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Teachers' Perceptions of Teaching Reading and Mathematics in Inclusion Classrooms

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This is to certify that the doctoral study by

Cherise T. Wesley

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Walden University
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M.Ed. Prairie View A & M University, 2007

B.A. University of Texas Arlington, 2004

Doctoral Study Submitted in Partial Fulfillment

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Abstract

The 2004 Individuals with Disabilities Education Act mandated that students with disabilities be educated with their nondisabled peers in the least restrictive environment. In a large urban district elementary school in the U.S. southwest inclusion classrooms were created to address this mandate. The problem for this study was that 3rd to 5th grade general education teachers at this school struggled to teach reading and mathematics to students with special needs in inclusion classrooms. The purpose of this study was to investigate (a) elementary general education teachers' perceptions about teaching reading mathematics to students using special education services in inclusion classrooms and (b) the resources these teachers perceived which could provide effective support to teach students with special education services in inclusion classrooms and foster more teacher self-efficacy. Bandura's social cognitive theory guided this basic qualitative study. Interview data were collected from 12 classroom teachers of students with special needs and analyzed through a systemic review. Three themes emerged from the findings: teachers believed students benefit from inclusion classrooms when they plan differentiated and engaging lessons, teachers were challenged by the responsibilities in a an inclusion classroom, and inclusion teachers need more and better classroom resources and support. The study results could provide positive social change by leading to professional development opportunities that address teachers' ongoing needs for effective instructional strategies and collaborative practices for teaching reading and mathematics in inclusion classrooms, increasing teachers' self-efficacy, and eventually improving the academic success of students with special needs in their classrooms.

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Dedication

This doctoral study is dedicated to John and Melba Wesley, who always believed in me and supported all my endeavors. My mother has been my inspiration all my life. Her persistence has been a pivotable example for me and so many others. An immigrant from La Trinidad, Benguet Providence, Philippines, my mother came to the states to pursue a better life. She capitalized on the US need for registered nurses in the early 70's only to find systemic barriers once she arrived. Alone and away from family and other supports, her grit finally took her to her place of purpose and peace. She struggled, got knocked down, but continued to rise and meet the next challenge. Finally, she arrived at the place where she would invest in others by sharing a message of hope, determination, and indefatigable resilience. Her journey set the stage for my doctoral path. I marvel and stand in awe of my mother.

My dad has always been the silent, solid rock for our family. His sage advice has been an uplifting and sustaining force for me. My dad, an unassuming man, displayed executive functioning skills before the term appeared in modern literature. My dad provided me unlimited opportunities to develop leadership skills by teaching me to think and make data-driven decisions, even in high-risk situations. Without telling me, his Socratic methods taught me more than I will ever know.

All that I am and ever hope to be, I owe it to the love and unwavering dedication of John and Melba Wesley!

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Dr. Kimberly Alkins was a godsend. At one of my most desolate times, Dr. Alkins stepped in and carefully guided me to completion. I am thankful for her energy, insight, and persistence. I will never forget her unwavering commitment to my completion. Above all, her genuine heroic efforts left an indelible mark on my life. Words are inadequate to express my thanks. However, thank you Dr. Alkins.

This accomplishment would not be possible without the scholarly counsel of Dr. Sandra K. Adams. Dr. Adams, a well-respected academician in the southwest, unselfishly gave of her time and expertise to help me frame this work and provide coherence to dissonant fragments. She was my sounding board, a shoulder to cry on, but most importantly she's my friend.

The next person is Andrae Rhyne. He's been my coach, strategist and propellant. During periods of disgust and frustration, Andrae would take time to redirect me and create the framework for my next sprint. An educator and musician, Andrae helped me to morph chaos into harmony. When I wanted to quit, he would listen to my diatribe and move me past frustration to actionable steps.

Finally, there were so many other friends, colleagues and well wishers who played important roles. From the beginning, through different revisions until completion, unique individuals stepped in a supported me during key moments. The list is lengthy but each one deserves recognition.

If it takes a village to raise a child, then this child is the product of a village who supported and believed in me. Now it's my turn to pay it forward.

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Section 1: Introduction to the Study

Introduction

Elementary school student populations include students with a broad range of learning abilities and instructional needs. The U.S. Department of Education (2020b) reported a 13% increase in the percentage of students with special needs enrolled in public schools between the 2011-2012 (6.4 million students) and 2018-2019 (7.1 million students) school years. Simultaneously with this rapid growth of special needs population, the number of inclusion programs continued to increase. As these trends continue, general education teachers face difficulties teaching children across diverse instructional levels. Differentiated instruction became a prominent instructional approach used in general education classrooms since 1999. Workshops involving differentiated instruction have been offered, yet student success in inclusion classrooms is still lacking, and teacher self-efficacy (TSE) remains low. Despite preservice and in-service trainings for teachers regarding the use of differentiated instruction for reading, mathematics, and special education, Grades 3 through 5 elementary school teachers at the research site have not developed the skill sets or gained confidence necessary to work within this broad spectrum of student learning abilities.

This study offered teachers an opportunity to express personal perceptions, beliefs, and ideas regarding teaching practices that address the varying learning levels of students with special needs in inclusion classrooms. Interviews informed the study by providing a basis of understanding regarding perceptions of teachers' self-efficacy in terms of teaching reading and mathematics within inclusion classrooms. These interviews

provided general education teachers an opportunity to express concerns about the effectiveness of strategies used in imparting instruction in reading and mathematics to students in inclusion classrooms. In Section 1, I discuss components of the study including the problem statement, purpose of the study, research questions, and conceptual framework. Additionally, I present a preliminary view of the research design and methodology, along with the scope and significance of the study.

Problem Statement

The problem for this study was that third through fifth grade general education teachers at this school struggled to teach reading and mathematics to students with special needs in inclusion classrooms. Third grade was selected as the starting point because that is the grade level in which instructional programs for elementary students move from learning to read to reading to learn, and there is a transition in special education from self-contained to inclusion programs. Fifth grade was selected as the end point because in this school district, fifth grade serves as the gateway to middle school.

The least restrictive clause of the Individuals with Disabilities Education Act (IDEA) outlines a requirement mandating that students with disabilities receive their education to the maximum extent appropriate with their abled peers. There is a requirement that teachers attend preservice and in-service training designed to build their self-efficacy by participating in skill-building for instructional design, delivery, and assessment in inclusive classroom environments. According to the 2017 school district budget, the staff members of this elementary school have been challenged due to the limited amount of funding the school receives for special education and increased

numbers of low performing students in inclusion programs. In 2015-2016, 8.4% of the student population at the research school qualified to receive special education services. The next year the special education population increased by12.9%. The federal funds for 2016-2017 were reduced by 34% from the previous year, thus heavily affecting special education services at the school. This information is supported by data published on the school district website.

During an instructional planning meeting I attended as the inclusion teacher of the research school in January 2017, third through fifth grade general education teachers expressed difficulties and challenges about teaching both reading and mathematics in inclusion classrooms. During this meeting, several teachers expressed feelings of frustration in terms of lack of preparation for implementing inclusion curricula and inadequacy of sustained instructional planning and effective delivery methods for students requiring special services. According to the principal of the school participating in this study, teachers have expressed a need for assistance with strategies to meet the widening range of student needs.

Student performance information is based on state reported scores from the school district, supported by data published on the school district website. According to the research school district web site, the school population had an at-risk student population of approximately 30%, with 77% of students from a low socioeconomic background. Only 27% of the teaching population believed they received adequate feedback and support from administrators according to the research school district web site.

Teacher frustration appeared to emanate from their attempts to meet the needs of

students with divergent learning levels and individualized education program (IEP) requirements. At the same January 2017 meeting, a third grade mathematics teacher stated it was difficult for students with special needs to participate and follow along in whole group settings, as well as working in small group settings. According to the teachers of the school participating in this study, students needed more specialized support. A fourth grade reading teacher indicated that proper support was not provided to students with special education services. Students' IEPs do not appear to be followed in inclusion classrooms, and appropriate modifications and interventions are sometimes not in place.

Teachers expressed concerns about varying learning capacities of students in inclusion classrooms in meetings during January, March, May, and September of 2017. During a January 2017 meeting, a fourth-grade mathematics teacher said special education students were not able to identify or define basic math vocabulary words, and that made it difficult for the students to understand math problems and solve them correctly. At this meeting, fourth grade teachers claimed it was difficult to teach students how to solve grade level math problems when they did not know basic math concepts. Subsequent meetings on May 9 and September 12 of 2017 produced information from third and fifth grade teachers about behavioral issues arising out of students' inability to comprehend assignments, the overwhelming workload of teachers who are engaged in teaching students with special needs, and resulting inadequacies involving effective instructional practices and methods of assessing student success.

Accommodating students with special education services may present

instructional challenges for teachers who find themselves charged with helping students with special needs navigate academic life and social skill development from a perspective that is different from students who are considered nondisabled. Just as teachers have been historically responsible for the academic needs of general education students, they are now equally accountable for the academic achievement of students with disabilities, which means these teachers need to be equipped by their districts with a broad range of skills and techniques to be able to address students as individual learners regardless of their learning levels. This expectation involves following IDEA which require that teachers working in inclusion classrooms, take on broader responsibilities, possess comprehensive instructional knowledge, demonstrate adaptive skills, and manifest dispositions that lead to achievement of students with special needs.

Prior to this study, the Grade 3 through 5 general education teachers at the research school expressed difficulty and skepticism regarding their abilities to meet the instructional needs of both general education students and students that receive special education services primarily because they specifically lack specialized training in inclusion strategies which teach them how to adjust complexity, pace, group and independent learning, and collateral material support when delivering mathematics and reading curriculum. The teachers expressed that they believed they did not have the knowledge and skills to teach inclusion students and therefore were less likely to implement effective inclusion practices or exhibit self-efficacy that fosters strong student-teacher relationships necessary to achieve successful classroom outcomes. Consequently, the academic progress for their students with special education services did not meet

campus and state goals. Evolving regulations involving the topic of meeting educational needs of students with disabilities in inclusion classroom environments coupled with complex challenges facing today's general education teachers were the context of the present study.

Nature of the Study

In this study, I used a basic qualitative design to explore general education teachers' perceptions about teaching reading and math in inclusion classrooms and investigate their perceptions about resources needed to work more effectively. Using a qualitative research design, I conducted interviews and solicited in-depth responses from participants about their differentiated instruction experiences, training, and available resources. The research study took place in one prekindergarten through fifth grade elementary school in a large urban school district in the southwestern United States. Situated within a predominantly lower income community, the school had primarily a minority student population, and standardized assessments were low in reading and mathematics. Most members (95%) of the student population are economically disadvantaged. Third grade is a critical juncture where students traditionally move from learning to read to reading to learn concepts that require more independent interpretation of information gained from books, articles, short stories, poetry, and mathematical word problems. Fifth grade serves as a gateway to middle school where social skills, independence, autonomy, and higher levels of responsibility for classwork are required.

Purpose of the Study

The purpose of this basic qualitative study was to: (a) explore general education teachers' perceptions about reading and mathematics instruction of students with special education services in inclusion classrooms, and (b) investigate their perceptions regarding resources necessary to teach math and reading effectively. The Grade 3 through 5 general education teachers' perceptions of teaching students with special needs in an inclusion setting was unknown. Their perceptions on training and resources that could improve instruction had never been sought out. An exploration of educator perceptions could help in terms of formulation of training that moves teachers toward developing student-centered curriculum instead of having a content-centered focus.

Research Questions

Two research questions guided this study:

RQ1: What are elementary general education teachers' perceptions about teaching reading and mathematics to students using special education services in inclusion classrooms?

RQ2: What resources do general education teachers perceive can provide effective support to teach students with special education services in inclusion classrooms and foster higher degrees of TSE?

Conceptual Framework

The conceptual framework for this study Bandura's social cognitive theory (SCT), which is grounded in the social learning theory. In social learning theory, "new patterns of behavior can be acquired through direct experience or observing the behavior

of others" (Bandura, 1971, p. 3). There are five constructs in the SCT: reciprocal determinism, behavioral capability, observational learning, reinforcements, and expectations; a sixth construct, self-efficacy, was added when social learning theory developed into SCT, which includes the effect of cognition on a person's behavior. The central concept of SCT is *reciprocal determinism*, which refers to reciprocal interactions between a person, environment, and behavior. *Behavioral capability* refers to a person's knowledge and skill sets. The consequences of a person's behavior within an environment can change the environment. *Observational learning* is characterized by learning through modeling. People can learn by observing and then reproducing actions. Reinforcements can be positive (e.g., giving something to achieve a desired behavior) or negative (e.g., taking away something to increase a desired behavior) and generate from the person or the environment. *Expectations* refers to thinking about consequences before engaging in behavior. Previous experiences affect expectations but are subjective to the individual. And finally, *self-efficacy* refers to an individual's confidence in their ability to exert control over their thinking, behavior, and environment.

According to Bandura (1986), persons' level of knowledge and beliefs determines how they feel, think, and motivate themselves, and the way people perceive themselves and their abilities influences the goals they set and how they attempt to complete them. Therefore, if individuals believe that they are successful, they are more likely to be successful, which is a base for the idea of self-efficacy. Furthermore, people are less likely to retreat when facing challenging situations. Bandura's concept of self-perception pertained to this study because teachers' perceptions about the professional development

they have received may be determined by their experiences in past professional development trainings. Also, the perceptions of the teachers on their own abilities to teach may affect student performance in reading and math.

Zee and Koomen (2016) found that teachers with high efficacy, confidence in their abilities, produced greater student achievement than teachers with lower efficacy beliefs and less confidence in their abilities. Therefore, providing professional development opportunities to teachers is required to ensure maximum productivity in the inclusion classroom. Based on Bandura's SCT, I explored types of professional development that general education teachers perceived they needed to successfully teach in inclusive classrooms.

Lived experiences influence teachers' perceptions, which in turn affect their ideas and beliefs. Bandura (1986) noted that positive perceptions lead to positive cognitive responses which lead to positive performances from individuals. Bandura's SCT served as the conceptual framework to explain teachers' perceptions of their professional development and how it influences their performance.

Operational Definitions

Differentiated instruction: A pedagogical approach that involves persistent monitoring how each student learns most effectively and creating individualized learning plans. Classroom teachers divide time, resources, and efforts based on individual backgrounds, readiness, skill levels, and learning styles (Tomlinson, 2014).

Evidence-based practices: A high quality researched instructional strategy, intervention, or teaching program that has resulted in consistent positive results when experimentally tested (Mitchell & Sutherland, 2020).

Inclusion classroom: A general education classroom into which students with disabilities are integrated so they can receive equitable educational opportunities (Agran et al., 2020).

Individualized education program (IEP): A specialized program developed by a team that includes parents or guardians, an administrator, a special educator, and at least one general educator. The IEP team may also include other relevant professionals (e.g., school psychologists, speech therapists, occupational therapists, physical therapists, and mental health professionals). Decisions are made involving accommodations, modifications, and services by the team. These decisions become legally binding but can be subject to revision when agreed upon in subsequent IEP meetings.

Individuals with Disabilities Education Act (IDEA) of 2004: A law affecting students with disabilities which includes mandates regarding procedures for the discipline of students with behavioral challenges.

Least restrictive environment (LRE): Requires school districts to refrain from isolating students using special education services from their peers and integrate them into mainstream classrooms whenever possible (U.S. Department of Education, 2020a).

Self-efficacy: An individual's belief in his or her ability to execute specific actions needed to complete predetermined tasks (Bandura, 1995).

Assumptions, Limitations, Scope, and Delimitations

Participants received preservice and in-service training on reading, mathematics, and special education differentiated curriculum delivery in a local elementary school but were still struggling with confidence about implementing these strategies with fidelity. I assumed teachers understood and applied learning from their workshops. I also assumed that teachers honestly reported their perceptions about their abilities to teach reading and mathematics in inclusion classrooms.

There were several delimitations to the study. Potential participants were third through fifth grade teachers at one elementary school who teach reading and mathematics. They taught predominantly African American student populations and were also African American. All potential participants taught in inclusion classrooms during the 2018 to 2019 academic year. Results could contribute to professional knowledge for educators working in inclusion classrooms. The study limitation included a small sample size making it difficult to generalize the findings to a larger population.

Significance of the Study

This study involved perceptions and experiences that were shared by third to fifth grade elementary general education teachers who were employed in a local urban elementary school in the southwest United States regarding the delivery of curriculum to students with special needs within inclusion classrooms, as well as the kinds of resources they believed could help them improve their teaching performance. To provide general education teachers who teach in inclusion classrooms with the support they need to deliver student-centered curriculum, it is essential to conduct an analysis of teachers'

perceptions regarding teaching students with special needs in an inclusion setting. Public school districts nationwide are experiencing rapid growth in terms of the number of students with special learning needs (Waitoller, Maggin, & Trzaska, 2017). As the number of inclusion programs increased, elementary school general education teachers face the challenge of teaching students who have diverse learning needs in their classrooms. The problem for this study was that third through fifth grade general education teachers at the research school struggled to teach reading and mathematics to students with special needs in inclusion classrooms. I explored Grade 3 through 5 elementary general education teachers' perceptions about teaching reading and math in inclusion classrooms and investigated their perceptions about resources needed to work more effectively.

Positive social change could result from this study on several levels. Grade 3 through 5 elementary general education teachers could learn to make changes in their instruction through targeted staff development that was based on the results of this study. They may improve their self-efficacy in providing reading and math instruction for included students. Also, students would benefit from the teachers' new knowledge and skills and will possibly demonstrate academic improvement in reading and math.

This study focused on the transitional third and fifth grade years of inclusion classrooms where complexities in reading and mathematics need to be taught so that students transition successfully from learning to read to reading to learn and learn about autonomy needed in middle school. An administrator or school district has a responsibility to provide key resources that will align training, instructional delivery, and

teaching toward successful student outcomes. TSE refers to teachers' personal beliefs in terms of their abilities to plan and execute instructional objectives successfully (Habila, Simon, Bala, & Attah, 2016). To plan and execute instructional objectives, teachers must have administrator support, training, and classroom resources to develop flexibility in terms of modifying and delivering instruction. This requires that schools and districts help support teachers effectively modify learning activities rather than forcing students to adapt to learning tasks where they may never master the material.

Summary

I used a basic qualitative design to explore Grade 3 through 5 elementary general education teachers' perceptions about teaching reading and math to students using special education services in inclusion classrooms and investigate their perceptions about resources needed to work more effectively. The problem for this study was that third through fifth grade general education teachers at this school struggled to teach reading and mathematics to students with special needs in inclusion classrooms. More than 30 years since the enactment of the reauthorization of IDEA in 1975, many teachers still find it difficult to implement effective inclusion practices in general education (see Alexander, 2014; Broyard-Baptiste, 2012). In Section 1, I discussed the problem, provided the RQs and nature of the study, defined key terms, stated my assumptions and the study limitations, and concluded with discussion of the study significance.

In Section 2, I review literature regarding teaching reading and mathematics in inclusion classrooms and teacher perceptions about resources needed to provide effective instruction. In Section 3, I present the research design and methodology used in this

study. I explain the basic qualitative design and processes for selecting participants, collecting data, and analyzing collected data. In Section 4, I report findings from my data collection and analysis, including patterns and themes that emerged. In Section 5, I align and interpret findings involving current research, report possible implications for social change, and recommend actions and opportunities for further study.

Section 2: Literature Review

Introduction

As contemporary classrooms become increasingly diverse, the paradigm of differentiated instruction has prevailed in framing curriculum. A one-size-fits-all teach-to-the-middle approach has faded in popularity as all teachers now must respond to students with disabilities, varied language backgrounds, emotional difficulties, and learning styles. Tomlinson (2005) said student academic performance improves when educators accommodate student variations in terms of backgrounds, school readiness, learning profiles, and personal interests. The problem for this study was that third through fifth grade general education teachers at the research school struggled to teach reading and mathematics to students with special needs in inclusion classrooms.

This literature review includes a synthesis and summary of extant literature regarding the research questions to demonstrate how literature and research informed topics associated with the problem statement and research questions. In this section, I use Bandura's SCT (1986, 1995) and its constructs of self-efficacy and reciprocal determinism, to report the current research on this study topic. Bandura' model (1986, 1995) of reciprocal determinism is the central concept of SCT and refers to reciprocal interactions between a person, environment, and behavior. Bandura (1986, 1995) indicated that confidence and self- efficacy are key determinants in how an individual approaches goals, tasks, and challenges. As I conducted my review of the literature, I examined each component of reciprocal determinism in the context of teachers'

difficulties in terms of teaching reading and mathematics in inclusion classrooms, and I focused mainly on research related to elementary school general education teachers.

The literature review is organized by the following topics: the evolution of inclusion, TSE in inclusion classrooms, reciprocal determinism factors and TSE in inclusion classrooms, differentiated instruction and TSE in inclusion classrooms, literature related to the methods, and literature related to differing methodologies,. I used the following databases for searching literature between 2014 and 2020: Education Resources Information Center (ERIC), Educational Research Complete, and Google Scholar. Other sources included related to the conceptual framework. Key words used in database searches were *staff development, teacher efficacy, inclusive education, inclusion, teacher training, inclusive strategies, differentiated instruction, student achievement,* and *special education.*

Evolution of Inclusion

In 2004, Congress renamed the Education for All Handicapped Children Act of 1975 the IDEA. Major changes in the 2004 law included the requirement for performance goals and indicators in alignment with state testing and the reporting of those scores on students with special needs to the State (U.S. Department of Education, 2019). The law also required that all teachers must be highly qualified and that teaching programs be scientifically based. The states could create a response to intervention framework, based on evidenced-based research, for general educators to adjust their ways of teaching for identified students with special education services (Wright & Wright, 2016). The components of the response to intervention include: (a) a schoolwide, multilevel

instructional and behavioral system for preventing school failure, universal screening of all students for learning and behavioral outcomes; (b) assessing student learning and behavior; and, (c) using a data-driven system to identify students with disabilities and make decisions on their placements. The mandates of IDEA and the NCLB legislation placed the responsibility for special needs students' academic achievement onto all teachers involved. One purpose of this legislation was to reduce the achievement gap for at-risk students, including students with disabilities, students of color, students in poverty, and students who are English language learners (Kissau & Algozzine, 2015).

Although inclusion has been implemented in the past, the process is still evolving. Each reauthorization of IDEA has not only been concerned with expanding the definition of the LRE but has reformed the roles and accountabilities of the general educators (Wright & Wright, 2016). General educators' responsibilities toward students with special needs have changed over several decades to increase involvement and responsibility in their instruction (Wright & Wright, 2016). The general education teacher is now legally required to include students with special education services in planning, teaching, and assessing curriculum; consequently, upholding individual civil rights with inclusion has been determined as one of those rights (Every Student Succeeds Act, 2015; Kena et al., 2016). When a general education teacher and a special education teacher work together to educate students with and without disabilities in a general education classroom in-class support occurs.

Many researchers (Stone, 2019; Wilson, Kelly, & Haegele, 2019) have made it clear that students who have special needs benefit most when taught in the LRE.

Individuals with disabilities desire connection and acceptance in society (Wilson et al., 2019). LRE serves as the cornerstone for removing discrimination against individuals with disabilities in educational settings. In a frequently cited study by Bui, Quark, Almazon, and Valenti (2010), benefits from LRE included improved academic achievement, achievement of IEP goals, improved appropriate behavior, increased peer acceptance and self-esteem, greater motivation to learn, and avoidance of the special-education stigma attached to pullout programs.

Culturally and linguistically diverse students with disabilities add another dimension for the general education teacher to consider in planning, executing, and assessing instruction (Wilson et al., 2019). Teachers are responsible for designing sequential, relevant, high-quality instructional activities during the planning phase. In this phase, teachers are asked to demonstrate content knowledge, curriculum knowledge, and pedagogical content knowledge (Dessemontet & Bless, 2013). Bryant, Maarouf, Burcham, and Greer (2016) defined curricular knowledge as the knowledge associated with the programs created for the instruction of specific subject areas and skills. Students with disabilities make less progress in segregated environments with more simplified curricula than their counterparts in a general education, inclusive environment (U.S. Department of Education, 2019). Additionally, these students are disproportionately represented in certain programs and disability categories (Morgan, Farkas, Hillemeier, & Maczuga, 2017). For example, African American males are overrepresented in classes for students with emotional and behavioral disorders and Latino students are overrepresented in programs serving students with learning disabilities (Morgan et al., 2017). An

inclusive environment for these students employs culturally relevant instructional principles which include the following: Assessment of student progress in a curriculum, not standardized tests; use of direct observational data to examine the student and his or her instructional environment, cultural heritages and accommodations of learning styles visibly reflected in the classroom; and development of school-family-community collaborations (Algozinne, 2015).

TSE in the Inclusion Classroom

Teacher self-efficacy (TSE) is a construct of Bandura's SCT and refers to an individual's confidence in his or her ability to control their thinking, behavior, and environment. TSE is an important factor in general education teachers' success in teaching students with disabilities in inclusion classrooms. In this study, TSE was explored through the perceptions of participants regarding their abilities to develop and deliver differentiated curriculum to students with special needs in an inclusion environment. For the purposes of this study, TSE refers to teachers' assumptions about their ability to frame thoughts and behaviors that result in improved student or classroom performance. TSE refers to teachers' personal beliefs in their abilities to plan and execute instructional objectives successfully such that all learners at all levels gain some understanding or mastery of the material delivered (Habila et al., 2016). Even when teachers know what they need to do to successfully teach a lesson, they cannot do it effectively if they perceive they do not have adequate skills, training, or resources. People's beliefs affect the ways in which they interact with problems and the anxiety they experience. TSE is measured along a continuum from low to high efficacy. Educators

with low levels of self-efficacy are less likely to adapt instruction, and they may view students' personal challenges as internal, stable, or fixed student characteristics (Woodcock & Vialle, 2016). Low self-efficacy may translate to poor classroom outcomes, negatively influence student-teacher relationships, and lower test scores (Bandura, 1977; Tomlinson, 2005). Teachers with low levels of self-efficacy tend to devote more attention to higher ability student groups and less time with lower ability students and are more likely to perceive lack of student success as something that is beyond teacher control (Iaquinta, 2014; Ross & Bruce, 2007).

General education teachers tend to hold negative perceptions about the inclusion of students with disabilities into the classroom. General education teachers often state that they have no personal responsibility for the educational success of students with disabilities and that the ultimate success of these students should be in the hands of the special education teacher alone (Brevik, Gunnulfsen, & Renzulli, 2018). Gurgur and Uzuner (2010) indicated that general education teachers believe that they have no personal responsibility for the educational success of students with disabilities and that the ultimate success of these students should be in the hands of the special education teacher alone. However, as the requirements of the IEP are now being met in the general education setting, the traditional roles of the general and special educators have shifted necessitating more co-planning between the educators (Friend & Barron, 2016).

The level of perceived severity of disability of the students relates to teacher efficacy involving students (Vaz et al., 2015). Teachers with low levels of self-efficacy tend to devote more attention to higher ability student groups and less time with lower

ability students; in addition, teachers are also more likely to perceive a lack of student success as something beyond their control. Fisher (2013) found that the type of disability a student had affected the teachers' attitudes toward inclusion. Fisher's study showed that elementary school teachers believed they were more prepared to meet the educational needs of those with learning disabilities over those with autism, speech/language disorder, or emotional disability. Students with learning disabilities often display common social and behavioral characteristics such as inattentiveness, impulsivity, and distractibility, all of which present challenges of engagement for teachers (Woodcock, Hitches, & Jones, 2019). High levels of student engagement connect to classroom management. When students are engaged, educators can manage the class much better, thereby, reinforcing TSE.

Teachers with a well-developed sense of efficacy toward inclusion tend to encourage students to develop an intrinsic interest in learning and can highlight positive student academic and nonacademic achievements (Woodcock & Emms, 2015; Woodcock et al., 2019). Teachers with high self-efficacy foster a positive atmosphere for learning. They also tend to promote further self-efficacy for themselves and their students (Woodcock et al., 2019). Some powerful forces of teacher efficacy involved in the schooling process include: a sense of personal accomplishment and a view of teacher work as important; an enthusiasm to try new, creative practices; feelings of being personally responsible for student learning; greater job satisfaction, correlating with teacher retention; the embracing of democratic decision making between teacher and students; and a persistence in helping students who are struggling or have special needs

(Sharma & Sokal, 2015; Zee & Koomen, 2016). Reinforced self-efficacy further leads teachers to greater academic optimism as outlined by Beard, Hoy, and Woolfolk Hoy (2010) who defined such optimism as a construct that is comprised in part of self-efficacy, was also tied to student success. Beard et al. found that teachers who believed that students could be successful, were more likely to seek a variety of methods to support students.

Reciprocal Determinism Factors and TSE in Inclusion Classrooms

The three components of Bandura's construct of reciprocal determinism—personal (cognitive), behavioral, and environmental factors—are interrelated (Bandura, 1971, 1986). In this section, I discuss this relationship, specifically addressing the influence of these factors on general education teachers' TSE and behaviors in inclusion classrooms. Because the topic of the second research question involved identifying resources that general education teachers perceived as providing effective support when teaching students with special needs, this section focuses on preservice teacher education, professional development, evidence-based practices, and school resources and administrative support.

Teacher Education and Professional Development

Teachers' perceptions of their TSE may be determined in part by their teacher preparation experiences. These experiences may involve their preservice teacher education (i.e., their training as new educators); TSE perceptions may also reflect in-service professional development training that teachers receive after they have become more experienced. Attesting to the positive effect of training on TSE, an investigation of

88 Colorado middle school teachers' perceptions of self-efficacy growth (Sharma & Sokal, 2015) showed that teachers' sense of efficacy growth was highest among those who participated in and accurately executed the practices suggested in their training. The more time that teachers spend engaged in any professional development program, the more likely their teaching practice is to improve (Jacques, Behrstock-Sherratt, Parker, & Bassett, 2017).

The successful implementation of inclusion policies depends on general education teachers possessing positive attitudes and a high sense of self-efficacy, which may be supported by effective training and professional development. Given the trend toward more inclusive schooling for students with disabilities, teachers need effective professional training and development to handle diverse learning issues at all levels of schooling (Brevik et al., 2018). Toward this end, the Every Student Succeeds Act of 2015 provides resources to assist states in ongoing teacher professional development. Although the effort to include students with disabilities in general education classrooms continues to increase across the country, the problem persists of how best to implement an inclusion model (Council for Exceptional Children, 2019), as well as how to ensure that teachers are adequately prepared for this task.

As Massenberg, Schulte, and Kauffeld (2017) noted, general education teachers must engage in professional development opportunities to support effective instructional practices in inclusion classrooms. Unfortunately, implementation of the inclusion model remains an ongoing issue (Alexander, 2014), and teacher training opportunities to support inclusion may be lacking. At one university, for instance, a lack of availability of special

education courses created a deficiency for student teachers (Rakap, Cig, & Parlak-Rakap, 2017). Traditionally, general education and special education training have been separated, and the two tend to have different foci and priorities (Wright & Wright, 2016); thus, students who receive only general education training may be unprepared for inclusion classrooms.

In addition to receiving inadequate preparation for inclusion classrooms in their initial training, teachers may lack meaningful professional development to support inclusion once employed. For instance, Lee (2013) found that among 79 elementary teachers in eastern Tennessee, inclusion practices were not evident in professional development offered by the district during the academic year of the study. Without high-quality professional development training programs to support them in teaching in inclusion classrooms, teachers may lack the mastery experiences they need to develop positive or high self-efficacy in working with students with disabilities (see Woodcock & Hardy, 2017).

As a result of inadequate teacher training, general education teachers may approach the challenge of including students with disabilities according to their self-perceived abilities of competence and performance. In relation to teaching students with disabilities in an inclusion setting, Everhart (2009) found that a common theme emerged in which the teachers used words such as worried, scared, nervous, and concerned and teachers used phrases that indicated a lack of understanding of circumstances and learning needs involving students with disabilities. Ziaian-Ghafari and Berg (2019)

reported that these types of feelings or teacher distress over inability to help their students with disabilities can lead to compassion fatigue or teacher burnout.

Well-designed, effective teacher preparation programs can help change the negative attitudes of general education teachers regarding inclusion and working with students using special education services (Brevik et al., 2018). Taylor, Roth, Wilson, Stuhlsatz, and Tipton (2017) proposed that teacher self-reflection combined with deep content planning provides a robust approach to professional learning. Teachers can participate in content-embedded professional learning may work as a team while engaged in video self-reflection and reviewing student work samples. A seminal work by Darling-Hammond, Wei, Andree, Richardson, and Orphanos (2009) recommended that for training to be most beneficial, it needs to be ongoing, rather than limited, hour-long workshops. Ongoing supports allow teachers to modify and adapt instructional strategies to meet the needs of students in the varied learning environments as well as assist teachers with acquiring new skills. Five years later, Song and Choi (2017) further contributed to the literature by exploring the various components of professional learning communities. These components include the social, organizational, and operational components. Diverse school administrator leadership behaviors, authority delegation, school social capital, educational programs combined with external features of the school's organization can also shape professional learning (Song & Choi, 2017).

The quality and type of professional development, not just the quantity of professional development hours must be considered to develop efficacy. In other words, teachers do not just need more professional development to support students with

disabilities in inclusion classrooms, they have specific needs. Some general education teachers preferred professional development related specifically to making their curriculum and standards more accessible to at-risk students (Kosko & Wilkins, 2009). In Jilly's research (2012) teachers agreed on the following six common areas for training: knowledge of different disabilities, use of instructional strategies, different assessment techniques, classroom management strategies, collaboration, and knowledge of the legal aspects of special education. While working with students with Down Syndrome, general education teachers agreed that they needed help in the following areas: technology, sensory issues, realistic expectations, and underprepared teaching assistants (Romo, 2014). Quality professional development does not necessarily imply formal or structured professional development (e.g., workshops); some teachers found that informal professional development (e.g., learning from colleagues and on-the-job training) resulted in more positive teacher beliefs than formal professional development (Woodcock & Hardy, 2017). In short, though training is needed, the substance of the training must be relevant and effective for educators to feel confident in classroom delivery.

Recognizing the need for better resources to foster self-efficacy, the National Staff Development Council identified five different models of effective staff development for teachers: training, individually guided staff development, observation and assessment, involvement in the development and improvement process, and inquiry (Doubet & Hockett, 2017). The following design elements were needed to provide additional clarity for effective professional developments: active learning, collaboration, use of models and modeling, coaching and expert support, feedback and reflection, and sustained duration.

Developers have often successfully integrated many of these strategies in efforts to meet the diverse needs of teachers (Doubet & Hockett, 2017). Additionally, the current types of professional development programs use a variety of formats including study groups, mentoring, coaching, networking, and regular school day meetings that may occur during the classroom instruction or planning times (Doubet & Hockett, 2017). The advantages of such changes to the structure of professional development are that they enable teachers to make the necessary connections with how and what they teach in their classrooms and ensure that how and what they teach in their classrooms becomes easier to sustain over time. In addition, the reformed professional development programs may have more influence on changing teaching practices, be more responsive to teachers' needs and goals, and be more accessible to how teachers learn (Peng et al., 2014).

The effectiveness of any professional development event and its effect on self-efficacy depends on characteristics such as willingness of general-education teachers to participate, use of research-based best practices, and knowledge of response to intervention. Professional development is effective when it is (a) content specific and focused on well-defined professional practices rather than general issues; (b) aligned with intervention or instructional goals, learning standards, and the curriculum materials used in practice; and (c) intensive, sustained over time, and designed to give feedback and guidance through methods such as coaching, consultation, or facilitated group collaboration (Darling-Hammond et al., 2009).

The No Child Left Behind Act (NCLB) of 2001 described high-quality professional development as times to develop and grow teachers' knowledge of the core

curriculum the teachers teach that are continuous, intensive, and aligned with state academic content standards, student academic achievement standards, and assessments (U.S. Department of Education, 2020c). Desimone and Garet (2015) found that professional development targeting each content area in inclusive classes positively affected teachers' efficacy in the curriculum. Piasta et al. (2017) suggested that integrating instructional practices with a central content focus is a dynamic approach to designing professional development. However, the authors did not specify the level to which content should be addressed to produce the expected outcome. Professional development provides teachers with opportunities to grow personally and improve their professional practice when planning and delivering instruction (Kazemi, Ghousseini, Cunard, & Turrou, 2016).

Collaboration creates an ideal setting for special and general education teachers to develop relationships centered on teaching obligations and interests, to improve their teaching, and to positively affect students' development (Goddard & Kim, 2018). Grounded in the idea that teacher development does not take place in isolation, developers of professional development programs have sought to involve teachers in meaningful collaborative activities. In other words, those teachers who share the same concerns and challenges, especially in inclusion classrooms. gain more knowledge working in conjunction with professional development experiences.

Evidence-Based Practices

The area of research-based inclusion practices (also referred to as evidence-based practices) is at the core of a successful inclusion program (Sanders, Jurich, Mittapalli, &

Taylor, 2013; Spooner, McKissick, & Knight, 2017). Sanders et al. (2013) found that high performing schools for students with disabilities had a curriculum that was accessible to all students; prevalent co-teaching and co-planning between general and special education staff; social learning programs for the students; shared instructional visions with high expectations for students; engaged leaders; extensive professional development offered to all staff; community and leadership partnerships that expanded resources and services available to students; and behavior management systems focused on positive behavior. The development of positive student behavioral traits led to better outcomes overall. Factors affected by student behavioral traits include engagement, classroom management, and instructional strategies which all directly affect teacher efficacy involving the teachers themselves (Webb-Williams, 2018). Instructional strategies are also connected to engagement and classroom management. Teachers with high self-efficacy tend to feel more confident in their repertoire of instructional strategies. Effective teachers vary their instructional strategies to meet the needs of students' capabilities and learning outcomes and critically analyze their instruction in the classroom, making connections between the teachers' current practices and effective evidence-based instructional practices.

School Resources and Administrative Support

In large part, the variety of student support methods that pre-exist on school campuses are provided through administrative support. Administrative support is usually beyond the teachers' control because teachers cannot make changes to the schedules, schedule common planning time, implement professional development on issues of

concern, or lengthen the school day or year because these are state, school district, or local school administrative decisions. Having administrative support also affects general educators' positive feelings toward inclusive practice (Hamblin, 2013; Santoli, Sachs, Romey, & McClurg, 2008; Urton, Wilbert, & Hennemann, 2014). The program policies and how administrators implement policies affect the outcome of a successful inclusion program (Santoli et al., 2008; Stipek, 2012). Schulze and Boscardin (2018) found that some administrators preferred to provide training for teachers who work with inclusion students and were not concerned about the pre-service training of their teachers.

School resources, administrative support, and the school inclusion structure affect TSE involving the school environment. School resources, administrative support, and the school inclusion structure affect TSE involving the school environment (Moreno-Rodriguez, Lopez, Carnicero, Garrote, & Sanchez, 2017). Patton, Parker, and Tannehill (2015) reported that group discussions for common planning and networking are components of long-term effective professional development. Gordon (2013) found that teachers value planning and preparation time to implement students' accommodations from their IEPs. School environments that do not adequately provide this support of time negatively affect TSE and teachers' capability to bring about positive student outcomes.

Differentiated Instruction and TSE in Inclusion Classrooms

An educator's perceptions about differentiated instruction strongly influence their use of differentiated instruction strategies. Teachers generally agree that differentiated instruction in the inclusion classroom is integral, warranted, and should be employed consistently. Many, however, believe they lack the proper knowledge and training

necessary to effectively implement the practice (De Neve, Devos, & Tuytens, 2015). Low self-efficacy can become a self-fulfilling prophecy. If an educator believes a lesson plan will not work, the instructional delivery will fail (Shoulders & Krei, 2016; Wan, 2016).

Tomlinson (2005) posited that when educators employ differentiated instruction effectively, the delivery of the curriculum becomes more purposeful and flexible. Teachers in schools that adopted a culture of collaboration reported greater integration of differentiated instruction into inclusive classrooms (Goddard & Kim, 2018). Schools where teachers reported greater teacher collaboration reported greater success with the implementation of differentiated instruction. Effective delivery of differentiated instruction requires that general education teachers be familiar with their students, be cognizant of their students' abilities, and be well-versed in a myriad of instructional approaches (O'Rourke & Houghton, 2009). Given these findings, ensuring that general education teachers are provided the appropriate training becomes paramount.

In some cases, general education teachers' knowledge and understanding of differentiated instruction did not match their implementation of these types of strategies in the classroom. For example, general education teachers may understand the textbook profile and definition of differentiated instruction, but struggle with the ability to deliver this type of instruction across a broad spectrum of learning styles and abilities (Maddox, 2015). General education teachers may value differentiated instruction strategies but fail to use differentiated instruction in their day-to-day curriculum because they lack competence in differentiated instruction delivery (Chien, 2015). If differentiated instruction is to be effectively implemented in the classroom, teachers must have a solid

understanding of this approach and be willing to implement it with fidelity (Jang, Henretty, & Waymouth, 2018). However, teachers may find it difficult to implement differentiated instruction because doing so mandates a shift in their teaching strategies to meet students' needs (Suprayogi, Valcke, & Godwin, 2017). Educators indicated that teachers are not likely to begin or continue using differentiated instruction without continued support and training (Suprayogi et al., 2017). These findings highlight the concerns regarding teacher perceptions of differentiated instruction and therefore, serve to emphasize the importance of this study.

Literature Related to the Methods

In this section, I discuss qualitative research conducted on general education teachers' perceptions about teaching in an inclusion classroom in which the overall findings indicated the need for more and specific training for teaching in inclusive classrooms. Inclusion teachers reported they lacked training in implementing inclusion, needed additional support from the principal, lacked preparation time, and needed assistance in modifying the curriculum (Alexander, 2014). Other professional development requests included: training in inclusive pedagogy, common planning time for general and special education teachers, peer-to-peer classroom observations, and more training in the co-teaching model of instruction (Iaquinta, 2014). Specific training in hands-on differentiated instruction with techniques specific to students with learning disabilities and more planning time to work with implementing these strategies with the co-teachers were the findings in King's (2016) case study exploring what factors hindered differentiated instruction in rural Southeastern elementary classrooms. Although

limited planning time was a concern in Alexander (2014) and King's studies, additional planning time did not necessarily affect teachers' use of differentiated instruction (Wright, 2018). Some teachers have negative perceptions or experiences about teaching in inclusion classrooms (Alexander, 2014; Garcia, 2019). When working with teachers who had negative perceptions about inclusion, general education student teachers reported that they were not prepared to include students with intellectual disabilities and their university course work did not focus on special education (Garcia, 2019).

The quality of training affects the general education teachers' beliefs about their ability to work with inclusion students. Methodology studies which included case studies and an ethnography using teacher interviews, commonly showed that general education teachers need more planning time and training to meet the academic needs of students with disabilities. (see Alexander, 2014; Garcia, 2019; Iaquinta, 2014; King, 2016; and Wright, 2018).

Literature Related to the Use of Differing Methodologies

In this section, I discuss literature related to different methodologies used to research general education teachers' perceptions about teaching in inclusion classrooms comparing general education and special education teachers. In a quantitative correlational study, Kamphausen (2015) evaluated the self-efficacy of general education and special education teachers who participated in the co-teaching model of inclusion. Although the role of the teacher did not predict attitudes toward inclusion in the study, teachers' level of self-efficacy did. In Charley's (2015) quantitative study using the Teacher Attitude and Self-Efficacy Survey to measure differences in general education

and special education teachers' attitudes towards inclusion of students with disabilities in terms of self-efficacy, special education teachers had a more positive attitude toward students with learning disabilities and higher levels of self-efficacy. Collaboration between special education and regular education teachers and a mentor program where teachers with higher self-efficacy were paired with those with low self-efficacy were recommended. Sims (2018), in a mixed-methods study, compared the perceived self-efficacy of elementary and middle school general and special education teachers, as well as the perception of administrators, to identify specific areas of needed support and training. Teachers with preservice or graduate training for inclusion scored higher for self-efficacy. All groups supported ongoing professional development training on inclusion best practices, differentiated instruction, and classroom management. Despite using methodologies that differ from my study, Kamphausen (2015), Charley (2015), and Sims's (2018) findings demonstrate the importance of collaboration among general and education teachers in inclusion classrooms, TSE in teaching students with disabilities, and professional development on inclusion practices.

Summary

Environmental factors and teachers' personal and behavioral factors exist in a dynamic relationship and affect the development of differentiated instructional materials and inclusive teaching. How teachers behave in their classrooms is influenced by their efficacy expectations and beliefs that they are capable of positively affecting the lives of the students they teach. Additionally, the research indicates that administrative support, peer interaction, preservice and in-service training, differentiated instruction strategies,

evidence-based research are the broad categories to consider in meeting the needs of students with special education services. Section 3 contains a description of the research methodology that I used in the study, the design of the study, the research questions, the role of the researcher, a description of how I selected the participants, the procedures for data collection, the methods for coding the data, and a description of the data analysis process.

Section 3: Research Method

Introduction

The problem for this study was that third through fifth grade general education teachers at this school struggled to teach reading and mathematics to students with special needs in inclusion classrooms. I solicited in-depth responses regarding general education teachers' perceptions of reading and mathematics instruction with students using special education services in inclusion classrooms and resources needed to teach effectively. Two research questions guided this study:

RQ1: What are elementary general education teachers' perceptions about teaching reading and mathematics to students using special education services in inclusion classrooms?

RQ2: What resources do general education teachers perceive can provide effective support to teach students with special education services in inclusion classrooms and foster higher degrees of TSE?

With RQ1, I sought to identify perceptions of 12 third through fifth grade elementary teachers regarding the perceptions of their work with teaching reading and math to students who receive special education services at their school.

With RQ2, I sought to identify the resources that 12 third through fifth grade elementary teachers perceived as effective in teaching reading and math to students who receive special education services at their school. First-person accounts involving experiences with differentiated instruction curriculum that were transcribed, analyzed, and documented provided information regarding teachers' perceptions of working within

the inclusion classroom. A positive foundation for success is established through teachers' positive attitudes about inclusion, confidence in terms of teaching students with disabilities, specialized training regarding effective practices for inclusion classrooms, and access to quality resources.

In this section, I describe the research design, methodology, and procedures that I used in this study. Justification is provided for the research design. In addition, this section contains descriptions of participant selection, data collection, data analysis, and ethical protection of participants. The conclusion of this section addresses validity and reliability of the data.

Design

I chose a basic qualitive design for my study instead of a quantitative design. A quantitative research design includes testing of hypotheses, collecting relevant data via instruments such as surveys and applying a statistical treatment to the data. This type of design is confined to the scope of the data collection instruments and limits the participants' ability to provide full details. Quantified measures found in a questionnaire are different from open-ended responses from semi-structured interviews. Interpretations of data analysis of quantitative research involve generalizability to other similar populations and this was not a focus of this study. Therefore, a quantitative research design was not the best fit for this study.

Other qualitative methodologies include phenomenology or narrative design, ethnography, and grounded theory. Phenomenology or narrative designs were not appropriate for this study, because they require the focus to be more on the broad and

extensive life experiences of teachers rather than the specific problem of teaching in an inclusion classroom. An ethnographic design was inconsistent with the purpose of this study because this study did not explore the culture of a specific group.

Having examined other quantitative and qualitative methods for my study, I concluded that a basic qualitative design was the best approach for this research study. Basic qualitative designs fall in between the traditional boundaries of qualitative and quantitative designs (see Kahlke, 2014; Percy, Kostere, & Kostere, 2015). Basic qualitive designs are "used to investigate people's reports of their subjective opinions, attitudes, beliefs, or reflections on their experiences, of things in the outer world" (Percy et al., 2015, p. 78). The goal of a basic qualitative design is to understand how individuals make sense of their experiences, which is a characteristics of all qualitive research designs; however, the other types of qualitative designs have other distinctive components (see Merriam & Tisdell, 2015) as previously described. This basic qualitative design focused on one group of educators in similar classroom settings within a single location during a specific timeframe. A basic qualitative design enabled me to explore 12 Grade 3 through 5 general education teachers' perceptions about working in an inclusion classroom as they talk about their teaching practices.

Context

The study took place in one elementary school that provides for students in pre-kindergarten through fifth grade; however, this study focused on third, fourth, and fifth grade teachers. This elementary school is in a large urban school district in the southwestern United States. School demographics showed there were 29 general

education teachers and one inclusion special education teacher who work at the school. Most teachers were from minority groups and women. According to a published school 2017-2018 profile report from the organization under study, the total school population was 414 students with 315 identified as low socio-economic status. The school consisted of 121 students who were at-risk, 36 students who were special education, 33 English language learner students, and 32 talented and gifted students. The average class size was 21 students. The average number of students with special education services in third through fifth grade classrooms was four students.

Criteria for Selection of Participants

The following criteria helped guide identification of key informants for this study: (a) participants were certified general education elementary school teachers who had experience teaching in Grades 3 to 5; (b) participants must have taught reading or mathematics, and (c) participants must have had experience teaching in an inclusion classroom. I developed the selection criteria to align with the purpose of the study and to ensure respondents had enough background experience to respond to the interview questions. I used the process and scope of the plan to provide the Walden University Institutional Review Board (IRB) an explanation of how data were collected and analyzed, and the methods used to ensure confidentiality of participants.

Researchers use purposeful sampling to intentionally select individuals and sites to learn or understand the central phenomenon and to include people who know the most about a topic. I used a purposeful sampling method to select general education teachers from Grades 3 to 5 who were employed in a local elementary urban school in the

southwest United States. There were 29 teachers employed at the elementary school. There were 414 students who attend the elementary school. Nine teachers instructed Grades 3 to 5 at the school study site; however, 15 teachers, school wide, had current or prior experience teaching reading or mathematics in Grades 3-5 inclusion classrooms. I selected one elementary school as the focus of this study. This school faculty has had trouble with implementing differentiated instruction. The school did have an assigned principal.

My goal was to obtain 12 teachers out of the 15 potential participants who could provide rich information to answer the research questions. The choice of sample size for qualitative research was driven not by concerns about statistical generalizability to a larger population, but rather by concerns about data saturation (see Creswell & Creswell, 2017). Data saturation takes place when participants cease to make novel and significant additions to the body of data collected by the qualitative researcher. The number of participants required to reach data saturation is highly dependent on context. There are studies in which only a handful of subjects might be enough for data saturation to be reached and other studies in which dozens of participants might be required. Creswell and Creswell (2017) suggested 10 to 12 participants are usually enough to reach the point of data saturation. I chose the participants for the study by using a purposeful sampling method.

Ethical Protection of Participants

I obtained approval from the Walden University IRB (Approval No. 07-11-19-0073820) to ensure the research design meets the standards of Walden University before

recruiting any participants. By providing informed consent agreements to potential participants, I specifically shared unbiased research procedures, minimized participants' risks, and demonstrated potential benefits of the research. The informed consent form was sent to all potential participants along with a letter of invitation. I established the confidentiality of the data collected measures for ethical protection of participants include the following: (a) informing participants of the purpose of the study; (b) sharing information about the study with participants; (c) conducting meetings in a private, locked room; (d) respecting the thoughts and feedback of the participants; (e) using ethical interview practices; (f) maintaining confidentiality; (g) securing all data collected, and (h) collaborating with participants (Creswell & Creswell, 2017).

All information from the study will be kept confidential by storing information in a locked file cabinet in my home for a minimum of 5 years. This includes the hard copy of all documents, interview transcripts, journals, and any other storage devices used during the study. Confidentiality was also maintained by using pseudonyms to protect the identity of the site and participants (e.g., Participant 1, Participant 2) so that the names, professional roles, and contact information were not revealed. During the time the study was being conducted, I limited my communication with the participants.

Procedures for Gaining Access to Participants

I started the process for obtaining informed consent from the teachers using the following steps. I obtained all email addresses from the staff directory on the school website and sent an invitation and informed consent form to all teachers who met the study criteria explaining the study and requesting consideration. Fifteen teachers were

invited to participate in the study and were asked to respond by email with the words "I consent" or by sending a signed copy of the informed consent in the self-addressed stamped envelope provided. I accepted the first 12 teachers who agreed to participate and signed the informed consent form. The number of potential participants was limited to the 15 who currently taught in inclusion environments. The selected participants submitted a signed informed consent agreement in the self-addressed stamped envelope provided or sent an email stating, "I consent" to acknowledge and accept the terms of the agreement. During the data collection, I was in minimum contact with teachers and only contacted them to arrange times for interviews and member checking.

Role of the Researcher

At the time of this study, I was an employee of the local school district, and I was a teacher at the elementary school site. I had no supervisory role over the teachers. I had 12 years of teaching experience as a special education teacher; I had taught at the secondary level for three years. I had been an elementary level special education teacher and taught at the elementary school site, where I am currently employed, for the previous 9 years. As a teacher in the district, I had worked with elementary teachers for the previous 9 years, so there were established relationships with each of the potential participants.

Although I had co-worker relationships with the potential participants of this study, I set boundaries to maintain an appropriate researcher-participant relationship. Creswell and Creswell (2017) emphasized the need to set boundaries so the researcher-participant working relationship would not be compromised. Throughout the study, I

maintained a non-participant role by respecting the individuality of each of the participants as well as their confidentiality (see Creswell & Creswell, 2017).

I was knowledgeable of the local problem, but was careful not to inflict my personal thoughts, biases, and predetermined ideas on interviewees. The probing questions allowed participants to share thoughts during the interview. I stayed attentive throughout the interview conversation and kept a calm manner. It was essential to keep calm, use limited nonverbal cues, and maintain eye contact to focus a conversation (Coady, Harper, & De Jong, 2016). Before collecting participant data, I used a personal reflection log to record my personal responses to the interview questions. This log provided me with the opportunity to record my thoughts, feelings, and perceptions throughout the research process; and allowed me to completely disclose my responses and opinions. Participants were assured that the focus of the data collection was to examine third through fifth grade reading and mathematics general education teachers' perceptions about teaching students with special education services in inclusion classrooms and investigate the teachers' perceptions about resources needed to work more effectively in these classrooms.

Methods for Establishing Researcher/Participant Relationship

The participants and I agreed on the times and locations for the interviews prior to conducting interviews, so that the times and locations were convenient and appropriate for both parties. Creswell and Creswell (2017) advised that data collection should not interrupt instructional responsibilities. For that reason, I let participants know that under no circumstances would I interrupt class time for interviews during the data collection

period. The participants were given my contact information prior to the study and permitted to contact me as needed. Furthermore, I notified participants that all information gathered would be neither evaluative nor judgmental; information would only be used for contributing information to address the research questions, and never be revealed to others. Numbers were used to identify participants and to record all data within interview transcripts. I informed the participants that numbers would identify participant statements within the study. I also reminded participants to share only what they were comfortable sharing about teaching in inclusion classrooms and what resources could support general education teachers in inclusion classrooms. Additionally, I provided participants a chance to take a break when necessary. These conditions were offered to increase comfort levels during the individual interviews. My role as the researcher was limited to asking questions with brief checks for understanding.

Data Collection

I began collecting data upon receiving approval by the Walden University IRB, the district RRB, the elementary school principal, and the teachers who elected to participate. Choosing the type of data to collect involved weighing advantages and disadvantages of the choices (see Creswell & Creswell, 2017). To obtain direct information about teachers' perceptions of teaching reading and mathematics in inclusion classroom, I conducted interviews (see Bogdan & Biklen, 2007).

Qualitative approaches usually concentrate on individuals within a small group in natural settings to collect data through various sources (Lodico, Spaulding, & Voegtle, 2010). Qualitative approaches are used to explore in-depth processes (Creswell &

Creswell, 2017). A basic qualitative design was the best choice to complete this study, because I gathered information by interviewing teachers about their perceptions of teaching reading and mathematics in inclusion classrooms.

The data for this qualitative study were collected from general education teachers who teach reading and mathematics in inclusion classrooms. I chose the individual interview method for collecting data. I conducted individual interviews to obtain teachers' perceptions regarding teaching reading and mathematics in inclusion classrooms.

Data Source: One-on-One Interviews

I conducted 12 individual teacher interviews to gather information about teachers' points of view. I conducted these interviews at a mutually agreed upon off-school site. According to Bogdan and Biklen (2007), interviews are usually conversational and are used to collect descriptive data in participants' own words so that the researcher gains an understanding on how participants interpret things. A semi-structured interview protocol provided the participants some flexibility when answering (see Merriam, 2009) and was adequate for this study because the protocol allowed me to ask probing questions and to prompt teachers' responses about teaching reading and mathematics in inclusion classrooms. For participants to be able to express their perceptions and experiences without any external influence, the interviews included open-ended questions (see Appendix A). I used probing questions as necessary for the participants to elaborate on answers that needed additional detail (see Creswell & Creswell, 2017). Prior to each interview, I reminded each participant of the study's purpose, the expected time of 45-60

minutes for the interview, the planned use of the interview results, and the availability of the study summary after the study completion. Lodico et al. (2010) indicated that it is good practice to provide interview participants with an expected timeframe to set expectations. Additionally, I used a digital recorder and smart phone recorder to ensure the quality of the recording was sufficient for transcription, and transcribed each interview for later use in collecting, collating, and coding data. Digital recording was vital because it allowed everything said to be preserved for analysis (Merriam, 2009). Moreover, the audiotape gives an accurate record of the conversations (Creswell & Creswell, 2017).

The interview questions were produced by me based on the key concepts of teachers' perceptions of teaching reading and mathematics in inclusion classroom, and the interview questions are aligned with the research questions. Questions 1 through 4 are aligned with RQ1 and Questions 5 through 7 are aligned with RQ2. The interview questions were guided by a model from Lodico et al. (2010). These questions helped to identify teachers' perceptions of teaching reading and mathematics in inclusion classroom. Merriam (2009) shared that exceptional interview questions are those that are generally open-ended and constructed around the topic being studied. Open-ended questions provided the participants with an opportunity to give in-depth answers and not imprecise responses (Creswell & Creswell, 2017). The questions I designed for the study provided participants with the opportunity to elaborate on personal experiences with their perceptions of teaching reading and mathematics in inclusion classroom, but also to discuss the viewpoint on factors that cause minimum effectiveness of inclusion.

Data Analysis

Data were collected in a systematic way to find emerging themes and make sense of what has been collected. Once I received the necessary approvals, I organized and participated in continuous data analysis to provide focus and structure to the data collected. During data collection, I began the analysis process to track data patterns and emerging understandings. I digitally recorded the interviews and transcribed the information manually. When the verbatim transcriptions were completed (see Appendix B), I uploaded the files to a password protected file on my personal computer and a password protected file on an external hard drive. I collected and prepared data for analysis by transcribing, critically read the transcribed material, and then assigned codes by labeling. Creswell and Creswell (2017) identified six ways to analyze and interpret the qualitative data: (a) preparing and organizing data; (b) exploring the data by coding; (c) using the code to produce broad categories (themes); (d) using narratives and visuals to represent and report findings; (e) interpreting the meaning of the results; and (f) validating the findings. I used the transcribed information and organized participants' responses into categories on a spreadsheet. Responses were coded by identifying similarities in the interviews along with highlighting concepts and themes. I produced visual representations of the response patterns and interpreted emerging patterns. Finally, participants reviewed the transcriptions for accuracy.

Interviews

I listened to the digital recorded version and transcribed it using Microsoft Word after each interview. I waited 3 days and listened to the interview recording again, to

ensure accuracy, demonstrating consistency and avoiding bias. The first step of analysis was exploring data and developing codes. I read the first transcript from the first interview and coded for responses related to the research questions for this study. Next, I used the process of open coding to highlight initial responses to the interview questions that connected to the research questions. Finally, I read and commented on the data by creating memos in my reflection journal and along the right margins of the transcript to capture tentative themes, categories, and explanations.

Coding Process

Interviews were coded for further analysis of patterns, themes, and descriptions. The coding process includes separating and labeling text to form broad categories and themes from the data (Merriam, 2009). I used an open-coding process to interpret the data by labeling segments. I then identified patterns and themes from the participants' perspective. This process allowed me to collapse codes into broad categories based on repetitiveness.

Coding involves: (a) identifying text segments, (b) placing a bracket around the text segment, (c) and assigning a code word or phrase to accurately describe the meaning of that part of the text. These text segments are sentences or phrases that relate to a single code. I used the constant comparative methods for thematic coding, which was an inductive process (see Merriam, 2009). I used the same colors to highlight words from the transcript that related to each research question. I highlighted any words or phrases that were relevant to RQ1 in pink and RQ2 in yellow. I searched for comparable wording

from the various participants and placed a box around them to form codes and themes which I recorded in the margins using an organizational structure.

Lodico et al. (2010) suggested researchers identify, examine, and interpret patterns that emerge from the data and determine patterns and themes that relate to the research questions. I took the coded data from the interviews and used the same colors to highlight information based on research questions. First, I coded each data source and assigned broad themes. Then I marked similarities to reduce my list of themes. Lastly, I labeled the components as table headings. Qualitative researchers may represent findings using tables. Capturing the patterns that emerged from the coded data may help to reveal perceptions and experiences of participants about inclusion classrooms.

Research Accuracy and Credibility

According to Merriam (2009), the processes and methods used to conduct a study can simply define the quality of the research. The accuracy of reporting findings is a major component of ensuring the quality of research. A researcher must consider the details of the study and be able to describe the problem (Gay, Mills, & Airasian, 2012). Furthermore, a researcher must be as descriptive as possible, so readers are able to formulate a conceptual understanding for themselves. According to Gay et al. (2012), writing as descriptive as possible helps with transferability. The trustworthiness of a qualitative research study is established through the transparency of how research methodologies and data are presented and by how well the narrative of the study is described (Merriam, 2009). The accuracy of reporting findings is a major component of ensuring the quality of research. I determined my study's trustworthiness through its

credibility, transferability, and confirmability, steps which will be discussed in greater detail in Section 4.

Discrepant Cases

After comparing themes and patterns found in the data, I conducted a discrepant case analysis. To present efficient results, I looked for and identified discrepant cases within my data. Merriam (2009) said researchers should ensure that all data and emerging findings are saturated, where they are not able to find any new information. Merriam suggested that the researcher should look for alternative statements or perceptions, besides what has already been drawn from the data. I share the information along with the findings drawn from the data in Section 4.

Conclusion

This qualitative study involved a basic qualitative study research design to collect data to address the problem of third through fifth grade general education teachers at this school struggled to teach reading and mathematics to students with special needs in inclusion classrooms. Participants were selected using a purposeful sampling of Grade 3-5 general education teachers from the local elementary school. Semi-structured interviews were employed for data collection. Additionally, I kept a researcher log for field notes and personal reflections. Open coding was used for data analysis to identify recurring themes and trends.

Section 4: Results

Introduction

The purpose of this basic qualitative study was to: (a) explore general education teachers' perceptions regarding reading and mathematics instruction of students with special education services in inclusion classrooms, and (b) investigate their perceptions regarding resources necessary to teach effectively. In Section 4, I describe the data collection, analysis processes, and themes that emerged from the analysis. Additionally, I describe the research findings using participants' verbatim quotes.

Process for Collecting and Analyzing Data

I requested permission to begin collecting data from Walden University IRB and the research site. The Walden University IRB granted permission on July 1, 2019 (IRB # 07-11-19-0073820), and I received a letter of permission from the research site's IRB on June 3, 2019. Before beginning the interview process and data collection, signed consent forms were submitted to interviewees. Data were collected using semi-structured interviews and involved classroom teachers' perceptions regarding instruction for students with special education services in inclusive classrooms. Data were also collected to investigate teachers' perceptions about resources needed to teach reading and mathematics effectively. Both sets of data were structured to determine factors affecting TSE.

Interviews. Semi-structured interviews averaging 35 minutes were conducted face-to-face with classroom teachers after school hours in a public library. Interviews

consisted of seven open-ended questions supported with follow-up questions to gain knowledge about participants' experiences.

Process for recording data. I conducted 12 interviews using two recorders, a digital recorder, and a smartphone audio recording application employed as a means of ensuring audio was sufficiently clear for accurate transcription. Following interviews, I manually transcribed data from digital recordings to a script format. Digital recordings were transferred to a computer and locked in a password- protected file. Transcripts were stored in a home safe where they will remain for 5 years. I was the only one with access to transcripts and recordings.

System for Keeping Track of Data and Emerging Themes

Digital interviews were transcribed verbatim and stored on my computer in a password-protected file. To protect privacy, recorded interviews on the smartphone were deleted once interviews were transcribed and saved on the computer. Files of digital recordings were created and protected with passwords. Participant names were not used in transcripts or recordings. While listening to recordings, I also read each transcript to ensure the veracity of the transcripts. Prior to analyzing data, I gave each participant a copy of their transcribed interview and asked them to review it for accuracy. After I analyzed data, I contacted each of the participants via email to schedule a date, time, and location for an individual private meeting. I provided each participant with a copy of the findings and a transcript to review. During the next step of the process, we discussed those findings. The member checking process eliminated misunderstanding or misinterpreting participants' perceptions.

Content analysis involves identifying common themes (Merriam, 2009). I reviewed the relevant data again for repeated ideas among the participants and then organized them into common themes. Data were reviewed using a recursive process of continuously reading text until groups of themes were exhausted. I initially coded responses into data categories and then searched to identify themes, and 12 codes emerged. An initial eight categories of data were developed before being condensed into the following three themes: (a) Teachers believe students benefit in inclusion classrooms when teachers plan lessons that are differentiated and engaging; (b) teachers are challenged by the responsibilities of teaching in an inclusion classroom, and (c) inclusion teachers need increased and improved support and resources. Table 1 includes themes and categories of data by research question.

Table 1

Research Questions, Categories of Data, and Themes

Research Questions	Themes	Categories of Data
1: What are elementary general education teachers' perceptions about teaching reading and mathematics to students with special educational services in inclusion classrooms?	1. Teachers believed students benefit in inclusion classrooms when teachers plan lessons that are differentiated and engaging.	1. Teachers believe students benefit when lessons incorporate engaging instructional materials. 2. Teachers believe differentiated lessons accommodate students varied learning styles and needs.
	2. Teachers were challenged by the responsibilities in an inclusion classroom.	3. Teachers are challenged by the diversity of learning needs in one classroom. 4. Teachers are challenged by the increase in classroom management issues. 5. Teachers are challenged by the shared co-teaching constraints.
2: What resources do general education teachers perceive can provide effective support to teach students with special educational services in inclusion classrooms and foster higher degrees of TSE?	3. Inclusion teachers need increased and improved resources and support to foster higher degrees of TSE.	6. Teachers believe focused professional development will increase their instructional capacity. 7. Teachers believe increased service of trained teachers will provide adequate support to meet learner needs. 8. Teachers believe improved teaching resources will increase teacher's sense of self-efficacy and student engagement.

Findings

The problem addressed in this study was that classroom teachers struggle to teach reading and mathematics to students with special education services in inclusion classrooms. Research questions were addressed using semi-structured interviews with 12 inclusive classroom teachers. The purpose of this basic qualitative study was to: (a) explore general education teachers' perceptions about reading and mathematics instruction of students with special education services in inclusion classrooms, and (b) investigate the teachers' perceptions regarding resources necessary to teach effectively. The participants' perceptions were useful because they informed an understanding of what changes teachers perceived were necessary for improving education outcomes and provided an understanding of capabilities, individual factors and environmental factors that functioned as barriers to positive self-efficacy. As such, the findings may inform changes to school practices ranging from professional development to providing resources that may help teachers deliver instruction more effectively and with a higher degree of positive self-efficacy. Three major themes were identified, and verbatim quotes were organized by categories of data. Findings were organized by research question, and within research questions, by categories of data.

RQ1

RQ1 addressed elementary general education teachers' perceptions about teaching reading and mathematics to students with special educational services in inclusion classrooms. I aligned Interview Questions 1 to 4 with RQ1 and developed the interview questions based on Bandura's SCT theory and the construct reciprocal determinism,

which is illustrated through a triadic model showing a dynamic connection among personal, environmental, and behavior factors. During Interview Question 1, participants were asked to describe three different lessons that they were proud of this school year. During Interview Question 2, participants were asked about the rewards of teaching in an inclusion classroom. During Interview Question 3, they were asked what they found challenging about teaching in an inclusion classroom. And finally, during Interview Question 4, I asked participants how they feel the laws such as IDEA and NCLB for children with disabilities affected their teaching. Each question had probing components. All interview questions were designed to elicit responses that align with components (personal, behavioral, and environmental) of Bandura's constructs of reciprocal determinism.

The two following themes emerged that were relevant to RQ1: (a) teachers believed students benefit in inclusion classrooms when teachers plan lessons that are differentiated and engaging, and (b) teachers were challenged by the responsibilities in an inclusion classroom. Teachers perceived that there existed a direct relationship between effective lesson planning (with a focus on differentiated instruction and high engagement) and student achievement. Generally, teachers perceived the inclusion classroom as presenting more and varied challenges and responsibilities.

Theme 1

Theme 1 addressed participants' perceptions about teaching within inclusive classrooms. Theme 1 includes the following two data categories: (a) students benefit when lessons incorporate engaging instructional materials, and (b) differentiated lessons

accommodate students varied learning styles and needs. Participating teachers expressed confidence that differentiated instruction is an effective strategy for meeting the diverse learning needs of student in inclusive classrooms that include students with special education services. The first two data categories describe teachers' experiences implementing differentiated instruction strategies and the third data category gives voice to challenges in doing so.

Teachers believed students benefit when lessons incorporate engaging instructional materials. This belief is explained through Bandura's theory of reciprocal determinism in which the teacher's personal belief about engaging instructional materials is an environmental factor that effects the behavior of student performance. Six of the teachers (Teachers 1, 2, 3, 5, 7 and 10) noted that engaging instructional materials were critical for maintaining engagement when several groups at differing grade levels were working in a single classroom. Most of the teachers recognized many of their learners have a kinesthetic preference, so they incorporated learning activities that allow their students to move about the classroom while accomplishing the learning tasks. Teacher 1 supported the use of multimedia that emphasized the importance of practical experiences within the classroom environment. She recommended open-ended assignments to stimulate the cognitive powers of advanced learners. Quotes from Teacher 5, 6, and 7's interviews provide examples of how teachers incorporated engaging learning activities. Teacher 5 stated:

> My students need to move around and touch things to learn most effectively. They have trouble sitting at their desks for extended periods of time. The lesson had

> many opportunities for the students to move and visuals to refer to follow along with the lesson.

Teacher 6 stated:

> I believe incorporating hands-on activities, body motions, visuals and fun stories in every concept taught during lessons helped because majority of students are kinesthetic learners. Their attention follows their hands so drawing the diagrams of what they were hearing in a lesson along with the other activities captured the students' attention.

Teacher 7 stated:

> Contributing factors are since students learn better when they can use their senses, it is key to have manipulatives readily available for daily lessons and to include supplemental aids for all students when selecting designated supports for district and state assessments.

Teachers perceived that students in inclusion classrooms benefit when teachers incorporate engaging instructional materials and differentiate lessons to accommodate all students.

While describing lessons that were designed and delivered with engaging activities Teacher 10 shared:

> During these specific lessons, I had 100% engagement because the lessons included tools such as computers, tablets, books, dressing up, bringing something to show or making a creative design of some sort. The kids enjoyed the lessons because the topics were individualized and of their interest.

Teacher 12 stated, “My students learn best when they can move around versus sit and do the work. The lessons involved several mini hands-on projects and a lot of small group instruction.” Designing and delivering lessons with engaging activities not only provides insight into teachers’ self-efficacy but also explores factors that influence student mastery of academic standards.

All 12 participants voiced some frustration regarding the preparation time necessary to identify and obtain engaging instructional material for multiple groups in a single class period; however, there was variation in the types of engaging instructional material that teachers used. Teacher 2 spent more time planning and accessing engaging instructional material for lessons. These lessons incorporated more hands-on activities to which the students would relate and included fun and engaging educational activities such as labs and stations. Teacher 12 was the only teacher who mentioned miniature hands-on projects. Teachers 5, 6, 7, and 12 reported that engaging lessons incorporated movement and use of a variety of activities using their senses. Although six of the teachers did not specially address kinesthetic movement in their lessons, all teachers addressed the need for engaging activities.

Teachers believed differentiated lessons accommodate students varied learning styles and needs. All teachers designed lessons using differentiated strategies. Despite the increased planning time, teachers identified differentiated instruction as an effective strategy for addressing students’ individual learning styles. Most of the teachers described specific strategies for implementing differentiated instruction and expressed confidence that individual needs were being met.

Teachers described the process for implementing differentiated instruction with students in various ways. Teacher 1 described differentiated instruction as a sequence and was the only teacher to address the needs of the advanced learner. Teacher 1 stated:

> I start with concrete objects, manipulatives, props, pictures, videos. Then I build in guided practice. I sometimes work with small groups to help them understand the skills better. I try to offer open ended tasks for advanced learners to allow them the ability to work at a more challenging level.

Teacher 2 believed that differentiated instruction must be tailored towards varied learning styles. Teacher 3 described the use of manipulatives and supplemental aids tailored to each student's learning style and noted that both in-school and homework assignments required individualized attention. Teacher 4 indicted success with chunking assignments to create smaller, more achievable goals as an effective differentiated instruction technique. Teacher 5 differentiated assignments by providing fewer answer choices and fewer questions. Teacher 6 differentiated assignments for students "by providing a multiple-choice option when other students have to provide essay responses, less multiple-choice options, or oral responses." Teacher 10 said:

> When I work along with my co-teacher to create lesson plans that are differentiated for the various learning styles and levels in my classroom, we are successful. Regardless of how challenging the assignments are my students are motivated to work.

Teacher 12 reported that she found success with differentiated instruction by providing alternate questions based on learning style and skill level.

Theme 2

Theme 2 emerged from Interview Question 3 which was designed to have teachers describe a time they had low self-efficacy by describing what they found challenging about teaching in an inclusion classroom. These three data categories were generated: challenges teachers faced with respect to the diversity of learning needs in one classroom, the increase in classroom management issues, and the shared co-teaching constraints.

Teachers were challenged by the diversity of learning needs in one classroom. A very clear pattern emerged from the data that all participants expressed difficulty in identifying and using differentiated instruction strategies to meet widely varying skill levels and expressed concern that the additional lesson planning time provided by the school was inadequate. The variance within this pattern was with the level of responsibility the teachers took for these challenges. Teacher 6 stated:

> Even after hours of training, it doesn't feel like I am reaching all learning levels in my class. I dedicate many hours to planning lessons, but I still feel defeated when accommodating for special education students and general education students in one classroom.

Teacher 10 highlighted the urgent need for inclusion teachers given the restricted expertise of general education teachers dealing with students' disabilities:

> It is difficult to manage an inclusion classroom without an inclusion teacher present. The inclusion teacher is a special education teacher. I am not a special education teacher. I am not familiar with a lot of the students' disabilities and the

> best teaching strategies for the group. It is nice to be able to work in small groups and have another adult in the room working along with me teaching.

Teacher 2 perceived that the grade level gap between students was difficult to manage and stated, “I find that the gaps are so large that it’s hard to close them”. Teacher 5 described lesson plan challenges as follows, “creating lesson plans becomes confusing trying to accommodate all my special education students and various learning styles of my general education students”. Teacher 8 and 4 expressed the same concerns. Teacher 8 stated:

> Including special education students in my class adds more pressure and responsibilities to the ones I already have. Often, I am needing to slow down, or even completely stop to accommodate their needs or put them back on track. I have one student that needs one on one support, but I don’t have the time or the capability.

Teacher 12 echoed similar concern about the lack of inclusion support for special education as well as general education students within an inclusive environment. Scarcity of resources poses many challenges for teachers. Interview Question 3 was designed to have teachers describe a time they had low self-efficacy by describing what they found challenging about teaching in an inclusion classroom.

Teachers were challenged by the increase in classroom management issues. Academic challenges were not the only issues teachers must overcome to manage inclusive classrooms. According to all teachers, the increase in behavioral distractions from students with special education services and the time necessary to address those

behaviors reduced learning time. Teacher 5 stated, “The behavior of some special education students distracts the class from learning by making random noises or speaking out of turn. A lot of my instructional time is used redirecting my special education students off-task behavior.” Teacher 4 noted behavioral challenges as one problem as well:

> I am not only teaching three tiers of students, I am also teaching students that are below grade level, students who are emotionally disturbed and cause classroom disruptions, students who have attention deficiencies and difficulties focusing on the lesson and distract other students as well.

Teacher 4 and 5’s comments are representative of some of the challenges general education teachers encounter when teaching students with special education services in inclusion classrooms.

Teachers reported students were challenged to maintain focus when the general education teacher and the inclusion teacher facilitate instructional activities concurrently. The inconsistency in instruction created a classroom management issue. Teacher 11 stated that, “Some students have difficulty maintaining focus to the lesson when there is a small group doing something different in the same classroom.” Teacher 3 indicated that at the core of the classroom management problem are the twin issues of teacher availability and consistent student focus:

> Some students have difficulty maintaining focus to the lesson when there is a small group going doing something different in the same classroom. When the inclusion teacher has a small group in the classroom and I am giving whole group

> instruction, some students have difficulty focusing because they want to know what is going on in the small (inclusion) group.

Teacher 10 reflected on the burdens of teaching both groups of students without a co-teacher, and cognitive variability which effected classroom management:

> When the inclusion teacher is not available, I am dealing with general education and special education students at one time. Special education students include students who are emotionally disturbed and students with ADHD. I never know what behaviors to expect from day to day. On top of that, the students' academic levels are all different. I feel that students are either being left behind or not being challenged. I believe in differentiated instruction, but that type of instruction takes a lot of planning and knowledge. Working to differentiate instruction and reaching all kids with limited inclusion support and material is difficult.

Teachers are challenged by shared coteaching constraints. All teachers expressed frustration with inadequate co-teaching resource availability. Another challenge all teachers faced was the lack of a co-teacher in inclusion classrooms. Teacher 12 stated:

> We only have one inclusion teacher for Grades 3-5 for all subject matters. She is not able to support each classroom with adequate time and support. She is often pulled away from her schedule due to ARD [Admission Review and Dismissal] meetings, case management duties, and other school duties. Providing the amount of support each special education student needs in an entire school with one inclusion teacher is almost impossible. Not only do we need more in-class support

> for academic work, but we also need support for behavior disabilities, lesson planning and pull out inclusion support.

Teacher 9 also shared that a limited number of inclusion teachers affects the educational process in an inclusive classroom due to the various educational needs of regular and special students:

> One thing that I have found challenging about teaching in an inclusion classroom in our school is that unfortunately not all students with disabilities are reached because of the high number of students and the ratio of the inclusion teacher. She does come in the classroom, but one teacher is not enough for all the students.

Almost all the participants interviewed agreed that the absence of a co-teacher affected their ability to differentiate instruction as well as classroom culture, routines, and learner outcomes. Teacher 7 agreed with the other inclusion teachers who articulated their opinions on the effect of co-teachers on students and concluded that inclusion classrooms without co-teachers negatively affected students. Teacher 7 stated:

> The inclusion teacher is not always in the classroom so consistency is not there, and the students have to learn to adapt to when she's there and when she's not; unfortunately, the level of differentiation they're accustomed to may not be available. I'm faced with when the inclusion teacher is not in the classroom, is being able to provide the time and attention the students she normally services with the level of differentiation they're accustomed to receiving.

Similar to Teacher 7, Teacher 6 declared that the lack of a co-teacher in their inclusion classroom effects their classroom negatively:

> Furthermore, if I do not have the inclusion teachers' support during the introduction of a lesson it is almost guaranteed that I will experience behavior issues from students with behavior intervention plans and that spirals into the entire class being off task. A contributing factor is limited manpower on our school. We only have one inclusion teacher and one instruction coach. Lesson planning is a rigorous and time-consuming task. I need more support to create effective lesson plans. Students must be equipped with the tools of self-reliance and confidence in the absence of teachers.

Based on students' IEPs, co-teachers were a mandatory requirement in inclusion classrooms but the teachers at this school all reported that the accessibility and time co-teachers spend in the classroom was not enough support.

RQ2

The second research question addressed the resources general education teachers perceived could provide effective support to teach students with special education services in inclusion classrooms and foster higher degrees of TSE. This research question and Interview Questions 5, 6 and 7 were also aligned with Bandura's (1986) construct of reciprocal determinism in that they describe teachers' perceptions of what they need to have high self-efficacy (Bandura's personal component). Teachers were asked in Interview Question 5 what methods they used to encourage students to explore learning opportunities. In Interview Question 6 teachers described how they motivated students to persevere with challenging assignments. Teachers were asked in Interview Question 7 how they challenged slow learners and the advanced learners within the same class.

Theme 3, inclusion teachers need increased and improved resources and support, emerged from the interviews of the teachers at this school. According to my findings the quality and quantity of resources and support influences the degree of efficacy in inclusion classrooms. Sustained availability of resources ensures student and teacher growth simultaneously.

Theme 3

The environmental challenges of resources and support which are beyond the control of teachers affected teacher beliefs and self-efficacy, which in turn affected their behaviors in the classroom. Theme 3 included the following three data categories: strategically focused professional development, increased services from trained special education co-teachers, and improved teaching resources. In the one-on-one interviews, participants expressed the need for significant instructional supports for teaching students with special needs in inclusion classrooms regarding strategy focused professional development. All three data categories were in the control of school administrators who in turn are constrained by budgets and logistics.

Teachers believed strategy-focused professional development would increase their instructional capacity. More than two-thirds of teachers expressed the need for additional professional development opportunities from trained special education co-teachers to effectively address students with special needs in inclusion classrooms. These participants consistently expressed the need for various types of support including ongoing professional development in key areas to support their efforts to provide effective instruction in teaching reading and mathematics to students with special needs

in the general classroom. The differences in the teachers' responses were that some teachers were more specific in identifying professional development topics than others.

Most of the participants suggested that continuing professional opportunities were effective when focused on well-defined professional practices rather than general issues, aligned with instructional goals and curriculum materials used in practice, and sustained over a period. Participants suggested that professional development opportunities be focused in the following content areas: knowledge of disabilities and most effective instructional strategies for each, comprehensive knowledge of assessment tools and techniques, classroom management strategies, and co-teacher collaboration strategies. Participant 12 stated that, "Providing teachers with professional development focused on teaching educational students that are emotionally disturbed, students with behavior intervention plans, differentiated instruction for students that are two levels below grade level, would make the experience more rich". Teacher 5 added, "It was important for schools to provide teachers with professional development regarding teaching students with specific disabilities." Professional development activities that are efficiently planned and meticulously crafted to equip teachers enable teachers to use the available resources effectively and resolve management issues quickly.

Teachers believed increased service of trained teachers will provide adequate support to meet learner needs. This belief was a key environmental barrier to positive TSE in that the teachers believed they are not fully supporting all students. However, a common frustration that they did not spend enough time in the classroom was expressed by all teachers. According to Teacher 1, the lack of continuous presence in the inclusion

classroom means, “Students don’t have someone they can count on to help with their issues.” Teacher 7 shared Teacher 1’s opinions and stated that students with special needs demanded constant attention from teachers. Teacher 12 explained:

> Providing the amount of support each special education student needs in an entire school with one inclusion teacher is almost impossible. Not only do we need more in class support for academic work, but we also need support for behavior disabilities, lesson planning and pull out inclusion support.

Teacher 10 had similar views pertaining to the issue of teacher availability for inclusive classrooms:

> We work in a small school. We only have one inclusion teacher for the entire school. We need more knowledgeable inclusion teachers in order to provide our students with the education they deserve and to make this inclusion model work.

Teacher 12 reiterated the need for additional inclusion teachers for various subjects:

> The one inclusion teacher for grades 3 to 5 for all subject matters not able to provide adequate time and support, and she is often pulled away from class support for administrative and case management meetings.

Teacher 9 said, “There are too many students with disabilities the inclusion teacher unfortunately is not able to reach all of them.” Although all teachers reported the need for increased time of the co-teacher, the difference among them lies in the quantity of time they believed was needed.

Teachers believe improved teaching resources will increase teacher’s sense of self-efficacy and student engagement. Teachers conceptualized resources that helped

support their instruction in a variety of ways through a broad range of responses that highlighted differences in the teachers' beliefs. These supports ranged from technology to professional development. Teacher 5 stated:

> Other resources needed are more inclusion teachers, professional development on lesson planning for inclusion classroom settings. Variety of technology for academic purposes . . . Providing teachers with professional development, emotional support, additional teachers, help with lesson planning, more effective academic resources, technology, additional lesson planning time.

Teacher 10 also voiced concerns about the necessity of appropriate resources for teachers engaged in the inclusive classroom:

> More inclusion teachers and inclusion time for each classroom, technology in the classroom that is geared toward students with various disabilities, assistance with lesson planning, technology throughout the school, support and strategies to deal with the various behaviors of special education students are resources that are needed.

The difference in the teachers' responses were Teacher 1 had a concrete example of specific resources required but not available for all grade levels, stating, "If I plan a lesson that requires reading for a student with dyslexia, I need supplemental aids for them to be successful at reading." Teacher 3 integrated online learning tools with some success but needed additional resources; she stated, "Online learning is a great way to encourage students. They are intrinsically motivated when learning online." Teacher 11 was the only

participant that suggested fields trips are valuable resources that would yield substantial benefits for students.

Evidence of Quality

No discrepancies were found. I used strategies presented in the literature to personally collect and analyze the data. I determined my study's trustworthiness through credibility, transferability, and confirmability. To establish credibility, I captured what the participants believed, experienced, and perceived through member checking as outlined by Merriam. Member checking is the act of forwarding findings or summaries of findings to participants for their review to ensure that their responses were not prejudiced by my biases. I read each transcript while listening to the recordings to ensure the veracity of the transcripts. I reviewed the transcripts for relevant data that related to the problem statement and research questions guiding this study. As I read each participant's transcript, I created a table of data by writing repeated ideas, themes, quotations, and keywords to an Excel file. After the data were analyzed and interpreted, I contacted each participant via email to schedule a date, time, and location for a private meeting. During the individual meetings, I provided each participant with a copy of the findings (along with verbatim transcript) to have them review those findings and then discuss those findings with me. This process of member checking eliminated misunderstanding or misinterpreting participants' perceptions.

Throughout the study, I also took notes. The notes detailed how data were collected and how I arrived at the themes and categories. The notes aided in providing rich descriptions and specific details about the context of the participants' responses to

ensure transferability. Confirmability was strengthened through the reflexivity of my thoughts during the coding process. Finally, I will create a summary document and share it with the participants, principal, and the members of the district administration once I have completed the process and degree.

Summary

In this basic qualitative study, data collected from one-on-one interviews were used to identify teachers' perceptions of teaching reading and mathematics in inclusion classrooms. All data were aligned with the research questions and the emerged themes. Therefore, there were no discrepant cases. The participants provided detailed evidence to describe their teaching experiences in inclusion classrooms. Teachers openly expressed and exchanged their views on crucial matters attached to inclusion classrooms such as the requirement of increasing number of teaching personnel and the establishment of a curriculum tailored towards student success. There was consensus amongst teachers on the idea of common planning that involves general and special education teachers. Teachers agreed that productive collaboration between these two groups is essential to intellectual stimulation of students. Section 5 concludes this study with an interpretation of the findings presented from the literature review, limitations, recommendations, and implications for social change.

Section 5: Discussion, Conclusions, and Recommendations

I conducted this basic qualitative study to explore 12 third to fifth grade elementary general education teachers' perceptions about reading and mathematics instruction of students with special education services in inclusion classrooms and investigate their perceptions regarding resources necessary to teach effectively. The basic qualitative approach provided me with the opportunity to review expressed perceptions and record thoughts of these 12 elementary school general education teachers about teaching reading and mathematics in inclusion classrooms. Furthermore, the approach also provided me with a chance to report teachers' thoughts regarding types of support that would be most beneficial to general education teachers to be effective while teaching reading and mathematics in inclusion classrooms.

Third through fifth grade general education teachers at this school struggled to teach reading and mathematics to students with special needs in inclusion classrooms. General education reading and mathematics teachers from Grades 3, 4, and 5 were interviewed. During the interviews, I asked specific questions about their perceptions regarding reading and mathematics instruction with students using special education services in inclusion classrooms, as well as resources necessary to teach effectively.

Three major themes emerged from the analysis of collected data from participants' one-on-one interviews. These themes indicated teachers believe students benefit in inclusion classrooms when teachers plan lessons that are differentiated and engaging, are challenged by the responsibilities in an inclusion classroom, and need increased and improved resources and support. Section 5 begins with the interpretation of

the findings that I presented in Section 4. In addition, I analyze and interpret findings using the conceptual framework, discuss limitations of the study, suggest recommendations for further study, discuss implications for social change, and provide a conclusion.

Interpretation of the Findings

Elementary classroom teachers in a large urban public school district in the southwestern United States struggle to meet the academic needs of their students in reading and math. During interviews with 12 general education teachers, all teachers shared their perceptions regarding teaching reading and mathematics to students with special educational services in inclusion classrooms. Teachers also shared what resources they perceived could effectively support these students and foster higher levels of TSE. In this section, I interpret findings and themes that emerged from interviews. Additionally, I describe ways the findings confirm, disconfirm, or extend research discussed in the literature review in Section 2.

Interpretation of Theme 1

Theme 1 is connected to RQ1. During the interviews, all 12 teachers shared they had confidence in differentiated instruction as an effective strategy for meeting the diverse learning needs of students in inclusive classroom, including students with special education services. Teachers reported they were not satisfied with the implementation of differentiated instruction at their school. Teachers' attitudes toward differentiated instruction effectiveness related to their successful implementation of differentiated instruction in their teaching. Participants in this study reported that they did not have the

necessary resources to support their planning and instruction in math and reading for inclusion students at their school.

Interpretation of Theme 2

Theme 2 is connected to RQ1. All participants described struggles in terms of finding and using differentiated instruction strategies to meet the various academic skill levels of the students in their classroom and voiced concerns that the lesson planning time provided by the school was insufficient. This lack of planning time affected teachers' perceptions of their teaching efficacy and led to frustrated feelings involving inadequacy. This finding relates to Bandura's (1997) theory, which said that the way people perceive themselves and their abilities influences the goals they set and how they attempted to complete them. Therefore, if people believe they are successful, they are more likely to be successful (Bandura, 1997). The lack of inclusion teachers in the classrooms, as reported by the participants, reduced the functionality of the inclusive classroom and was a definite hindrance to students' progress.

Culturally and linguistically diverse students with disabilities add additional factors for the general education teacher to consider in terms of planning, executing, and assessing instruction. Students' academic performance improves when educators accommodate student variations in backgrounds, readiness, learning profiles, and personal interests (Tomlinson, 2005). Therefore, it is important to adapt to specific educational requirements of diverse student populations in inclusive classrooms for successful implementation of the academic curriculum. Because educators must attend to specific educational requirements of the diverse student population it imperative for

teachers in inclusion classrooms to incorporate a variety of instructional materials to attract the attention of students. Teachers' usage of these materials depends on their knowledge of varying cognitive levels of students. Teachers' ability to recognize and acknowledge the extent of a student's academic abilities dictates the nature of resources used in the classroom for instructional purposes. Therefore, selection of instructional material, be it multimedia or multiple-choice exercises, is one of the first challenges inclusion teachers need to successfully resolve to prevent future learning obstacles that may disrupt the flow of learning in inclusion classrooms. For example, to teach a math lesson on place value, a teacher may learn that base ten blocks are an excellent instructional tool based on past successful experiences using them and previous training on best practices. This teacher may develop high self-efficacy and therefore, the students will likely perform better in the lesson as a result of implementation of the base ten block instructional strategy. Designing and delivering lessons with engaging activities not only provides insight into teachers' self-efficacy but also helps in terms of exploring factors that influence student mastery of academic standards.

General education teachers in Grades 3, 4, and 5 were not only challenged with academic issues but nonacademic issues that challenged inclusive classroom management. In this study, all teachers expressed there was an increase in behavioral distractions from students using special education services, and the time required to address those behaviors decreased learning time. Students with learning disabilities often display behavioral issues such as inattentiveness, impulsivity, and distractibility, which present engagement challenges for teachers (Woodcock et al., 2019). Participants in this

study reported that their success in terms of addressing behavioral challenges depended upon the severity of the disability. Webb-Williams (2018) found additional student behavioral issues including engagement, classroom management, and instructional strategies, and these factors directly affect TSE and teachers' perceptions of managing behavioral challenges.

Interpretation of Theme 3

Inclusion teachers need increased and improved resources and support to foster higher degrees of TSE is Theme 3 and is connected to RQ2 In this study, I found most teachers expressed the need for added professional development opportunities from trained special education co-teachers to successfully address students with special needs in inclusion classrooms. These participants continuously voiced the requirement for various forms of support including ongoing professional development in vital areas to assist their effort to provide effective instruction in teaching reading and mathematics to students with special needs in the general education classroom.

Most participants stated that ongoing professional development opportunities are beneficial when concentrated on specific professional practices that are aligned with instructional goals and curriculum resources used in practice instead of general issues. Participants recommended that professional development opportunities be concentrated in the following content areas: knowledge of disabilities and most effective instructional strategies for each, knowledge and skills development in differentiated instruction, comprehensive knowledge of assessment tools and techniques, classroom management strategies, and co-teacher collaboration strategies.

I concluded that the participants in this study want more professional development in instructional strategies that produce positive benefits with students of special needs. The participants also requested professional development on lesson planning, classroom management, and other high yield strategies. These conclusions are supported by similar research which found inclusion teachers needed more professional development, increased services of trained special education co-teachers, and improved teaching resources (see Sanders et al., 2013). Similar findings emerged from research in which 31 teachers at a large Southern California high school were surveyed to determine training needs to support students with disabilities in general education (Jilly, 2012). The teachers agreed on the following six common areas for training: knowledge of different disabilities, use of instructional strategies, different assessment techniques, classroom management strategies, collaboration, and knowledge of the legal aspects of special education).

In addition to needing support, teachers in this study wanted improved resources. Most participants in this study defined resources as tangible items such as instructional materials, technology, and online learning. However, some participants reported needs for systematic change, such as change in educational policy, less testing, more time, more field trips, and shifting of budgets. The examples of support and resources the teachers of this study desired were environmental, a component of Bandura's SCT, and influence the personal and the behavioral components of any subject. School resources, administrative support, and the campus inclusion structure affect TSE involving the school environment (see Cohen & Abedallah, 2015; Moreno-Rodriguez et al., 2017).

Implications for Social Change

Implications for Social Change Local Setting

There are profound implications for social change from this research study. The findings and recommendations will benefit teachers at the local setting and have the potential to affect the professional practice of teachers in a larger setting. At the local level, the special education population has been a consistent part of the school's population. Teachers and other education professionals have long debated the most effective placement for students with special needs. Even the concept of the LRE has undergone changes in recent years. The current inclusion delivery model places students with special education services in the general education classroom with few resources and little support, which could contribute to teacher burnout and teacher turnover. The findings and the recommendations contained in the study maybe an important determining factor in designing professional development at the local, district, state, and national levels.

Professional development represents one aspect for change. Other areas include resource allocation, administrator training, budget allocations, and educational policy. Summative comments from the interviews clearly justify the need for additional resources in classrooms that serve students with special needs. As school principals are the instructional leaders, they are also charged with equitably distributing resources throughout the school. Often school administrators do not differentiate budgets for teachers that serve for general education teachers from those who serve students with

special education services in the same classroom. As a result, teachers often support their classroom with personal funds.

Additionally, there are opportunities that will change at the local level that might affect teacher perceptions Due to state standards, much of the professional development centers on instructional strategies that prepare students to pass state content assessments. Many students receiving special education services are mandated to test in an environment with accommodations and modifications. Yet the general education teacher receives little professional development on the accommodations and modifications for students with special needs. Moreover, incorporating these accommodations and modifications into the general education classroom for general education students places them at a disadvantage as the modifications and accommodations do not apply for them. As a result, a differentiated approach for professional development at the campus level has the potential to improve teacher efficacy by focusing on effective teaching practices for inclusion classrooms.

Another school opportunity includes the use of personnel. Responses from the one-on-one teacher interviews revealed the special education teacher is often not present because of other job responsibilities. In a continuous improvement effort as well as one to improve efficiency, the campus leadership team could monitor and evaluate all tasks performed by the special education teacher. In doing so, they could identify workflows from generic to highly specific. Tasks that are generic could be reassigned to other personnel to allocate more time for the special education inclusion teacher to work with a general education teacher.

Implication for Social Change Beyond the Local Setting

This study will contribute to positive social change in several ways beyond the local school. Many schools have replaced the traditional grade level meeting which often includes operational conversations with the professional learning community (PLC). Professional learning communities are particularly attractive because they are highly flexible and have zero cost. Principals, administrators, specialized personnel, counselors, special service providers, and teachers can design their PLC around student needs and collaborate to create action plans.

Another area includes changes in educational policy. As evidenced by the teachers' responses and the citations in the literature review, scheduling students with special education services into general education classroom changes the learning environment and classroom culture. A policy change might limit the number of general education students scheduled in two classes of students with special needs. The reverse scheduling practice also represents a shift in policy that has the potential to empower general education teachers to instruct students more effectively with special education services in the inclusion classroom.

Most important, a progressive and prepared society for the 21st Century is an educated society possessing knowledge, skills and positive dispositions that advance quality of life for all. Toward that end, this research serves to empower the teachers who guide students with learning needs hopefully leading to academic achievement improvement for these students. The results of this study indicate that more needs to be done to improve differentiated instruction at the research school, but that this focus

should be expanded to all schools. The logistical and technical means exist to plan, deliver, and assess tailored instruction given time and resources. In an ever evolving and complex world, educators must do better for all students and embrace the struggles and responsibility that come with that charge.

Recommendations for Action

The findings in this study lead to three recommendations for action. These recommendations are based on feedback gained from the one-on-one teacher interviews and are consistent with the two research questions. Acting on these recommendations may address teacher perceptions about teaching students with special needs in the general classroom and equitably distributed teaching resources throughout the campus.

Recommendation #1

It is recommended that co-teaching time be increased by at least 20% by removing tasks that can be done at another time or by other personnel. Overwhelmingly, teachers identified additional co-teaching opportunities as a priority. Some teachers even described the presence of the co-teacher as the main factor for student success. The findings in this study suggest multiple opportunities for increased collaborative and shared responsibilities at the local campus.

During the one-on-one interview, teachers expressed a need for additional lesson planning with the special education or co-teacher. In addition to lesson planning some of that time should be repurposed to implementation and or lesson delivery. As mentioned in the teacher comments, the presence or absence of the co-teacher may be the

determinant factor of lesson plan success. This gap may also prevent the general education teacher from teaching to the middle.

Teachers also expressed concerns and frustrations regarding classroom management issues when incorporating students who receive special education services in the general education classroom. The additional support provided by the co-teacher would allow both professionals to establish a division of responsibility to ensure that both general education students and students with special education services receive a high-quality education.

Recommendation #2

It is recommended that the PLCs be restructured to address at least two strategies that focus on high yield practices for reading and mathematics. Findings in this research project identified opportunities for increased collaborative opportunities. Other findings revealed opportunities to closely align all reading and math curriculum.

Teachers who feel good about their level of preparedness and expertise are more effective teachers (Woodcock et al., 2019). The PLC provides a safe space for teachers and school leaders to explore topics including instruction, classroom management, differentiation, assessment, technology integration, and personalized learning. This approach leans toward a more instructionally focused experience and relegates noninstructional tasks to a different type of setting. Realistically the PLC must at some point in time discuss operational issues such as entry procedures, lunchroom procedures, specials procedures, and dismissal procedures. However, these activities should not dominate the available time teams have in collaboration.

Recommendation #3

It is recommended that resources be leveraged to ensure general education teachers have a variety of instructional materials and supplemental aids to deliver effective teaching in reading and mathematics. Many schools operate under the old construct of classroom sets of textbooks, supplies, and materials for each teacher. This construct is expensive in that it duplicates instructional materials for each teacher. With proper scheduling done in a PLC, teachers can organize themselves and draw on shared arrangements of instructional materials to include reading materials, classroom libraries, visual aids, posters, math manipulatives, calculators, tablet devices, Chromebooks, and software. This shared arrangement allows schools to buy greater quantities of materials to be shared by teaching staff. This arrangement also frees up resources to provide enrichment activities such as one-to-one devices, field trips, and other out of class learning opportunities.

Recommendations for Further Study

The findings in this research project create three recommendations for action. These recommendations are based on feedback gained from the one on one teacher interviews and are consistent with the two research questions. Acting on these recommendations may address teachers' perceptions about teaching students with special needs and the general classroom and equitably distributed teaching resources throughout the campus.

The findings from my study have the potential to serve as a focal point upon which to reimagine professional development activities to equip teachers to meet the

instructional, behavioral, and diversity challenge found in many classrooms across the local area, state and nation. Recognizing the diversity present in many classrooms can serve as the beginning for differentiating professional development in several areas. These activities include but are not limited to professional development opportunities for self-efficacy training for teachers, high yield strategies for general education teachers who served students with special education services in inclusion classrooms, and administrator response to matters concerning the education of students with special education services in inclusion classrooms. Additional research is recommended in the type and specificity of self-efficacy training programs. Whether a session solely on this topic or embedded into content professional development, self-efficacy training is an important factor in the successful application of teaching strategies.

Federal, state, and local policies guide educational leaders to support classroom teachers and propose solutions that significantly improve student outcomes. Capitalizing on this initiative would provide opportunities for further research to build a compendium of strategies to improve the effectiveness of general education teachers who serve students with special education services in inclusion classrooms. Therefore, research where researchers assess the effectiveness of these strategies should be ongoing and even replicated.

Classroom teachers represent one component of the delivery model. Campus principals represent an important and determining factor toward teacher success, positive teacher attitudes, and expected learner outcomes. Therefore, it is recommended that campus and district leaders participate in leadership training and decision-making

processes that support general education teachers of inclusion classrooms. Research that includes assessment of the effectiveness of this specific training should be integrated as part of the training process and published to expand the knowledge base regarding the school principals' roles in successful inclusion.

Other research opportunities include university and teacher preparation entities to explore and improve training for pre-service teachers and ongoing training for continuing teachers. This proposal contains the potential to strengthen the professional practice teachers and add to the body of research to strengthen the teaching profession.

Summary

In reflecting on the planning and execution of this study, I have developed new understandings about the process and effectiveness of conducting a qualitative study, the perceptions of the participants toward their students with special needs, the tie-ins of resources to positive TSE, and the level of importance and regard I hold at this school. As the special education teacher, I observed first-hand the challenges these teachers faced with inclusion. When failing test results of students with special needs in reading and math corroborated my observations, I was motivated to further my understanding of the problem and seek solutions. This motivation of seeking change and possibly being the catalyst of change is admittedly a source of personal bias in this study. But like a true catalyst, I refrained from inserting myself too strongly in the research process by exercising common practices in qualitative research that promoted trustworthiness of the data collection and analysis.

I was motivated to conduct research that was grounded in cognitive learning theory would demonstrate respect for the participants, and would allow them to explain the issues they experienced with inclusion, particularly in their ability to feel successful in how they reach and teach inclusion students. Bandura's SCT best fit this research because of its explanation of self-efficacy, a key component guiding the research questions. The open-ended interview best met these motivations and paralleled what is naturally done in problem solving—identifying and describing the problem. Furthermore, the interview process best fit the role I had with the teachers, that of a resource and support for planning, delivering, and assessing students with special needs in their classrooms. The interview experience enlightened me on many levels. I found the teachers very aware of the academic needs of the students included in the classroom and expressed concern and responsibility for their achievement. They knew that the students needed differentiated curriculum and often knew specifically how to assist them. This level of understanding about the problem I found encouraging.

All teachers were clear that they believed if given extra time and training to develop differentiated instruction for math and reading, the students with special needs would greatly improve on their next state assessment. I found this research result so compelling that I now think in terms of differentiated instruction and student achievement in most of my decision making at this school. This intense focus of action generates hope that student academic improvement is inevitable and that the general education teachers' struggles with inclusion will ease.

Today's classrooms represent not only the diversity of America, but often include diversity from all parts of the globe. A standardized approach has become outmoded due to varying needs of students with disabilities who hail from myriad backgrounds and have varied learning styles and emotional constraints. Federal requirements included in NCLB and Every Student Succeeds Act were instituted to level the playing field by equipping students with a high-quality education.

Dissemination of knowledge in inclusion classrooms is dependent on educational curriculums that rest on the adaptive capabilities of students, effectiveness of instruction, and above all, the ability to continuously employ student-centered teaching techniques in in class. Undergraduate programs have now become *inclusive* in nature. Hence teacher education programs are now aimed at producing teachers who are capable of mentoring students whose abilities to absorb and synthesize instruction vary widely.

What cannot be understated in these conclusions is the pivotal and critical role school administrators play in the development of positive TSE among teachers. Administrators maintain and set budgets and logistics, thereby, controlling the availability of the resources outlined in the six constructs that make-up Bandura’s SCT. Administrators set expectations, determine many of the environmental factors or barriers described by research participants, model behaviors or set the tone for modeling, gauge the quality of the teaching staff and ultimately decide if their teaching staff have the positive TSE necessary to successfully meet the challenges within an inclusion classroom.

The quest for excellence in education must include the perceptions and attitudes of practitioners who deliver services in the classroom, the most fundamental level. By acknowledging the findings and conclusions represented in this study, teacher attitudes and efficacy can be improved which in turn will improve the educational outcomes of all students in all classrooms.

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Appendix A: One-on-One Interviews

Date:

Start Time:

End Time:

Meeting Location:

Introduction:

Thank you for taking the time to participate in this one-on-one interview for a study entitled Teacher Perceptions of Teaching Student with Special Education Services in Inclusion. The purpose of this study is to explore general education teachers' perceptions about teaching students with special needs in inclusion classrooms and to investigate the teachers' perceptions about resources needed to work more effectively.

Research Question #1: What are elementary general education teachers' perceptions about teaching reading and mathematics in inclusion classrooms?

- Difficult. Lesson planning time consuming and complex,
- not enough differentiated teaching material,
- not enuf or professional dev opportunities to feel confident,
- addition instructor needed to meet all needs
- too many skill levels to teach to
- ED, LD, autistic provide classroom

Interview question 1: Describe 3 different lessons that you were proud of this school year.
Probe 1.1: What was different about these 3 lessons than the others?
Probe 1.2: What do you see as contributing factors?

Interview question 2: What are the rewards of teaching in an inclusion classroom?
Probe 2.1: What do you see as contributing factors?

Interview question 3: What have you found challenging about teaching in an inclusion classroom?
Probe 3.1: Can you give an example?
Probe 3.2: What do you see as contributing factors?

Interview question 4: As a teacher, how do you feel the laws such as IDEA and NCLB for children with disabilities impact your teaching?
Probe 4.1: Provide an anecdote that illustrates how including students with special education services effect your classroom?

Research Question #2: What resources do general education teachers perceive can provide effective support in inclusion classrooms and foster higher degrees of self-efficacy?
Interview question 5: What methods do you use to encourage students to explore learning opportunities?
Probe 5.1: What creative methods have you successfully used to build motivation?
Probe 5.2: Are other resources needed?

Interview question 6: How do you motivate students to persevere with challenging assignments and task?
Probe 6.1: Name several ways you differentiate assignments and tasks for the different level of learners in your class?

Interview question 7: How do you challenge slow learners and the advanced learners within the same class?
Probe 7.1: What would make their experience richer and/or promote higher levels of student mastery?

Appendix B: One-on-One Interview Transcript

Interviewee: Teacher 8

Interviewer: Cherise Wesley

Research Question #1: What are elementary general education teachers' perceptions about teaching reading and mathematics in inclusion classrooms?

Interviewer: Interview question 1: Describe 3 different lessons that you were proud of this school year.

Interviewee:

- **Lesson 1:** One of the first lessons I had was teaching students about genres. To begin, I collected books of different genres. I showed students a fiction book, pointing out different characteristics of it and explained how they were all characteristics of a fictional book. Then, I had students look at the books in their group and find books they thought were fiction and separate them from the ones that were not fictional books. As they looked through the books, I had them describe what characteristics they noticed that made a book fictional and what made a book non-fiction.
- **Lesson 2:** Another lesson I taught was in comparing fractions. During this lesson, I brought in someone bread. I took two pieces of bread and cut one into 4ths and the other into 8ths. I showed them one piece from each and showed them how although one is cut into less pieces, it is still the larger fraction because the pieces are bigger. Then we did some more practice cutting bread into pieces and comparing the sizes. After the practice, I showed them the butterfly method and had them check their answers by cutting some more bread.
- **Lesson 3:** A third lesson I taught was about inferencing which is difficult for all students. In this lesson, I explained that we learn all kinds of information about people, places, things, etc. because of the clues we see, hear, touch, taste, and smell. I showed them a women's Tennie shoe and began to describe it based on the what I saw, touched, and smelled. Then I began to make inferences based on my observations. (Sole of the shoe was flat or well-worn, probably meaning the woman either walks a lot or runs.) Then, I divided students into groups and gave them each a different shoe. They made observations and recorded them on a T-chart. After all the observations were recorded, they discussed what type of inferences they could make because of them.

Interviewer: Probe 1.1: What was different about these 3 lessons than the others?

Interviewee:

- One of the biggest differences I had in these three lessons and some of the other lessons was that they were all in some way hands on. Each student/group had something to physically hold and they could explore for themselves the items.

Interviewer: Probe 1.2: What do you see as contributing factors?

Interviewee:

- Some contributing factors were manipulatives, peer & teacher support, free exploration.

Interviewer: Interview question 2: What are the rewards of teaching in an inclusion classroom?

Interviewee:

- A few of the awards for teaching in an inclusion classroom is the need to differentiate information/content more. While all students learn differently, most can still learn the content in a way that is not to their learning style. However, in an inclusion classroom, it is a necessity to teach students in a manner that is conducive to their learning style.
- Another reward is the opportunity to for students and teachers to learn how to interact with people that are different from themselves or from people they would normally associate with.

Interviewer: Probe 2.1: What do you see as contributing factors?

Interviewee:

- Some contributing factors include teacher and peer support, variety of experiences and opportunities through diversity.

Interviewer: Interview question 3: What have you found challenging about teaching in an inclusion classroom?

Interviewee:

- I can probably say that the biggest challenge is having the time to provide the support needed to plan and implement the different types of plans for each child, especially if that child needs extra time.

- Another challenge is having the resources necessary to provide the student(s) with the materials/supports that they need.
- Data results are lower effecting teacher's overall scores.

Interviewer: Probe 3.1: Can you give an example?

Interviewee:

- An example would be that one of the inclusion students I have has a very slow processing speed. Therefore, he needs not only extra time to do the work, but he also needs me to move at a slower pace. However, if I go to slow, the rest of my students stop being engaged and become disruptive.
- Another example is that one of my inclusion students benefits from real life experiences such as field trips. With very little funds, that is not possible, nor is it possible to bring items or people in to the school unless using my own money.
- Example: I have 3 students. My one SPED student has yet to pass a reading test, thus my results always show that I have only a 67% passing rate.

Interviewer: Probe 3.2: What do you see as contributing factors?

Interviewee:

- Some contributing factors include time, parental and/or administrative support, pressure from those higher up, and funding.

Interviewer: Interview question 4: As a teacher, how do you feel the laws such as IDEA and NCLB for children with disabilities impact your teaching?

Interviewee:

- I believe that such laws are needed to ensure students with disabilities receive the necessary instruction to be successful in life and that they are not just dismissed because of a disability.
- However, I also believe that they make it difficult for a teacher to hold a student back if it is necessary. Most teachers just pass the student even though holding them back may make them more successful in the long run because they don't want to deal with the paperwork.

Interviewer: Probe 4.1: Provide an anecdote that illustrates how including special education students effect your classroom?

Interviewee:

- Including special education students in my class adds more pressure and responsibilities to the ones I already have. Often, I am needing to slow down, or even completely stop

to accommodate their needs or put them back on track. I have one student that needs one on one support, but I don't have the time or the capability to offer it because I have others in the class that need my help as well.

Research Question #2: What resources do general education teachers perceive can provide effective support in inclusion classrooms and foster higher degrees of self-efficacy?

Interviewer: Interview question 5: What methods do you use to encourage students to explore learning opportunities?

Interviewee:

- I provide students with the opportunity to do projects outside of the classroom. I try to bring new types of literature that may interest the students.

Interviewer: Probe 5.1: What creative methods have you successfully used to build motivation?

Interviewee:

- Students often have been encouraged to create their own models for projects in whatever way they choose.

Interviewer: Probe 5.2: Are other resources needed?

Interviewee:

- Others could benefit from field trips outside of school or even at the school. More hands-on experiences.

Interviewer: Interview question 6: How do you motivate students to persevere with challenging assignments and task?

Interviewee:

- I try to give my students different rewards such as stickers or candy, toys, etc. Or I try to give them free time or extra recess. I also try to give them extra time on challenging assignments or tasks.
- I give verbal praise and encouragement throughout the days and weeks.

Interviewer: Probe 6.1: Name several ways you differentiate assignments and tasks for the different level of learners in your class?

Interviewee:

- To differentiate assignments I create shorter assignments, make less choices (multiple choice questions), less writing is required (3 paragraphs instead of 5), give extra time, lower leveled passages or passage is read. I also give them options on how to do their projects.

Interviewer: Interview question 7: How do you challenge slow learners and the advanced learners within the same class?

Interviewee:

- I give my more opportunities as a small group or in pairs. I give them a voice in their projects, like on how they want to make a model or how in depth they want their writing to be. I give them logic puzzles to try that are more on their level.
- My more advanced students I provide them with more challenging texts and questions, more open ended vs. multiple choice, especially when in groups or pairs. I also give them options on how to do their projects as well. I also give these students logic puzzles on their levels.

Interviewer: Probe 7.1: What would make their experience richer and/or promote higher levels of student mastery?

Interviewee:

- Less testing would help not only SPED students, but also all my students. I also think that there is too much focus on testing and not on just learning. This leaves students with a lack of inner motivation toward personalized learning.
- An opportunity for more real-world experience, like going on field trips or bringing in experts to teach the class. More hands-on equipment or manipulatives.