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This dissertation, directed and approved by the candidate's committee, has been accepted by the College of Graduate and Professional Studies of Abilene Christian University in partial fulfillment of the requirements for the degree

Doctor of Education in Organizational Leadership

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November 5, 2020

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Multi-Tiered Systems of Support and School Leadership in High-Achieving Pennsylvania Schoolwide Title 1 Elementary Schools

> A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Education in Organizational Leadership

> > by

Malinda Jane Mikesell

November 2020

Dedication

I dedicate this work first to my Lord and Savior, Jesus Christ. Jeremiah 29:11 says, "For I know the plans I have for you, declares the Lord, plans for welfare and not for evil, to give you a future and a hope."

To my parents, grandparents, and my husband Byron's family who have blessed me with their illustration and example of how to grow in my faith and develop a Biblical worldview.

To Kellen and Seneca, who have graciously allowed mama to do her "schoolwork" as they were completing theirs. It is my prayer that they will be inspired to fulfill their educational goals and continue to grow as learners throughout their lives.

Lastly, I dedicate this work to my husband, Byron. Thank you for your love and encouragement that has enabled me to accomplish this life-long dream.

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I further acknowledge my fellow administrators, educators, literacy coaches, and reading specialists who have encouraged me to begin my doctoral studies and who have been with me through the journey. Their words of encouragement were priceless.

Lastly, I want to acknowledge the many mentors who have shaped me as an educator throughout my career. It is these individuals, who have always encouraged me to challenge the processes and practices of our field, in the spirit of continuing our collective journey of growing and developing not only individually but as a collective of passionate educators.

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Abstract

This explanatory case study illustrates how some Pennsylvania Schoolwide Title 1 elementary schools are thriving on state assessments while others are unable to achieve this success. The study was limited to this population of elementary schools to focus on how and why some schools with high percentages of students who receive free and reduced lunch are achieving excellent student achievement. First, the differences between Schoolwide Title 1 schools' achievement on the Pennsylvania state assessments were categorized. Then Schoolwide Title 1 elementary schools with the highest percentages of students with low socioeconomic status (SES), who still achieved proficient school performance profiles were recorded. Finally, interviews were conducted with the building principals of these elementary schools to determine the impact between the school's multi-tiered system of support framework, the leadership of the building principal, and the successful achievement. The findings indicate there are very few Schoolwide Title 1 elementary schools with over 70% of students receiving free or reduced lunch achieving high levels of proficiency. Those buildings who are achieving proficient results share a strong focus on core instruction, intense targeted small group instruction, robust use of data to drive instruction, and fidelity to an MTSS framework for literacy, math, and behavior. The findings also indicate the building principal shares qualities of transformational leadership, specifically building relationships with staff, students, and families; implementing and communicating a shared vision and goals derived from a deep knowledge of the standards at each grade level; the use of data to drive instruction and the instructional practices needed for students to be successful.

Keywords: multi-tiered systems of support, positive behavior intervention support, response to intervention, Pennsylvania Future Ready Index, school performance profile

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Chapter 1: Introduction

The Pennsylvania Future Ready Index scores demonstrate consistent high achievement on state math and literacy assessments at some Schoolwide Title 1 elementary schools. Students in Schoolwide Title 1 schools need to eclipse many unique challenges in order to achieve excellent results on state assessments. Many of these challenges stem from prevailing underprivileged within the schools' socioeconomic status (SES) that result in heightened educational demands of the system. Schoolwide Title 1 indicates at least 40% of the student population receives free or reduced lunch. Kainz (2019) stated, "Research on the relation between Title I programming choices and children's academic performance and growth is needed to facilitate informed programming choices and ultimately improved education opportunity and performance for economically disadvantaged children" (p. 161). Every Student Succeeds Act (ESSA), enacted on December 10, 2015 by the United States Department of Education identified Multi-Tiered Systems of Support (MTSS) as the instructional framework for Local Education Agencies (LEAs) to satisfy the academic and behavioral needs of all students. Leadership in Schoolwide Title 1 schools combined with the implementation of Multi-Tiered Systems of Support (MTSS) may be factors that impact student achievement as the high performing schools respond most effectively to the heightened educational demands.

Background

Multi-Tiered Systems of Support (MTSS) or Response to Intervention and Instruction (RTII) provide schools and districts with frameworks for instructional delivery that will ensure all students achieve at their maximum potential. The Multi-Tiered Systems of Support framework further develops the concept of RTII by encompassing not only academic support structures, but also a continuum of systematic, collaborative targeted interventions that are

1

responsive to students' social and emotional learning needs. Through the development of the MTSS framework, school teams representing all stakeholders collaborate to develop structures that allow students to receive intervention services in all areas of need (Fuchs & Deshler, 2007; Fuchs & Fuchs, 2006; Harn et al., 2015). Ultimately, effectiveness of the MTSS instructional framework is confirmed when it is implemented with fidelity in an LEA and the students experience successful achievement on state assessments (McIntosh et al., 2010; McIntosh & Goodman, 2016).

In Pennsylvania, MTSS intends to bring collaborators together to include the following: core classroom teachers, special education teachers, math interventionists, reading specialists, and behavioral specialists to develop a strong core program accompanied by intensive interventions available to all students in every area. "Administrators are key to the effective implementation of MTSS," as Eagle et al. (2015) argued "District and building level administrators are in positions that can enhance MTSS implementation and provide structures within school schedules that can assist the sustainability of systems-level change" (p. 166). Fidelity to core instruction, universal screening procedures, protocols for determination of the diagnostic tiered interventions that are appropriate for each child, and progress monitoring systems must be in place to facilitate the MTSS structure.

Pennsylvania is one of the "forty-two states, the District of Columbia, four territories, and the Department of Defense Education Activity (DoDEA) who have adopted the Common Core State Standards" according to the Common Core State Standards Initiative Website (2010). This adoption means that core instruction in every academic area is based on the standards as they were released in 2010 and were then modified to be the PA Common Core Standards as implemented in 2013. In every school across Pennsylvania the development of an MTSS structure is important, but it is essential in Schoolwide Title 1 buildings that have 40% or more of the student population receiving free or reduced lunch. In 2017, the National Assessment of Educational Progress (NEAP) reported that in fourth grade reading, the achievement gap between students at high-poverty and low-poverty schools was 35 points (National Academies of Sciences, Engineering, and Medicine, 2017). This score was not different from the gaps noted in 2005 and 2015. Thus, if all Schoolwide Title 1 schools develop an MTSS framework for reading, math and behavior this will assist with the closure of the achievement gap. To significantly close the achievement gap, effective instruction must occur in all areas of MTSS: Tier 1, Tier 2, and Tier 3, and in all areas of math, literacy, and behavior (Benner et al., 2013).

The development of MTSS ensures a more systematic delivery of core instruction with great fidelity across educators. Effective core instruction allows 75 to 80% of the students to achieve mastery of the standard. However, Shapiro (1999) advocated that for schools with high concentrations of poverty it may take many years to achieve this level of mastery within the student population. Hall (2018) asserted, "Another principle of MTSS is that all students receive what they need" (p. 6). MTSS warrants that students receive effective core instruction and systematic, diagnostic tiered intervention instruction.

Robust transformational leadership by the building principal enables the implementation of an MTSS framework. For transformational change to occur, leaders must possess a depth of knowledge regarding the common core standards and grade level expectations in reading, math, and behavior. Leaders must develop a climate and culture where staff are willing to follow the systematic protocols of universal screening, intervention placement, continuous progress monitoring and consistent implementation of the school wide Positive Behavior Intervention Support system. Kramer and Allen (2018) indicated that leaders who have goals that transcend their own and work toward the common good of the followers are truly transformational leaders. Transformational leadership allows for the development of a consistent climate and culture of high achievement within a school, regardless of its demographic composition.

Some Pennsylvania elementary Schoolwide Title 1 LEAs have fully implemented MTSS instructional frameworks, while others do not. Schoolwide Title 1 schools have varying degrees of achievement as illustrated by the Future Ready Index and the School Performance Profile for each school. Overall, Schoolwide Title 1 schools have higher concentrations of students from low SES, minority status, low English proficiency, and higher Adverse Childhood Experiences in comparison to other LEAs, who are not Schoolwide Title 1 (Almeida et al., 2005; Hall, 2018; Saporito & Sohoni, 2007). The challenges of this particular student population illustrate the importance of not only MTSS but also transformational leadership to ensure student achievement.

Schoolwide Title 1 LEAs share some characteristics of effective leaders such as building trusting relationships, shared decision making, and adequate resource allocation (McLeskey et al., 2014; Sailor et al., 2018). Dulaney et al. (2013) found "A current evaluation of district leader knowledge, perceptions and efforts regarding MTSS implementation can inform current practice" (p. 33). Some Schoolwide Title 1 leaders have schools with fully implemented MTSS systems where students have consistently demonstrated achievement on state assessments while others have not experienced these successes.

Conceptual Framework

Multi-tiered systems of support is a conceptual framework outlined by the Pennsylvania Department of Education as an instructional delivery system that meets the needs of elementary students through the following characteristics: standards aligned instruction, universal screening, shared ownership, data-based decision making, the delivery of services and interventions, and family engagement (Pennsylvania Department of Education, 2010). The PA MTSS structure has a systematic approach for decision-making that is based on instructional practices that are driven by data collected through universal and diagnostic assessments. Universal screenings are those assessments in literacy and math that are given to all students. Behavior checklists and rating scales that are completed by teachers are used as universal behavior screeners (Batsche et al., 2006; Fuchs & Fuchs, 2006, 2017; Hall, 2018; Lembke & Stecker, 2007). The essential components of RTI as identified in the literature include the following: (a) universal screening; (b) data reviewed by a problem solving team; (c) targeted interventions for math, literacy and behavior that are monitored through data collection; (d) intensity of interventions through a tiered approach; and (e) referral methods for students who do not respond to interventions at an expected pace (Bender & Shores, 2007; Fuchs & Fuchs, 2006, 2017; Hall, 2018). These components of MTSS/RTII must be evident in the school culture and implemented by all stakeholders to maximize student growth.

Historically, implementation of RTII and MTSS systems across the United States began in many school districts with literacy interventions and have developed to include math and behavior. Balu et al. (2015) completed "The Evaluation of Response to Intervention Practices for Elementary School Reading," which was a landmark study of over 20,000 students in 13 states across the country. This study found insignificant reading growth for students receiving Tier 2 supports and those receiving only Tier 1 support. Critics of the study such as Baker et al. (2015) and Fuchs et al. (2018) argued the study highlights the inconsistencies in the implementation of MTSS/RTII among local school districts that account for the lack of significant growth among Tier 2 students. Coyne et al. (2018) found that in literacy "Initial growth on these foundational skills provides evidence that students are responding to intervention and building the base for acquiring more advanced skills" (p. 362). Therefore, consistent implementation of MTSS/RTII is an essential component in the effectiveness of the MTSS/RTII system to ensure students' growth in literacy, math, and behavior.

Students' growth each school year combined with students' longitudinal growth illustrates the health of an MTSS/RTII system within a school. Fuchs et al. (2018) identified seven dimensions of intensity that must be considered when calculating a student's rate of acquisition in either literacy or math growth. These dimensions include: the strength of the intervention being delivered to the student, the dosage or amount of time the student is spending per day in intervention, the alignment of the intervention to the core classroom instruction, the attunement of the interventionists and the classroom teacher to the student's rate of transfer, the complexity of the student's needs, the behavioral needs of the student, and the degree to which the intervention and instruction must be individualized for the student to achieve growth. The school leader's knowledge and sensitivity towards these dimensions of intensity is an essential component in the implementation of an effective MTSS/RTII system. Effective implementation of an MTSS/RTII system will lead to successful student achievement as measured on state literacy and math assessments.

The facilitation of the MTSS system within a school district or individual school must be consistent and maintain a high degree of fidelity. According to Fuchs and Fuchs (2017), "All RTI systems should reflect a balance between what is effective and what is doable and the balancing of the two should occur at the local level" (p. 266). Sustaining an MTSS/RTI system requires the vigilance of the building principal to ensure that the system itself does not become a substitution for special education. Rather, MTSS is an integral partner that allows students to receive Tier 3 intervention services in combination with high quality core instruction that is scaffolded or differentiated as is dictated by the student's needs over time. Access to core instruction and intervention services through a MTSS/RTII structure is one aspect of students' rights to a free and appropriate education in a public school. Students who attend Schoolwide Title 1 schools, like all other students, should have access to an MTSS framework that promotes all students' academic and behavioral achievement under the leadership of the building principal.

Statement of the Problem

Some Schoolwide Title 1 leaders of LEAs with fully implemented MTSS frameworks have achieved consistent student success on the Pennsylvania Future Ready Index, while other schools with the same Schoolwide Title 1 profiles have not experienced these successes. The challenges that many Schoolwide Title 1 students bring into the school can cause their acquisition of learning to be delayed. Many of these students have food insecurity, trauma, and other factors that could make learning difficult. Despite these challenges, some Schoolwide Title 1 schools with fully implemented MTSS frameworks have achieved consistent student achievement, while others have not.

The MTSS framework outlines robust core instruction in math, literacy and behavior, along with specific Tier 2 and 3 interventions that grow students within individual areas of need. Data analysis, collaborative planning, and fidelity to the MTSS model are all attributable to the leadership of the building principal. Therefore, when the MTSS framework is fully implemented and the building principal provides robust leadership, then the results of student achievement from one school to another would seemingly be similar. State-wide performance data demonstrates the contrary (Pennsylvania Department of Education, 2019). Rather, within schoolwide elementary schools, the students' achievement varies greatly.

Purpose of the Study

The purpose of this study was to understand how some of the Pennsylvania kindergarten through sixth grade Schoolwide Title 1 schools are thriving on state assessments, while others are unable to achieve this success. Further analysis of the Schoolwide Title 1 schools who are demonstrating proficiency on the state assessments will highlight how many students from low SES attend each school. The study showcases the extent to which the implementation of an MTSS framework and the leadership of the building principal cultivated students' successful achievement on state assessments.

Research Questions

The study was guided by the following research questions:

RQ1: What are the differences among Schoolwide Title 1 elementary schools' performance on Pennsylvania state assessments?

RQ2: Within Schoolwide Title 1 elementary schools who are demonstrating proficiency on the school performance profile, how do schools with high percentages of students from low socioeconomic families perform?

RQ3: How do building principals of Schoolwide Title 1 schools in Pennsylvania perceive the impact between the MTSS framework, their leadership, and their students' successful achievement on Pennsylvania state assessments?

Significance

A description of the factors that have led to some Schoolwide Title 1 elementary schools' successful performance on state assessments are significant because this knowledge can be

transferrable to other schools. The inclusion of schools that are only within this targeted population of elementary Schoolwide Title 1 schools is critical. These are the buildings where successful performance on state assessments is more difficult due to the concentration of poverty and trauma present within the population. The degree to which the building principal attributes the state assessment results to the implementation of a MTSS system for math, literacy and behavior and/or their own leadership characteristics contextualizes the school culture. Equally important is an analysis of what other factors the building principals identify that they believe may have led to their school's successful performance.

Beyond the educational community, this knowledge is important to the public because the factors that influence students' achievement on state assessments in Schoolwide Title 1 schools may be replicable. The discovery of these elements of success will allow other Schoolwide Title 1 Schools to further implement or contextualize these factors within their school's culture.

Definition of Key Terms

The study was guided by the following definitions:

Building administrator/Principal/MTSS coordinator. A leader within the school who is responsible for the implementation and fidelity of the MTSS/RTII system for literacy, behavior, and math. A MTSS coordinator may be responsible for the implementation of MTSS for literacy, math and behavior in multiple school through a school district or just for one school (Wallace Foundation, 2013, p. 14).

Free and appropriate education (FAPE). This entitles students with IEPs or 504 plans to have their educational needs provided for the least restrictive environment possible (Office for Civil Rights [ED], Washington, DC, 1996).

Future ready Pennsylvania index. Pennsylvania Future Ready Index is a public reporting tool that increases transparency around "academic performance, student progress and college and career readiness" for each school in Pennsylvania (Pennsylvania Department of Education, 2018, p. 2).

Individualized education program (IEP). An individualized plan is written for students to ensure their educational needs as determined by a school-based team of educators and other stakeholders are met in the general education setting (Pretti-Frontczak & Bricker, 2000).

Multi-Tiered systems of support (MTSS). Multi-tiered systems of support is an umbrella term for instructional delivery that facilitates the success of all students. This framework encompasses the academic (RTI) and behavioral components (PBIS) of student success. "A standards-aligned, comprehensive school improvement framework for enhancing academic, behavioral and social-emotional outcomes for all students using a three-tiered model of instructional delivery" (Pennsylvania Department of Education, 2018, p. 1).

Positive behavior intervention support (PBIS). Positive Behavior Intervention Support is the instruction of core social emotional learning expectations for all students within the building and the tiered intervention structures that enable all students to achieve these expectations. This is one component of the MTSS system (Pennsylvania Department of Education, 2018, p. 1).

Response to intervention (RTI). Response to Intervention (RTI) is "(a) use of multiple tiers of increasingly intense interventions; (b) a problem-solving approach to identify and evaluate instructional strategies; and (c) an integrated data collection and assessment system to monitor student progress and guide decisions at every level" (Coleman et al., 2006, p. 1). This

definition is used to specifically illustrate the math and literacy components of the MTSS structure.

Schoolwide Title 1 elementary school. A school with any configuration of grades kindergarten through sixth grade that has at least 40% of the student population, who receive free or reduced lunch. Title 1 funds must be used to raise the achievement of all students in the school (Mercer et al., 2017).

Summary

In this chapter, the study was outlined to identify factors that result in some Schoolwide Title 1 schools' successful achievement of excellent results on the PSSA as opposed to others that struggle to find success. This outline included background information, a conceptual framework, research questions, the purpose and significance of the study, and an initial glossary of important terms. Chapter 2 will provide a comprehensive review of the literature related to the education of children in elementary Schoolwide Title 1 buildings, MTSS, and educational leadership.

Chapter 2: Literature Review

The review of related literature and research includes a historical context of state and federal mandates that have influenced the development of multi-tier systems of support (MTSS) and Response to Intervention (RTI). The historical journey of RTI and MTSS in the United States, specifically in Pennsylvania have required all schools in Pennsylvania to implement multi-tier systems of support to strengthen core instruction and assist students who are struggling in math, literacy or behavior. Research regarding the key aspects of the MTSS system, the general impact of poverty on students' achievement, and the impact of poverty on the implementation of the MTSS system will be discussed. Literature regarding the history of educational leadership, and specifically transformational leadership as it relates to the implementation of MTSS will also be discussed.

The purpose of this study was to determine if Pennsylvania Schoolwide Title 1 elementary schools who demonstrate consistent high achievement on state assessments have accomplished this as a result of leadership, implementation of the MTSS system or other factors as outlined by the building principal. There are few studies that specifically consider how the implementation of the MTSS framework and the leadership of the building relate to student achievement in high poverty schools (Fuchs & Fuchs, 2006, 2017; Fuchs et al., 2018). Thus, the purpose of this study was to enhance the literature base, specifically as it relates to what factors have influenced students' successful achievement on state assessments in Pennsylvania Schoolwide Title 1 schools.

Historical Development of RTI in the United States

Response to Intervention (RTI) and Multi-Tiered Systems of Support evolved from the literature on learning disabilities that began to be studied in the 1960s and early 1970s. Samuel

Kirk in 1962 was the first individual to name a child's learning difficulties that did not result from intellectual disability as a learning disability. In the 1970s the U.S. Office of Education defined learning disabilities and state educational agencies began to adopt achievementdiscrepancy requirements for learning disability qualification. Scruggs and Mastropieri (2002) began to question the validity of IQ testing, particularly in the area of reading. This is due to some students being identified who had a discrepancy between their IQ score and their achievement, while others continued to struggle in literacy but were not identified. For example, students whose IQ scores were equal to their literacy achievement did not have the need discrepancy to qualify for any additional services.

As more and more students were identified as having a learning disability, educators began to question this methodology for special education identification. Scruggs and Mastropieri (2002) found the number of students who were struggling in school seemed out of balance with the number of students who were being identified for special education. This caused a belief to grow that any student could benefit from special education services. Preston et al. (2016) indicated that "In essence, they conceptualized the origins of RTI by claiming that general education teachers should be responsible for providing multiple interventions to students who are struggling and for documenting student progress within these interventions" (p. 175). Fuchs and Fuchs (1991, 1998) began to further develop the concept of RTI, particularly in the area of tiered literacy interventions for primary students in combination with progress monitoring tools that teachers could use to facilitate their daily instructional sequence. The concept of evaluating students' responses to intervention before they fail is a concept that has remained to the present day. Providing instruction in the general education setting that is differentiated to meet all students' needs in combination with giving all students assessments to gain an understanding of their achievement level became common practice in the 1980s. Deno (1985) indicated that in the mid-1980s some school districts were using standardized assessments, while others were creating their own assessments. These were created in an effort to better understand which concepts or skills students understood and could move forward with in the learning progression, and which ones the students needed more assistance to understand. Curriculum-based measurements created in the late 1970s offered teachers and schools assessment tools that could be given to students to assess their progress once or twice a week as needed.

With disgruntlement in the field rising through the 1980s and 1990s regarding the credibility of the discrepancy model of identification for special education, The National Joint Committee of Learning Disabilities indicated their discontentment with this model by writing a letter to the Office of Special Education Programs (National Joint Committee on Learning Disabilities, 1997). This letter prompted the formation of the Learning Disabilities Initiative in 2000, which was a group of people who were working to identify how the discrepancy methodology could be improved. The formation of this group eventually led to the President's Commission of Excellence in Special Education which was formed in 2001 for the purpose of considering some of the ideas that were being researched as components of the Reauthorization of IDEA that was forthcoming.

In 2002, the National Research Center on Learning Disabilities issued the *Common Ground Report* (American Institutes for Research, 2002), which provided a foundation that led to changing the learning disability discrepancy model to a response to intervention model. The response to intervention model involved progress monitoring, universal assessments and the use of systematic interventions before the students began to fail in literacy or math. By 2004, the Individuals with Disabilities Education Improvement Act (IDEA; Handler, 2006) relaxed the law to allow for students to be diagnosed with a specific learning disability through the response to intervention model instead of the achievement discrepancy mode. Burdette (2007) indicated this change also allowed for early intervening services to be paid for with IDEA funds. Preston et al. (2016) argued "These two major changes in IDEA shifted the focus of LD, learning disabilities, from a reactive to a proactive approach for early intervention" (p. 176). These legislative developments allowed for multiple pathways to be available for students' with and without an IQ and achievement discrepancy to receive the educational services they needed to be successful.

Two Models of RTI

In the early 2000s two general models emerged for the implementation of RTI in schools. These models were the standard protocol model and the problem-solving model. Batsche et al. (2005) and Fuchs et al. (2010) clarified these models and their isolated or blended implementation in schools. Ikeda et al. (1996) originally developed the problem-solving model which states if the proper differentiation is provided to the student within core instruction, the student will not need any special education services. Fuchs et al. (2010) outlined that when a student is not making adequate progress in Tier 1 the teacher, school-based team and the child's family should meet to develop a plan that included a goal and progress monitoring tools to assess the students' progress. This process repeated itself in Tiers 2 and 3 until an intervention produced adequate progress towards the goal determined for the student. If this did not occur then the student is referred to receive special education service. Batsche et al. (2005) further clarified the problem-solving model allows educators to consistently analyze if the plans in place for individual and groups of students are effectively addressing the problems identified as needs. Using the standard treatment protocol model, all students received universal screening assessments and those falling below a certain criterion are provided more intensive instruction for a specific period of time. These intensive interventions are outlined by the school and staff who are providing the interventions are trained to deliver them. The standard protocol model was studied by Torgesen et al. (2001). Students who did not make progress were considered nonresponsive through the collection of progress monitoring data. This cycle was repeated several times to determine if changes to the intervention at Tier 2 would enable the students' progress more effectively. Those who continue to be nonresponsive are then referred for special education services at Tier 3. In the standard treatment protocol, model Tier 2 interventions use scripted intervention programs to ensure that explicit intervention is being provided to the students. Despite a clear articulation of these models, many individual schools use a variety of versions of these models that combine different aspects of each model.

Many researchers have studied the effectiveness of these two models, as well as many variations on the models (Batsche et al., 2005; Burns et al., 2005; Fuchs et al., 2010; Torgesen et al., 2001; VanDerHeyden et al., 2007). A meta-analysis of 21 studies indicated that schools implementing RTI showed improvement on student achievement and systematic outcomes for students. This study also illustrated a decrease in the number of students referred for special education as a result of RTI implementation within the school. Preston et al. (2016) wrote, "One of the greatest achievements may be the systematic use of universal screenings to identify students at risk for reading and mathematics difficulties" (p. 178).

There are several lessons the educational research community has learned over the years since the inception of RTI. Differentiation in Tier 1 must occur consistently throughout the lesson plan, and Tier 2 instruction must be based on universal screening data, in combination

with diagnostic data to determine the appropriate intervention group for each student. The Tier 2 groups must meet a minimum of three times per week for at 30 minutes with a targeted instructional sequence that targets the specific skill deficits of this particular group of students as defined by the universal and diagnostic screening tools. Tier 3 instruction must occur daily through the use of evidence based instructional strategies and programs that allow students to receive appropriate feedback and target the students' deficits in reading or math in an intensive, systematic instructional methodology. Fuchs and Vaughn (2012) found the location of the Tier 3 service delivery and who was delivering the intervention was not as important as the students' receipt of the explicit intensive intervention. Finally, the importance of powerful Tier 1 instruction that is provided to all students, special education or not, cannot be overstated in its ability to improve education outcomes and growth for all students.

The development of a fully implemented RTI system within an individual school or district is only completed through the tireless work of numerous administrators, classroom teachers and specialists alike. Maintaining this framework requires continued professional development of staff, effective use of all assessment tools and a deep understanding of the essential instructional components that must occur to foster students' growth in literacy, math, and behavior.

Historical Development of RTI in Pennsylvania

The Pennsylvania Department of Education implemented RTI in 2005 as a data-driven, systematic method to meet academic and behavioral needs of all students. Core instruction was delivered to all students through Tier 1. In Tiers 2 and 3, students received specific intervention services that were tailored to their areas of need. Students who mastered core instruction in Tier 1 were provided with enrichment opportunities during Tier 2 and Tier 3 instruction. In 2009, the

Pennsylvania Department of Education stated that Response to Instruction and Intervention (RTII) would replace Response to Intervention (RTI) "as the assessment and instructional framework to organize and implement Pennsylvania's Standards Aligned System (SAS)" (Pennsylvania Department of Education, n.d.). The purpose of this change was to ensure that core instruction and intervention services were delivered with equal fidelity in schools and districts across the commonwealth.

RTII was then changed again in 2015 to MTSS to ensure that all schools and districts recognized the need for academic services for core instruction and intervention, as well as core and intervention services for behavior (Pennsylvania Department of Education, 2018). The Multi-Tiered Systems of Support included both the academic components under the RTII structure, in which core instruction is provided using the Pennsylvania Common Core Standards, and Positive Behavior Intervention Support which includes a core behavior component in each building. Core instruction, within this model, allowed for differentiation to occur within the core in addition to the intervention services. MTSS ensured all students who needed tiered services in literacy, math, and behavior supports were able to receive them, not as a replacement of core instruction, but in addition to core instruction. MTSS in Pennsylvania also included components such as family engagement, community support, teacher effectiveness, and instructional collaboration.

In January of 2018, Pennsylvania's Consolidated State Plan, The Every Student Succeeds Act (ESSA; Pennsylvania Department of Education, 2018) was officially approved. This plan included the MTSS framework, with an emphasis on the Positive Behavior Support component as Pennsylvania's intervention strategy to improve all students' achievement on state assessments in math and literacy beginning in grade 3. "Pennsylvania's technical assistance, interventions, and support are rooted in the belief that it is necessary to meet the academic and nonacademic needs of students in order to promote their achievement and long-term success" (Pennsylvania Department of Education, 2018, p. 62). The ESSA plan also advocated that school districts use the MTSS framework not only as a model for instructional delivery, but also as an alternative to the discrepancy and achievement model of identification for special education services.

Schoolwide Title 1

Schoolwide Title 1 schools are identified as such by the Federal government as a result of 40% or more of their student population being comprised of students who receive free or reduced lunches. This calculation is based on US Census data for the geographic location that the school serves. The U.S. Department of Education (2018) indicated that 75% of all schools receiving Title 1 funding are Schoolwide, and of these - 49% have a poverty rate of 75% or greater (Snyder et al., 2018). Kainz (2019) stated "More succinctly, poor African American and Latinx students who attend schools with high minority concentrations begin school behind and make less progress while in school compared to their more advantaged peers who attend schools with low minority concentrations" (p. 161). Schoolwide Title 1 schools often reflect high minority concentrations relative to their non-Schoolwide Title 1 buildings.

Adverse Childhood Experiences (ACEs) in Schoolwide Title 1 Buildings

In the state of Pennsylvania school districts are locally controlled by school boards and as a result schools within a school district are most often attended by students living in the neighborhoods adjacent to the school. Therefore, Pennsylvania Schoolwide Title 1 schools are commonly located within a geographic area or region of a particular school district in which the school reflects the community in which the students are living. In the seminal Adverse Childhood Experiences (ACE), Felitti et al.'s (1998) study conducted in California with 80% white affluent, college educated adults, determined that abuse, neglect, and mental health issues in the home during childhood have adverse effects on adults' later health and behavior outcomes. In this study, 50% of respondents reported experiencing at least one adverse childhood experience while growing up and 25% had experienced two or more. In 2008 the Center for Disease Control and Prevention conducted a similar study in five states, including one in Pennsylvania in 2010. In 2010 this study found similar results with most of the respondents being white, middle class, and educated. This study found that 53% of the respondents had suffered at least one adverse childhood experience.

However, a similar Research and Evaluation Group (2012) study conducted in Philadelphia, Pennsylvania with 1700 respondents by The Institute for Safe Families found that "In all, over 37% of Philadelphia respondents reported four or more ACEs" (p. 1). This study was conducted with 40% of the respondents being white, 40% black, and 20% Latino or other. Therefore, if schools in Pennsylvania are attended by students who live in the neighborhoods surrounding the schools, then Schoolwide Title 1 schools clearly have a larger percentage of students who are more likely to have experienced ACEs during their childhood, which could impact their successful achievement in school. As illustrated in the Philadelphia study, when populations of people who are more racially, ethnically, and socioeconomically diverse are studied there are higher percentages of individuals who report having experienced ACEs during childhood. As public schools that educate these students, the impact of ACEs on students' health, academic, and behavioral success must be considered.

Impact of Poverty on Student Engagement

In the elementary grades of kindergarten through fifth grade, student engagement in the learning process is essential to the creation of neurons in the brain that cement learning into pathways from which students can retrieve the information. Hattie (2008) described engagement as feedback, cooperative learning, project learning or interactive teaching. Regardless of the vocabulary term that is used students must be an active partner in the learning process of literacy, math or even behavior concepts. Blodgett and Lanigan (2018) found:

An understanding of ACE risk is not only useful for the most vulnerable children but also it can be productively used to understand and respond to children who struggle with academic success as a critical developmental process but who may never be formally diagnosed or referred for services. (p. 141)

This indicates all educators benefit from a robust understanding of ACEs and how they impact students' engagement with the educational process. While the impact may be more overtly seen in students with higher ACE scores, this knowledge will enhance the educator's ability to more productively engage all of their students.

As a result of the ACEs that students from poverty are more likely to have experienced, the children are more likely to struggle to engage in the learning process. As a result of this struggle to engage the students, they may ultimately be deprived of some learning opportunities that their more affluent peers are afforded. Pianta et al. (2007) found that children from poverty had only a 10% likelihood to experience highly engaging, quality instruction across multiple grades. Zacarian et al. (2017) wrote,

School and district leaders play a key role in making sure that using a strengths-based approach with students living with adversity (as well as the overall student population) is part of the core of each school's vision and mission and not an add-on or box to be checked. (p. 156)

This statement argued that everyone must work toward the common vision of student achievement in both academics and behavior despite the students' ACE score or the students' lack of engagement that may accompany the students into the classroom.

Impact of Poverty on Students' Neurological Development

Students in Schoolwide Title 1 elementary buildings are more likely than their Nontitle 1 peers to have experienced ACEs or trauma that make them more vulnerable towards unfavorable health outcomes, but it was also more likely their neurological development may be impacted. Sheridan et al. (2012) demonstrated there is an association between the SES of the parent and the students' executive function skills. Executive skills are those goal-oriented skills that included problem solving, critical thinking, process speed, attention, self-control, impulse control, and working memory. While students' Nontitle 1 peers may come to school with many of these skills already developed, many students who grew up in low socioeconomic homes do not have these skills developed.

Executive function skills and fluid reasoning can be taught and developed through explicit instruction and excellent teacher modeling. Jensen (2013) wrote

One of the best things teachers can do is foster fluid intelligence, or students' ability to use learned skills and thoughts or processes to reason and solve problems in new, unfamiliar context. Fluid intelligence is a highly transferable skill that will serve your students well in the real world - - and it can be taught. (p. 54) Therefore, if students in Schoolwide Title 1 buildings received robust, informed instruction from well trained staff, this provided a measure of insolation against the ACEs and trauma the students may have experienced.

This insolation allowed the student to more effectively understand and refine their behavior, but also more effectively learn literacy and mathematical concepts. Willingham (2017) indicated, "If an educator has a model of reading in her head, like a complex clockwork, she can predict what will happen to the system as a whole when a part of it changes in some way" (pp. 193-194). This model of literacy enabled well-trained educators to think through their lesson plans and anticipate students' outcomes and misconceptions in a manner that allowed the teacher to design instruction that will meet the students' needs in literacy and move them forward in learning how to read. A deep understanding of literacy, math, executive function, and behavior instruction are essential for all strong elementary teachers to design strong lessons. These skills are essential for the student population in Schoolwide Title 1 buildings. This is especially true at the elementary level, where many of the foundational skills in each of these areas are taught and a level of mastery is expected of students before they move to the next grade level or instructional progression.

Impact of Poverty on Lesson Design

A cornerstone of MTSS is teacher delivery of robust, systematic core instruction that is adequately back-mapped to the Common Core Standards for mathematics and literacy. In the area of behavior, the school leadership's definition of Positive Behavior Expectations must be consistent throughout the building. The standards for math, literacy and behavior must be instructed through the use of strong lesson design in order to achieve the goal of 80% of students gaining mastery of the material from core instruction only. Achievement at this level became increasingly more difficult for the educator and required the teacher to plan accordingly for differentiation that meets the needs of all students in Schoolwide Title 1 schools. Haycock (1998) indicated the teacher has a greater impact on student achievement than socioeconomic background and parent education. Therefore, the teacher must not only deliver systematic instruction, but the educator must believe students are able to learn the material they are presenting and achieve the standards.

Schmid (2018) conducted a study to assess the impact of teachers' beliefs about their students, on the students' achievement. Schmid argued, "Participating teachers also believed in appropriate instruction which included giving students opportunities for practice, providing corrective feedback and hold students accountable, assessment of students frequently, praising and redirecting students, and differentiating instruction" (pp. 7-8). Quality instruction coupled with teachers' beliefs that students can learn created an environment in which all learners were able to thrive.

In a Schoolwide Title 1 school, each individual teachers' understanding of the standards, knowledge of strong lesson design, belief that all students can learn, and their delivery of this instruction is heightened, as compared to that of their nontitle peers. Fuchs et al. (2018) described instructional intensity using the dosage and response outline. MTSS began with quality core instruction, coupled with supplements to core instruction to achieve specific student outcomes in a particular grade level. For example, if 50% of the students in fourth grade are unable to decode multi-syllabic words as illustrated by universal and diagnostic screeners, then perhaps the teacher will supplement core instruction for all students in addition to providing Tier 2 and Tier 3 instruction to the students. The tiered instruction must also be taught to students with increasing intensity, decreased group size, and increased frequency of instructional sessions

per week for the students with the most intensive needs. Schoolwide Title 1 schools have an increased presence of student need as a result of their population, therefore, fidelity to both core and intervention instruction was essential to ensure that all students achieved growth in math, literacy, and behavior.

Schoolwide Title 1 Professional Development

Teachers and administrators in Schoolwide Title 1 buildings must have a depth of knowledge regarding ACEs, trauma, student engagement, and the neurological impact of these on the developing brains of children. This knowledge was certainly useful to all elementary teachers, but those invested in teaching in Schoolwide Title 1 buildings found this invaluable. Sprenger (2018) stated, "Professional development for teachers indicates that a school district is interested not only in raising student achievement but also in providing teachers with the tools they need" (p. 177). Providing staff in Schoolwide Title 1 buildings with professional development education to meet the needs of the students they serve is essential to the development of a vibrant MTSS framework within an elementary school. Reeves (2006) wrote, "If you believe that adults make a difference in student achievement, you are right. If you believe that adults are helpless bystanders while demographic characteristics work their inexorable will on the academic lives of students, you are right" (p. 76).

Reeves further explained the belief of the leadership team determined the trajectory of the school in terms of its guiding mission and vision statements from which school climate, culture, and instructional practices will derive. When the concept of team efficacy and the understanding that the work of the teaching and learning matters greatly to the future neurological development and learning of the students, everything changes within a school building. In a Schoolwide Title 1 building, where the newest professional development of the most recent educational crazy

might seem exciting and sensualized as the "silver bullet." It is the responsibility of the building leader to assist the staff in navigating these waters. Guskey (2000) reminds all educators that the goal of professional development is to change professional practice for the good of student achievement. These changes must be grounded in research-based practices that are well trained, understood, and implemented into the instructional practices of the staff within the Schoolwide Title 1 schools.

When administrators and staff are delivering core instruction in literacy and math, it is extremely important that students are not only engaged in the learning, but they are being challenged to reach or exceed grade level standards. Fullan et al. (2018) indicated "We call this equity hypothesis, noting emerging evidence that suggests deep learning is necessary for all but may be even more advantageous for those alienated and underserved by traditional schools" (p. 24). Collective efficacy developed when the building leadership team provided a vision regarding students' ability to successfully achieve on state assessments that assess their independent knowledge of grade level standards. This continued by ensuring that in core instruction students are challenged to achieve their highest potential with the appropriate scaffolds to support their success as needed. An example of this occurred when students were asked to write in response to text. Dr. Anita Archer advocated that teachers provided students with the words to scaffold their ideas and if needed the technology to facilitate the students' thoughts so the child can fully participate in responding to grade level text and questions. This example of scaffolding instruction provided students one avenue to engage in deep learning as their skills are developing. Another student scaffold is to hire additional staff to facilitate differentiated core instruction and intervention instruction.

Schoolwide Title 1 Spending Effectiveness

A report on Schoolwide Title 1 spending indicated a majority of the Title 1 funding was being used to pay salaries for additional reading and math intervention staff (Le Floch et al., 2018). Through an understanding of MTSS/RTII systems it is likely the reading and math teachers who are being hired using Title 1 funding are delivering Tier 2 and Tier 3 math and literacy interventions in these schools. The effectiveness of this resource allocation on student growth or achievement has not been researched in part due to the inconsistencies in state funding allocations to local educational agencies or individual schools/districts. This inconsistency exists because states have the opportunity to allocate the funding to LEAs in their states through their individual formulas. The use of these Federal funds to enhance the educational program can only achieve optimal effectiveness if the staff who are being hired to deliver these services are certified and highly trained in the interventions these individuals are delivering.

Congruency and feedback between administration, classroom teachers, interventionists and other members of the staff are essential to students' optimal growth in Schoolwide Title 1 schools. All staff must have knowledge of the MTSS framework, students' needs within math, literacy and behavior, along with the possible interplay between these internal school needs and external needs the student is bringing to school each day. Highly trained and certified staff are essential to the fulfillment of intersecting research and daily practice. Freeman et al. (2015) highlighted "Implementation can become fragmented when academic and behavioral MTSS teams or trainers are not communicating. Over time, the benefits of both tiered models will be diminished" (p. 69). Therefore, as MTSS implementation evolved within an individual Schoolwide Title 1 building communication among leaders, coaches and even professional trainers are an additional layer of continuity that must be carefully planned for and shared among all stakeholders. This feedback and consistent evolution of the MTSS structure allows Schoolwide Title buildings to ensure each aspect of the framework continues to grow, develop, and change flexibly with the needs of the students and staff.

Educational Leadership

In addition to the implementation of the MTSS framework, administrators in Schoolwide Title 1 schools may possess many characteristics of transformational leaders that are attributable to the student achievement found in some buildings. These qualities included fostering shared decision making, proficiently allocating resources, and developing trusting professional relationships among staff, students, and the community at large. A transformational leader provides vision, futuristic thinking, and promotes organizational change within the school. Bass and Riggio (2006) indicated that a transformational leader strives to inspire and develop workers to achieve their full potential, while also consistently improving and reflecting on their own leadership of the organization. This combination of organizational improvement, while balancing and fostering the leaders' own self-actualization, assures a cycle of continuous growth to continue over many years.

Historical Development of Leadership Theories

Transformational leadership theory is defined by Burns (1978) as a process that creates a connection between the leader and the follower to increase the motivation and morality of both parties. This connection occurs as the leader systematically attends to the needs of the followers and helps them reach their highest potential. Transformational leadership represents years of evolution in the field of leadership due to its complexity. Benner (1959) stated, "Of all the hazy and confounding areas in social psychology, leadership theory undoubtedly contends for the top nomination. And, ironically, probably more has been written and less known about leadership

than about any other topic in the behavioral sciences" (p. 259). Historically, leadership has enjoyed many definitions with some overlapping previously studied constructs and other aspects introducing a new lens of increasing complexity.

Beginning in the early 1900s, researchers began to study what made humans great leaders and this continued until 1960, when Jennings (1960) concluded that in 50 plus years of research the field still could not distinguish one personality trait or set of traits that categorized an individual as a leader or not a leader. Progressively leadership theorists began to study not only the traits of the individual leader, but also the relationship between the leaders and the followers in terms of the distribution of power. Pfeffer (1977) illustrated the ambiguity surrounding the definition of leadership, the selection of leaders and the relationship between leaders and followers. Lipham (1981) indicated the leadership traits being studied were somewhat contradictory and the leadership surveys were not really predictive of how successful a leaders' interactions would be with the followers. Thus, the concept of leadership is complex and has been historically difficult for the research community to study or explain.

A major advancement in leadership theory emerged through a movement away from the personality traits of individuals, but towards which behavior traits are illustrated in an effective leader. Griffin et al. (1987) indicated that in the Ohio State and Michigan studies there were two important leaders' behavior traits synthesized: an emphasis on the accomplishment of leadership tasks and a concern for individual and group cohesion within the organization. The managerial grid or the leadership grid was developed to illustrate the behavior of the leader towards the employees on one axis and the behavior of the leader towards the production of goods or outcomes on the other. The most effective leader will be rated at the highest level of leadership on both aspects of the grid. Therefore, in the field of education, the leader is focused on the

outcomes of successful student achievement as the product and the development of relationships with the staff within their building or district.

As the era of situational and contingency leadership evolved, there was a greater consideration towards the nature of the leadership task, the social status of the leader, the distribution of power among the leader and followers, and the external environment. Fiedler (1964) found that leaders should be placed in positions based on the groups' trust of the leader, the clarity of the task, and the extent to which the leader can influence or change the practices of others. The path-goal theory which focused less on the situation or leaders' behaviors and more on how the leader ensures there are conditions for the followers to perform optimally. In this theory there are four major styles of leadership: directive, supportive, participative, and achievement oriented. In the directive leadership style, the leader provides explicit direction and task-orientation. In the supportive style, the leader allows the followers to have more autonomy but provides needed supports. In the participative style, the leader and the followers work collaboratively towards a common goal. Finally, in the achievement-oriented style, this work is directly focused on accomplishing a specific target or goal. In this theory, the leader is the primary individual who provides encouragement and motivation to persist until the goal is achieved or the task is completed.

Lastly, the Normative Theory developed by Vroom and Yetton (1973) and Vroom and Jago (1988) explained how the decision-making process is matched with the type of decision that needs to be made. This decision-making methodology and theory were well accepted and easy for leaders to implement within an organization. However, it was difficult to sustain the use of this theory in the everyday lives of leaders due to the nature of the problems the leader was trying to solve. This was found quite often with educational leaders who are constantly being faced with minute by minute problems that do not allow them to work through a decisionmaking tree in this manner. These theories collectively not only shaped the contingency leadership era, but also enabled researchers to further develop the concept of leadership trait theories.

Human transactions or interactions between leaders and followers for the mutual benefit of both parties became a more prominent focus rather than traits or behaviors of leaders as had previously been the focus. Vertical Dyad Linkage Theory was originally studied by Dansereau et al. (1975) and then furthered by Duchon et al. (1986), and is most commonly known as the Leadership Member Exchange Theory. This theory focuses on the relationships between the leader and each individual follower. It assumes all followers are equal, and followers work to establish themselves as members of the in group as their relationship with the leader develops. This theory also recognizes in order for the leader to get optimal performance from all of the followers, the leader must work to continuously develop all team members particularly in their areas of struggle. During this development the leader must also be sensitive to fact that positive interactions between leaders and followers led to better outcomes for the school and district. Graen and Uhl-Bien (1995) found these positive interactions reduced follower's turnover and led to more optimal follower performance. As leadership theory continued to evolve Leadership Member Exchange Theory become more widely known as transactional leadership theory. Transactional Leadership Theory as defined by Bass (1981) encompassed the three basic components of organization, control, and short term-planning of a task. In this theory, leaders motivate followers by rewards and punishments. Therefore, the most effective transactional leaders have the goals of the individuals and the group aligned so when the individual or group meets the goals all are rewarded.

Transactional leadership theory builds on the principals of Maslow's Hierarchy of Needs (1943) and Theory X published by McGregor (1960). In transactional leadership theory the followers need to have their basic needs of food and shelter met by earning a reward or paycheck for their work, therefore, the followers desire to be told what to do, thus meeting the lower aspects of Maslow's Hierarchy of Needs. In Theory X, the followers need to be directed in what to do because the followers do not have robust goals that are important for them to meet. Transactional leadership theory has an emphasis on supervision in which the leader is providing guidelines or targets for the followers to meet and underlying structures for them to meet the goals as set forth. The follower's ability to meet the established targets and successfully accomplish the tasks are the most important aspect of transactional leadership theory. If these goals are met, then the follower is rewarded, and if not, the follower is punished. In this theory the goal of the leader is to ensure supervision, organizational structure, and performance is consistent across the organization.

The four dimensions of transactional leadership as defined by Bass (1960) are: contingency reward, active management by expectation, passive management by expectation, and laissez-faire. In contingency reward, the followers establish goals that SMART, (S)pecific, (M)easurable, (A)achievable, (R)elevant, and (T)ime-bound and using then followers are rewards if the goals are achieved. In active management by expectation, the leader is calculably helping the followers to meet their goals by providing structures and foresight to assist the followers in meeting the established goals. The passive management by expectation means the leader would only intervene if an aspect of the goal or plan was not being met, and this interaction would often involve punishment. The fourth-dimension laissez-faire indicates the leader in this model places the burden of carrying out the goal on the followers entirely and beyond the objective the followers have control of how to meet the outcome. Using these four dimensions of transactional leadership, a transactional leader is very directive, provides guidance, and is responsive to the needs of the followers.

Transformational Leadership Theory

As leadership evolved from transactional to transformational, Burns (1978) first described transformational leadership as "Transformational leadership ultimately becomes moral in that it raises the level of human conduct and ethical aspiration of both leader and led, and thus it has transforming effect on both" (p. 20). Bass (1985) is credited for articulating as their behavior of the leader impacts the motivation of the followers and how this ultimately improves the overall organization and performance. Bass (1985) also suggested it was possible for leaders to demonstrate both transactional and transformational leadership at the same time. There are four attributes present in transformational leaders that have been identified and studied by Bass (1985) and Bass and Riggio (2006): idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Idealized influence is the concept of leader as the role model for the organization. In the event of challenges to the organization, the transformational leader stands firm and assures others the collective whole will overcome these challenges. Inspirational motivation quantifies the leaders' ability to communicate a future vision that others are enthusiastic to work towards and ultimately achieve the desired goals. Transformational leaders encourage intellectual stimulation and the development of creative solutions to organizational challenges. Individualized consideration is the leader's ability to develop a relationship with each employee that includes an understanding of their strengths and needs. Burns (1978) and Bass (1985) in transformational leadership have successfully changed

the narrative of leadership theories from a focus on the traits, behaviors, and attributes of the leader, to the concept of leadership in more philosophical manner.

There are several key aspects of transformational leadership that are noticeable in systems run by transformational leaders. Bass and Avolio (1994) found that transformational leaders are willing to take risks because the leader understands that change is vital in the forward development of any organization. Followers are motivated to achieve more than the desired outcomes of the system. The leader provides structures and supports that allow followers to advance beyond their own personal goals to achieve success for the organization. Transformational leaders possess the traits of charisma, intellectual stimulation, and are change agents themselves, which allows them to more easily challenge the status quo of the organization (Bass, 1998). Transformational leadership is evidenced not only in the characteristics and daily interactions of the leader, but also within the climate and culture of the organization.

Transformational Leadership in Public Schools

Application of transformational leadership theory to the daily school setting was done by Leithwood (1994). Leithwood (1994) indicated that transformational leadership allows the school leader to facilitate change within the school through comprehensive reform of the teaching and learning practices within the building. Leithwood and Jantzi (1999) found that in schools with transformational leaders the principal is not the only leader within the school. There is shared leadership that fosters collective efforts of many teacher leaders within the school. In schools where transformational leadership is fostered, the staff become increasingly more collaborative and work together as a collective unit or staff, rather than individuals. This acknowledgement from the leader of teachers' knowledge and mutual respect often also prompts a climate and culture of collective thinking. Some transformational leadership also recognizes an array of components from transactional leadership. Bass and Riggio (2006) stated "Transactional leadership is when the leader rewards or disciplines the follower, depending on the adequacy of the follower's performance" (p. 79). This includes rewarding employees based on certain criteria, and taking corrective action when mistakes arise in an effort to decrease failures. Dweck (2006) indicated that individuals with a growth mindset regarding teaching and learning leadership are better able to provide opportunities for staff to try new ideas in a safe coaching environment, as opposed to those with a fixed mindset about staff's ability to grow and change in their learning. "In the fixed mindset, everything is about the outcome.... The growth mindset allows people to value what they're doing regardless of the outcome" (Dweck, 2006, p. 48). The transformational leader develops this culture of growth that provides adequate time and space for the growth of staff within the building. Fostering a growth mindset culture allows the staff to grow and develop through the leaders' coaching and guidance.

When principals or building leaders engage in transformational leadership there is a motivation to create a culture of growth. Dweck et al. (2014) wrote, "Whereas effective teachers and schools challenge their students with high performance standards, less effective ones cater to the presumed limitations of their students by setting low standards" (p. 22). The establishment by the leader of an expectation of growth and each student's ability to meet the standard is evident in transformational leadership. Hoy and Smith (2007) found the leader's ability to also empower the students to have a voice within the school, allows for the growth of collective unity within the school. Additionally, Hauserman and Stick (2013) indicated that transformational leaders are reflective practitioners. This development of teachers further extends the culture of growth, mutual respect and shared leadership within schools with

transformational leaders. Fullan (2001) indicated that the more complex that society becomes the more sophisticated and flexible leadership models need to become to meet the needs that are present in our schools. Transformational leadership presents a model that equips educational leaders to not only become more responsive to the needs of their students and schools, but also to develop their staff to a level of increased staff flexibility that will allow the body of educators in the school to more easily meet the intensifying challenges of 21st century learners.

Transformational Leadership and the Coherence Framework

As a result of the challenges that students in Schoolwide Title 1 schools bring into the school the transformational leader must create an environment that is a safe and encouraging coaching environment in which both teachers and students alike are encouraged to develop a growth mindset. Fullan and Quinn (2015) and Fullan et al. (2018) developed The Coherence Framework to assist educators in understanding the intersection between practice and theory. "Coherence by our definition is the shared depth of understanding about the nature of the work" (Fullan & Quinn, 2015, p. 29). Focusing direction, cultivating collaborative cultures, securing accountability and deepening learning are the essential components of The Coherence Framework and together they allow deep learning to occur. Leadership in this framework "acts as a force that pumps the blood to the areas that need it most" (Fullan & Quinn, 2015, p. 31). With increased student needs in a Schoolwide Title 1 building the leader must begin with this combination of growth mindset and focusing direction for the staff. This ensures that a clear collective vision is shared and everyone, including the leader is concentrating their efforts on the achievement of this vision. This also implies that everyone in the building must share a united understanding that all students can learn.

In a Schoolwide Title 1 building cultivating collaborative cultures is essential to the creation of a culture that enables innovation and allows both staff and students the opportunity to grow together with mistakes as an evolution part of the process. The aspect of deep learning is fueled by the collective vision and ensures the focus of the entire school is relentlessly on the improvement of teaching and learning practices within the school. Children living in poverty experience significantly greater chronic stress than their more affluent counterparts (Almeida et al., 2005). The culture of learning on the part of staff allows the staff to more readily meet the increased needs of the students in Schoolwide Title 1 buildings. The development of teacher experts who can assist the leader and other teachers along the journey towards mastery of their craft is essential to the development of a collaborative culture of teaching and learning within each school.

External accountability is present in Schoolwide Title 1 schools as a result of the additional funding these buildings receive from the Federal government. Securing accountability within the framework acknowledges the external accountability factors that are present, by making them internal and measuring progress through progress monitoring from the smallest skills to the large skill areas. "The conditions that favor internal accountability include: specific goals, transparency of practice and results, precision of action, non-judgmentalism, commitment to assessing impact, acting on evidence to improve results and engaging with the external accountability system" (Fullan & Quinn, 2015, p. 32). It is then the leader's responsibility to continue to merge and gel these components together into a system that ensures both teachers and students are learning at their optimal level.

Transformational Leadership and Authentic Leadership

Transformational leaders working in Schoolwide Title 1 buildings can be authentic or inauthentic in their leadership style. Bass and Riggio (2006) stated, "Authentic transformational leadership has an impact in all cultures and organizations because transformational leaders have goals that transcend their own self-interest" (p. 85). Transformational leaders can create environments and cultures in which the employees feel valued and are willing to work hard to achieve common goals that may at first seem impossible to the team. Jones (2013) wrote "The principal is not the only key leader in making schools better. In fact, a number of different school leaders can fundamentally change learning and help teachers transform learning in their classrooms using the latest practices and pedagogy" (p. 3). Not only is the transformational leader the principal, but it is also shared leadership across the staff within the building.

A transformational leader's recognition that he or she cannot lead change alone is in many respects a divergence of the traditional views of leadership in which the leader is unflawed and able to single handedly mobilize change (Reeves, 2006). However, working with adults and developing human beings is not only hard, but only further challenged by the complexities of school systems. The needs of the students within a Schoolwide Title 1 school thrust the building leader into a dance between this historical view of leadership and the present need. At one time the building principal may have been regarded as the heroic leader or single change agent, but with the complexities of modern school systems, the role of transformational leader has also evolved. This agent of change must not only facilitate shared vision, but also maintain and engage continuous collective efficacy within the building. Reeves (2006) stated "Rather than developing what they lack, great leaders will magnify their own strengths and simultaneously create teams that do not mimic the leader but provide different and equally important strengths for the organization" (p. 23). Thus, a transformational leader can be likened to an architect who is consistently focused on all aspects of teaching and learning within the Schoolwide Title 1 building.

Transformational Leadership in a Schoolwide Title 1 Building

Within a Schoolwide Title 1 building transformational leadership is essential to the continued construction and evolution of an MTSS framework that allows students to develop as successful learners. James MacGregor Burns, a leadership writer and presidential biographer first used the phrase, transformational leadership to describe a leader whose morality and expertise not only leads others but moves each individual in the organization to achieve their greatest potential. Later, Bernard Bass refined this definition to include the concept that transformational leaders truly transform the followers that they are leading (Bass & Riggio, 2006). The transformation of the followers or staff of a Schoolwide Title 1 building is what is needed in order to successfully meet the needs of all students. Embedded in this transformation of staff the building leader must recognize all of the external needs that the staff members are bringing into the school, just as teachers do this with their students. Bass and Riggio (2006) stated, "The authentic transformational leader is truly concerned with the desires and needs of followers and cares about their individual development" (p. 83). The development of staff is critical to the leader's ability to effectively serve the students and families who attend a Schoolwide Title 1 building.

Transformational leadership is essential in the promotion and fulfillment of Schoolwide Title 1 plans that are required by each Title 1 school. Anderson (2017) indicated "though not a cure all for school leadership, it is supported by decades of research on the considerable positive impact of the leadership style in enhancing the performance of business organizations and in the last ten years' school settings" (p. 11). This proclamation rings true throughout the educational system, particularly in high needs schools, because there is a desire among employees to be led into a new age of teaching that promotes equity and prepares all of the students for 21st century occupations. The principal is to consistently lead through transformational leadership so others within the building will also be transformed and students will ultimately be provided with the most precise, focused, and individualized education to promote successful achievement.

Schoolwide Title 1 transformational buildings leaders understand the essential importance of teachers' feeling supported and valued in their job. Robinson (2011) indicated "In schools where students achieve at higher than expected levels, leaders are much more focused on improvement of teaching and learning than in similar schools where students perform at lower than expected levels" (p. 18). Thus, the transformational leaders must focus on the components of human resource theory that outline the importance of the development of the relationships that underlie the structure of the school climate and culture. This time in relationship building is essential in every building, but it is further accentuated by the student needs in a Schoolwide Title 1 buildings. "Leaders must be consummate relationship builders with diverse people and groups – especially with people different from themselves. Effective leaders constantly foster purposeful interaction and problem solving, and are wary of easy consensus" (Fullan, 2001, p. 5). This keen awareness and engagement in deliberately building relationships with staff and prompting collective efficacy is integral to the development of transformational leadership within Schoolwide Title 1 buildings.

Transformational Leadership in the 21st Century

As research regarding transformational leadership continues to evolve there are several specific aspects of leadership that are being studied within the educational community. One of

these is instructional leadership that encompasses the leaders' view of teaching and learning from a student-centered perspective. "Student-centered leadership requires direct involvement with teachers in the business of improving teaching and learning" (Robinson, 2011, p. 22). This involvement expands on the concepts of transformational leadership in which the staff of the building share a vision and collective efficacy towards meeting specific goals that are outlined in the vision of the building. As Healy (2009) stated, "taking a school from mediocre to great requires a leader who has a vision and is focused on that vision" (p. 30). Robinson (2011) also indicated the vision must be student-centered and focus on the students' achievement as a collective shared goal. Menon (2014) suggested that "transformational leadership practices are not sufficient for effectiveness unless they are combined with additional leadership behaviors such as those linked to instructional leadership" (p. 524). These behaviors ensure the leader will remain focused on students regardless of other duties or tasks the leader may need to complete.

Another aspect of leadership is inspirational leadership, which suggested there was an old and new style to leadership (Secretan, 1999). The old style of leadership valued the collective efficacy of the group working together, achieving goals, and working towards a common vision. In the new style of leadership, Secretan (1999) indicated we must give staff an understanding that school is a fun, engaging place to learn and work as a community of learners. There are four essential attributes to practicing inspirational leadership and the first is courage. First, significant bravery is required in order for leaders to become vulnerable and speak honestly to staff. Secondly, leaders must genuinely care about the followers and love them for who they are as human beings. This means taking time to not only build relationships, but know the staff deeply as people. Thirdly, inspirational leaders are individuals of highest integrity who follow through on what they say or do. Lastly, inspirational leadership involves the use of grace. This means leaders love their followers and their followers love them. Inspirational leadership enables the leader to be a guide, a counselor, friend, mentor, and leader all at the same time. "Effective leaders make people feel that even the most difficult problems can be tackled productively. They are always hopeful, conveying a sense of optimism and an attitude of never giving up in the pursuit of highly valued goals" (Fullan, 2001, p. 7). This lens of leadership moves beyond many of the qualities of transformational leadership in that it requires the leader to acknowledge the collective goals, while still holding in mind the needs of the individuals and the outcomes that must occur for success student achievement to actualized within the building.

Summary

In this chapter, relevant literature was presented to illustrate the historical context of RTI and MTSS from 1970 through 2019. The evolution of RTII and MTSS in the state of Pennsylvania and the process of identification of Pennsylvania Schoolwide Title 1 schools was also described. The impact of poverty on students' brain development as it relates to student engagement with the learning process was examined and leadership theories from the early 1900s through the present were described and contextualized for Schoolwide Title 1 buildings. In Chapter 3, the methodology will be described.

Chapter 3: Research Method

The purpose of this case study was to understand how some of the Pennsylvania kindergarten through sixth grade Schoolwide Title 1 schools are thriving on state assessments while others are unable to achieve success. Analysis of the Schoolwide Title 1 schools demonstrating proficiency on state assessments were compared to the SES of students attending each school. Finally, building principals' experiences and perceptions were examined in this study to identify the extent to which the implementation of an MTSS framework and the leadership of the building principal cultivated students' successful achievement on state assessments. The findings of this study will assist other school leaders in the replication of these systems, structures, and factors within the population of Schoolwide Title 1 elementary schools. The findings of this study can be applied to other Schoolwide Title 1 schools or other schools who experience similar population demographics. This chapter will outline and discuss the methodology of the study.

Research Questions

The study was guided by the following research questions:

RQ1: What are the differences among Schoolwide Title 1 elementary schools' performance on Pennsylvania state assessments?

RQ2: Within Schoolwide Title 1 elementary schools who are demonstrating proficiency on the school performance profile, how do schools with high percentages of students from low socioeconomic families perform?

RQ3: How do building principals of Schoolwide Title 1 schools in Pennsylvania perceive the impact between the MTSS framework, their leadership, and their students' successful achievement on Pennsylvania state assessments? The study used an explanatory case study design of multiple Schoolwide Title 1 schools that have been identified using a bounded system. Schoolwide Title 1 public elementary schools in Pennsylvania that contain the grade configurations of kindergarten through grade six were included in the initial screening of schools. All public schools that are not identified as Schoolwide Title 1 buildings and all schools with grade configurations of seventh through twelfth grades were removed from the study. Within the elementary Schoolwide Title 1 buildings, the schools were categorized into schools that scored the highest on the Pennsylvania State Assessments and those with the highest population of students from low SES. From this set of schools, qualitative case studies were conducted using surveys and interviews with the building principals. Explanatory case studies of these proficient schools enabled me to understand more about the culture and social contexts of these schools. The explanatory case study design allowed me to use the quantitative analysis to identify the schools that were reviewed in the case studies. These case studies provided subsequent analysis and description of the contributing factors towards disparate performance on the Pennsylvania state assessments by the participating schools.

The quantitative data analysis occurred through the use of data for each school obtained through the public domain. Public schools in Pennsylvania were sorted into Schoolwide Title 1 Schools and nonschoolwide. From there, schools that did not contain grades kindergarten through sixth grade were removed from the set. Data analysis of test scores for the remaining schools were used to parse them into those that exhibit higher and lower proficiency levels using the School Performance Profile. The School Performance Profile was helpful because it is a single number that reflects each school's overall academic achievement on state assessments. This number is a representation of the raw state assessment data compiled for each school. Using an Excel database, the School Performance Profiles for each Schoolwide Title 1 school was analyzed in combination with the number of low socioeconomic students who attend each school. This analysis of the student populations within each school was used to further refine the set of the schools that will be included in the case studies.

Semistructured interviews enabled me to glean a description of the social context within each of the proficient Schoolwide Title 1 schools. The exact number of schools included in the case study was determined following an analysis of how many elementary Schoolwide Title 1 schools have students who are scoring proficient on state assessments and contain the highest percentage of low socioeconomic students. This data analysis was conducted using a Microsoft Excel spreadsheet with multiple data sorting features to determine the answers to the first and second research questions. The multi-site case study enabled me to collect data describing the real-life applications of MTSS and educational leadership theory at each site and then synthesize these across various locations. Yin (2002) defined a case study as "a contemporary phenomenon within its real-life context, especially when the boundaries between a phenomenon and context are not clear and the researcher has little control over the phenomenon and context" (p. 13). The purpose of this study was to articulate if MTSS, principal leadership, or other contributing factors may be attributed to successful student performance on state assessments. At each school, I used semistructured interviews with the building principals to glean the needed information for the third research question. I was not a member of the school community, nor was I intimately familiar with the culture and climate of the schools used in the study. Therefore, it was essential that the interview questions allow participants the opportunity to expand upon their responses and offered me an opportunity to clarify participant statements.

It was also important that given the case study design, I was able to articulate each decision within the research process. This included my ability to provide logical explanations for each step that is taken in the analysis process. Yin (2002) stated "the logical sequence that connects the empirical data to a study's initial research questions and ultimately, to its conclusions" (p. 20). This case study design with semistructured interview questions enabled me to develop an understanding of the participants' MTSS framework, the leadership within the school, and gather information about any other factors that participants felt attributed to the students' successful achievement on state assessments.

Population

The selection of the Schoolwide Title 1 schools was completed by cross-referencing the list of Schoolwide Title 1 elementary schools with their achievement as represented in the School Performance Profile. The list of Schoolwide Title 1 schools who exhibit high achievement as measured by student performance on the state assessments and reported in the School Performance Profile was further analyzed. This list of high achieving schools was crossreferenced against the percentage of low SES students enrolled in each school within the study. From there, the schools who were proficient on their state assessment results and who have the highest percentage of students from low SES were surveyed to determine their level of MTSS implementation in math, literacy, and behavior. Based on the survey responses and the willingness of participants, schools with the longest tenure of full MTSS implementation and the highest achievement were selected to participate in the case study. This selection process enabled me to identify willing participants who also met the criteria of the study.

The sample size for the study was comprised of several Schoolwide Title 1 kindergarten through sixth grade elementary schools with fully implemented MTSS instructional frameworks for literacy, math, and behavior. Each of the schools studied had the highest scoring students on the state assessments as well as the highest percentage of students from low SES. At each school, I interviewed the building principal. The building principal was representative of the larger elementary educational population. The principal was the individual in the building with the most knowledge of the MTSS instructional framework and their own leadership within the building. The comparison of the data from each of these schools was used to explain how and why these schools are scoring proficient despite the challenges of their students' demographics.

Instrumentation

All interviews were conducted using a semistructured interview structure. Participation in the study was voluntary, and the interviews lasted a maximum of 60 minutes. The interviews were recorded with permission and then transcribed. The interviews provided an understanding of the school's MTSS system and the leadership characteristics of the leader in the school. School names and participants are confidential in order to maintain the anonymity of participants. In the study, school principals are discussed using a fictitious name and the schools as Pennsylvania Schoolwide Title 1 elementary schools.

The interview questions were field-tested by educators who have a scholarly understanding of the components of the study but who were not study participants. The field-test participants provided clarity regarding the question structure, sequence of questions, and overall clarity of the information being asked of participants. All suggested revisions and feedback was incorporated in the final interview questions.

Data Collection Procedures

After receiving approval from the Institutional Review Board (IRB) at Abilene Christian University, participants were identified using cross referencing between Schoolwide Title 1 elementary schools in the state and their achievement as quantified by their School Performance Profiles. Schools meeting the quantitative criteria of Schoolwide Title 1 identification and those having the largest percentage of students from low SES were surveyed to determine their implementation of MTSS and willingness to participate in the study. Several schools were selected from this set. Schools were ranked in order from the highest achievement school with the largest percentile of students from low SES to the lowest. The schools were then prioritized by those with the most fully implemented MTSS framework and the school's willingness to participate. The building principals were interviewed using a qualitative semistructured interview.

Interviews

Oltmann (2016) found that "By considering the interviewer and respondent contexts, researchers can more thoughtfully select the most appropriate and useful interview mode" (p. 12). The scope of this research used telephone interviews of several principals each from different Pennsylvania Schoolwide Title 1 schools. The semistructured interviews were 45 minutes to an hour in length.

Interview questions were field tested using an expert panel comprised of at least two Schoolwide Title 1 building principals. The interview questions focused on the schools' implementation of MTSS with questions relating to each aspect of a well-developed MTSS system. Participants were asked about the leadership within the school in terms of the leaders' understanding, vision and guidance during the process of fully implementing an MTSS system for literacy, math and behavior. Saldana and Omasta (2018) highlighted the importance of a semistructured interview process, stating "As the name implies, these interviews have a degree of structure but also offer researchers significant latitude to adjust course as needed; researchers make such adjustments as a result of their interview analysis" (p. 92).

Rubin and Rubin (2012) further defined this interview structure, stating "Researchers plan interview questions in advance, organizing them so they are linked to one another to obtain the information needed to complete a whole picture" (p. 6). The semistructured design allowed me to ask purposeful planned questions, while allowing for greater depth in the conversation through follow up questions. This design enabled the participants to provide complete responses that illustrate detailed information regarding both the MTSS system and the leadership characteristics within their school.

Data Analysis

In the first cycle of coding, thematic analysis was the focus. Data were then coded using hard codes that were derived from the holistic coding. Miles et al. (2014) stated, "Holistic coding is most applicable when the researcher has a general idea as to what to investigate in the data" (p. 11). In the second cycle of coding the holistically coded hard codes enabled me to uncover the categories of themes. The hard codes were derived from the elements of a fully implemented MTSS system and the characteristics of transformational leadership that are present in each school and illuminated during the semistructured interviews. "Coding this type of data often involves interpreting what respondents mean in their answers to questions. Doing so correctly requires that coders have sufficient background knowledge in the subject matter of the interviews" (Campbell et al., 2013, p. 297). This was particularly applicable when I applied hard codes to the recognition of a full implemented MTSS system because components of the system may carry the same meaning and rationale. Interviewees explained some of these elements using

an array of different vocabulary and environmental constraints particular to the school, but describing the same elements of the system.

In order to confirm the accuracy of qualitative research using semistructured interviewing with coding, Campbell et al. (2013) stated "There is not much guidance in the literature for researchers concerned with establishing reliable coding of in-depth semi-structured interview transcripts, and there is virtually none for establishing reliability in the situation where coding is left to a single coder" (p. 297). To provide the most reliable data and analysis I derived code families when creating the hard codes. Code families are "several codes reflecting different aspects of a general theme" (Campbell et al., 2013, p. 301). Krippendorff (2004) stated

The act of unitizing text depends on the analyst's ability to see meaningful conceptual breaks in the continuity of his or her reading experiences, on the purposes of the chosen research project and on the demands made by the analytical techniques available to date. (p. 98)

The combined use of code families, unitizing of text, and the assistance of software enabled these codes to be applied across multiple interviews. This design enabled me to glean an understanding of the school's implementation of MTSS, and the transformational leadership characteristics of the individuals in leadership positions that have attributed to the students' successful achievement.

Establishing Trustworthiness

I established trustworthiness by selecting several Schoolwide Title 1 elementary schools with successful student achievement as determined by their individual School Performance Profiles. Then I determined which of these schools had the highest percentage of students with low SES. This methodology established creditability because the public data were analyzed in a manner that is replicable. I then determined through a survey which of the Schoolwide Title 1 elementary schools with the highest percentage of students from low SES have a fully implemented MTSS instructional framework for literacy, math and behavior and who were willing to participate in the study. This promoted dependability because the participants who met the criteria voluntarily agreed to participate in the study. The interview questions were validated using an expert group of participants and then the data from the participants at each school was coded together to illustrate patterns. The interviews were conducted via phone or in-person to enhance the depth of conversation. Participants' ability to review and amend the notes taken during the interview process will ensure absence of research bias and transparency between the participants and me.

Creditability was established through methodological triangulation. Quantitative methods were used to determine which schools would be included in the study. This allowed me to use data available from the public domain to select the schools for the case. The use of qualitative semiconstructed interview questions allowed me to glean answers to prepared and validated questions, in addition to capturing the building principal's perspectives regarding other contributing factors that led to the school's success. The use of site triangulation ensured internal validity because conducting interviews with multiple building principals whose schools meet the criteria ensured an accurate illustration of the commonalities and differences in these schools who have achieved similar results. Foreman-Wernet (2003) stated

Sense-making mandates the framing of research questions such that the respondent is free to name his or her own world. Great care is taken to allow the respondent rather than the researchers to describe and define the phenomenon in question. (p. 8) This validated the semistructured interview structure as the most appropriate methodology to credibly describe each school. This validation allowed for a greater opportunity to transfer the knowledge gleaned from this study to other schools with similar social contexts and student populations.

Finally, the use of coding the interview question responses allowed for commonalities across several successful schools to be illuminated within the data. This coding enhanced the dependability of the research and allowed for the potential of replicating the study every year, as new state assessment data are available each year. Creation of a diagram regarding the steps of my methodology allowed for confirmability and replication of the study. The combination credibility, transferability, dependability and confirmability enabled me to provide a complete illustration of the factors that led to students' successful achievement on state assessments in these schools.

Researcher's Role

I had a significant role in the data collection. My knowledge of the MTSS instructional framework and leadership characteristics enabled me to apply codes to the interview data. I interviewed participants who met the criteria of the study but who were otherwise unfamiliar to me. All interviews were audio-recorded and then transcribed. Participants reviewed and verified the transcribed interviews.

Ethical Considerations

Approval from Abilene Christian University's Institutional Review Board (IRB) was gained prior to collecting any data for the study. Once approved, I recruited participants for the study using first the publicly available current list of Schoolwide Title 1 elementary schools and then each of their accompanying School Performance Profile scores. After selecting schools based on the schools within this group, who have the highest number of students with low SES, I recruited building principals. Prior to interviewing each principal, I reviewed the consent form with each participant, answered any questions and then scheduled a time for the interview. The recorded interviews were deleted once transcribed. Interviewees received a copy of the transcription and analysis for verification of the information provided. During the interviewees' review of the transcription and analysis they were free to add or clarify as they saw appropriate. Interviewees could have withdrawn from the study at any time. All participation in the study was voluntary.

Assumptions

I assumed participant candor during the interview process and in the participants' review of the interview transcript and analysis. I assumed the participants, as a result of their current roles of leadership or staff within the Schoolwide Title 1 school, would respond to the research questions using their knowledge of MTSS, and their daily experiences within the school building. I assumed the data collected from these schools would adequately provide responses to the research questions.

Limitations

The study was limited by only considering the population of Pennsylvania Schoolwide Title 1 schools that contain configurations of kindergarten through sixth grade in the study. These school configurations are considered elementary. The study was further limited within this population by selecting only elementary schools that have demonstrated proficient achievement based on their school performance profiles. Among these schools, only those with the highest percentage of students from low SES were included in the study. The study was also limited to interviews with only the building principals from schools that met the criteria of the study. Finally, it was limited by data collection occurring during a global pandemic.

Delimitations

In this study I assessed the Multi-Tier Systems of Support Instructional Framework and the leadership within these Schoolwide Title 1 elementary schools who had successful student achievement. Therefore, this study did not consider other schools that were not Schoolwide Title 1 and may have achieved the same successful student results.

Summary

In this chapter, the procedures and methods that were used to conduct an explanatory case study of Pennsylvania elementary Schoolwide Title 1 schools, who were successful on state assessments, was outlined. Trustworthiness, the role of the researcher, ethical considerations, assumptions, limitations, and delimitations were discussed. In subsequent chapters, quantitative data regarding which schools were studied and qualitative data from each studied school are presented to illustrate the answers from the research questions.

Chapter 4: Results

The purpose of this study was to understand how some of the Pennsylvania kindergarten through sixth grade Schoolwide Title 1 schools are thriving on state assessments, while others are unable to achieve this success. Analysis of Schoolwide Title 1 schools who are demonstrating proficiency on the state assessments highlighted how many students from low SES attend each of these schools. The study showcases the extent to which the implementation of an MTSS framework and the leadership of the building principal cultivate students' successful achievement on state assessments. The research findings in this chapter address the following research questions:

RQ1: What are the differences among Schoolwide Title 1 elementary schools' performance on Pennsylvania state assessments?

RQ2: Within Schoolwide Title 1 elementary schools who are demonstrating proficiency on the school performance profile, how do schools with high percentages of students from low socioeconomic families perform?

RQ3: How do building principals of Schoolwide Title 1 schools in Pennsylvania perceive the impact between the MTSS framework, their leadership, and their students' successful achievement on Pennsylvania state assessments?

This chapter presents findings from the analysis of each studied Schoolwide Title 1 elementary school's performance and state assessment data, and the analysis of this data in regards to the percentage of low socioeconomic students who attend these schools. This data analysis dictated which building principals were interviewed (Appendix A). This chapter will present the findings from these interview questions and the themes that emerged. Direct quotations from the

interviews will be presented to further illustrate the voice and experience of the building principals who were interviewed. Each principal will be referred to by a fictitious name.

Research Question 1

Schoolwide Title 1 Elementary Schools

According to the February 2, 2020 list of Pennsylvania approved Schoolwide Title 1 schools, there are 1058 individual schools that have approved Schoolwide Title 1 plans in the state. A Schoolwide Title 1 school has 40% or more of the students who are enrolled in the school qualify for free or reduced lunch. Of these 1058 schools, 685 schools contain a combination of grade configurations between pre-kindergarten and sixth grade (Table 1). This study examined only elementary schools, so only schools with this grade configuration were included in the study.

Table 1

Grade Configuration	Frequency <i>n</i>
PreK-3	4
PreK-4	12
PreK – 5	80
PreK – 6	25
K-3	22
K-4	88
K-5	239
K-6	144
1-3	0
1-4	3
1-5	14
1-6	0
2-3	1
2-4	2
2-5	4
2-6	3
3-4	3
3-5	14
3-6	10
4-5	2
4-6	10
5-6	5

Grade Configurations of PA Schoolwide Title 1 K-6 Schools

Student Populations

The 685 schoolwide elementary schools with various grade configurations are then ranked according to the percentage of students who were considered economically disadvantaged or from low SES during the 2018-2019 school year as reported in the Future Ready Index for each school. Schools were placed in an economically disadvantaged band beginning at 100% of the students in a school to less than 40% of the students. Some of the 685 Schoolwide Title 1 schools have been considered Schoolwide Title 1 for a period of years, therefore they can be "grandfathered" as Schoolwide Title 1 schools despite less than 40% of the students attending the school being considered low SES.

The distribution of 685 schools over these bands of low SES students indicate that the highest number of schools at 12% have 40% or less of their students who are economically disadvantaged. There are 33% of schools with less than 50% of the students considered low SES. Finally, there are 53% of these schools that have less than 60% of students considered low SES. Therefore, more than half of the schools in this distribution only have 60% of the students or less that are considered low SES. Only 7% or 51 of the 685 schools have an SES population between 90% and 100% of their students. The schools with a low SES population representing between 80% and 100% of their students is just 18%. Therefore, 82% of Schoolwide Title 1 schools have an SES population of less on than 80% (Table 2).

Table 2

Economically Disadvantaged Bands	Number of Schools N	Percentage of Schools Per Band
95-100%	22	3.2%
90-94.9%	29	4.2%
85-89.9%	33	4.8%
80-84.9%	42	6.1%
75-79.9%	39	5.7%
70-74.9%	43	6.3%
65-69.9%	44	6.4%
60-64.9%	68	9.9%
55-59.9%	59	8.6%
50-54.9%	74	10.8%
45-49.9%	79	11.5%
40-44.9%	69	10.1%
Less than 40%	84	12.3%

No. of Schoolwide Title 1 Schools in Each Band of Economic Disadvantage

School Performance Profile (SPP)

All of the Schoolwide Title 1 schools are ranked by their School Performance Profile scores from 2019. The SPP scores were calculated by the state based on the school's performance on the PSSAs in the given year as well as student's growth from one year to the next on the PSSAs. Table 3 illustrates the answer to research question one. The distribution of the 685 elementary Schoolwide Title 1 schools over the score categories of advanced, proficient, basic, and below basic as a result of their SPP scores shows the differences in each school's performance. To score advanced the SPP must be 90 or greater, proficient must be 70 or greater, basic must be 60 or greater, and less than 59.9 is considered below basic.

Table 3

SPP Scores	Number of Schools N	Percentage of Schools
Advanced	2	0.29%
Proficient	265	38.68%
Basic	234	34.16%
Below Basic	184	26.86%

Elementary Schoolwide Title 1 School's SPP Scores by Category

Table 4

Elementary Schoolwide Title 1 School's SPP Score Distribution

SPP Scores	Number of Schools N	Percentage of Schools	
90 & above	2	0.29%	
85 & 89.9	14	2.04%	
80 & 84.5	42	6.13%	
75 & 79.9	73	10.65%	
70 to 74.9	136	19.85%	
65 to 69.9	117	17.08%	
60 to 64.9	117	17.08%	
55 to 59.9	83	12.11%	
50 to 54.9	50	7.29%	
49.9 & below	51	7.44%	

Table 3 illustrates a categorical distribution of SPP scores that shows a division of Schoolwide Title 1 schools into thirds with schools scoring below basic, basic, and proficient. However, Table 4 illustrates the distribution of these scores within the categories. It shows that in the proficient category of 70 to 89.9, 19.85% or 136 of the 265 schools that scored proficient actually scored in the lowest part of the proficient range, whereas only 8% or 56 schools scored proficient in the upper part of the proficient range with SPP scores between 80 and 90. Therefore, only 39% of the 685 elementary Schoolwide Title 1 schools are receiving a SPP score that is in the proficient or advanced range, leaving 61% that have SPP scores of basic and below basic. With the further understanding that 20% of the 39% of schools who scored proficient did so with scores between 70 and 74.9, the lowest possible scores while still achieving proficiency.

Within the basic and below basic categories that comprise 418 schools or 61% of the 685 the schools in the basic category are evenly split between the upper and lower portion of the distribution. However, in the below basic category we see 133 schools or 19% scoring an SPP score between 50 and 60, while another 7% of schools have an SPP of 50 or lower. The lowest SPP score of elementary Schoolwide Title 1 schools in this study is 37.6. Not only are most of the schools not scoring proficient or advanced, some schools in the below basic category are scoring 20 points or more away from even a score of basic. Thus, the resounding answer to research question one is 61% of elementary Schoolwide Title 1 schools are not receiving an SPP score of proficient, and another 20% are scoring in the lowest possible range of proficiency, making them more vulnerable to fall from this proficient score in the coming years.

Research Question 2

The 685 elementary Schoolwide Title 1 schools represent an array of economically disadvantaged students, as well as SPP scores across the scoring categories. Of the 39% or 267 elementary Schoolwide Title 1 who received a proficient or advanced SPP score these schools represent an array of economically disadvantaged students.

Table 5

Percentage of students who are Economically Disadvantaged in each school	SPP Advanced	SPP Proficient	SPP Basic	SPP Below Basic	Total number of schools
95-100%	0	1	4	17	22
90-94.9%	0	1	7	21	29
85-89.9%	0	2	6	25	33
80-84.9%	0	5	5	32	42
75-79.9%	0	4	17	18	39
70-74.9%	0	8	18	17	43
65-69.9%	0	15	18	11	44
60-64.9%	0	23	30	15	68
55-59.9%	0	24	27	8	59
50-54.9%	0	43	22	9	74
45-49.9%	1	46	30	2	79
40-44.9%	0	38	24	7	69
Less than 40%	1	55	25	3	84

SPP Scores and the Number of Economically Disadvantaged Students

Table 5 illustrates that the two Schoolwide Title 1 elementary schools who scored advanced both contain less than 50% of the student population as economically disadvantaged. Additionally, schools with less than 40% of the students who are low SES have the highest percentage at 65% of these schools with SPP scores of proficient or advanced. Of the 265 schools that have proficient SPP scores, 244 schools or 92% have economically disadvantaged student populations of less than 69.9% or less. Therefore, the smaller the low SES population the more likely the school was to score proficient.

Calculating the number of schools in each percentage band of low SES populations there are more schools that have SPP scores of proficient than basic or below basic when the population of low SES students is 54.9% or less. At 55% or more of the students in the school being low SES there were more schools that had SPP scores of basic or below basic rather than proficient. Beginning at 70% economically disadvantaged students through 100% that number of schools in each band that have a proficient SPP score dwindles from 19% of the schools in the 70% to 74.9% band to 5% in the 95% to 100% band. Overall, schools with a higher percentage of low SES student populations were more likely to score basic or below basic. Of the schools with 80% to 100% economically disadvantaged student populations, 75% of these schools were more likely to score an SPP score of below basic, rather than proficient or basic.

Schools with the highest number of students who are economically disadvantaged 80% or more are more likely to have an SPP score of below basic. 80% of schools with a population of 75% to 79.9% have SPP scores of either basic or below basic, evenly distributed between the two categories. Ninety percent (90%) of schools from 70% to 74.5% low SES have SPP scores of either basic or below basic, evenly distributed between the two categories. Schools within the 60% to 70% low SES band have a relatively even distribution across the categories of proficient, basic, and below basic. Schools in the 55% to 59.9% band have less schools in the below basic category and a more even distribution between proficient and basic scores. From 54.9% and below of the school's student population being low SES, the schools are more likely to score proficient with less than any band showing more than 12% of the schools scoring below basic. Therefore, the higher the percentage of students in a given school who are economically disadvantaged the more likely the school is to have an SPP score of basic. Studying schools with between 80% and 100% of their population comprised of students who are economically disadvantaged 75% of these schools have SPP scores of below basic.

Research Question 3

The data contained within the gray shading of Table 5 illustrates the schools within the 685 elementary Schoolwide Title 1 schools that have 70% or more the student population in the building comprised of students with low SES backgrounds, and yet still have an SPP score of

proficient. These 21 schools were contacted to request the school principal's participation in the study through a 45-minute interview. The purpose of the interviews was to glean an understanding of the MTSS framework within these successful schools and an understanding of how the principal's leadership contributed to the proficient SPP score. Of the 21 schools contacted, the two schools that had an SPP score of proficient with an economically disadvantaged student population of 90% or greater both had SPP scores that were the lowest possible scores to still be in the proficient category. An interview with building Principal Aaron was conducted, while the other declined an interview.

The remaining 19 schools with economically disadvantaged populations between 70% and 89.9% of the total student population were also contacted via email. Four of these schools indicated at this time the school district by which the individual school is governed, denied the principal's ability to participate in the study due to the current global COVID 19 pandemic. Thirteen of remaining schools did not respond to multiple requests over a four-month period requesting the principal's participation in the study. Principals Bella and Curtis were interviewed because their schools fell within the lowest band of the economically disadvantaged schools being considered and their schools also received the lowest possible SPP score to still be in the proficient category.

Principal Aaron

Interview A was conducted with the Principal Aaron of a Schoolwide school whose SPP score was proficient and whose school had over 90% of the students receiving free or reduced lunch. Aaron described the development of the MTSS framework within the school and his leadership of the school over many years.

Schoolwide Title 1 Challenges

Aaron indicated the percentage of students who receive free or reduced lunch in his building is typically between 90% and 100% each year. The school qualifies for the Community Eligible Provision grant each year to provide each student in the building with breakfast and lunch daily. Aaron also indicated that 40% of the student population is comprised of English Language Learners (ELL) and the transience rate is approximately 40%. The student body is approximately 300 students in grades kindergarten through fifth grade, so approximately 120 students are annually enrolling as new students or leaving the school. Additionally, the student population in this school comes from a small geographic area within a large school district, so an additional challenge is many of the ELL students are not literate in their first language, thereby compounding the task of learning English. Aaron stated, "three years ago we had 50 ESL kids and this year we are up over 120 students" (Principal A, personal communication, May 19, 2020). Despite the poverty number remaining relatively constant over time this increase in ELL students has caused the school to develop some strategies to meet the needs of this student population.

MTSS for Literacy

Aaron described a process called flooding that was instrumental in providing the needed intervention for elementary literacy. Aaron said, "We do this thing called flooding. Since we have been doing this our growth scores and benchmark scores have been pretty good." Describing the process of flooding in grades kindergarten through second grade, he said:

Each classroom gets 2 of the 4 interventionists. So, during the guided reading when they go to rotation they are getting multiple rotations of an adult. Our low or struggling

readers, who need the most support, get two or three rotations of guided reading sessions with a direct adult. That's been very powerful with our reading benchmark scores.

Aaron described that in grades three to five another strategy the school employed for literacy was to have multiple grade levels scheduled for reading during the same time block. He said, "So instead of an interventionist teaching a 5th grade group, we have the groups meeting at the same time, so the interventionist can pull from both grades at the same time." This allows our school to better maximize the interventionist that they were given. Particularly for the ELL students, the school has used the Grape Seed Program, and this allowed the school to send materials home to families that accompanied the program. However, in the newest edition this is still possible, the program is just now web based making it more difficult for some families to access. Aaron said:

I am concerned that this online thing will further widen the gap between the haves and the have-nots even if the district can provide resources. For the kids in my school to use the hotspots that we give them, the kids need to go down the street a bit to even have the hotspot work.

Other programs that the school uses for literacy instruction are Raz-Kids and Headsprout. These are reading and phonics programs the students access both during the school day, afterschool, and at home. Aaron described that during the 2019-2020 school year, the school received some additional Title 1 funding over previous years that enabled them to have "a couple days where the computer lab stayed open till 5 p.m. and this allowed the students to practice with some of the web-based programs we have in our building." The after-school program was extremely beneficial for the students who participated. Our one 4th grade ELA teacher spent a couple of nights a week working with a group. She started out with 8 kids, and it wasn't that many by the end, but her proficiency rate in that class doubled on the ELA PSSA test. I think it was because the kids were getting an extra couple hours of instruction per week, with the instruction being focused on the areas of need, and the needs being met by the person who knows the student the best.

Aaron also indicated that previously an instructional coach who worked in the building had been instrumental in helping with the implementation of MTSS for literacy, but this position was cut due to budget constraints during the 2020-2021 school year. The 2019-2020 year was also the first year for implementation of the flooding concept in the building.

MTSS for Math

Aaron indicated that right now the teachers were able to work with math coaches to assist them with planning both core math instruction and interventions for math. However, the concern is these positions, like the literacy coach positions, may at some point also be eliminated. The principal identified the after-school program as also being very effective for math.

Our ELL teacher stayed 4 nights a week for an extra hour working with 3rd grade ELL students in Math to do previewing, work on vocabulary, and assisting the students, focusing only on math. Our math PSSA scores went from 20% to the mid 40% proficient. I think a lot of that was because of the third grade ESL teacher's work with those students after-school.

MTSS for Behavior

Aaron indicated the school was not technically participating in PBIS like some of the other schools in the district.

Over the last few years, I would put our students' behavior up against any school in the district based on how our students behave. I am basing that on the fact that this year we had 2 suspensions this year in 2020-2021, and last year we had 4 or 5 suspensions for the year. This is down from pushing 30 the years before that.

Aaron attributed much of the change in students' behavior to the growth mindset and approach of helpfulness that has been cultivated in the school over the past several years. Additionally, he indicated the school went from having one guidance counselor, who was split between three schools in the district, to having one guidance counselor who is in the building for half a day every day and who is only split over two buildings. "We were actually able to work with kids to prevent behaviors from occurring, as opposed to being reactive - like you did this, so now we are going to do this to make sure this doesn't happen again." Aaron continued,

We have to make a lot of tough calls, and I always try to place myself - what if I am on the receiving end of this call? How would I like to be addressed with my kid? Your kid did this. We need to fix your kid. I am calling because we have a concern that we want to help you with. We would like to have your help in helping us to help your kid.

Principal's Leadership

When I asked the principal in what three words could summarize the leadership in the building, Aaron stated, "I serve and assist parents, I encourage the staff, and I want everyone to set goals. I want to make sure everyone has what they need to meet the goals. How can I help you get there?" Further explaining the approach that this principal takes with parents and families, the principal indicated that it is essential to greet everyone with respect. "I say, this is their (students' and families') school that we get to work at, and if it wasn't for them we

wouldn't be here." He elaborated further that greeting students each day is essential even for the 40% of the student body who do not speak English well.

Even the parents we can't really say Hi to we can shake their hand, and pat them on the shoulder. They know it is a positive sign even if they don't really understand English. How you greet parents is so important, and how you meet parents for the first time is so important and that can be any day... I could meet a parent for the first time today. You have to treat to them with respect and let them know they count.

In regards to encouraging the staff, Aaron indicated the majority of the staff are between 10 and 15 years in education and they are a hard-working group of individuals. He used an analogy of a pot or kettle to explain why encouragement for the staff is an important aspect of a principal's leadership in a challenging school.

I see school as a big old pot. Eventually, you get all this stuff in the pot – increased rigor, more writing, we have higher standards over the last couple of years, which are all good things in the pot. When we start throwing in ELL issues, language issues, transient issues, the pot can't handle it, but it has to go in the pot. What happens is the side of the pot can't handle it and the side of the pot ends up blowing up cause there is too much pressure in the pot. And part of the blow out is the negative stuff on the staff – like too much stress.

One method Aaron uses to combat this stress and staff burnout is to walk around the building at least two mornings per week to greet the staff as they are coming into the building before the students arrive. "I just walk around and say good morning to everyone. That sends a message that I care about them." He indicated this strategy is also used with students in the mornings as much as possible. "I stand out front when the kids come in and I try fist bump as many kids as I can. This tells them this is safe place and we are glad you are here.... Not, hey, you are not going to do this today are you?"

Goal setting for students and staff was indicated as the third way Aaron would summarize leadership within the school. "We are not going to get performance until we get growth." Returning to the pot analogy, he indicated that to achieve growth and overcome some of the challenges in the pot, students need an extended learning time with the staff who know them best, their teachers.

I see one of the bigger pot ideas as being an extended learning time, where the kids need more time to learn. So, to that end, teachers could pick whomever they wanted to meet with and stay after school and work with them to get caught up. When asked how students, families, or staff would describe the leadership in the school, Aaron stated, "I think they would say that I care. I work hard. I am funny, and that I am going to help everybody out."

Factors That led to Success on the PSSA

Aaron indicated the extended learning time, in combination with flooding for literacy, and the additional staff for behavior were some of the key changes that led to the buildings' success. "So, we went up in every grade and every test, but also every cohort of students also went up." He continued, "When it came in our 5th grade ELA was at the district and the state average for proficiency rate and our 4th grade ELA was a percentage point under the state average." The principal also indicated,

We are not going to get performance until we get growth. So, if we can get a bunch of blue growth then our scores will continue to be up at the state average. It also is a people thing where we have a lot of hard-working dedicated staff members.

Principal Bella

Interview B was conducted with Bella, the principal of a school with a proficient SPP score, and approximately 70% of the students received free or reduced lunch.

Schoolwide Title 1 Challenges

This school not only has 70% of the students who receive free or reduced lunch, but it also is the location of the emotional support program for the school district. Therefore, students from other Kindergarten through fifth grade schools in the district send their students to this elementary school. Bella stated, "We have emotional support kids who are pushed out with very, very difficult behaviors."

MTSS for Literacy

She indicated the school got a literacy curriculum during the 2019-2020 school year and before that the school was innovative in terms of the curriculum because they did not have one. Bella stated, "So, because we did not have a curriculum, we downloaded stories from Read Works and then at the released items from the state." She explained the process the school went through in terms of literacy. "What we did to get our scores up, was to look at the released items from the PSSA and then work on one area where we thought we could see gains. This area was Text Dependent Analysis (TDA)." The principal focused on looking at the students' TDA responses and then compared them with the released responses from the state. Using this information, the principal was able to determine where the needs were for both the students and the teachers. Bella said, "I guess I have to go into the classrooms and model lessons."

Drawing on the past experiences this principal had as a high school English teacher allowed the creation of an MTSS framework for literacy in this building that particularly addressed the TDA component of the state assessment. During the 2018-2019 school year, this school had a literacy coach in the building. Bella stated,

I was trusting that the coach was following the released items and the expectations because we were having the conversations about the scores. And then when the district got rid of the coach, which upset me very much. I had to step in and do it myself and now I see that we were not following it.

Bella continued on to explain how she modeled for the teachers and began to bring them together in professional learning communities to first develop a better understanding of text dependent analysis and then to learn how to teach students how to respond to these kinds of written response questions in a method that will allow them to get all of the points. She explained:

So, I thought ok, I have to model a lesson from the kid's perspective, and I think that is the missing piece that teachers don't do. For example, I have heard a teacher say to a kid, "underline what's important." We'll a kid doesn't know what's important. You have to model it for them. So, I went in the classroom sentence by sentence, with the story in front of the kids, using the overhead and modeled how to teach it. I taught them how to annotate, in order to be able to respond to the prompt. The first two paragraphs we did together. I explained to the students – you don't know what's important, I don't know what's important, but we are going to figure it out together.

Next, Bella explained she worked with the teachers through modeling and professional learning communities how to teach the students to annotate the text, so they did not have to keep rereading the story. "This allows everything to match when you are annotating." Thereby making the process of reading, understanding the question, finding the evidence to answer the question and then answering the question more clearly defined for the students. She then had the teachers create a kid friendly rubric. "After that, we made up a rubric that was kid friendly that the kid could follow." The rubric contained not only a scoring system that the students could use to self-assess their work, but also the steps that they needed to follow between reading the question and the text and answering the question fully.

Bella elaborated that in order to get the students to understand the connection between the question, their response and the supporting evidence from the text, they used a squiggly line under the text.

So, the students have to answer the question, put your transition statement, then in the text it says, and then your squiggly line. Where is your squiggly line? Put in your own words why that quote matches. So, we had them do that. Then at the end they have to restate the first paragraph, restate in different words why you think what you said, and all of the kids did it.

Lastly, the students who followed these directions and were able to successfully write a TDA response received a reward of an ice cream party.

MTSS for Math

In terms of Math, Bella indicated she was so focused on increasing the ELA scores that she trusted the intermediate Math teachers to work on Math. The principal said,

I had a good math teacher, who was working and doing it, because she has done it before. So, I kind of like – checked in on her, but I taught the class for ELA/Reading – we all took groups – I took a group, the teacher took a group, the special education teacher took a group. We all took a group of kids and worked on those TDAs.

MTSS for Behavior

Bella indicated the school was one of the last three in the school district to move to a PBIS model, so the staff has not been through any formalized training, however, they have implemented many things on their own. For example, she stated, "This was a guessed strategy because I know the kids, I greet them at the door every single day and I greet you every single day, and I say, 'I know you, and you can have a great day.'" Additionally, Bella explained to the students, "the importance of you being proficient. You have to be able to do it. You are the best kids in the city. You have to prove it and show it right here." Lastly, the principal said, "We started giving incentives to those good kids and then the other ones started saying, okay, I want ice cream or I want what you got. So, they wanted what we had, so they started acting better too."

Principal's Leadership

Then I asked Bella to identify what three words could summarize her leadership in the building. She explained the school has a family culture, an open-door policy, and a climate of working together. In terms of family culture, the principal said "I don't want the teachers to miss anything of their own children's activities, because I want you here for these kids. So, we help each other and work it out like that." So, not only is the family culture within the school one of taking care of the students within the school, but the principal also ensures that the staff are also taken care of, so they are better able to serve the students. Bella explained the school has a pledge that students and staff say together each day.

The principal explained that the open-door policy in the school means teachers can come into the office and offer any suggestion or idea, and the principal will listen. "We can talk about it because they might know more than me – I am open to that, working together and trying new

things." She also indicated that a priority in the school is to hire new teachers who can be modeled to fit the needs of the school. Bella said,

I love young teachers, if I can grab them, I grab them, because I can mold them anyway I want to mold them and they have creative innovative new ideas that I haven't heard about – so, it is a win-win.

Lastly, Bella indicated the school under her leadership has developed a culture of working together. The pledge and greeting students each day are two factors that have led to this culture within the school. Bella said,

Loving culture in the building – I greet kids at the door every day in the winter, summer, rain, or whatever. I am outside so that parents, families and kids can see me, and I am watching the kids too, so I know if their demeanor changes, or if something is wrong – that way we can talk about it before school starts. We greet kids to see how they are doing, high five, give me a hug, we have special handshakes, or tell me how's grandma today.

Factors That led to Success on the PSSA

Bella described their leadership, especially in literacy with the TDAs, combined with the "A loving family culture, where there are high expectations and we work with the students until they can get there," as the two biggest elements that led to the school's success.

Principal Curtis

Interview C was conducted with Curtis, the principal of a school with a proficient SPP score, and approximately 70% of the students received free or reduced lunch.

Schoolwide Title 1 Challenges

Curtis explained this school is just formally moving into PBIS for the 2020-2021 school, and their math curriculum is their area of growth for this school year. The literacy curriculum has been in place for several years and the school is pleased with the student results.

MTSS for Literacy

This is the school's third year with The American Reading Company or ARC as the main literacy curriculum. Curtis stated, "we are focusing on having our students being reading fluently and proficiently by 3rd grade." There several components to the literacy program, including a computer-based assessment, conferencing with individual students, and an emphasis on independent reading. Curtis explained,

There is a conferencing piece where the teacher is conferencing with students, but there is also an independent reading piece. Kids are both in school and at home, a half an hour each. Then there are times during the day when the students are getting a read aloud by the teachers. So, what ends up happening with the ARC program is that we are able to zero in on the kids who have a lot of needs.

An additional component to the literacy program is the students get incentives for the number of minutes they read each day and then each week.

Each step is equal to 15 minutes of reading, so if they are reading for 1 hour per day that is 4 steps. The whole goal of that piece, is to have them read so much and that they get to pick their books.

The ARC program is further strengthened by the schools' use of the Dynamics Indicators of Basic Early Literacy Skills or DIBELS for phonemic awareness, phonics and fluency, in addition to the Classroom Diagnostic Tools or CDTs for comprehension. Curtis said it is these assessments that allow the school to "build up a plan for the kids who are at risk and need some supports." He also explained the school does supplement the phonics portion of ARC to ensure the needs of the primary students are being met.

MTSS for Math

For math the school has had several curriculums and programs over the years, but most recently they have used the Standards Aligned System through the state website to back map the instructional sequences for math directly from the standards. The principal stated, "We go to the SAS portal, we look at the learning progressions, which are all coming from standards and then we try to do as much data and collaboration as we can." In the school there is a significant amount of time devoted to collaboration between primary and intermediate teachers in terms of the math standards and the progression of instruction. The teachers do use assessments from the current math curriculum, but they balance these with information from the Classroom Diagnostic Tests in the intermediate grades.

Within the collaborative work for math, there is also an emphasis on working with small groups of students on targeted skill instruction. For example, "Now I can group students into groups of like 6 and then I can really work on those skills, and now I can really hit those skills," Curtis stated.

MTSS for Behavior

Curtis indicated this school was one of the last elementary schools in the district to be formally trained in PBIS. Over the last several years, the building has used a combination of outlining behavioral expectations in common areas such as the cafeteria, hallway, and in specials classes, and the CHAMPS model to assist students in understanding their own behavior. The school has also used a robust point system, where students earn points that convert to "cash" in a school or classroom store as a result of their good behavior. He said, "We also have little things in place that will help them track their behavior, and incentives too." This system of points and "cash" was in place when the principal moved to this building seven years ago. This system allows the students to keep track of their points and recognize when they need to make a change to their behavior so they can get more points in their account.

Principal's Leadership

When I asked Curtis to identify what three words could summarize the leadership in the building, he said collaboration, honesty, and communication. Curtis indicated that partially due to the size of the building and being only two classroom teachers in each grade level, it is important whenever possible to include the staff in the decision-making process. Curtis said, "Depending on the decision, I will get their input and sometimes, depending on the decision I might have to get their input and then make the decision." Committee structures such as having a time keeper, a note-taker, and a task master assigned to individuals in each meeting also allow for shared leadership between the principal and the staff. Curtis highlighted that as a staff the faculty use OneNote to maintain a record of every meeting that is held throughout the year. This system allows for inclusion of everyone's ideas, as well as providing a reference tool that can be used as needed throughout the school year.

In terms of openness and honesty, he said,

My leadership role is we are all a team – obviously I am the leader of the building, but I don't say my role is higher than you, etc. ... I might have to have some tough decisions but we all treat each other with respect and so forth and professional. We know that at the end of the day our kiddos are the ones who benefit from our decisions and that is what we need to think about.

Curtis articulated several times throughout our conversation that these qualities of leadership that summarize his actions are also the qualities he sees in the central office administrative team who lead the school district. He said, "I feel that we definitely have a strong leadership team that helps me grow as a leader every single day. I take something from every meeting that I want to focus on."

Curtis shared that communication is key between the school and the staff, but also between the school and the families, who they serve. In terms of staff, he explained, "Communication is a big piece: emails, phone calls, text messages, or face to face, the biggest piece is trying to be clear." Curtis continued with "Communication and flexibility are two big ones. Parents can come in here and 99% of the time, I will make that time to handle their situation or concerns or whatever." The school communicates using a variety of methods including social media, like Facebook and Twitter, as well as more traditional communication like, email, texts and phone calls. He also explained being in the halls both in the morning and at dismissal, as well as attending after-school events and activities, is important. Curtis stated, "Every student in this building, will know who I am because they see me. I would say about 90% of parents would know who I am." Of the three leadership characteristics mentioned, Curtis believes that communication is the most important of these three. "I would say, communication is definitely something that they would say about my leadership."

Lastly, he highlighted the importance of family first and reflection as other components of the building leadership that are essential to student achievement. "The biggest piece as a leader is I have to reflect," and "Family first. You have got to be present," the principal explained. Elaborating on this point a bit more, Curtis outlined that if something is going on with a staff member or a student personally, then this has to be dealt with before the teacher or the student can engage in the teaching and learning process. Curtis stated,

If you are focused and you can do your job, but if there is something going on personally you gotta make sure that is taken care of first. You gotta worry about your students when you are here. The trust is there, and honesty – agree to disagree, as long as we understand that everything we do is in the best interest of our kiddos.

Factors That led to Success on the PSSA

Curtis pointed to the school's use of data to drive instruction as a major factor that contributed to the students' successful achievement on the PSSAs. He stated, "I would say our district focuses on literacy and math, and then specifically in my building we take Pennsylvania's Value Added Assessment System, PVAAS data very seriously." The principal described that when the state assessment data are available, usually in July, teams of teachers look carefully at the data for strengths and needs. Then when PVAAS data, which indicates not only achievement, but also growth data for the total student population and also various cohorts and individual groups of students, becomes available in the late summer or early fall again teams of teachers review this data. From there instructional changes are implemented and student growth is consistently being measured in both reading and math using the CDTs specifically.

Curtis indicated the new superintendent's class size caps have also enabled small group instruction to occur more easily and systematically than it ever did in the past. The principal said, "Small group instruction is something we are always trying to get better at. It is helpful that our district just created caps at 28, which is a blessing because we normally have classes of 31 or 32 students." Specifically, in a building where there are two classroom teachers in each grade level the class caps at 28 allow for more opportunities for teachers to work in small groups with students much more easily.

The seniority of the staff is another element that Curtis indicated is a big factor in the students' success. The staff in this building as an average tenure in this building of 20 years, with three teachers who have worked at this school for more than 30 years. He indicates, "There is not a lot of turnover. This is a big part of our success – it is a family." Curtis summarizes the building's success on the PSSAs in this way,

It is collaboration, data review, and the program ARC is a big piece. What we are using, is to review that data and then share it, and being honest with each other. This leads us back to the standards that are going to drive our instruction.

Summary of the Research Principals' Experiences

Each of the principals who were interviewed discussed the MTSS framework and their own leadership, as they related to the students' successful achievement the Pennsylvania State Assessments.

Targeted Small Group Instruction

Each principal identified different methods that allowed the students in their building access to target literacy interventions and support beyond the core instruction as a component of their MTSS framework. Aaron shared that at their school they use a methodology called "flooding." This method allows all of the intervention staff (i.e., reading specialists, special education teachers, and English Development teachers) to collaborate with the classroom teachers at a particular grade level and provide intervention to that grade level during a specific time period each day. Bella outlined how all of the intervention staff and even paraprofessionals worked with small groups of students to provide targeted instruction. Lastly, Curtis indicated the school uses a program called American Reading Company, where the teachers work with both small groups of students around targeted skills in addition to individual student conferencing. During both the interviews with Aaron and Curtis, they both mentioned that recent changes at the district level to decrease the number of students in each classroom in their school buildings has been very helpful in allowing the teachers to work directly with smaller groups of students because there are not as many students overall in an individual classroom.

The MTSS framework for math in all three buildings was one of the areas the principals indicated needed continued growth. Aaron and Curtis indicated they do use small group instruction for math, but it is not as well defined in terms of targeted intervention groups as it is for reading. Aaron indicated the after-school program that occurred several nights a week for both math and literacy was another component of small group instruction that was very beneficial to the students. Aaron stated, "The kids were getting an extra couple hours of instruction per week, with the instruction being focused on the areas of need, and the needs being met by the person who knows the student the best." Across these buildings targeted small group instruction provided both during the school day and after-school was highlighted as a key component of students' growth in literacy and math.

Use of Data to Drive Instruction and Achievement

Each of the three principals indicated they met multiple times per year with grade level teams of teachers, including the special educator, reading specialists, the English development teacher, and other interventionists to review student data, track progress, and measure students' growth. All three schools used assessment measures for literacy and math that measured basic skills in each area in combination with assessments in grades three through five that mirrored the PSSA assessment. The data were studied together in combination with students' previous assessment data, including the PVAAS data that comes from the state each year.

Teachers, students, and families in each of these buildings were informed about exactly what aspects of the standards their children needed more targeted instruction to master and how they were progressing throughout the year. Curtis stated, "I would say our district focus on literacy and math, and then specifically in my building we take Pennsylvania's Value Added Assessment System, PVAAS data very seriously." The principal is mentioning here that not only does this school in the district take the data seriously, but the district's focus on student achievement is also a component of students' growth over time. Aaron stated, "We are not going to get performance until we get growth. So, if we can get a bunch of blue growth then our scores will continue to be up at the state average." Indicating that students' growth data on PVAAS will occur first before the students' achievement data increases. Bella indicated, "A loving family culture, where there are high expectations and we work with the students until they can get there." Across all three principals, the message is clear that in addition to using the data to drive instruction and achievement, students' growth must be highly valued and celebrated before students will be able to meet or exceed the grade level standards.

Bella and Curtis both indicated they also use rewards to celebrate students' growth and achievement. Bella shared that students who were able to successful write a response to a TDA question were given an ice cream party to celebrate their success. Curtis shared that students are given individual prizes such as dog tags as well as group prize to celebrate the time they spend reading over a specific period of time. During all three interviews principals indicated they set specific targets with the teachers and paraprofessionals to outline what the achievement of student growth or proficient will look like. Aaron and Bella indicated that in order to move the entire school to score proficient, they challenged their staff to move an entire class of students from what category they had previously achieved to the next category (e.g., students who had scored below basic to scoring basic, students who had scored basic to proficient, and those who had scored proficient to advanced). Setting these expectations assisted not only students, but also staff to clearly understand the goal.

MTSS Behavior

Strikingly all three principals worked in schools that had not formally received training in Positive Behavior Support. Each principal indicated this training either happened during the 2019-2020 school year, or was occurring during the 2020-2021 school year. Regardless, this means it occurred following the students' successful performance on the state assessments. The principals indicated they had been using many of the components of Positive Behavior Support, PBS in their buildings for years, through their own development of a plan for the building. Principals Aaron and Bella indicated that office referrals were very high when they began as principals in their buildings between five and seven years ago, but now office referral rates are significantly reduced. Curtis indicated the average tenure of the teachers in the building is 20 years and this is a considerable contributing factor to the successful PBS system the building has enjoyed for the past seven years. In each building, the principals described the prizes and rewards that classrooms, groups of students, or individuals are able to earn through the PBS system.

School Culture and Leadership

Across the three interviews each principal described the "family culture" of the building as a key component of their leadership. Aaron stated, "I stand out front when the kids come in and I try fist bump as many kids as I can. This tells them this is safe place and we are glad you are here." He also indicated that as many mornings as possible the principal prioritizes greeting the staff in the same manner the students are greeted. Bella said,

Loving culture in the building – I greet kids at the door every day in the winter, summer, rain, or whatever. We greet kids to see how you doing, high five, give me a hug, we have special handshakes, or tell me how's grandma today.

Curtis stated, "Every student in this building, will know who I am because they see me." During interview the principals' described how they take care of not only the students and families in their buildings, but also the staff. Curtis said, "family first," while Bella indicated that if a staff member needs to go see their personal children at a school event or sporting event, the staff works this out so the staff also feel supported and cared for both personally and professional.

Communication between staff and the building principal was expressed in all three interviews as a key aspect of school culture and the principal's leadership. Aaron indicated being encourager of staff, students, and families was extremely important, while Bella has an opendoor policy and Curtis said, "honesty communication." Each individual emphasized the importance of the phrase, "agree to disagree," as an area they consistently work to help staff understand the final decisions always rest on what is best for the students in our school.

Collaboration and Leadership

Each principal highlighted that a large component of their leadership is shared with the staff in the building. This collaborative relationship not only occurs between the principal and the staff, but also within and among staff members. One principal indicated that due to the smaller size of the building, staff collaborative decision-making is a norm. For example, Curtis said, "Depending on the decision, I will get their input and sometimes, depending on the decision I might have to get their input and then make the decision." Bella stated, "We can talk about it

because they might know more than me – I am open to that, working together and trying new things." Aaron said, "I want to make sure everyone has what they need to meet the goals. How can I help you get there?" Each principal shared this collaborative approach allows not only their students to grow, but also their staff.

Summary of Leadership

Throughout the three interview the themes of establishing and maintaining a positive school culture for both staff and students combined with clear communication that provides and fosters shared leadership, and a willingness to respect and challenge each other to continue to grow as educators were evident in the responses of each of the principals. These qualities of leadership were outlined by each principal as being one component that contributed to the success of their students on the PSSAs.

Summary

In this chapter the findings of the study were presented. Data from the Future Ready Index and the School Performance Profiles of each Schoolwide Title 1 elementary school were analyzed. Interviews with three principals from the 21 Schoolwide Title 1 elementary schools that achieved proficient SPP scores were described. The following chapter will explain how the quantitative and qualitative data compares to the themes in the existing literature.

Chapter 5: Discussion, Conclusions, and Recommendations

Chapters 1 and 2 include the introduction to the study, and a literature review on Schoolwide Title 1 schools, principals' leadership, and successful strategies schools use to assist students in overcoming barriers and challenges to achieve student success on state assessments. Chapter 3 outlines the research methodology and data analysis. Chapter 4 describes the qualitative analysis of data from the Future Ready Index and the School Performance Profile scores for each school. Chapter 4 also includes the interview responses from principals and the themes that emerged from these interview responses. Chapter 5 includes the overview of the study, an interpretation of the findings, conclusions, recommendations of the study, a chapter summary, and an overall summary of the study.

Overview of the Study

Some Schoolwide Title 1 leaders of LEAs with fully implemented MTSS frameworks have achieved consistent student success on Pennsylvania state assessments, while other schools with the same Schoolwide Title 1 profiles have not experienced these successes. The challenges many Schoolwide Title 1 students bring into the school can cause their acquisition of learning to be delayed due to trauma or other factors. The MTSS framework outlines robust core instruction in math, literacy and behavior. Data analysis, collaborative planning, and fidelity to the MTSS model are all attributable to the leadership of the building principal. Therefore, when the MTSS framework is fully implemented and the building principal provides robust leadership, then the results of student achievement from one school to another would seemingly be similar. Statewide performance data demonstrates the contrary (Pennsylvania Department of Education, 2019). Rather, within schoolwide elementary schools, the students' achievement varies greatly. The purpose of this study is to understand how some of the Pennsylvania kindergarten through sixth grade Schoolwide Title 1 schools are thriving on state assessments, while others are unable to achieve this success. The study was guided by the following research questions:

RQ1: What are the differences among Schoolwide Title 1 elementary schools'

performance on Pennsylvania state assessments?

RQ2: Within Schoolwide Title 1 elementary schools who are demonstrating proficiency on the school performance profile, how do schools with high percentages of students from low socioeconomic families perform?

RQ3: How do building principals of Schoolwide Title 1 schools in Pennsylvania perceive the impact between the MTSS framework, their leadership, and their students' successful achievement on Pennsylvania state assessments?

Interpretation of the Research Findings

Research Question 1

What are the differences among Schoolwide Title 1 elementary schools' performance on Pennsylvania state assessments?

Of the 1058 Schoolwide Title 1 schools in Pennsylvania, 685 of these schools contain grade configurations at the elementary school level and were included in the data analysis. Breakdown of the School Performance Profile scores for each school is illustrated in Table 3. Only 39% of the 685 schools achieved a School Performance Profile score that falls in the proficient or advanced categories. The remaining 61% of schools achieved scores in the basic or below basic range. Recognizing that Schoolwide Title 1 schools by definition have 40% or more of the students attending this school who receive free and/or reduced lunch, and compound this difficulty because there are 501 school districts in the state with many elementary schools organized as neighborhood schools. The U.S. Department of Education (2018) indicates that 75% of all schools receiving Title 1 funding are Schoolwide Title 1, and of these – 49% have a poverty rate of 75% or greater (Snyder et al., 2018).

The high poverty rate among Schoolwide Title 1 elementary schools combined with the model of neighborhood schools contribute to the large percentage of Schoolwide Title 1 schools with low School Performance Profiles. These lower profiles likely indicate a more diverse student population, with a high degree of poverty therefore making successful achievement challenging. Kainz (2019) said, "More succinctly, poor African American and Latinx students who attend schools with high minority concentrations begin school behind and make less progress while in school compared to their more advantaged peers who attend schools with low minority concentrations" (p. 161). The diverse student population contributes to a higher incidence of ACEs (Felitti et al., 1998) within the student populations in these Schoolwide Title 1 schools. Reeves (2006) wrote, "If you believe that adults make a difference in student achievement, you are right. If you believe that adults are helpless bystanders while demographic characteristics work their inexorable will on the academic lives of students, you are right" (p. 76). The leadership, mission and vision will provide the foundation upon which school climate, culture, and instructional practices that lead to achievement will thrive.

Research Question 2

Within Schoolwide Title 1 elementary schools who are demonstrating proficiency on the school performance profile, how do schools with high percentages of students from low socioeconomic families perform?

There are 51 schools with a free and reduced lunch percentage reported on the Future Ready Index between 90% and 100%. Only two of these 51 schools achieved a School Performance Profile of proficient and none achieved a ranking of advanced. In the 80% to 89% category, there are seven schools of 75 that achieved a proficient ranking and none achieved a advanced. Finally, there are 12 of the 82 schools in the 70% to 79% category that achieved a proficient ranking with no schools achieving advanced. Therefore, of the Schoolwide Title 1 elementary schools with a free and reduced student population, as reported on the Future Ready Index of 70% to 100% there were only 21 schools of these 208 possible schools that achieved a School Performance Profile of proficient and none of them achieved the ranking of advanced.

In this study only 208 schools or 30% of the original 685 elementary schools studied had a poverty rate greater than 70%. This is considerably less than the US Department of Education report from 2018 that 49% of all Schoolwide Title 1 schools have student populations of free and reduced lunch students that are greater than 75%. Despite the lower percentage of students receiving free and reduced lunch, there are still only 21 schools that have achieved a School Performance Profile of proficient.

Research Question 3

How do building principals of Schoolwide Title 1 schools in Pennsylvania perceive the impact between the MTSS framework, their leadership, and their students' successful achievement on Pennsylvania state assessments?

The three principals interviewed indicated their MTSS frameworks were built on strong core instruction, targeted small group instruction, data driven decision-making, and behavior supports. In all three schools the principals indicated their school uses a blend of the standard RTI protocol model and the RTI problem-solving model (Batshe et al., 2005; Fuchs et al., 2010). Each principal indicated the strength of their MTSS framework was a contributing factor in their students' successful achievement on the state assessment.

Strong Core Instruction

The principals discussed their core literacy and math curricula or programs as key aspects of the MTSS framework. Principal Aaron indicated that A to Z reading is one of their core programs, while Principal Curtis said, The American Reading Company, and Principal Bella said they did not have a curriculum so they made their own using mostly Readworks. Each principal said they begin by looking at the standards for the grade level and then the standards are used as the goals or targets that students' progress is measured against. Curtis discussed the importance of their core literacy program building not only literacy skills for students but also reading stamina. Aaron indicated that A to Z affords the students, teachers, and families a common language for discussing when the students move to the next level of text. Bella discussed the importance of continuous training for staff regarding how to teach various aspects of how to use a core literacy curriculum or program.

In the area of math, all three schools indicated their literacy programs were much stronger than their math instruction. Bella said she had to select an area to focus on and the team determined literacy was the focus area first. All three principals indicated they are using multiple programs and resources for core math instruction, but everything they are teaching is derived from the standards. Curtis particularly noted the building uses the Pennsylvania Standards Aligned System to assist their team in determining which concepts are the most important to teach to mastery in each grade level.

Targeted Small Group

As one component of core instruction and as the methodology for intervention, all three principals indicated the importance of small group instruction. To develop these small groups, teachers begin by using universal screening tools in math and literacy to determine which students need additional intervention services. Preston et al. (2016) indicated the importance of universal screening tools and each of the three principals highlighted universal screening as a key component of their MTSS framework. Preston et al. (2016) discussed the need for general education teachers to provide interventions, and all three principals indicated that this practice was occurring in their schools for both literacy and math. Aaron indicated the classroom teacher who knows the student the most intimately in terms of where they are in a particular concept and what the next step is in their development is the individual in the best position to support the student's learning. He also highlighted the practice of flooding, where all reading specialists, learning support teachers, and paraprofessionals support a specific grade level during a certain time period each day. This allows the grade level to be flooded with supports and the students to be broken into the smallest possible groups with targeted skill instruction in specific areas. Bella discussed how on most days the principal was even teaching one of the groups in certain grade levels, as a model for the teachers. Curtis discussed the team effort of the classroom teachers and the specialists working together to ensure that the small groups are providing the most targeted and effective instruction possible to the students. Aaron and Bella indicated that in addition to the targeted small group instruction that was occurring during the school day, the building was able to also offer this resource after-school as another opportunity for small group instruction.

Data Driven Instruction

Each of the three principals indicate their data includes universal and diagnostic data for both literacy and math for all students. These three principals actually begin the data process in the summer before the school year begins. Teams of teachers, specialists, counselors, and the principals, breakdown the state assessment data from the previous year, so everyone is aware of the students' individual strengths and needs coming into the new school year. Additionally, the teams work through all of the growth data provided by the state to track which individual students or groups of students are showing growth in terms of the state assessment from one year to the next. The individual building teams use this data to determine if their core instruction has been effective and/or what changes they need to make to prompt increased student growth during the next school year. The concept of meeting during the summer and providing teachers with an in-depth understanding of exactly where the students in the building are starting and what their growth goal is for the year is an integral aspect of each principal's planning process.

MTSS Framework Behavior

In Pennsylvania's Consolidated State Plan of 2018, it is written that MTSS includes a PBIS component in addition to the literacy and math aspects. Ironically, each of the three principals indicated that their respective school districts have previously sent some of their elementary buildings to training for PBIS, but their buildings were the last of the elementary schools in their school district to receive this training. Each principal explained the PBIS system their individual building had put together was created pretty much on their own, using in-house professional learning communities and trial and error. Bella indicated that over the years they had tried several different systems before the building arrived at one that worked well for their particular school. Curtis said their building is just now in the 2020-2021 school year receiving formal training, but this training will serve to enhance the systems that have already been established. Thus, each of these schools, despite formal professional development, have put together effective PBIS systems that work for their population of students. Principals Aaron and Bella specifically discussed the decrease in disciplinary referrals in their schools during the past five years.

Transformational Leadership

In each of the three elementary schools, the building principals shared their perspective on their own leadership. Each principal illustrates the key components of transformational leadership. Robinson (2011) stated, "In schools where students achieve at higher than expected levels, leaders are much more focused on improvement of teaching and learning than in similar schools where students perform at lower than expected levels" (p. 18). Each principal stressed the focus of each of their buildings is on students' growth and if the students achieve growth they will ultimately achieve successful results on state assessments, even if this does take several years. The principals indicated the high expectations that are upheld in their buildings are based on a shared vision or growth and the message each child can achieve. Bella and Curtis both have school mottos and chants the students recite each day to encourage their continued striving for excellence. Each principal highlighted their knowledge of the standards, how to interpret data, and how to use this knowledge to assist teachers in moving students forward in their learning.

The principals also support and uphold the importance of shared decision making and consensus building within their schools. Each one discussed the importance of first getting to know their staff on a personal level before the professional trust can be fostered and grow. Fullan (2001) stated, "Leaders must be consummate relationship builders with diverse people and groups" (p. 5). This knowledge of staff was identified by the principals as being an essential component of the shared decision making. Curtis highlighted committee structures as another key aspect of relationship building. Aaron and Bella discussed the importance of talking with staff each day and being available for conversations or to assist with problem-solving as issues arise within the building. Each principal described themselves and their schools as being "family-oriented" learning environments where everyone – students, families and staff are all

working collectively towards the goal of growth for every student. A culture of collective goals setting that still maintains the needs of individuals, while also upholding the shared vision of student growth and success was highlighted by each of the three principals.

Findings and Conclusions

This study revealed several important conclusions regarding the state assessment achievement of students who attended Schoolwide Title 1 elementary schools.

- Despite the Pennsylvania state definition of Schoolwide Title Schools as those who have 40% or more of the students receiving free or reduced lunch this study illustrated that 12% of the 685 elementary schools studied were approved Schoolwide Title 1 schools who did not reach the 40% threshold of students receiving free or reduced lunch.
- While the U.S. Department of Education reports 49% of the nation's Schoolwide Title I schools have a poverty rate of 75% or higher, the proportion of Pennsylvania Schoolwide Title I schools that experience this poverty level is just over 24% (Snyder et al., 2018).
- 3. The lower the poverty rate in the elementary Schoolwide Title I school you attend the more likely the school is achieving a higher School Performance Profile. Only 10% of the schools with high poverty rates of 70% or higher had a proficient School Performance Profile. None of the Pennsylvania high-poverty schools were attributed with advanced School Performance Profile status.
- 4. The principals interviewed in this study indicated an MTSS structure for literacy, math, and behavior was a contributing factor to their students' successful performance on the state assessments.
- 5. The principals readily indicated in their respective school districts the schools they serve were the last building or one of the last buildings in their district to receive formal

training on MTSS behavior. However, each building had already begun a successful program to decrease office referrals, improve students' behavior and promote a positive growth culture. This is a protective factor to mitigate the trauma or ACEs that many of these students bring into the classroom.

- 6. The principals each highlighted the importance of building relationships with students, families, and staff. The relationship between the principal and their staff enables collaborative decision-making and the feeling of a "family culture" within the school building.
- 7. The principals' strong relationships combined with their knowledge and expertise relative to the standards as well as their high expectations for students contributed to the students' overall success.

Recommendations

The issues surrounding underperformance of Schoolwide Title 1 elementary schools is an issue across Pennsylvania. This study illustrates how a strong, well developed MTSS framework combined with a principal's leadership do attribute to some Schoolwide Title 1 elementary schools where students are scoring proficient on state assessments. Fuchs and Fuch (2006, 2017) and Fuchs et al. (2018) are studies that specifically address how the MTSS framework and the principal's leadership impact student achievement in high poverty buildings. This study has several implications for the future practices of Pennsylvania Schoolwide Title 1 principals.

- 1. Develop strong relationships with the staff, students and families within the school because this relationship is the bedrock upon which shared vision and goals are built.
- 2. Communicate and implement shared vision and goal statements derived from student data as this plan for the future is essential to promoting student growth in the present.

- Be knowledgeable of all standards, students' data and the effective implementation of an MTSS system that includes core and intervention components for literacy, math and behavior.
- 4. Be knowledgeable regarding how to effectively deliver core and intervention instruction within an MTSS framework that will produce positive student growth outcomes. Students must achieve growth before they can achieve proficiency.

Suggestions for Further Research

In this study, I examined why some Schoolwide Title 1 elementary schools in Pennsylvania achieve successful results on the state assessments while others do not. Future research recommendations are the following:

- 1. Research Schoolwide Title 1 elementary schools not in Pennsylvania and compare the students' results on state assessments.
- Research Schoolwide Title 1 elementary schools' achieve on state assessment results both in and outside of Pennsylvania in a longitudinal study over five years and compare results.
- 3. Research Schoolwide Title 1 middle and high schools' state assessment results both in and outside of Pennsylvania and compare results.
- Examine the processes and procedures of determining Schoolwide Title 1 eligibility in Pennsylvania and other states.
- Examine schools that are not Schoolwide Title 1 at the elementary, middle and high school level in terms of what factors most influence these school's success or lacking achievement on state assessments.

6. Examine teacher's perceptions of what factors most influence a school's success on state assessments in comparison to the principal's perceptions.

Reflections and Closing Remarks

In this study, I quantitatively determined which schools of the 1058 Schoolwide Title 1 schools in Pennsylvania were considered elementary. Studying just these 685 schools, I evaluated their students' performance on the state assessment using the School Performance Profile. The data were then categorized according the number of students who are receiving free and reduced lunch in each building as reported on the Future Ready Index. Of the 21 Pennsylvania Schoolwide Title 1 elementary schools that had School Performance Profiles of proficient, I interviewed three of these building principals. I was enlightened by the principals' honesty and transparency regarding the MTSS system in their schools, their reflection on their own leadership, and their thoughts regarding the success of their students on the state assessments. Each principal that shared illustrated how their leadership over several years in each of these schools has fostered the current MTSS framework structure and students' success. However, I have learned through each story the relationships upon which the leadership, the MTSS framework, the shared vision, and common goals are built is paramount to the continued success of the students who attend these schools' proficiency on state assessments.

I have enriched the literature base through highlighting the MTSS framework, and principal's leadership that have enabled these Schoolwide Title 1 elementary schools to succeed. These factors are replicable within other Schoolwide Title 1 schools in an effort to move their students toward more successful results on state assessments. I intend to share my research by presenting at several conferences with both Title 1 and non-Title 1 school administrators and teachers in attendance. I will continue to enrich my own leadership skills through modeling and training other teachers and administrators in the development of their skills to assist their schools towards successful student achievement.

Summary

This final chapter provided a summary and discussion related to the research questions along with findings and conclusions. This chapter provided recommendations for Schoolwide Title 1 principals, teachers, and families. The chapter concluded with future research suggestions and a final conclusion.

References

Almeida, D. M., Neupert, S. D., Banks, S. R., & Serido, J. (2005). Do daily stress processes account for socioeconomic health disparities? *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 60(Special_Issue_2), S34-S39.
 https://doi.org/10.1093/geronb/60.Special_Issue_2.S34

American Institutes for Research. (2002). Specific learning disabilities: Finding common ground. A report developed by the ten organizations participating in the learning disabilities roundtable (Washington, DC, February 4-5, 2002).
 https://archive.org/details/ERIC_ED469464/page/n1/mode/2up

- Anderson, M. (2017). Transformational leadership in education: A review of existing literature. International Social Science Review, 93(1), 1–13. <u>https://digitalcommons.northgeorgia.edu/issr/vol93/iss1/4/</u>
- Baker, S., Smolkowski, K., Chaparoo, E., Smith, J., & Hank, F. (2015). Using regression discontinuity to test the impact of a tier 2 reading intervention in first grade. *Journal of Research on Educational Effectiveness*, 8(2), 218–244.

https://doi.org/10.1080/19345747.2014.909548

Balu, R., Zhu, P., Doolittle, R. Schiller, E., Jenkins, J., & Gersten, R. (2015). *Evaluation of response to intervention practices for elementary school reading*. National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

https://ies.ed.gov/pubsearch/pubsinfo.asp?pubid=NCEE20164000

Bass, B. (1960). Leadership, psychology and organizational behavior. Harper.

Bass, B. (1981). Stogdill's handbook of leadership: A survey of theory and research. Free Press

- Bass, B. (1985). Model of transformational leadership. In T.F. Mech & G.B. McCabe (Eds.), Leadership and academic librarians (pp. 66–82). Greenwood.
- Bass, B. (1998). Transformational leadership: Industry, military, and educational impact. Lawrence Erlbaum Associates.
- Bass, B., & Avolio, B. (1994). Improving organizational effectiveness through transformational leadership. Sage.
- Bass, B., & Riggio, R. (2006). The transformational model of leadership. In G. Hickman (Ed.), Leading organizations: Perspectives for a new era (pp. 16-33). Sage.
- Batsche, R., Elliorr, J., Graden, J. L., Grimes, J., Kovaleski, J. F., Prasse, D., Schrag, J., & Tilly,
 W. D. (2006). *Response to intervention: Policy considerations and implementation*.
 National Association of State Directors of Special Education.
- Bender, W., & Shores, C. (2007). *Response to intervention: A practical guide for every teacher*. Corwin.
- Benner, G. (1959). Leadership theory and administrative behavior: The problem of authority. *Administrative Science Quarterly*, *4*, 259–301. <u>https://doi.org/10.2307/2390911</u>
- Benner, G., Kutash, K., Nelson, J., & Fisher, M. (2013). Closing the achievement gap of youth with emotional and behavioral disorders through multi-tiered systems of support.
 Education & Treatment of Children, 36(3), 15. <u>https://doi.org/10.1353/etc.2013.0018</u>
- Blodgett, C., & Lanigan, J. (2018). The association between adverse childhood experience (ACE) and school success in elementary school children. *School Psychology Quarterly*, 33(1), 137–146. <u>https://doi.org/10.1037/spq0000256</u>
- Burdette, P. (2007). *Response to intervention as it relates to early intervening services: Recommendations*. <u>https://eric.ed.gov/?id=ED529741</u>

Burns, M. (1978). Leadership. Harper and Row.

Burns, M., Appleton, J., & Stehouwer, J. (2005). Meta-analytic review of responsiveness-tointervention research: Examining field-based and research-implemented models. *Journal* of Psychoeducational Assessment, 23(4), 381–394.

https://doi.org/10.1177/073428290502300406

- Campbell, J., Quincy, C., Osserman, J., & Pedersen, O. (2013). Coding in-depth semistructured interviews: Problems of unitization and intercoder reliability and agreement. *Sociological Methods & Research*, 42(3), 294–320. <u>https://doi.org/10.1177/0049124113500475</u>
- Coleman, M. F., Buysse, V., & Neitzel, J. (2006). *Recognition and response: An early intervention system for young children at-risk for learning disabilities. Full Report.* The University of North Carolina Press.
- Common Core State Standards Initiative. (2010). Common core state standards for English language arts & literacy in history/social studies, science, and technical subjects. <u>http://www.corestandards.org/assets/CCSSI_ELA%20Standards.pdf G</u>
- Coyne, M., Oldham, A., Dougherty, S., Leonard, K., Koriakin, T., Gage, N., Burns, D., & Gillis, M. (2018). Evaluating the effects of supplemental reading intervention within an MTSS or RTI reading reform initiative using a regression discontinuity design. *Exceptional Children*, 84(4), 350–367. <u>https://doi.org/10.1177/0014402918772791</u>
- Dansereau Jr, F., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. Organizational Behavior and Human Performance, 13(1), 46–78. <u>https://doi.org/10.1016/0030-5073(75)90005-7</u>

Deno, S. (1985). Curriculum-based measurement: The emerging alternative. *Exceptional Children*, *52*(3), 219–232. <u>https://doi.org/10.1177/001440298505200303</u>

- Duchon, D., Green, S. G., & Taber, T. D. (1986). Vertical dyad linkage: A longitudinal assessment of antecedents, measures, and consequences. *Journal of Applied Psychology*, 71(1), 56–60. <u>https://doi.org/10.1037/0021-9010.71.1.56</u>
- Dulaney, S., Hallam, P., & Wall, G. (2013). Superintendent perceptions of multi-tiered systems of support (MTSS): Obstacles and opportunities for school system reform. AASA Journal of Scholarship & Practice, 10(2), 30–45. <u>https://scinapse.io/papers/124012588</u>
- Dweck, C. (2006). Mindset. Penguin Random House.
- Dweck, C. S., Walton, G. M., & Cohen, G. L. (2014). Academic tenacity: Mindsets and skills that promote long-term learning. *Bill & Melinda Gates Foundation*. https://eric.ed.gov/?id=ED576649
- Eagle, J., Dowd-Eagle, S., Snyder, A., & Holtzman, E. (2015). Implementing a multi-tiered system of support (MTSS): Collaboration between school psychologists and administrators to promote systems-level change. *Journal of Educational & Psychological Consultation*, 25(2-3), 160–177. <u>https://doi.org/10.1080/10474412.2014.929960</u>
- Felitti, V., Anda, R., Nordenberg, D., Williamson, D., Spitz, A., Edwards, V., Koss, M., & Marks, J. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*, *14*(4), 245–258.

https://doi.org/10.1016/S0749-3797(98)00017-8

Fiedler, F. (1964). A theory of leadership effectiveness. McGraw-Hill.

- Foreman-Wernet, L. (2003). Rethinking communication: Introducing the sense-making methodology. In B. Dervin and L. Foreman-Wenet with E. Lauterbach (Eds.), *Sense-making methodology reader: Selected writings of Brenda Dervin* (Chapter 1, pp. 3-16). Hampton Press.
- Freeman, R., Miller, D., & Newcomer, L. (2015). Integration of academic and behavioral MTSS at the district level using implementation science. *Learning Disabilities: A Contemporary Journal*, 13(1), 59–72. <u>http://www.morningsideacademy.org/wp-</u> content/uploads/2015/10/LDCJ-3-15-web.pdf#page=66
- Fuchs, D., & Deshler, D. (2007). What we need to know about responsiveness to intervention. Learning Disabilities Research & Practice, 22(2), 129–136. https://doi.org/10.1111/j.1540-5826.2007.00237.x
- Fuchs, D., & Fuchs, L. S. (2006). Introduction to response to intervention: What, why and how valid is it? *Reading Research Quarterly*, 41(1), 93–99. <u>https://www.jstor.org/stable/4151803</u>
- Fuchs, D., & Fuchs, L. S. (2017). Critique of the national evaluation of response to intervention: A case for simpler frameworks. *Exceptional Children*, 83(3), 255–268. <u>https://doi.org/10.1177/0014402917693580</u>
- Fuchs, D., Fuchs, L. S., & Malone, A. (2018). The taxonomy of intervention intensity. *Teaching Exceptional Children*, 50(4), 194–202. <u>https://doi.org/10.1177/0040059918758166</u>
- Fuchs, D., Fuchs, L. S., & Stecker, P. (2010). The "blurring" of special education in a new continuum of general education placements and services. *Exceptional Children*, 76(3), 301–323. <u>https://doi.org/10.1177/001440291007600304</u>

- Fuchs, L. S., & Fuchs, D. (1991). Curriculum-based measurements. *Preventing School Failure*, 35(3), 6–13. <u>https://doi.org/10.1080/1045988X.1991.10871068</u>
- Fuchs, L. S., & Fuchs, D. (1998). Treatment validity: A unifying concept for reconceptualizing the identification of learning disabilities. *Learning Disabilities Research and Practice*, 13(4), 204–219. <u>https://psycnet.apa.org/record/1998-03124-002</u>
- Fuchs, L. S., & Vaughn, S. (2012). Responsiveness to intervention: A decade later. *Journal of Learning Disabilities*, 45(3), 195–203. <u>https://doi.org/10.1177/0022219412442150</u>

Fullan, M. (2001). Leading in a culture of change. Jossey-Bass.

- Fullan, M., & Quinn, J. (2015). Coherence: The right drivers in action for schools, districts and systems. Corwin Press.
- Fullan, M., Quinn, J., & McEachen, J. (2018). Deep learning. Corwin Press.
- Graen, G., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multilevel multi-domain perspective. *Leadership Quarterly*, 6(2), 219–247.

https://digitalcommons.unl.edu/managementfacpub/57/

Griffin, R., Skivington, K., & Moorhead, G. (1987). Symbolic and international perspectives on leadership: An integrative framework. *Human Relations*, 40(4), 199–218. <u>https://doi.org/10.1177/001872678704000402</u>

Guskey, T. (2000). Evaluating professional development. Corwin Press.

Hall, S. (2018). 10 Success factors for literacy interventions, getting results with MTSS in elementary schools. ASCD.

Handler, B. R. (2006). Two acts, one goal: Meeting the shared vision of no child left behind and individuals with disabilities education improvement act of 2004. *Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 80(1), 5–8.

https://doi.org/10.3200/TCHS.80.1.5-8

- Harn, B., Basaraba, D., Chard, D., & Fritz, R. (2015). The impact of schoolwide prevention efforts: Lessons learned from implementing independent academic and behavior support. *Learning Disabilities - A Contemporary Journal*, 13(1), 3–20.
 <u>http://www.morningsideacademy.org/wp-content/uploads/2015/10/LDCJ-3-15-</u> web.pdf#page=10
- Hattie, J. (2008). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.
- Hauserman, C., & Stick, S. (2013). The leadership teachers want from principals: Transformational. *Canadian Journal of Education*, 36(3), 184–203. <u>https://files.eric.ed.gov/fulltext/EJ1057940.pdf</u>
- Haycock, K. (1998). Good teaching matters: How well-qualified teachers can close the gap. *Thinking k-16*, *3*(2), n2. <u>https://eric.ed.gov/?id=ED457260</u>
- Hoy, W., & Smith, P. (2007). Influence: A key to successful leadership. International Journal of Education Management, 21(2), 158–167. <u>https://doi.org/10.1108/09513540710729944</u>
- Ikeda, M., Tilly III, W., Stumme, J., Volmer, L., & Allison, R. (1996). Agency-wide implementation of problem solving consultation: Foundations, current implementation, and future direction. *School Psychology Quarterly*, *11*(3), 228–243. https://doi.org/10.1037/h0088931

Jennings, E. (1960). An anatomy of leadership: Princes, Heroes, and Superman. Harper.

Jensen, E. (2013). Engaging students with poverty in mind. ASCD.

Jones, T. (2013). Education for the human brain. Rowman and Littlefield Education.

https://doi.org/10.1016/j.ecresq.2018.08.012

Kirk, S. (1962). Educating exceptional children. Houghton Mifflin.

Kramer, C., & Allen, S. (2018). Transformational leadership styles pre- and post-trauma. *Journal* of Leadership Education, 17(3), 81–97. <u>https://doi.org/10.12806/V17/I3/R5</u>

Krippendorff, K. (2004). Content analysis: An introduction to its methodology. Sage.

- Le Floch, K. C., Levin, J., Atchison, D., Tanenbaum, C., Hurlburt, S., Manship, K., & Stullich,
 S. (2018). Study of Title I Schoolwide and Targeted Assistance Programs. *Office of Planning, Evaluation and Policy Development, US Department of Education.*
- Leithwood, K. (1994). Leadership for school restructuring. *Education Administration Quarterly*, 48(3), 499–503. <u>https://doi.org/10.1177/0013161X94030004006</u>
- Leithwood, K., & Jantzi, D. (1999). The relative effects of principal and teacher sources of leadership on student engagement with school. *Educational Administration Quarterly*, 35(5), 679–706. <u>https://doi.org/10.1177/0013161X99355002</u>
- Lembke, E. S., & Steck, P. M. (2007). Curriculum-based measurement in mathematics: An evidence-based formative assessment procedure. RMC Research Corporation Center on Instruction.
- Lipham, J. (1981). *Effective principals, effective schools*. American Association of Secondary School Principals.

Kainz, K. (2019). Early academic gaps and Title 1 programming in high poverty, high minority schools. *Early Childhood Research Quarterly*, 47, 159–168.

- McIntosh, K., & Goodman, S. (2016). Integrated multi-tiered systems of support: blending RTI and PBIS. The Guilford Press.
- McIntosh, K., Goodman, S., & Bohanon, H. (2010). Toward true integration of academic and behavior response to intervention systems: Part one--tier 1 support. *Communique*, 39(2), 1–15. <u>https://eric.ed.gov/?id=EJ901472</u>

McLeskey, J., Waldron, N. L., & Redd, L. (2014). A case study of a highly effective, inclusive elementary school. *Journal of Special Education*, 48(1), 59–70. https://doi.org/10.1177/0022466912440455

- Menon, M. (2014). The relationship between transformational leadership, perceived leader effectiveness, and teachers' job satisfaction. *Journal of Educational Administration*, 52(4), 509–528. <u>https://doi.org/10.1108/JEA-01-2013-0014</u>
- Mercer, S. H., McIntosh, K., & Hoselton, R. (2017). Comparability of fidelity measures for assessing tier 1 school-wide positive behavioral interventions and supports. *Journal of Positive Behavior Interventions*, 19(4), 195–204.

https://doi.org/10.1177/1098300717693384

- Miles, M., Huberman, A., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook.* Sage.
- National Academies of Sciences, Engineering, and Medicine. (2017). Evaluation of the achievement levels for mathematics and reading on the national assessment of educational progress. National Academies Press.
- National Joint Committee on Learning Disabilities. (1997). Learning Disabilities and Young Children: Identification and Intervention. (Technical Report).

https://www.asha.org/policy/RP1998-00130/

- Office for Civil Rights (ED), Washington, DC. (1996). Free appropriate public education for students with handicaps: Requirements under Section 504 of the Rehabilitation Act of 1973. ERIC Clearinghouse.
- Oltmann, S. M. (2016). Qualitative interviews: A methodological discussion of the interviewer and respondent contexts. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 17(2), Art. 15. <u>http://nbn-resolving.de/urn;nbn/de/0114-fqs1602156</u>
- Pennsylvania Department of Education. (2018). *Pennsylvania Consolidated State Plan for Every Student Succeeds Act.* <u>https://www.education.pa.gov/K-12/ESSA/Pages/Consolidated-</u> <u>State-Plan.aspx.</u>
- Pennsylvania Department of Education. (2019). Act 82 Building Level Scores. <u>https://www.education.pa.gov/Teachers%20%20Administrators/Educator%20Effectivene</u> <u>ss/SPP/Pages/SPPResults.aspx</u>
- Pennsylvania Department of Education. (n.d.). PA transitions from RTII to a multi-tiered system of supports (MTSS). <u>http://www.pattan.net/</u>
- Pennsylvania Training and Technical Assistance Network. (2018). *Multi-tiered systems of supports academic*. <u>http://www.patten.net/multi-tiered-system-of-supports-academic/</u>
- Pfeffer, J. (1977). The ambiguity of leadership. *Academy of Management Review*, *2*, 104–112. <u>https://doi.org/10.5465/amr.1977.4409175</u>
- Pianta, R., Belsky, J., Houts, R., & Morrison, F. (2007). Opportunities to learn in America's elementary classrooms. *Science*, *315*(5820), 1795–1796. <u>https://doi.org/10.1126/science.1139719</u>
- President's Commission of Excellence in Special Education. (2002). *A new era: Revitalizing special education for children and their families*. U.S. Department of Education.

Preston, A., Wood, C., & Stecker, P. (2016). Response to intervention: Where it came from and where it's going. *Preventing School Failure*, *60*(3), 173–182.

https://doi.org/10.1080/1045988X.2015.1056399

- Pretti-Frontczak, K., & Bricker, D. (2000). Enhancing the quality of individualized education plan (IEP) goals and objectives. *Journal of Early Intervention*, 23(2), 92–105. https://doi.org/10.1177/105381510002300204
- The Research and Evaluation Group. (2013). *Findings from the Philadelphia urban ACE survey*. Reeves, D. (2006). *The learning leader*. ASCD.
- Robinson, V. (2011). Student-centered leadership. Jossey Bass.
- Rubin, H., & Rubin, I. (2012). *The first phase of analysis: Preparing transcripts and coding data. Qualitative interviewing: The art of hearing data* (2nd ed.). Sage.
- Sailor, W., McCart, A., & Choi, J. (2018). Inclusive education through multi-tiered system of support. *Inclusion*, 6(1), 3–16. <u>https://doi.org/10.1352/2326-6988-6.1.3</u>
- Saldana, J., & Omasta, M. (2018). *Qualitative research: Analyzing life*. Sage.
- Saporito, S., & Sohoni, D. (2007). Mapping educational inequality: concentrations of poverty among poor and minority students in public schools. *Social Forces*, 85(3), 1227–1253. <u>https://doi.org/10.1353/sof.2007.0055</u>
- Schmid, R. (2018). Pockets of Excellence: Teacher beliefs and behaviors that lead to high student achievement at low achieving schools. SAGE Open, 8(3), https://doi.org/10.117712158244018797238
- Scruggs, T., & Mastropieri, M. (2002). On babies and bathwater: Addressing the problems of identification of learning disabilities. *Learning Disability Quarterly*, 25(3), 155–168. <u>https://doi.org/10.2307/1511299</u>

Secretan, L. (1999). Inspirational leadership. The Secretan Center.

Shapiro, E. (1999). *Tiered instruction and intervention in a response-to-intervention model*.Center for Promoting Research to Practice.

http://rtinetwork.org/essential/tieredinstruction/tiered-instruction-and-intervention-rtimodel

- Sheridan, M., Sarsour, K., Jutte, D., D'Esposito, M., & Boyce, W. (2012). The impact of social disparity on prefrontal function in childhood. *PLoS One*, 7(4), e35744. https://doi.org/10.1371/journal.pone.0035744
- Snyder, T., Dinkes, R., Sonneberg, W., & Cornman, S. (2018). Study of the Title 1, Part A Grant Program mathematical formulas (2019-016). US Department of Education: National Center for Education Statistics. <u>https://nces.ed.gov/pubs2019/2019016.pdf</u>

Sprenger, M. (2018). How to teach to students remember (2nd ed.). ASCD.

- Torgesen, J., Alexander, A., Wagner, R., Rashotte, C., Voeller, K., & Conway, T. (2001). Intensive remedial instruction for children with severe reading disabilities: immediate and long-term outcomes from two instructional approaches. *Journal of Learning Disabilities*, 34, 33–58. https://doi.org/10.1177/002221940103400104
- VanDerHeyden, A., Witt, J., & Gilbertson, D. (2007). Multi-year evaluation of the effects of a Response to Intervention (RTI) model on identification of children for special education. *Journal of School Psychology*, 45(2), 225–256. <u>https://doi.org/10.1016/j.jsp.2006.11.004</u>
- Vroom, V., & Jago, A. (1988). *The new leadership: Managing participation in organizations*. Prentice-Hall.
- Vroom, V., & Yetton, P. (1973). *Leadership and decision-making*. University of Pittsburgh Press.

- Wallace Foundation. (2013). *The school principal as leader: Guiding schools to better teaching and learning*. Wallace Perspectives Series.
- Willingham, D. (2017). *The reading mind: A cognitive approach to understanding how the mind read*. Jossey Bass.
- Yin, R. (2002). Case study research: Design and methods. Sage.

Zacarian, D., Alvarez-Ortiz, L., & Haynes, J. (2017). Teaching to strengths. ASCD.

Appendix A: IRB Approval Letter



Educating Students for Christian Service and Leadership Throughout the World

Office of Research and Sponsored Programs 320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103 325-674-2885

April 22, 2020



Malinda Mikesell Department of Educational Leadership Abilene Christian University

Dear Malinda,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled "Multi-Tiered Systems of Support and School Leadership in High-Achieving Pennsylvania Schoolwide Title 1 Elementary Schools",

(IRB# 20-050) is exempt from review under Federal Policy for the Protection of Human Subjects.

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D. Director of Research and Sponsored Programs