starr, E. M., Martini, T. S., & Kuo, B. C. (2014). Transition to kindergarten for children with autism spectrum disorder, a focus group study with ethnically diverse parents, teachers, and early intervention service providers. *Focus on Autism and Other Developmental Disabilities*, 31(2), 115-128. <https://doi:10.1177/1088357614532497>
- Stehle, S. M., & Peters-Burton, E. E. (2019). Developing student 21 st Century skills in selected exemplary inclusive STEM high schools. *International Journal of STEM Education*, 6(1), 1-15. <https://doi.org/10.1186/s40594-019-0192-1>
- Stephenson, J., & Carter, M. (2014). What do employers ask for in advertisements for special education positions? *Australasian Journal of Special Education*, 38(1), 51-62.
<https://doi:10.1017/jse.2014.3>
- Stoesz, B. M., Shooshtari, S., Montgomery, J., Martin, T., Heinrichs, D. J., & Douglas, J. (2014). Reduce, manage or cope: a review of strategies for training school staff to address challenging behaviors displayed by students with intellectual/developmental disabilities. *Journal of Research in Special Educational Needs*, 16(3), 199-214.
<https://doi:10.1111/1471-3802.12074>

Stone, W. L., & Rosenbaum, J. L. (1988). A comparison of teacher and parent views on autism. *Journal of Autism and Developmental Disorders, 18*(3), 403-414.

<https://doi:10.1007/bf02212195>

Stough, L. (2006). *The place of classroom management and standards in teacher education*. Erlbaum.

Strieker, T., Gillis, B., & Zong, G. (2013). Improving pre-service middle school teachers' confidence, competence, and commitment to co-teaching in inclusive classrooms. *Teacher Education Quarterly, 40*(4), 159-180.

<http://files.eric.ed.gov/fulltext/EJ1072126.pdf>

Strogilos, V. (2018). The value of differentiated instruction in the inclusion of students with special needs/ disabilities in mainstream schools. *SHS Web of Conferences, 42*, 3.

<https://doi:10.1051/shsconf/20184200003>

Subban, P., Round, P., & Sharma, U. (2019). "I can because I think I can": An investigation into Victorian secondary school teacher's self-efficacy beliefs regarding the inclusion of students with disabilities. *International Journal of Inclusive Education, 1*-14.

<https://doi:10.1080/13603116.2018.1550816>

Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2019). Understanding teacher shortages: An analysis of teacher supply and demand in the United States. *Education Policy Analysis Archives, 27*(35), 1-40. <https://doi:10.14507/epaa.27.3696>

Swackhamer, L. E., Koellner, K., Basile, C., & Kimbrough, D. (2009). Increasing the self-efficacy of inservice teachers through content knowledge. *Teacher Education Quarterly, 36*(2), 63-78. <https://www.jstor.org/stable/23479252?seq=1>

- Swain, K. D., Hagaman, J. L., & Leader-Janssen, E. M. (2021). Teacher-reported IEP goal data collection methods. *Preventing School Failure: Alternative Education for Children and Youth*, 1-8. <https://doi.org/10.1080/1045988X.2021.1980849>
- Symes, W., & Humphrey, N. (2011). The deployment, training and teacher relationships of teaching assistants supporting pupils with autistic spectrum disorders (ASD) in mainstream secondary schools. *British Journal of Special Education*, 38(2), 57-64. <https://doi.org/10.1111/j.1467-8578.2011.00499.x>
- Tabachnick, B. G., & Fidell, L. S. (2012). *Using multivariate statistics* (6th ed.). Pearson.
- Tam, K. B., Seevers, R., Gardner, R., Heng, M. A. (2006). Primary school teachers' concerns about the integration of students with special needs in Singapore. *Teaching Exceptional Children Plus*, 3(2), 1-13. <http://escholarship.bc.edu/education/tecplus/vol3/iss2/art3>
- Taub, D. A., McCord, J. A., & Ryndak, D. L. (2017). Opportunities to learn for students with extensive support needs: A context of research-supported practices for all in general education classes. *The Journal of Special Education*, 51(3), 127-137. <https://doi.org/10.1177/0022466917696263>
- Tejeda-Delgado, M. (2009). Teacher efficacy, tolerance, gender, and years of experience and special education referrals. *International Journal of Special Education*, 24 (1), 112-119. <https://files.eric.ed.gov/fulltext/EJ842124.pdf>
- Theofanidis, D., & Fountouki, A. (2018). Limitations and delimitations in the research process. *Perioperative Nursing*, 7(3), 155-163. <https://doi.org/10.5281/zenodo.2552022>
- Tomlinson, C. A., Brighton, C., Hertberg, H., Callahan, C. M., Moon, T. R., Brimijoin, K., ... & Reynolds, T. (2003). Differentiating instruction in response to student readiness, interest, and learning profile in academically diverse classrooms: A review of literature. *Journal*

for the Education of the Gifted, 27(2-3), 119-145.

[https://doi:10.1177/016235320302700203](https://doi.org/10.1177/016235320302700203)

Treder, D. W., Morse, W. C., & Ferron, J. M. (2000). The relationship between teacher effectiveness and teacher attitudes toward issues related to inclusion. *Teacher Education and Special Education*, 23(3), 202-210. [https://doi:10.1177/088840640002300303](https://doi.org/10.1177/088840640002300303)

Tsakiridou, H., & Polyzopoulou, K. (2014). Greek teachers' attitudes toward the inclusion of students with special educational needs. *American Journal of Educational Research*, 2(4), 208-218. [https://doi:10.12691/education-2-4-6](https://doi.org/10.12691/education-2-4-6)

Tschannen-Moran, M. & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching & Teacher Education*, 23(6), 944-956. [https://doi:10.1016/j.tate.2006.05.003](https://doi.org/10.1016/j.tate.2006.05.003)

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

Tschannen-Moran, M., & McMaster, P. (2009). Sources of self-efficacy: Four professional development formats and their relationship to self-efficacy and implementation of a new teaching strategy. *The Elementary School Journal*, 110, 228-245.

[https://doi:10.1086/605771](https://doi.org/10.1086/605771)

Tschannen-Moran, M., Hoy, A. W., & Hoy, W. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202-248.

[https://doi:10.3102/00346543068002202](https://doi.org/10.3102/00346543068002202)

- Tümekaya, G. S., & Miller, S. (2020). The perceptions of pre-and in-service teachers' self-efficacy regarding inclusive practices: A systematized review. *Elementary Education Online*, 19(2), 1061-1077. <https://doi:10.17051/ilkonline.2020.696690>
- Türkoğlu, M. E., Cansoy, R., & Parlar, H. (2017). Examining relationship between teachers' self-efficacy and job satisfaction. *Universal Journal of Educational Research*, 5(5): 765-772. <https://doi:10.13189/ujer.2017.050509>
- U.S. Department of Education (2008). *Building the legacy: IDEA2004*. <http://www.idea.ed.gov/explore/view/p/,root,regs,300,A,300%25>
- U.S. Department of Education. (2017). *Summary: Proposed regulations on accountability, state plans, and data reporting under ESSA*. <http://www2ed.gov/policy/elsec/leg/essa/essaaccountabilitynprmsummary52016.pdf>
- UNESCO. (1994). *The Salamanca statement and the framework for action on special needs education*. Paris: UNESCO.
- United Nations. (2006). *Convention on the rights of persons with disabilities and optional protocol*. United Nations.
- Urton, K., Wilbert, J., & Hennemann, T. (2014). Attitudes towards inclusion and self-efficacy of principals and teachers. *Learning Disabilities--A Contemporary Journal*, 12(2), 151-168. http://www.academia.edu/download/35835859/Urton_et_al._-_2014_-_Attitudes_towards_inclusion_and_SE_of_p.pdf
- van den Berg, R., & Ros, A. (1999). The permanent importance of the subjective reality of teachers during educational innovation: A concerns-based approach. *American Educational Research Journal*, 36(4), 879-906. <https://doi.org/10.3102/00028312036004879>

- van Garderen, D., & Whittaker, C. (2006). Planning differentiated, multicultural instruction for secondary inclusive classrooms. *Teaching Exceptional Children, 38*(3), 12-20.
[https://doi:10.1177/004005990603800302](https://doi.org/10.1177/004005990603800302)
- Vashistha, K. C., & Priya, K. (2013). Attitudes, knowledge, and concerns of teachers towards inclusion of students with disabilities. *Educational Quest, 4*(2), 123-129.
[https://doi:10.5958/j.2230-7311.4.2.008](https://doi.org/10.5958/j.2230-7311.4.2.008)
- Vaz, S., Wilson, N., Falkmer, M., Sim, A., Scott, M., Cordier, R., & Falkmer, T. (2015). Factors associated with primary school teachers' attitudes towards the inclusion of students with disabilities. *PloS One, 10*(18), e0137002. [https://doi:10.1371/journal.pone.0137002](https://doi.org/10.1371/journal.pone.0137002)
- Villa, R. A., & Thousand, J. S. (2003). Making inclusive education work. *Educational Leadership, 61*(2), 19-23. <http://www.ascd.org/publications/educational-leadership/oct03/vol61/num02/Making-Inclusive-Education-Work.aspx>
- Villegas, A. M., Ciotoli, F., & Lucas, T. (2017). A framework for preparing teachers for classrooms that are inclusive of all students. In *Teacher education for the changing demographics of schooling* (pp. 133-148). Springer International Publishing.
- Vitalaki, E., Kourkoutas, E., & Hart, A. (2018). Building inclusion and resilience in students with and without SEN through the implementation of narrative speech, role play and creative writing in the mainstream classroom of primary education. *International Journal of Inclusive Education, 22*(12), 1306-1319. [https://doi:10.1080/13603116.2018.1427150](https://doi.org/10.1080/13603116.2018.1427150)
- Waldron, N. L., & McLeskey, J. (1998). The effects of an inclusive school program on students with mild and severe learning disabilities. *Exceptional Children, 64*, 395-405.
[https://doi:10.1177/001440299806400308](https://doi.org/10.1177/001440299806400308)

- Walther-Thomas, C. S. (1997). Co-teaching experiences: The benefits and problems that teachers and principals report over time. *Journal of learning disabilities, 30*(4), 395-407.
<https://doi.org/10.1177/002221949703000406>
- Weisel, A., & Dror, O. (2006). School climate, sense of efficacy and Israeli teachers' attitudes toward inclusion of students with special needs. *Education, Citizenship and Social Justice, 1*(2), 157-174. <https://doi.org/10.1177/1746197906064677>
- Westling, D. L. (2010). Teachers and challenging behavior. *Remedial and Special Education, 31*(1), 48-63. <https://doi.org/10.1177/0741932508327466>
- Westwood, P. (2018). *Inclusive and adaptive teaching: Meeting the challenge of diversity in the classroom* (2nd ed.). Routledge
- Wilkins, T., & Nietfeld, J. L. (2004). The effect of a school-wide inclusion training programs upon teachers about inclusion. *Journal of Research in Special Education Needs, 4*, 115-121. <https://doi.org/10.1111/j.1471-3802.2004.00026.x>
- Williamson, P., Hoppey, D., McLeskey, J., Bergmann, E., & Moore, H. (2020). Trends in LRE Placement Rates Over the Past 25 Years. *The Journal of Special Education, 53*(4), 236–244. <https://doi.org/10.1177/0022466919855052>
- 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.
<https://doi.org/10.1080/13603116.2018.1455901>
- Wilson, C., Woolfson, L. M., Durkin, K., & Elliott, M. A. (2016). The impact of social cognitive and personality factors on teachers' reported inclusive behavior. *British Journal of Educational Psychology, 86*(3), 461-480. <https://doi.org/10.1111/bjep.12118>

- Wilson, J. (2000). Volunteering. *Annual Review of Sociology*, 26, 215-240.
<https://doi.org/10.1146/annurev.soc.26.1.215>
- Wolery, M., Martin, C. G., Schroeder, C., Huffman, K., Venn, M. L., Holcombe, A., ... & Fleming, L. A. (1994). Employment of educators in preschool mainstreaming: A survey of general early educators. *Journal of Early Intervention*, 18(1), 64-77.
<https://doi:10.1177/105381519401800106>
- Wong, H., & Wong, R. T. (2009). *The first days of school: How to be an effective teacher* (4th ed.). Harry K. Wong Publications, Inc.
- Woodcock, S., & Woolfson, L. M. (2019). Are leaders leading the way with inclusion? Teachers' perceptions of systemic support and barriers towards inclusion. *International Journal of Educational Research*, 93, 232-242. <https://doi:10.1016/j.ijer.2018.11.004>
- Woodcock, S., Hemmings, B., & Kay, R. (2012). Does study on an inclusive education subject influence pre-service teachers' concerns and self-efficacy about inclusion? *Australian Journal of Teacher Education*, 37(6), 1-11. <https://doi:10.14221/ajte.2012v37n6.5>
- Woolfolk, A. E., & Hoy, W. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology*, 82(1), 81-91. <https://doi:10.1037/0022-0663.82.1.81>
- Woolfolk, A. E., Rosoff, B., & Hoy, W. K. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching and Teacher Education*, 6, 137-148.
[https://doi:10.1016/0742-051X\(90\)90031-Y](https://doi:10.1016/0742-051X(90)90031-Y)
- Wyatt, M. (2016). "Are they becoming more reflective and/or efficacious?" A conceptual model mapping how teachers' self-efficacy beliefs might grow. *Educational Review*, 68(1), 114–137. <https://doi:10.1080/00131911.2015.1058754>

- Wymer, W. (2011). The implications of sex differences on volunteer preferences. *Voluntas*, 22, 831-851. <https://www.jstor.org/stable/41307840>
- Yada, A., & Savolainen, H. (2017). Japanese in-service teachers' attitudes toward inclusive education and self-efficacy for inclusive practices. *Teaching and Teacher Education*, 64, 222-229. <https://doi:10.1016/j.tate.2017.02.005>
- Yada, A., Tolvanen, A., & Savolainen, H. (2018). Teachers' attitudes and self-efficacy on implementing inclusive education in Japan and Finland: A comparative study using multi-group structural equation modelling. *Teaching and Teacher Education*, 75, 343-355. <https://doi.org/10.1016/j.tate.2018.07.011>
- Yan, T., & Deng, M. (2019). Regular education teachers' concerns on inclusive education in China from the perspective of concerns-based adoption model. *International Journal of Inclusive Education*, 23(4), 384-404. <https://doi.org/10.1080/13603116.2018.1435741>
- Yan, Z., & Sin, K. (2014). Inclusive education: Teachers' intentions and behavior analyzed from the viewpoint of the theory of planned behavior. *International Journal of Inclusive Education*, 18(1), 72-85. <https://doi:10.1080/13603116.2012.757811>
- Yell, M. L. (1995). Least restrictive environment, inclusion, and students with disabilities: A legal analysis. *The Journal of Special Education*, 28(4), 389-404. <https://doi:10.1177/002246699502800401>
- Yell, M. L. (1998). The legal basis of inclusion. *Educational Leadership*, 56(2), 70-73. <http://www.ascd.org/publications/educational-leadership/oct98/vol56/num02/-The-Legal-Basis-of-Inclusion.aspx>
- Yell, M.L. (2018). *The law and special education* (5th ed.). Pearson.

- Yell, M.L., Katsiyannis, A., Ryan, J.B., McDuffie, K.A., & Mattocks, L. (2008). Ensure compliance with the individuals with disabilities education improvement act of 2004. *Intervention in School and Clinic, 44*(1), 45-51. <https://journals.sagepub.com/home/isc>.
- Yeo, L. S., Ang, R., P., Chong, W. H., Huan, V. S., & Quek, C. C. (2008). Teacher efficacy in the contest of teaching low achieving students. *Current Psychology, 27*(3), 192-204. <https://doi:10.1007/s12144-008-9034-x>
- You, S., Kim, E. K., & Shin, K. (2019). Teachers' belief and efficacy toward inclusive education in early childhood settings in Korea. *Sustainability, 11*(5), 1489. <https://doi.org/10.3390/su11051489>
- Ysseldyke, J. E., Algozzine, B., & Thurlow, M. L. (1992). *Critical issues in special education*. Houghton Mifflin.
- Zagona, A. L., Kurth, J. A., & MacFarland, S. Z. C. (2017). Teachers' views of their preparation for inclusive education and collaboration. *Teacher Education and Special Education, 40*(3), 163-178. <https://doi:10.1177/0888406417692969>
- Zee, M., & Koomen, H. M. Y. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research, 86*(4), 981-1015. <https://doi:10.3102/0034654315626801>
- Zinskie, C. D., & Rea, D. (2016). The Every Student Succeeds Act (ESSA): What it means for educators of students at risk. *National Youth-At-Risk Journal, 2*(1). <https://doi:10.20429/nyarj.2016.020101>

APPENDIX A

Umesh Sharma <umesh.sharma@monash.edu>

To
Pankaj Khazanchi
CC
Umesh Sharma
03/29/16 at 8:11 PM

Dear Pankaj,

You are most welcome to use our scale. I do not expect to be a co-author for the publications coming out of your Ph.D. I sincerely thank you for the offer though.

Warm regards,
Umesh

Associate Professor Umesh Sharma, Ph.D., MAPS
Course Coordinator (Special Education Programs)
Krongold Centre
Faculty of Education
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Building 5, Monash University,
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Chief Co-Editor: *Australasian Journal of Special Education*
<http://journals.cambridge.org/action/displayJournal?jid=JSE>

Most recent book:

Sharma, Roodenburg, and Rayner (2015) *A Guide to Promoting a Positive Classroom Environment*
<https://www.sensepublishers.com/catalogs/bookseries/other-books/a-guide-to-promoting-positive-classroom-environment/>

APPENDIX B

On 28 March 2016 at 04:51, Pankaj Khazanchi <pankajkhazanchi@yahoo.com> wrote:

To
Dr. Umesh Sharma
Associate Professor
Faculty of Education
Monash University
Building 6, Clayton
Australia

Dear Dr. Sharma,
Greetings!

I hope you are doing well. I would like to inform you that I am pursuing a doctoral program at Liberty University. I would like to use your survey tool “A SURVEY OF PRESERVICE and INSERVICE TEACHERS' ATTITUDES TOWARD AND CONCERNS ABOUT INCLUSIVE EDUCATION” to conduct research, and I need your permission to use it. Later, when I submit it for publication, then you will be my co-author.

Please let me know if you have any questions about it. I look forward to hearing from you soon.

King regards,
Pankaj Khazanchi
Doctoral Student
Liberty University

email: pankajkhazanchi@yahoo.com

Life is just a mirror, and what you see out there, you must first see inside of you. (Wally ‘Famous’ Amos)

4. Low _____
 5. Very Low _____

J. If you indicated that your level of confidence in teaching SWDs is low or very low, what kind of training (or what content) could improve it?

1. _____
 2. _____
 3. _____

K. Have you used the co-teaching model in teaching SWDs in inclusive general education classroom settings? If yes, what model have you used?

1. Parallel Teaching Yes _____ No _____
 2. Station Teaching Yes _____ No _____
 3. Alternative Teaching Yes _____ No _____
 4. Team Teaching Yes _____ No _____
 5. I don't know Yes _____ No _____
 6. No, I have not used coteaching model. _____

L. I am teaching in

1. Elementary school
 2. Middle school
 3. High school

M. I teach in grade _____

N. Please describe what things at your school or in your classroom helps or makes it easy to deliver instruction to meet the educational needs of SWDs.

1. _____
 2. _____
 3. _____

O. Please describe what things at your school or in your classroom tend to hinder or impede the successful inclusion and instruction of SWDs.

1. _____
 2. _____
 3. _____

APPENDIX D

PART 3: Concerns about Inclusive Education

Inclusive education is one form of educational provision that may be made for SWDs within the school system. In the context of your **expectations** regarding the school situation and/or your **personal experiences**, indicate whether any of the following items will be a concern to you if a student with a disability was included in your class/school.

INSTRUCTIONS

Please indicate your level of concern by circling the most appropriate number that applies to you.

4	3	2	1
Extremely Concerned	Very Concerned	A Little Concerned	Not at All Concerned

- | | | | | |
|---|---|---|---|---|
| 1. I will not or do not have enough time to develop/redesign lesson plans for SWDs. | 4 | 3 | 2 | 1 |
| 2. It will be or is difficult to maintain discipline in class because of the presence of SWDs. | 4 | 3 | 2 | 1 |
| 3. I do not have the specialized knowledge and skills required to teach SWDs. | 4 | 3 | 2 | 1 |
| 4. I will have or already have to do additional paperwork and meetings related to SWDs. | 4 | 3 | 2 | 1 |
| 5. SWDs are not or will not be accepted by students without disabilities. | 4 | 3 | 2 | 1 |
| 6. Parents of children without disabilities do not or may not like the idea of placing their children in the same classroom with SWDs | 4 | 3 | 2 | 1 |
| 7. My school does not or will not have enough resources/support for implementing inclusion successfully across school settings. | 4 | 3 | 2 | 1 |
| 8. There will be or is inadequate para-professional staff available to support SWDs in my classroom. | 4 | 3 | 2 | 1 |
| 9. I will not/do not receive adequate in-service training or professional development to know how to work with SWDs more effectively. | 4 | 3 | 2 | 1 |
| 10. My workload will/did increase because of having SWDs in my classroom. | 4 | 3 | 2 | 1 |
| 11. Other school staff members will be or are already stressed about teaching SWDs in their classroom. | 4 | 3 | 2 | 1 |

- | | | | | |
|--|---|---|---|---|
| 12. My school will/does not have difficulty in accommodating students with various types of disabilities because of inappropriate infrastructure (for e.g., architectural/environmental barriers). | 4 | 3 | 2 | 1 |
| 13. There is or will be inadequate supplementary aid/services or resources available to support inclusion for SWDs. | 4 | 3 | 2 | 1 |
| 14. My school does not or will not have adequate special education instructional materials and teaching aids (e.g., Braille, communication boards, FM auditory devices, screen readers, etc.). | 4 | 3 | 2 | 1 |
| 15. The overall academic standards of the classroom will suffer or is currently suffering. | 4 | 3 | 2 | 1 |
| 16. My performance/ effectiveness as a classroom teacher will decline or is declining. | 4 | 3 | 2 | 1 |
| 17. The academic achievement of students without disabilities will be affected or is being affected. | 4 | 3 | 2 | 1 |
| 18. It will be or is currently difficult to give equal instructional attention to all students in an inclusive classroom. | 4 | 3 | 2 | 1 |
| 19. I will not be or currently am not able to cope with students with a disability who do not have adequate self-care skills (e.g., students who are not toilet trained). | 4 | 3 | 2 | 1 |
| 20. There is or will be inadequate administrative support to implement inclusive education successfully. | 4 | 3 | 2 | 1 |
| 21. The inclusion of a student with a disability in my class will lead or is leading to a higher degree of anxiety and stress in me. | 4 | 3 | 2 | 1 |
| 22. I will not be or am not able to cope with students with emotional/behavioral disorders or autism who have disruptive behaviors | 4 | 3 | 2 | 1 |
| 23. There will be or is inadequate special education and/or school psychologist support for addressing behavioral concerns in my classroom. | 4 | 3 | 2 | 1 |

Other comments about **Inclusive Education**

APPENDIX E

Part 4:

Self-efficacy in Implementing Inclusive Practices Scale

This survey is designed to help us understand the nature of factors influencing the success of routine classroom activities in creating an inclusive classroom environment.

Please circle the number that best represents your opinion about each of the statements.

Please attempt to answer each question

1	2	3	4	5	6
Strongly Disagree	Disagree	Disagree Somewhat	Agree Somewhat	Agree	Strongly agree

		SD	D	DS	AS	A	SA
1	I can use a variety of academic assessment strategies (e.g., portfolio assessment, modified tests, performance-based assessments, curriculum-based assessments, etc.) to help monitor SWD's progress through the curriculum.	1	2	3	4	5	6
2	I am able to provide an alternate explanation or instructional example when students are confused.	1	2	3	4	5	6
3	I am confident in designing learning tasks (e.g., differentiating the instructions, universal design for learning, collaborative instructions, etc.) so that the individual needs of SWDs are accommodated.	1	2	3	4	5	6
4	I can accurately gauge student comprehension of what I have taught.	1	2	3	4	5	6
5	I can provide appropriate challenges for very capable students.	1	2	3	4	5	6
6	I am confident in my ability to get students to effectively work together in pairs or in small groups.	1	2	3	4	5	6
7	I am confident in my ability to prevent disruptive behavior in the classroom before it occurs.	1	2	3	4	5	6
8	I can control disruptive behavior in the classroom.	1	2	3	4	5	6
9	I can use functional behavioral assessment as a way to collect information about what may be triggering and maintaining a SWD's problem behavior.	1	2	3	4	5	6
10	I can assist or consult with other teachers on how to conduct a functional behavioral assessment.	1	2	3	4	5	6
11	I am confident in taking information from a functional behavioral assessment to develop a behavior support plan.	1	2	3	4	5	6
12	I am able to calm a student who is emotionally upset or anxious.	1	2	3	4	5	6
13	I am able to get SWDs to follow classroom rules.	1	2	3	4	5	6
14	I am confident when dealing with students who are physically/verbally aggressive.	1	2	3	4	5	6

15	I can make my expectations about positive behavior clear to students.	1	2	3	4	5	6
16	I can assist/consult with families in helping their children do well in school.	1	2	3	4	5	6
17	I can improve the learning of a student who is failing.	1	2	3	4	5	6
18	I am able to work jointly with other professionals and staff (e.g., aides, other teachers) to teach SWDs in the classroom.	1	2	3	4	5	6
19	I am confident in my ability to get parents involved in school activities of their children with disabilities.	1	2	3	4	5	6
20	I can make parents feel comfortable coming to school to attend meetings, such as parent-teacher conferences, and parent training programs.	1	2	3	4	5	6
21	I can collaborate effectively with other professionals (e.g., speech/language pathologists, school psychologists, counselors, and related service providers) in designing educational and/or behavioral plans for SWDs.	1	2	3	4	5	6
22	Concerning the placement of SWDs in inclusive settings, I am confident in my legal knowledge/understanding of IDEA's free appropriate public education in the least restrictive environment requirement and can accurately inform others who know little about it.	1	2	3	4	5	6
23	I am confident in knowing what accommodations or modifications need to be made to district- or state-wide assessments to help SWDs fully participate.	1	2	3	4	5	6