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## MISSISSIPPI SCHOOL ACCOUNTABILITY, INSTRUCTIONAL LEADERSHIP, AND DATA USE; A FORMULA FOR SUCCESS

by

Teresa Duke

A Dissertation Submitted to the Graduate School, the College of Education and Human SciencesEducation and Human Sciences and the School ofSchool of EducationEducation at The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of PhilosophyDoctor of Philosophy

Approved by:

Dr. Kyna Shelley, Committee Chair Dr. David Lee, Committee Member Dr. Richard Mohn, Committee Member Dr. Chuck Benigno, Committee Member

May 2022

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2022

Published by the Graduate School



#### ABSTRACT

The following quantitative research study was conducted to determine if differences exist between "A-rated" and "F-rated" districts in Mississippi when it comes to how data are used for preparation of student academic achievement, how that data is used to influence instruction, and what beliefs school leaders have concerning the development of a data-based decision-making culture. Mississippi was chosen based on its unique accountability model.

The survey method was used for this study. Over 100 school leaders from across the state participated from 12 different school districts. Their responses provided some indication of the differences that exist between "A" and "F" rated school district leaders. The results showed a significant difference in the self-efficacy of school leaders in their beliefs about their ability to interpret and use data. There was not a significant difference in the organizational support that these school leaders provide.

#### ACKNOWLEDGMENTS

A special thank you to Dr. Kyna Shelley, my Committee Chair, who has held my hand throughout this entire process and has provided me the guidance to see this through to completion. I also want to thank the USM faculty serving on my committee: Dr. David Lee, Dr. Richard Mohn, and Dr. Chuck Benigno. None of this would be possible without their time and effort in providing the opportunity for me to continue my educational endeavor.

I owe my family my gratitude for their loving support and for allowing me the time to indulge in advancing my educational opportunities. My husband, Greg, is the most patient person in the world!

### DEDICATION

I want to dedicate my work to my father, Charles W. Thomas, who passed away before seeing me cross this finish line. He may not be here with me now, but his influence of hard work, determination, and work ethic lives on through me.

Dad, because you believed everyone deserves what they honestly earn, this study is dedicated to you!

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#### **CHAPTER I -BACKGROUND**

#### **Academic Accountability**

School leaders and teachers make decisions daily concerning student learning and the impact of those decisions affect student achievement. Hattie (2015) states that the success and failure in student learning comes from what leaders do or don't do to impact instruction. He further states that, "Effective instructional leaders don't just focus on student learning. They relentlessly search out and interrogate evidence of that learning," (Hattie, 2015, p. 37).

Student data is the lens through which school leaders and teachers make evidencebased decisions concerning what leads to student academic growth. The strategic plan for learning takes place through a process by which school leaders and teachers work collaboratively to create a data use culture that focuses on each individual student's progress. Hattie (2015) states that the process of using such data as evidence to promote academic achievement requires educators to determine which data is reliable and then use it consistently to make future decisions. Therefore, the process of effectively using data to make decisions concerning student academic achievement plays a large role in a school's overall accountability.

The history of academic accountability according to Gullo, (2013, p. 414), began under the regulations of the NCLB Act in which, "States were required to use accountability systems based on test results that reflected criteria regarding grade level and the subjects tested." Previous research indicates that a focus on the results of student assessment allows analysis to help determine the effectiveness of schools and provides for higher student achievement (Betebenner, 2009; Polikoff, Porter, & Smithson, 2011; Pomplun, 2009; Sims, 2013). States receiving federal assistance for educational purposes were obligated under NCLB to develop accountability models in accordance with meeting the NCLB requirements (Gullo, 2013; Pomplun, 2009).

The accountability models provide educational leaders a way to measure the overall effectiveness of school and district programs using student achievement on state assessments. (Betebenner, 2009). Some states developed student growth models known as Growth Model Programs (GMPs) while other states developed criterion referenced growth-to-standard models (Pomplun, 2009). According to Schafer, Lissitz, Zhu, and Zhang (2012) it doesn't matter what kind of model is used to show academic accountability if the data being measured is reliable.

In order to accomplish this, there must be an alignment between program curricula and state standards, which is known as instructional coherence (Newman, Smith, Allensworth, & Bryk, 2001; Polikoff et al., 2001). This is a fundamental process in providing a sustainable academic program that provides continuous academic improvement. Both types of accountability models help determine each school's level of instructional coherence by analyzing how well they align their curriculum to the assessed state standards, (Gullo, 2013; Betebenner, 2009; Sims, 2013).

Other research contradicts the notion that a common curriculum guided by common instruction will produce continuous student improvement. For example, schools that have diverse student populations tend to have less success than schools that are more homogenous. Another example is when a school fails to meet the accountability proficiency expectations in their state and are then forced to implement additional resources for the sake of raising student achievement and closing growth gaps by adhering to additional sanctions that do not address the fact that one size does not fit all (Schafer, Lissitz, Zhu, Zhang, Hou, & Li, 2012; Sims, 2012). These situations contribute to the likelihood of these schools being at a higher risk of falling further behind and failing in the future.

Some accountability models use longitudinal data to compare a prior assessment with a current assessment to show a student's academic growth (Akiba & Liang, 2016; Hamilton, Stecher, & Yuan, 2008). These growth-to-standard models often use a prediction formula to determine the extent of progress a student should earn over several years. Schools are given credit for students meeting or making yearly academic progress with the growth-to-standard model. Criterion-referenced models use a vertical measure from one grade level to the next for each tested subject. The criterion-referenced growthto-standard models track student achievement based on their mastery of subject content (Beterbenner, 2009).

Whether a model is standards-based as Hamiliton, Stecher, and Yuan (2008) describe as the academic expectations which specify what students should know and be able to do, or criterion-based which places the responsibility for providing the attainment of those expectations on the shoulders of school leaders and teachers; the type of accountability model that is used determines the academic focus for student achievement. School districts that receive federal money for education must adhere to the accountability system that is adopted by its state. The impact of the accountability model is to provide a process of evaluation of schools for the purpose of providing continuous improvement in student academic achievement.

According to the Mississippi Department of Education, the statewide accountability system for Mississippi schools is comprised of four components. Walt Drane, the executive director of Assessment and Accountability for the state of Mississippi in 2017, depicts the state's accountability model as one that measures proficiency and performance. Students are expected to take state assessments, meet set projected growth expectations for specified subject content and grade level, and graduate on time with their cohort to positively contribute to the Mississippi accountability model and show continuous academic growth. The Mississippi elementary and middle schools' accountability ratings are based on a seven-hundred-point scale whereas Mississippi high schools and district ratings are based on a one-thousand-point scale. The Mississippi State Department of Education has set annual cut scores for five performance ratings which are A, B, C, D, or F for districts, elementary schools, and high schools. An "A" rating is the highest level that may be obtained.

#### Leadership Responsibility

School programs that increase the success of student academic achievement are led by effective leaders (Day, Gu, & Sammons, 2016; Marzano, Waters, & McNulty, 2005; Odhiambo & Hii, 2012), that possess specific behaviors proven to produce successful schools. For example, Fullan, 2010, states effective principals are focused on "personalizing" instruction for all students to be successful. Further, effective leaders are known for building collaborative learning organizations and cultures that focus on promoting learning through the development of staff and community leadership capacity (Day et al, 2016). Marzano et al. (2005, p. 3) states, "Students in effective schools as opposed to ineffective schools have a forty-four percent difference in their expected passing rate on a test that has a typical passing rate of 50 percent." He further states that the effectiveness of school leaders is often based on the perceptions of stakeholders who identify success by what the school leader does -- whether the principal recruits only highly qualified teachers, whether the principal ensures that teachers provide quality instruction, etc.

Marzano (2003), however, also reports on previously conducted research on school effectiveness as reflected in the 1966 Coleman Report that indicated that a child's background and social status had more bearing on a child's achievement than does the school. The Coleman Report stressed that the inequalities that children experience outside of school such as their homelife, neighborhood, and friends have more influence on their lives than their education. President Ronald Reagan's report, *A Nation at Risk*, states "Our society and its educational institutions seem to have lost sight of the basic purposes of schooling, and of the high expectations and disciplined effort needed to attain them." There are other educational reports and works that reflect researchers' findings pertaining to beliefs and attitudes pertaining to what factors impact a school's effectiveness. Marzano (2003, p. 4) states, "My basic position is quite simple: Schools can have a tremendous impact on student achievement if they follow the direction provided by the research."

#### **Problem Statement**

The research on the positive impact an effective school leader can have on improving student achievement is very clear (Marzano, Waters, & McNulty, 2005), and provides a direct correlation between student achievement and school performance. Further research is also clear that schools that use reliable data to drive instructional decisions experience a positive impact on student achievement which drives school performance higher. However, the level of impact that data-driven decisions have on a school's performance is said to be dependent upon how well teachers know what data to use and how effective they are in applying it to instructional practices (Farrell & Marsh, 2016).

Legislation mandates that schools be held accountable for student achievement and the resulting school performance. Many states measure student achievement using a growth model to evaluate individual student learning and to rate a school's performance. For example, in Mississippi, a growth model is used to assign school performance ratings consisting of an A, B, C, D, or F level. 31 school districts out of 143 earned an "A" rating in 2019.

Although the research has shown how each of these variables have a positive impact on student achievement indicating improved school performance, there is an interest to know how combining effective school leadership and a data culture may affect student academic achievement and school performance ratings. Additionally, studies among states reflect the use of different accountability models that yield different results concerning the measurement of schools' performance. However, there are no known studies conducted in Mississippi that reflect the impact that school leadership and a data culture may have on student achievement and overall school performance ratings.

#### Purpose

The purpose of this study is to identify which data school leaders in Mississippi use, how often that data is used, and how it used to impact student achievement as it relates to accountability ratings. Specifically, administrators and teachers within school districts in Mississippi will be surveyed to identify the types of data used by each group and to identify attitudes and practices within each group toward a data use culture to determine the extent to which data is reported to guide instruction.

#### Justification

Schools with a strong data culture that effectively use data-based decision making--those who effectively provide student academic improvement. The quality of education of these effective schools could be analyzed to positively impact student achievement and improve statewide school performance ratings for all Mississippi schools. The opportunity for all schools to utilize evidence-based programs through the creation of a shared data-use culture could improve the learning conditions for all students. Mississippi is unique in that it has its own accountability standards and curriculum. All schools in Mississippi could benefit from knowing what data the top performing school districts are using, how often that data is used, and how the capacity within those schools is built to provide continuous data-based decision-making. Even within schools where data is used effectively to make decisions concerning individual learning, students could take a personal inventory of their effort and rate of success as compared to the level of success of their peers.

Higher student achievement would result in higher graduation rates and improve the participation rates for students enrolling in advanced placement (AP) courses and dual credit opportunities. In turn, higher participation rates in AP courses and dual credit courses could help provide a better transition for students to move from high school into college. Finally, this would result in a higher number of college graduates produced, and

society is more likely to benefit from the graduates' hard work, knowledge, and pursuit of excellence.

#### **Research Questions**

- 1. What type of data does each school district report using?
- 2. What are administrators' self-efficacy beliefs regarding data-based decision making?
- 3. What are administrators' beliefs concerning organizational support for schoolwide collaboration in using data-based decision-making to drive instructional practices?
- 4. Are the beliefs related to accountability ratings?

#### **Theoretical Framework**

The following theories will be utilized in developing the theoretical framework for the study. First, data-use theory provides the characteristics needed for an educational leader to be effective in providing systematic data-based decision-making. The evidencebased culture of using data will be a determining factor as to whether academic achievement is successful. The guiding principles for managing data and implementing instructional cohesion will be revealed through the principal's ability to analyze data, provide guidance in interpreting the collected data, and collectively tapping into stakeholder's beliefs about creating an environment that promotes learning for all.

Second, instructional leadership theory provides the necessary leadership behaviors to assist schools and school districts in achieving improvement. Instructional leadership has historically been a contributing factor to the overall success of students and the standard by which schools of higher learning provide students with best practices.

#### Delimitations

As a Mississippi educator, finding a "formula for success" is always a goal for continuous academic achievement. Choosing to focus on Mississippi school districts was most practical since the Mississippi State Department of Education is responsible for implementing the model that guides this study. Each district in the state faces some of the same challenges in providing continuous school improvement, and they all receive similar funding based on their student populations that provide the needed resources for improvement. Knowing what and how "A-rated" schools use their resources and data should provide opportunities for other schools to implement better school programs and reap better achievement results. The entire scope of the research is to determine the frequency of what and how data is assessed in the various rated districts in the state to determine the extent to which an instructional leader provides the necessary culture of data-driven decision making to create the "formula for success".

#### Limitations

Several limitations are evident for this study. Foremost, the targeted population is Mississippi school districts since the study involves the state's accountability model. Targeting one state limits the number of possible responses. The smaller sample size may impact the generalizability of the results as well as affect the strength of the overall analysis. In addition, the Mississippi Department of Education has conducted state-wide analysis on similar topics which may also interfere with participation of a third survey that is so closely tied to districts having been required to complete two prior to this one. The study requires participants to self-report on several variables which may reflect

overestimates or underestimates for true analysis. However, the outcomes from this study will provide opportunities for future studies that may increase student academic achievement.

#### Assumptions

School districts in Mississippi receive an accountability rating based upon the state's model for student academic achievement. The accountability model consists of five levels – A, B, C, D, and F. All public schools are held to the same academic standards and are required to participate in the same state assessments. The Mississippi Accountability Model's results were first reflected as a bell-shape curve when the state first began assigning ratings. Each year most of the school districts fell between a B and D rating while some school districts managed to maintain an A-rating and others earned an F until the state began assigning ratings based on performance outcomes of student achievement from an assigned cut-score. All public-school districts in the state receive local funds, state funds, and federal funds for their school program. All federal funds must adhere to strict guidance pertaining to using research-based practices and programs. Each district's funding allocations reflect the student populations served by the district.

The survey to be used in this study is to provide an honest and truthful reflection of what resources each district is using and to what extent those resources are being used to make data-driven decisions that positively impact student achievement. School leaders from participating districts will be asked to provide their beliefs about what data they use, how often the data is used, who they in include in training for the implementation of using the data they have, and to what extent they believe that data used influences the instructional goals for their personnel and students.

## Table 1

## Key Terms

Term	Definition
Accountability Policies	The federal and state policies established in response to school accountability legislation.
Accountability Ratings	A measurement that depicts performance and/or proficiency.
Data Culture	How a school shares the responsibility of using data to make decisions concerning student achievement.
Data-driven Decision-making	The use of all sources of student data to determine school trends, analyze student achievement, provide for instructional coherence, and make strategic decisions concerning the overall school program for the purpose of improving student achievement.

#### **CHAPTER II – REVIEW OF LITERATURE**

The purpose of this research is to identify the characteristics of Mississippi school leaders and teachers who are effective in implementing data-based decision making within the context of instructional leadership. School performance, instructional leadership, and a data-use culture are the primary variables utilized in this research study. The research in this chapter will explore the definitions of each of these variables and their historical and theoretical development. Due to the educational context of this study, the performance ratings for schools in Mississippi will be explored as well as the Mississippi Accountability System. The study will identify all "A" and "F" rated school districts for comparison purposes.

#### History of Educational Reform in the U.S.

School performance ratings are the result of educational reform dating back more than fifty years. Educational reform in this context refers to political policies imposed on states by the federal government to increase academic achievement of students. The research on educational reform according to Mitchell and Encarnation (1984) points to three historical goals for improving education: efficiency, equity, and quality.

Reed and Dempsey (2003) went so far as to suggest that educational reform is complex because it involves changing the cultures and practices in classrooms, schools, and school systems. The history of educational reform for many in the United States began with the *National Defense Educational Act* that took place as a result of the *Cold War*. According to the United States Senate Archived Floor Proceedings, "On October 4, 1957, the Soviet Union shocked the people of the United States by successfully launching the first Earth orbiting satellite, Sputnik." The race to space was won by the Soviets. The following year the National Defense Educational Act (NDEA) was enacted under President Dwight D. Eisenhower's guidance, which provided opportunities for Americans to obtain higher education and it established federal funding for low-cost student loans that afforded more students the opportunity to attend college. The primary focus of the NDEA was to advance learning in the areas of math and science. The need to efficiently produce better scientists and win the space race by being first to place a man on the moon became a priority of most political leaders; however, according to Casalaspi (2017) all legislation that addressed education during the Kennedy years were defeated. This included providing opportunities for students to attend college, construction of schools, and raising teacher salaries. He further points out that after Kennedy's assassination the Eighty-Eighth Congress under President Lyndon B. Johnson aggressively passed progressive education legislation that provided more than \$5 billion in federal aid for education. Hence, the passing of the *Elementary and Secondary* Education Act (ESEA) of 1965 was the largest U.S. investment in education at that time. President Johnson's goal for educational reform was to provide for the inequalities that existed between students of poverty and their peers. According to Casalaspi (2017) Johnson made education a priority in providing federal assistance to aid schools as a personal commitment to provide the best education for all students.

In 1983 President Reagan announced that America was *A Nation at Risk* based on the report he received from the National Commission on Excellence in Education. It was reported that little progress had been made after years of funding *ESEA* legislation and overhauling its existing programs. The report showed that American students were not measuring up to the global expectations of educational excellence. In fact, the Association of Supervision and Curriculum Development (ASCD) Policy Points (April 2013, p.1), pointed out that, "The report presented a doom-and-gloom picture of an America headed toward second-rate status based on the failure of its schools to produce students able to compete in the global economy." As a result of the report the federal government again provided federal assistance to states for the purpose of improving academic achievement and pushing legislation that addressed equality for all students. This new legislation provided for testing students to evaluate grade-level achievement. According to the ASCD Policy Points (April 2013, p. 2) "*A Nation at Risk* provided the recommendation for standardized testing in reading and math."

Approximately ten years later President Clinton passed the *Improving America's School Act (IASA)* in 1994. *IASA* provided for continued Title support as other *ESEA* reauthorizations did, but it included a greater emphasis on providing additional parent involvement than past *ESEA* legislation. Hanushek and Jorgenson (1996) state that parents are best served by providing them with materials and resources that they can use at home. The parent resources provide more opportunities for students to learn as parents actively participate and provide support for their child's learning.

In 2001 President George W. Bush supported the *No Child Left Behind Act* (*NCLB*) which has been noted as one of the most crucial pieces of educational reform in American history for raising student achievement. The standards were set high with 100% of all students expected to reach proficiency in math and reading by the school year 2013-14. *NCLB* provided assistance to individual states through impact aid, targeted assistance programs, and other Title programs that focused on categorical funding for all at-risk students. Standards-based mandated assessments were recommended for use in

determining student growth. Student growth models were created to determine the success of each school and district. *NCLB* provided guidance on school improvement and helped narrow achievement gaps across various states and school districts but never came close to reaching the 100% proficiency expectations set for all students in reading or in math.

The most recent educational reform, *Every Student Succeeds Act*, was signed into law by President Barack Obama on December 10, 2015. According to Fuller, E. J., Hollingworth, L. and Pendola, A. (2017, p. 727) "*Every Student Succeeds Act (ESSA)* requires states to staff each classroom with an effective teacher and each school with an effective leader." In comparing *NCLB* with *ESSA* legislation Dennis (2017) states there are three main differences in the language of *NCLB* as compared to *ESSA* which include securing effective teachers instead of those considered to be highly qualified, building library capacities to enhance learning with no restrictions on texts, and the use of alternative means to assess student learning.

#### Accountability and School Performance

The legislation focused on student achievement and the expectation for schools to provide continuous academic improvement evolved into accountability ratings for school districts, schools, and individual student achievement growth goals. According to Newman, et al. (2017) educational reform efforts must strive to strengthen the instructional program coherence in schools in order to improve student achievement. They found that too often schools implement multiple programs or initiatives in an effort to provide an effective instructional program, but then move on to other initiatives before the last adopted program has time to provide sustainable improvement. The constant search for what works best often results in teacher frustration and a lack of instructional coherence.

Results from the NCLB Act from 2001 have helped provide a much better understanding of accountability models and how to use them. Mathers (2001), for example proposed that the evolution of accountability systems developed over time into structures that include standards for students to master, assessments used to determine how much a student learns, and multiple other indicators that help determine a student's overall academic growth. For school systems, the range of accountability can be as simple as a written accommodation or as dramatic as a state takeover. Mathers (2001) further reports that the ratings schools receive are often tied to sanctions that result in increased federal assistance allocations as targeted supports needed to improve student academic achievement.

According to Hamilton, Stecher, and Yuan (2008) standards-based reform includes some form of academic expectation for students to attain that is aligned within school systems to promote academic achievement using standardized testing to monitor performance. Therefore, decisions concerning curriculum and instruction are no longer centralized within school systems, but rather are decentralized when assessments are designed to monitor student achievement based on the given performance standards of what students should know and be able to do. They indicate that school systems need appropriate support and technical assistance for the reform to be effective. They too state that the accountability provisions provided are to reward or sanction schools based on student performance.

Accountability requirements for schools to show continuous improvement fall on the shoulders of school leaders and teachers. Radigner (2014) shared that school leaders are not just expected to carry out basic managerial skills of overseeing finances and physical plant needs as past educational leaders have, but they are expected to provide professional development for teachers resulting in improved student achievement. He found through his research that many countries reported that their school leader evaluation systems provided valuable insight into the complexity of school leadership and the knowledge or pedagogical skills necessary for a school leader to be successful in providing higher academic achievement. He brings attention to the fact that school leaders must be held accountable for instruction and how effective teachers are in delivering it. Currently, schools across America fall under accountability models that are based on high-stakes, test-based systems which are reflective of the NCLB legislation.

Betebenner (2009) reports that the variations of accountability systems that use student status reflects an assessment result as opposed to growth systems that reflect academic achievement, and he further defines a status model as an achievement model that examines student performance at a point in time that includes no conditioning variables. According to Betebenner (2009) models that use the federal adequate yearly progress (AYP) guidance are relying on one "snapshot" of a student's performance to determine the effectiveness of a school. However, he does explain that accountability systems can provide valuable feedback concerning schools that may need additional supports and resources to effectively provide a quality education based upon descriptive identification of students being assessed. The question this raises of course is whether standardized assessments provide sufficient results that should be used to sanction

schools as being effective or not. This leads to the fact that some states use their state assessments to provide the "status" of individual students based upon using cut-score levels that depict a level of achievement for all students to reach as opposed to growth models that use longitudinal data from a prior assessment to compare to a current assessment.

Growth-to-standard models use a prediction over several years to show how a student should be progressing. According to Betebenner (2009), this type of model gives schools credit for students meeting or showing progress towards their expected learning goals while criterion-referenced growth-to-standard models track student proficiency based on content mastery. Student growth percentiles emerged from the criterionreferenced models that provide a vertical measure of student growth expected for each subject and grade level. Student growth percentiles therefore, provide a comparison of an individual student's growth as compared to their peers in the same grade and assessed on the same criteria.

Other researchers have determined that a common curriculum guided by common instruction does not always reflect gains when it comes to serving diverse student populations. Schafer, Lissitz, Zhu, Zhang, Hou, and Li (2012, p. 1) state, "It has become apparent that proficiency is loosely defined and no matter how it is defined, it is more difficult to achieve for some students than for others." According to Sims (2013), schools receive additional supports or resources when they fail but they also face additional sanctions with each additional failure. Failure is then compounded by the increased expectations for future achievement, and the expectations to effectively use more resources to provide better instructional coherence.

Differences in each state's accountability system are dependent upon how each state chooses to show continuous improvement in academic achievement. States have been providing longitudinal data on student achievement since NCLB regulations required schools to provide adequate yearly progress. Some states use norm-referenced growth models while others use criterion-referenced growth models to reflect targeted growth percentile measurements.

According to Betebenner (2009, p. 50) "Such models are problematic in that they fail to adequately separate two essential qualities accountability systems wish to audit: achievement and effectiveness." Educational reform provides states with the flexibility to choose their own accountability system that identifies schools by their ability to effectively provide student achievement as well as those in need of academic improvement (Duran, 2005). The intent of imposed accountability systems is to provide all students with a quality education through schools that are continuously reflecting on improving instruction.

Every state uses some form of a performance-based accountability system. According to Mathers (2001) it does not matter which method a state uses, some type or level of sanction components will be similar even if all states set standards, create assessments, choose multiple indicators, have rewards and enforce sanctions. Each state determines the levels of performance and then assesses progress based on the criteria adopted. States use different terms to describe low, adequate, and high-performance ratings although Mathers (2001) points out that many states use similar terms to describe low performing schools --failing, priority, or in decline. Using common descriptions or labels for schools and/or states allow a state department or the federal government to place sanctions on those schools identified as low performing.

#### Mississippi's Accountability System

Hall and Ryan (2011) refer to school compliance and examination by external means as educational accountability. The Mississippi Department of Education (MDE) has been implementing an A-F grading system for accountability of schools since 2013. The five-tiered performance grading system is currently still in use. According to MDE (Accountability FAQ, September 2018, p.1) the grades assigned to each school through their accountability system allows everyone to see how well students in each school are learning and what they need to be academically successful. Furthermore, from MDE's Office of District and School Performance (ODSP) website, they list that their main goal is to implement state assessments throughout the schools in Mississippi with integrity and fidelity.

The ODSP strives to maintain and produce highly accurate and defensible accountability data and results that reflect the performance of schools and districts through indicators that include proficiency on standardized assessments, growth in proficiency, graduation rates, ACT scores, and participation in and performance on advanced courses for high school students (para. 3).

Student achievement outcomes in Mississippi are reported by the ODSP by a grade rating of either A, B, C, D, or F for schools in each district as well as an overall rating being given to each district based on the average points obtained by all of its schools. Under the current accountability system, students in Mississippi are assessed in grades three through eight in English language arts and math. Students in grades five and eight are also assessed in science. School performance ratings for kindergarten through second grade schools' performance levels are backmapped using the state's formula for growth from third grade test scores. In other words, grade levels below third grade share in the responsibility and the reward of the earned rating for third grade since MDE provides a state curriculum that is scaffold by grade level to allow learning to increase and encompass all the skills needed for a student to be successful academically at the next grade level. Subject-area tests are administered to students in Algebra I, Biology I, English II, and U.S. History at the end of the school year in which the course is taken. In addition, the ACT is administered to all eleventh-grade students.

The MDE accountability growth is defined as whether or not a student increases in performance/proficiency levels from one (1) year to the next based on the following criteria: An increase of ANY performance/proficiency level, staying at the same performance/proficiency that is at or above proficient from one (1) year to the next, or an increase within the lowest three (3) performance/proficiency levels that crosses over the mid-point of the level (slide 2, Accountability Growth PowerPoint).

MDE provides that a student's growth may receive additional weight if the student increases their proficiency more than the expected yearly growth. For instance, a student who increases their performance/proficiency level by two or more levels is given a weight of 1.2. If a student increases their performance/proficiency level to the highest or advanced level, they receive a weight of 1.25. Students who maintain an advanced level rating receive a weight of 1 (Slide 3, Growth Measures in Accountability).

The Mississippi Accountability System includes all students attending public schools although alternate state assessments are given to students who are identified as having a severe cognitive disorder. MDE further requires that all English learners (EL) (students who are not proficient in communicating in English) be administered a state English language assessment each school year until they reach English proficiency. EL proficiency is the newest categorical weight in the state's growth formula which was first measured in the 2017-2018 school year.

*Current school ratings for Mississippi*. According to Vanderford and Drane, (2017) there are a total of 147 school districts in Mississippi made up of 143 regular districts, three charter schools, and one district that was omitted from the accountability rating system for the 2016-2017 school year. The Corinth School District is omitted from the MSAS due to participation in the District Innovation Program. Out of the 146 referenced school districts, 15 have an "A" status and nine have an "F" status. The performance level cut score for an "A" district is an accumulation of 668 points whereas the performance level cut score for an "F" district is anything less than 489 points. Points are earned from student achievement scores in reading, math, graduation rate, college and career readiness results taken from ACT, Acceleration points (IB, Advanced Placement courses, Industry Certification, Dual Credit Dual Enrollment programs) and other subject areas that include 5<sup>th</sup> and 8<sup>th</sup> grade science, Biology I and U.S. History.

#### **Effective School Leadership**

School accountability ratings reflect more than just student performance. Effective school leaders understand that excuses must be removed from the "rating equation" when it comes to student learning. For example, student backgrounds, home life, school culture, teacher biases, etc. all contribute to a student's academic success but cannot be allowed to dictate a student's proficiency outcome. According to Day, Gu and Sammons, (2016) effective schools are led by school leaders that possess a broader sense of success and practice instructional and transformational leadership. Their research reflects the positive effects that school leaders have on student achievement.

Effective leaders are known to make a difference in students' learning and by doing so produce successful schools (Odhiambo and Hii, 2012). Marzano, Waters, and McNulty (2005) presented similar findings through their research on the influence that a school leader can have on student achievement and the overall achievement of the schools they lead. Twenty-one behaviors were identified that effective school leaders are said to possess that consistently lead to success. For example, they suggest that effective leaders are good communicators and show appreciation to those with whom they serve. Another characteristic of effective leaders is that they are knowledgeable about curriculum and how to provide teachers with support they need to provide instructional coherence. They also state that effective leaders work hard within the school community to create a culture of success for everybody. The list of effective leader characteristics does not stop there nor are all the behaviors seen at one time. Effective principals, these researchers argue, leave nothing to chance when it comes to improving student achievement.

Classroom instruction is the most important school-level factor affecting student learning, but school leaders influence classroom instruction even if it is indirectly through their influence on the teachers that provide it (Radinger, 2014). Effective school leaders recognize that their most important resource in improving instruction is the classroom

teacher, which is the reason they provide support to teachers to continuously improve the educational process. Effective leaders, Radinger continues, know that their opportunity to increase student learning lies in their ability to help teachers provide effective teaching.

Decades ago, it was acknowledged (Fullan, 1985) that there is no one way to improve schools, but that school leaders must use strategies that are based on collective professional development. The best professional development comes from schools developing professional learning communities that focus on specific challenges and working within school teams to solve their own academic problems. Barkley (2017) agreed that to be successful, schools must work together as teams and move away from disenfranchised teacher academies that promote individualistic professional autonomy. Further, teachers need to be able to trust one another as professionals and use their individual strengths to grow each other collectively.

In examining how leaders can promote school effectiveness, research shows that there are best practices that effective leaders implement to improve academic growth. Protecting instructional time is one strategy effective school leaders find useful in improving student academic growth. Hitt and Tucker (2016) agree that effective leaders look for ways to prohibit or limit class disruptions to protect instructional time. Another strategy is to increase teachers' time teaching and students' time learning by promoting good attendance. Effective school leaders are also highly visible throughout the school. In other words, they are seen moving around the school for the purpose of supervising instructional time being utilized to the fullest.

Another attribute of effective leadership is often identified by a leader's personal qualities or soft skills. Davies and Brighouse (2010, p. 4) describe a passionate leader as

"Someone who has energy, commitment, a belief that every child can learn and will learn, a concern with social justice, and the optimism that we can make a difference." They propose that passionate leaders are courageous in facing the challenges thrust upon them. Further, the driving force of being a passionate leader comes from the truth that "It matters to them that they make difference," (Davies and Brighouse, 2010, p. 6).

#### Instructional Leadership

Effective school leaders implement instructional leadership. Jenkins (2009, p. 35) defines instructional leadership as, "The actions a principal takes to promote growth in student learning." Teacher instruction is the main focus of all decisions made by an instructional leader. Instructional leaders weigh the positive and negative consequences of every decision they make based on their understanding of what impacts student achievement. Fullan (2010, p. 12) concludes that, "Powerful principals are obsessed with the instructional core of personalizing learning and getting results for each and every student." Differentiation of individualizing instruction must be implemented for all students to improve academically. The one size instruction does not fit all students; therefore, instructional leaders must ensure that instruction is tailored to each student's individual needs and abilities.

Effective instructional leaders ensure that the state's curriculum and the school's curriculum are in alignment with what the community expects students to learn as well as the state department of education. Providing instructional coherence therefore becomes the responsibility of the school's instructional leader. According to Newman, Smith, Allensworth, and Bryk (2001) instructional coherence is the result of interrelated programs provided for students by staff that is guided by a common framework for

curriculum, provides for common instruction, administers common assessments, and sustains a culture of learning over a period time. Through their research they conclude that schools that invest in too many different endeavors at one time are often not good at any of them. They suggest that being on common ground is essential for school teams to be able to focus on specific challenges and work on improving outcomes. In addition, the time and effort spent solving specific issues and closing gaps within a learning environment helps produce more academic growth.

Singh and Fadhli (2011, p. 753) declare that, "Instructional leadership leads to the development of shared accountability, responsibility, and shared pedagogic and curricular understandings—all crucial to student success." However, they did not indicate that school accountability results reflect a direct correlation between instructional leadership and instructional practice. The assumption is that instruction alone will not provide improved student achievement. Instead, instructional leaders must provide a vision of growth and a culture of continuous school improvement.

"When the principal elicits high levels of commitment and professionalism from teachers and works interactively with teachers in shared instructional leadership capacity, schools have the benefit of integrated leadership; they are organizations that learn and perform at high levels," (Hitt and Tucker, 2016, p. 535). They recognize that many instructional leadership frameworks like the national ISLLC standards seek to measure a person's base knowledge or as they called it, "craft knowledge" which is often gained from college preparation programs and past experiences. There are other frameworks known to help determine a leader's influence on stakeholders. For example, Hitt and Tucker (2016) mention the Public Impact's Model from 2008 that identifies a leader's
ability to transform a school from low performing to high performing. Furthermore, they concluded that a leader may be defined by the influence he or she invokes a common vision among stakeholders. Leadership then is determined by the relationships a leader cultivates among stakeholders to achieve shared goals.

"Effective collaboration among teams is rooted in a concern with results called 'joint work' that affects gains and classroom performance," (Schmoker, 1999, p.12). He also shares that peer collaboration is a social process that involves monitoring student progress, examining peers' practices, and having open, constructive feedback given to stakeholders in a timely manner. In order for schools to produce a collaborative culture based on instructional program coherence, Fullan (1985) suggests that school leaders should be equipped with the skills and means to implement school improvement with fidelity through continuous evaluation, maintenance, and implementation of school programs. Ohlson (2009, p. 110) also states, "Working collaboratively with school leadership and teachers to strengthen the culture of the school, with the intent of improving teaching practice and student learning, is a promising school reform strategy."

## **Data-Use Culture**

Poortman and Schildhkamp (2016) report that internationally, policy makers, researchers and practitioners are increasingly recognizing the significance that data use can have in improving academic achievement. Additionally, Datnow and Park (2015, p. 48) suggest that, "Meaningful use of data in schools means giving all students the opportunity to achieve at high levels," They conclude that most educational reform research provides strategies for school leaders to follow that include educators taking time to reflect on what and how data is collected, to evaluate what the data shows, and to determine how the data should be used. They indicate that effective leaders use their time wisely by planning to use data that is most useful in producing academic growth and then determine how frequently they will analyze it. They also indicate that effective leaders spend time training their teachers to use data too in making decisions concerning student learning.

According to Bingham and Riney (2017, p. 87) "Using longitudinal trend analysis is one way school leaders can monitor students' academic progress to identify areas of strengths and weaknesses in school curricula and instruction." This is one strategy that allows school leaders to continuously improve student academic achievement based on evidence of student learning. However, effective school leaders as mentioned earlier, must share in the evidence finding and reflection process. Fullan (2010, p. 15) states, "The answer is not in producing more individuals with quality characteristics, but rather it is to develop the collective capacity of whole schools and school systems to become effective in their day-to-day work." In other words, the use of data allows school leaders the opportunity to reflect on their school's progress.

Using data analysis resources allows leaders more time to reflect on problem areas and work with fidelity in closing gaps and solving problems that may be hindering student achievement. Sahrratt and Fullan (2013, p. 45) state, "The growth of digital power has aided and abetted the spread of accountability-driven data — Adequate Yearly Progress, test results for every child in every grade." They acknowledge that school leaders have access to data systems and programs that are easy to use, efficient, and accurate. However, Marsh and Farrell (2015) recognize that the data-use theory goes beyond collecting, organizing, and analyzing of data. They propose that teachers are able to apply the knowledge gained from data use to directly improve instruction. The act of collecting results, making decisions based on previous outcomes, directing focus to areas that are ineffective leads to a continuous cycle of data collection, analysis, synthesis, and evaluation of the school's program.

Poortman and Schildkamp (2016) further add that teachers who use data are better able to adapt their instruction to allow more students the opportunity to learn. The adaptation of individualizing instruction based on data results leads to higher academic achievement for schools. Through their research they found that all schools are not equipped to provide the professional development needed to sustain long-term academic growth using data. They recommend that schools use data teams and provide professional development opportunities to guide the team's interventions. Datnow and Park (2015, p. 53) state "Data-informed decision making must contribute to teacher professionalism not threaten it."

## **Theoretical Frameworks**

### Data-Driven Decision-Making

"Better data creates opportunities to make better decisions," (Brynjolfsson & McElheran, 2016, p. 138). Their research shows that between the years 2005 and 2010 the number of companies in America using data-driven decisions (DDD) tripled. They attribute much of the growth in DDD to the many companies investing in technology capable of producing data analysis. Data analysis allows for management and workers alike to be better- educated on focused on improving results.

According to Poortman and Schildkamp (2016) data use starts with setting a goal to solve a problem. The goal must be specific and contain a measurable outcome. First,

the process includes data collection to verify the problem, and second to investigate possible causes of the problem --investigate a hypothesis. They suggest the process of data use should be done collectively between stakeholders taking into account as much feedback as possible. They share an eight-step process to data use that mirrors the scientific method of research with a few additions. They suggest one define the problem, collect data, provide for the accuracy of the data, analyze the data, draw conclusions from the data, implement interventions when needed, and then provide an evaluation of the interventions.

Data can be used to make instructional changes that helps school leaders improve student learning (Mandinach, 2012). "The objective in data-driven decision-making (DDDM) is to move educators, schools, districts, and states from being "data rich but information poor" to using data and transforming them into actionable knowledge," Mandinach (2012, p. 82). The goal of course is to ensure that data (evidence) are used to inform practice. In order to do that, data systems must be developed to provide consistency and validity to what and how data are used.

### Instructional Leadership Theory

According to Day, Gu, and Sammons (2016, p. 224) "Instructional leadership is said to emphasize above all else the importance of establishing clear educational goals, planning the curriculum, and evaluating teachers and teaching." They share that transformational and instructional leaders are associated with producing measurable outcomes in student achievement by creating school systems that share a vision of success, a culture of learning, common goals, and provide resources that support all stakeholders in the learning process. Instructional leaders are considered "effective" if they can show that what they are doing increases student success and therefore transforms the learning environment by improving academic achievement.

According to Harchar and Hyle (1996) effective instructional leadership is not defined by one set of characteristics -- no traits are considered absolute. They do state however that in the past instructional leadership was defined by how leaders were able to foster the improvement of a person, group, or program, which emphasizes a causeand-effect relationship. Hallinger and McCary (1990) propose that successful principals are set apart from less effective principals based upon the choices they make because choices ultimately determine actions.

Hallinger and Murphy (1985) provide three steps to improving instructional leaders. The first step is for school districts to remove barriers that prevent the school leader from focusing on curriculum and student achievement. The second step is that school districts should clearly define their expectations for instructional leadership. The third step is for school districts to provide a means to analyze the principal's instructional leadership based on accountability and useful professional development.

To date, research on how school leaders effectively use instructional leadership and data-based decisions to improve student academic achievement has largely focused on qualitative studies that focus on school culture, or quantitative studies that identify individual characteristics of school leaders that are considered to be effective in improving student achievement. Mississippi has a unique accountability model that serves as an indicator of school improvement based on student academic success. A study that compares the instructional leadership practices in making data-driven decisions in Mississippi's high and low performing school districts would assist school district leaders in determining which instructional leadership practices are most effective and what types of data are most useful in providing continuous school improvement.

Student achievement therefore is thrust onto the shoulders of school leaders and teachers who are held responsible for providing school improvement. School success is identified by each state's implementation of federal legislation through their adopted accountability systems.

# **CHAPTER III - METHODOLOGY**

### **Research Questions**

The purpose of the study was to determine what administrators of top-performing school districts and schools report are effective instructional leadership qualities that may influence a systematic use of data-driven decision-making to improve student achievement, determine what types of data are available for school districts and schools, and determine whether there is a direct correlation between data use and school accountability ratings. The following research questions were addressed:

- 1. What type of data does each school district report using?
- 2. What are administrators' self-efficacy beliefs regarding data-based decision making?
- 3. What are administrators' beliefs concerning organizational support for school-wide collaboration in using data-based decision-making to drive instructional practices?
- 4. Are the beliefs related to accountability ratings?

## **Participants**

The potential participants of the study were administrators in districts and schools in Mississippi. According to the Mississippi Department of Education, Table 2 below depicts the number of school districts and schools for each of the five possible accountability ratings reported on September 17, 2019. There were approximately 145 total school districts made up of 877 schools. Mississippi school districts vary by size and grade span depending on the make-up of the school community. Some districts have only one grade span per school while others may have two or more schools with the same grade spans.

Districts and schools earn annual accountability ratings which were used to compare the fifteen highest rated districts to the fifteen lowest rated districts using a tenyear average of the accountability ratings for each district. All accountability ratings for all districts in Mississippi for a period of ten years were compiled in an Excel Spreadsheet. Each accountability rating represented as a letter grade was assigned a numeric value. An "A" equaled five, a "B" equaled four, a "C" equaled three, a "D" equaled two, and an "F" equaled one. The averages are depicted in Table 2 and Table 3. The fifteen highest and fifteen lowest district averages made up the potential participants. Table 2

District Grade	2017 PCT	2017 Count	2018 PCT	2018 Count	2019 PCT	2019 Count
Α	10.30%	15	12.20%	18	21.40%	31
B	29.50%	43	28.60%	42	24.10%	35
С	29.50%	43	25.20%	37	24.10%	35
D	24.70%	36	19.00%	28	15.90%	23
$\mathbf{F}$	6.20%	9	15.00%	22	13.10%	19
N/A	0.00%	0	0.00%	0	1.40%	2
Totals	100.00%	146	100.00%	147	100.00%	145

District	Accounta	bilitv	Ratings
		/	

Note. The percent (PCT) and count of the districts is reported.

## Table 3

Grade	2017 PCT	2017 Count	2018 PCT	2018 Count	2019 PCT	2019 Count
Α	13.00%	114	20.40%	181	22.30%	196
В	29.70%	261	27.80%	247	31.90%	280
С	25.50%	224	21.50%	191	19.30%	169
D	21.00%	185	18.60%	165	17.40%	153
$\mathbf{F}$	10.60%	93	11.70%	104	8.80%	77
N/A	0.30%	3	0.00%	0	0.20%	2
Totals	100.00%	880	100.00%	888	100.00%	877

## School Accountability Ratings

Note: The data was retrieved from the Mississippi Department of Education Reports and Data page at https://www.mdek12.org/sites/default/files/Offices/MDE/OEA/OPR/2019/2019\_accountability\_media\_file\_9.17.19.xlsx.

Mississippi was chosen because it has a unique accountability system that is based on a formula that assesses overall student achievement as well as individual student growth. The Mississippi accountability rating scale consists of five levels with each level being represented by a letter grade (A-F). Mississippi requires all public schools to participate in grade-level state assessments which are used to determine a student's annual individual growth and provides each student with an achievement score. Each school then receives a rating based on overall student achievement and each district receives an overall rating based on an average of all the schools operating within the district.

The required state assessments for students are given in grades 3 - 8 in the areas of English language arts and math. Science is required to be measured in grades 5 and 8. End of course state assessments are required in English II, Algebra I, Biology I, and U.S. History.

# **Participant Profile**

The districts selected as the fifteen highest achieving districts are listed in Table 4. The fifteen lowest achieving districts are listed in Table 5. All districts overall scores were averaged over a ten-year reporting period by using zero points for an "F" rating, one point for a "D" rating, two points for a "C" rating, three points for a "B" rating and four points for an "A" rating. The points were then divided by ten. Those averages were then ranked from highest to lowest. The districts were given pseudo names to keep the schools and districts confidential and anonymous.

Table 4

Rank	District Name	10-Year Avg. Rating
1	SD1	3.89
2	SD2	3.89
3	SD3	3.78
4	SD4	3.78
5	SD5	3.67
6	SD6	3.56
7	SD7	3.56
8	SD8	3.56
9	SD9	3.56
10	SD10	3.56
11	SD11	3.44
12	SD12	3.44
13	SD13	3.44
14	SD14	3.33
15	SD15	3.22

## Highest 15 Achieving School Districts in Mississippi

Note: The Corinth School District was omitted from the selection due to being exempt from state testing for the 2016 and 2017 school years.

# Table 5

Rank	District Name	10-Year Avg. Rating
15	SD16	0.78
14	SD17	0.78
13	SD18	0.67
12	SD19	0.67
11	SD20	0.67
10	SD21	0.56
9	SD22	0.56
8	SD23	0.56
7	SD24	0.44
6	SD25	0.44
5	SD26	0.44
4	SD27	0.44
3	SD28	0.44
2	SD29	0.33
1	SD30	0.33

Lowest 15 Achieving School Districts in Mississippi

Note. Multiple school districts were omitted from the bottom fifteen due to missing years of data. Some were missing data due to consolidations while others were due to being closed. The schools listed had accountability data for all ten years.

# Procedure

The survey methodology was utilized in this study. First, data collected from the Mississippi Department of Education's Mississippi Student Testing Task Force's District Survey conducted in 2019 was analyzed to answer question #1. What type of data does each school district report using? The Task Force's survey report (2019) indicated that eighty-five percent of all school districts in Mississippi completed the survey. The survey report includes the types, quality, and number of tests administered by school districts. Permission was sought from the Task Force to obtain the survey results received from

school districts. The data from the District Survey was used in conjunction with an administrator survey to be administered to participants.

An email was sent to the superintendents of the fifteen highest achieving school districts and the fifteen lowest achieving school districts as identified in Tables 4 and 5 to seek permission to conduct the study in their district. The information provided to the superintendents included the purpose of the questionnaire, an overview of the research questions to be answered, and how the findings will be reported. The email requested participation from district level administrators and school level administrators responsible for accountability ratings.

Once superintendents responded, permission to conduct the questionnaire obtained through the Institutional Review Board (IRB) at The University of Southern Mississippi (USM). After approval was received, the questionnaire was created using an online format through Qualtrics. An email was sent to participants that provided an overview of the purpose of the study and informed them that their participation was anonymous and would be kept confidential. The email also contained a consent form which provided the participant the opportunity to consent to participate or opt out. Those who choose to consent to participate were provided a link to the questionnaire. A summary of the research is available to all participants through a written report.

## Instrumentation

The Self-Efficacy Beliefs for Data-Driven Decision-Making Survey developed by Kristal Pollard in 2018 was the instrument used to conduct the study. The first section of the survey was comprised of six questions that use a nine-point numeric scale for responses that range from "1" representing "None at All" to a "9" representing "A Great Deal". The second, third, and fourth sections of the survey consisted of sixteen items using a five-point response scale. Sections two and three used a Likert scale with "1" representing that the participant "Strongly Disagrees" to a "5" representing that the participant "Strongly Agrees". In section four, a frequency scale was used with a "1" representing "Never" and a "5" representing "Always".

Section I of the questionnaire which includes questions 1 – 6 was made up of items reflecting the personal beliefs that the administrator possesses for self-efficacy of data-driven decision-making. Section II was comprised of questions 7-13 and was based upon the administrator's beliefs that they possess organizational support for data use. Section III was comprised of questions 14-17 and was based upon the administrator's beliefs that they possess collaborative support for data use. Section IV was comprised of questions 18-22 and was based upon the administrator's beliefs that they possess engagement in data-driven decision-making. Section V was comprised of questions 23 – 27 which depicted the administrator's demographic information.

## Administrator Instrument for the Data-Based Decision-Making Survey

Section I: Self Efficacy Beliefs for Data-Driven Decision-Making

- 1. How confident are you in your ability to access interim assessment results for your school?
- 2. How confident are you in your ability to comprehend interim assessment reports for your school?
- 3. How confident are you in your ability to interpret subtest or strand scores to determine overall strengths and weaknesses in a given subject area at your school?

- 4. How confident are you in your ability to use data to identify gaps in student mastery of curricular concepts for each subject area?
- 5. How confident are you in your ability to use data to set academic goals for your school?
- 6. How confident are you in your ability to use data to guide your selection of instructional resources and materials for targeted interventions to address gaps in student understanding?
- Section II: Organizational Support for Data Use
- 7. I expect teachers in my school to interpret interim assessment data.
- I expect teachers in my school to use interim assessment data to inform instructional decisions in their classrooms.
- 9. I emphasize the importance of data to inform instructional decisions to my teachers and staff.
- 10. There is a culture of trust among grade levels when it comes to discussions about the results of interim assessment data.
- 11. I provide teachers with opportunities to discuss the results of interim assessment data with their colleagues.
- 12. Discussions about interim assessment data occur in a small group setting in my school.
- 13. I have received training on how to analyze and interpret interim assessment data. Section III: Collaborative Support for Data Use
- 14. My fellow administrators generally have a positive outlook on interim assessment data collection in our schools.

- 15. My fellow administrator generally support the idea of using interim assessment data to inform instructional decision-making.
- 16. I analyze the results of interim assessment data with other school leaders in my school.
- 17. I interpret the results of interim assessment data with other school leaders in my school.
- Section IV: Engagement in Data-Driven Decision-Making
- 18. I use interim assessment data to provide targeted feedback to my teachers about their performance.
- 19. I analyze interim assessment data to identify school-wide strengths and weaknesses.
- 20. I analyze interim assessment data to make decisions related to personnel.
- 21. I use interim assessment data to determine professional development activities for teachers at my school.
- 22. I use interim assessment data to recognize student growth in proficiency levels.
- Section V: Demographic Information
- 23. Gender: \_\_\_\_Female \_\_\_\_Other
- 24. Ethnicity: \_\_\_\_African-American \_\_\_\_Caucasian-American \_\_\_\_Hispanic/Latino American \_\_\_\_Asian-American \_\_\_Other
- 25. Years of Administrative Experience: \_\_\_\_0-2 years \_\_\_\_3-5 years \_\_\_\_6-10 years \_\_\_\_11-15 years \_\_\_\_16 years & above
- 26. Grade Level: \_\_\_\_Elementary (Pre-K through 5<sup>th</sup> grades) \_\_\_\_Middle (6<sup>th</sup> through 8<sup>th</sup> grades) \_\_\_\_High (9<sup>th</sup> through 12<sup>th</sup> grades)

27. I work at a school that is classified as: \_\_\_\_\_Title I (at least 40% of students are from low-income families) \_\_\_\_\_None-Title I (less than 40% of students are from low-income families)

28. Which group below is your district listed under (Group 1 or Group 2)?\_\_\_\_\_

Table 6

# District Groups

Group 1	Group 2		
Alcorn	Bay St. Louis		
	Waveland		
Biloxi Public	Calhoun County		
Boonville	Canton Public		
Clinton Public	Coahoma County		
Columbus Municipal	Coffeeville		
DeSoto County	Columbia		
Enterprise	Forrest County		
George County	Forrest County AHS		
Grenada	Greenville Public		
Itawamba County	Gulfport		
Jones County	Hancock County		
Lamar County	Harrison County		
Lauderdale County	Holmes County		
Laurel	Humphrey's County		
Lincoln County	Jackson Public		
Lincoln County	Jefferson County		
Long Beach	Lafayette County		
Lowndes County	Leflore County		
Madison County	Meridian Public		
Neshoba County	Monroe County		
Newton County	Moss Point Separate		
Ocean Springs	Natchez-Adams		
Oxford	New Albany Public		
Pass Christian Public	Noxubee County		
Petal	Okolona Separate		
Pontotoc City	Pascagoula Gautier		
Rankin County	Pearl River County		
Senatobia Municipal	Scott County		

## Table 6 continued

South Tippah	Stone County
Tishomingo County	Union County
Tupelo Public	Wilkinson County
Union Public	Winona Separate
Webster County	Yazoo City Municipal

Note. Both groups contain both A and F districts, but not all the districts were solicited to participate.

# **Data Collection**

The questionnaire was emailed to school districts whose superintendents agreed to allow their administrators to participate. The participants were given a two-week period to respond. An automated, scheduled reminder was sent to participants after two weeks. A second reminder was sent to participants after another two-week period had elapsed. After data was received from the Administrator's survey it was transferred to SPSS and cleaned to be used to answer research questions 3-4.

Descriptive statistics were used to describe the sample as well as the overall responses to the questionnaire and its subscales. In order to address research question one, "What type of data do districts report using," further descriptive statistics were used to determine the type of data each school district reports using. A comparison using an ANOVA was used to show the variance between high performing districts and low performing districts in how data-based decision-making is used to provide collaboration and support for teachers in making instructional decisions. A correlation was used to show if a relationship exists between data-based decision-making and accountability ratings.

#### **CHAPTER IV - RESULTS**

## **Participants**

The Mississippi State Department of Education issues accountability ratings annually for each district based on students' performance on state required assessments in the content areas of English language arts and math for third through eighth grade, as well as a science assessment that is administered in fifth and eighth grade. Secondary education content assessments include English II, Algebra I, Biology I, and U.S. History. The accountability ratings are calculated using an in-house formula that takes into account every student's performance level as well as their annual academic growth from the previous year.

Rating averages were compiled from the data for years 2009 to 2019. Districts missing two or more years of data in the 10-year span were omitted from the initial selection. The 15 highest ranked "A" districts and 15 lowest ranked "F" districts were selected for this study based upon their overall accountability school district ratings earned over a 10-year span.

Of the 30 Mississippi districts chosen to participate in this study only 12 agreed to participate which provided the 107 participants. It is important to note that not all 107 participants answered all items on the survey, and all participants were serving as school administrators either as a principal or an assistant principal. The 12 school districts that did participate were represented by six "A" rated school districts and six "F" rated school districts. The socio-economic status of the six "A" rated districts was a 43.51% poverty while the six "F" rated districts was 71.18% in 2019.

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Three "A" districts responded to the request to participate with a definitive "No". One stated, "Sorry, but the district is not granting permission for doctoral research for the 2020-2021 school year." Another reported that the administrators were having to meet the challenges of planning for the new year under the COVID pandemic guidelines and did not have time to participate. There were no responses from "F" districts that did not participate.

Most of the school districts contacted were operating online only due to COVID-19. Telephone calls were made to each district as a follow-up to emails sent. Over half of the "A" districts contacted a message was left concerning the request to participate in addition to the email that had already been sent. Only one "F" district answered the telephone call and then it was only to take a message which would be given to the appropriate administrator concerning the reason for the call.

The school districts that did participate were diverse and consisted of rural and urban districts. There was a good representation of Mississippi school districts located in the state's northern region, central region, and southern region. A total of 12 districts participated in the survey of which six districts were rated "A" and six districts were rated "F". Participants were asked to choose which group that their school district was listed under. Out of the 107 participants that responded to the survey only 89 chose to answer this question resulting in 53 who selected Group 1 and 36 who selected Group 2. Group 1 represented "A" districts and Group 2 represented "F" districts.

### **Demographics**

The survey was sent to Superintendents who shared the survey with their administrators. Some superintendents turned the task over to an appointed administrator on the district level to assist with the survey distribution. For example, the task was passed on to the District Test Coordinator in one district, while the Assistant Superintendent carried out the task in another district which helped ensure for those districts that the survey was sent only to the administrators with whom they shared the link. There were 49% of the participants who indicated that they were male, and 50% indicated they were female. One participant did not complete the gender question. See Table7 for further analysis.

The ethnicity of the participants was closely split between African Americans representing 43% of the total participants and Caucasian-Americans representing 54%. A total of 3 % chose the category of "Other". Table 7 reflects the ethnicity of the participants.

The number of years of experience as a school administrator varied between participants. School administrators with 0-2 years of experience made up 9%, 21% reported having 3-5 years of experience, 37% reported having 6-10 years of experience, 12% reported having 11-15 years of experience, and 21% reported they had 16 or more years of experience as a school administrator. A total of 70% had over five years of experience in an educational leadership position. See Table 7 for exact percentage totals.

Participants were asked to share the grade level or grade span in which they provide educational leadership, and 34% said they serve in an elementary school which was depicted by Pre-K to fifth grade level. Another 21% indicated they serve in a middle school setting. The middle school option included the grade spans sixth, seventh and/or eighth grade. School leaders representing high school represented 44% of the participants. The high school grade span included nineth to twelfth grade.

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Slightly more than half (58%) of the participants indicated that they serve at a school considered a Title I school. A Title I school represents a school that with least a 40% poverty rate and receives federal funds to provide additional resources to serve students of poverty. Responses from the remaining participants indicated that they served at a non-Title school. See Table 7 for further details.

Table 7

Demo	oran	hics
Demo	grup	nics

	Frequency	Percent	Valid	Cumulative
Demographics			Percent	Percent
Gender				
Female	46.00	50.50	51.10	51.10
Male	44.00	48.40	48.90	100.00
Total	90.00	98.90	100.00	
Ethnicity				
Caucasian	49.00	53.80	53.80	53.80
African American	39.00	42.90	42.90	96.70
Other	3.00	3.30	3.30	100.00
Total	91.00	100.00	100.00	
Years of Experience				
6-10	33.00	36.30	36.70	36.70
3-5	19.00	20.90	21.10	57.80
16 or more	19.00	20.90	21.10	78.90
11-15	11.00	12.10	12.20	91.10
0-2	8.00	8.80	8.90	100.00
Total	90.00	98.90	100.00	
Grade Level of School				
High (9th - 12th grade)	40.00	44.00	44.40	44.40
Elementary (Pre-K - 5th grade)	31.00	34.10	34.40	78.80
Middle (6th - 8th grade)	19.00	20.90	21.10	100.00
Total	90.00	98.90	100.00	
Type of School Title I School (at least 40% of students are from low-income fomilies)				
Tammes)	53.00	58.20	58.20	58.20

# Table 7 continued

Non-Title I School (less than				
40% of students are from low-				
income families)	38.00	41.80	41.80	100.00
Total	91.00	100.00	100.00	

# **Research Findings**

The first set of data comes from a survey conducted by the Mississippi Department of Education's Student Testing Task Force in 2019 that was developed by the Mississippi Research and Curriculum Unit (RCU) housed on the campus of Mississippi State University in Starkville, MS. The Taskforce's survey investigated the type of data points each district reported using, whether the assessments were standardized or not, the frequency by which the assessment was given, a timeframe and schedule for each assessment given, and who was responsible at the district level and the school level. The survey was not anonymous in nature. The Taskforce required the district's name, superintendent's name, person completing the survey, etc. were included in the responses for the survey to be submitted.

The results from item seven of the survey were used for this study. Item seven asked for the type of data used by the district. The participants had an opportunity to choose from a list of 21 known, effective vendor products, or they could choose "none" or "other" as options. If "other" was chosen, the participant was prompted to provide what they use. The choices listed by MDE represented standardized tests that are purchased from vendors.

Other items on the Taskforce's survey requested the frequency with which the product was used, when the product was administered, the number of school days

dedicated to administering the assessment, and who administered the assessment. The data reported by participants reflected an assortment of benchmark assessments, universal screeners, and curriculum programs.

Table 8 provides the actual responses from the 12 districts. Eight of the 12 districts reported participating in the state required Testing Survey. The four remaining districts consisted of three "F" rated school districts and one "A" rated school district. Table 8 provides the answer to research question #1. "What type of data does each school district report using?"

Table 8

Sidle Testing Taskjorce Dala Results	State	Testing	Taskforce	Data Results
--------------------------------------	-------	---------	-----------	--------------

	Reported using	
	a Vendor-	Reported Vendor
Participated	Created	
in Survey	Assessment	
Yes	Yes	iReady
Yes	Yes	STAR Reading and Math by
		Renaissance Learning, Developmental
		Reading Assessment (DRA) by
		Pearson, and EnCASE by TE21
No	-	
		Developmental Reading Assessment
		(DRA) by Pearson and EnCase by
Yes	Yes	TE21
		STAR Reading and Math by
		Renaissance Learning, and EnCASE
Yes	Yes	by TE21
		STAR Reading and Math by
		Renaissance Learning and EnCASE
Yes	Yes	by TE21
Yes	Yes	STAR Reading and Math by
		Renaissance Learning and i-Ready
		ELA and Math by Curriculum
		Associates
	Participated in Survey Yes Yes No Yes Yes Yes Yes	Reported using a Vendor- Created AssessmentParticipated in SurveyCreated AssessmentYesYesYesYesYesYesNo-Yes

## Table 8 continued

SD17	Yes	Yes	STAR Reading and Math by Renaissance Learning, i-Ready ELA and Math by Curriculum Associates, and EnCase by TE21			
SD20	No	-				
SD22	No	-				
SD25	Yes	Yes	STAR Reading by Renaissance and iReady ELA and Math by Curriculum Associates			
SD27	No	-				

Note. Districts SD2 to SD15 represent "A" districts. SD16 to SD27 represents "F" Districts. Districts that did not participate in the Mississispip Department of Education's Taskforce Survey have a dash (-) in the reporting vendor column because it is unknown what they may use for data.

The results show that three "A" districts and three "F" districts use Star Reading and Math as a universal screener. Four "A" districts and one "F" district use Encase by TE21 as a benchmark assessment. One "A" district and one "F" district use the iReady by Curriculum Associates as a reading curriculum which also includes a reading level screener. One "A" district did not respond to the Task Force's survey and three of the "F" districts did not respond.

To address research question 2, "What are administrators' self-efficacy beliefs regarding data-based decision making? Items 1-6 of the Data-Based Leadership Survey provides an analysis of the participants' beliefs concerning self-efficacy in data-based decision making. Although there was not a lot of variability between the item responses, there are some differences in how confident the participants are in using data.

The most positive item was Q5 for which participants indicated they were confident in using data to set content goals for student mastery. The least positive item for participants was item Q6 that was used to determine what resources should be used to improve targeted goals for academic achievement of specific content areas. The responses to Item Q3 were similar to item Q6 in which participants were not as confident in interpreting what student strengths and weaknesses exist concerning content strands.

Participant responses are shown in Table 9. To compare the overall responses of "A" rated districts to "F" rated districts, these items were averaged by the group that they indicated belonging to and creating a new target variable utilizing SPSS.

Table 9

Variable	N	Min.	Max.	Mean	Std. Deviation
Self-Efficacy	91	2.67	5	4.141	0.62703
Q5 How confident are you in your ability to use data to set academic goals for your schools?	90	3	5	4.31	0.647
Q4 How confident are you in your ability to use data to identify gaps in student mastery of curricular concepts for each subject area?	91	2	5	4.15	0.744
Q1 How confident are you in your ability to access interim assessment results for your school?	90	2	5	4.13	0.767
Q2 How confident are you in your ability to comprehend interim assessment reports for your school?	91	2	5	4.11	0.767
Q3 How confident are you in your ability to interpret subtest or strand scores to determine overall strengths and weaknesses in a given subject area at your school?		2	5	4.07	0.742
Q6 How confident are you in your ability to use data to guide your selection of instructional resources and materials for targeted interventions to address gaps in student understanding?	91	2	5	4.05	0.808

Overall Self-Efficacy Results

Descriptive statistics were then analyzed using an independent t-test that compared the differences of the means for the participants. Each group's mean for efficacy and organization beliefs about how data is used to impact decisions concerning instruction and student learning was determined. Group 1's mean score for efficacy was slightly higher at 4.3553 compared to Group 2's mean score of 3.8519.

The mean of "A" rated districts is different from the mean of "F" rated districts concerning self-efficacy in data-based decision-making, t(87)=4.019, p=.001. This represented a small effect. The results of the survey for self-efficacy indicate a significant difference between "A" and "F" districts.

The mean of "A" rated districts is very similar to the mean of "F" rated districts concerning the administrators' beliefs about the support of the organization, 4.6882 and 4.5635, respectively. This difference is not significant for organizational beliefs between "A" and "F" districts, t(87)=1.543, p=.128.

## **CHAPTER V– SUMMARY OF THE STUDY**

The purpose of this study was to identify the types of data that schools and districts use in Mississippi, determine how frequently the data are used, and determine if school leaders believe that the data they use helps to improve student achievement which in turn dictates their school performance level. The research specifically identified the data-use practices of school leaders in Mississippi and their attitudes concerning the extent a data-use culture drives instruction through teacher behaviors.

The theoretical framework for the study was based upon the data-use theory that shows how a culture and climate focused on using data to make decisions impacts student achievement (Lamb, 2007; Marzano et.al, 2005), and the instructional leadership theory that validates that student success comes from what school leaders do or do not do (Hattie, 2015). Both theories contribute to how an effective leader possesses the behaviors to effectively use systematic data-based decision-making for the purpose of providing continuous instructional improvement to increase student achievement. The study was conducted to investigate whether there is a difference in what school leaders from "A" and "F" rated districts do in making data-driven decisions that may lead to higher results for student achievement.

Twelve school districts agreed to participate in the study out of the 30 that were invited. Half of the 12 were represented by "A" rated districts and half were represented by "F" rated districts. The number of administrators varied across districts with a total of 107 participants. Even though demographics play a small role in the study it is important to note that the participants were very evenly distributed between gender, race, years of experience, and the type of school they served. Nine participants did not provide their demographic information.

# Non-Participating Districts

There were 18 districts that did not participate in the survey that were contacted multiple times, of which nine were "A" rated districts and nine were "F" rated districts. It was a challenge to reach the right person in each district with whom the decisions were made pertaining to dissertation research. The majority of the "F" districts did not list their contact information on their webpages and only provided a district telephone number. At least three districts required you to contact them through a district email address if you needed assistance. A reply from those districts was never received. Only three of the 15 "F" rated districts answered phone calls directly. All others allowed a voice message to pick up the call and two of the "A" districts did not answer phone calls.

## Participation Requirements

Two "F" rated school districts required additional assurances beyond the recommended letter of notification, IRB approval, and consent form in order for their district to participate. They both had a district consent form for the researcher that had to be completed and returned along with the assurance that their districts' name would not be mentioned in the research concerning responses or information provided by their school leaders. One "F" district had a review team that took a month to review the study and to respond concerning their participation. Another district had an investigator that required a copy of the procedures, voluntary nature of the study, the risks and benefits of being in the study, confidentiality, and a copy of the survey items.

One "A" rated district emailed a copy of their superintendent's dissertation. They recommended that it be used to assist in the research being conducted because it was on accountability. Another "A" district superintendent called to say that they were happy to help but wanted to see the items before approving the study.

All of the districts that participated had a specific person responsible for distributing the survey. The designated person dispersed the survey link to their administrators and then communicated with me that it had been sent out. It is unknown how many administrators from each district actually had an opportunity to complete the questionnaire.

The research questions (RQ) for this study consisted of:

- 1. What type of data does each school district report using?
- 2. What are administrators' self-efficacy beliefs regarding data-based decision making?
- 3. What are administrators' beliefs concerning organizational support for school-wide collaboration in using data-based decision-making to drive instructional practices?
- 4. Are the beliefs related to accountability ratings?

All the questions were answered quantitatively from the data obtained either by the district or individual school leaders who participated. Data for RQ1 was reported by the Mississippi Department of Education's (MDE) Mississippi Student Testing Task Force's District Survey that was developed by the Research and Curriculum Unit at Mississippi State University. Four of the participating districts for this study did not complete the MDE survey one of which was an "A" district. Only one "F" district out of six completed the survey. This created a huge discrepancy in the data and caused the information to be inconclusive.

Research questions 2 and 3 utilized the questionnaire "Self-Efficacy Beliefs for Data-Driven Decision-Making," (Pollard, 2018). Section I of the questionnaire asked respondents to reflect upon their personal beliefs concerning the self-efficacy of datadriven decision-making. Section II focused on the respondent's beliefs that they possess organizational support for data use. Section III identified the administrator's beliefs that they possess collaborative support for data use. Section IV captured the administrator's beliefs that they possess engagement in data-driven decision-making. Section V recorded the respondent's demographic information which included gender, ethnicity, type of school accountability rating their school had earned, years served as an administrator, grade span of their school, etc. The responses of the respondents from the "A" rated schools were compared to the responses of the respondents from the "F" rated schools. All responses were categorized, coded, and triangulated using a t-test to determine if an effect size existed between "A" rated and "F" rated district responses.

## **Discussion of the Findings**

The study began with the purpose of determining what "A" rated and "F" rated districts use for data in an effort to see if the data used is the same. The Mississippi Department of Education conducted a survey in 2019 to determine what districts were using for data, the frequency by which the districts assessed students, and who was responsible in districts for implementing, monitoring, and reporting data at each school that included all grade spans and content areas. The team of administrators that made up the "taskforce" was appointed by Dr. Carrie Wright, Superintendent of Education for

Mississippi. The data from the survey was used to answer RQ1 which asks what "A" and "F" districts use for data.

The results from the Taskforce's survey were inconclusive because only half of the participating districts in this study completed the survey that was sent out in 2019 by the Mississippi Department of Education's Student Testing Task Force. The purpose of the Taskforce's survey was to be able to share with all districts how different kinds of data are being used. There is nothing to compare when districts fail to report. Knowing if the "A" and "F" districts were using the same data points, with the same frequency would have provided valuable information when comparing how data is being used. Over half of the "F" districts participating in this study did not report and neither did one "A" district.

According to Marzano, Waters, and McNulty (2005) effective leaders possess behaviors that cause them to work hard to create a culture of success for everybody. School leaders should want to share what they are doing and compare that to other schools who are just as successful or more successful than they are to provide continuous improvement of student achievement for their students? By the "F" districts not reporting what they use for data, no one can effectively determine whether or not the assessments are useful or not. One cannot even determine if they are using data.

A general correlation between the results of the two groups of leaders in RQ1 reflect how effective leaders as discussed by Marzano, Waters, and McNulty (2005) possess the behaviors to be good at communicating as well as possess a good understanding concerning curriculum that provides instructional coherence for students to consistently be academically successful. Four of the six "A" districts utilize Encase by TE21 – a benchmark assessment to determine if curriculum content is being learned and

the amount of learning taking place between each assessment. Only one "F" district reported using a benchmark assessment. Benchmark assessment data informs administrators of what is being learned and to what extent that learning is showing mastery of the curriculum that is being assessed. This allows administrators to make predictions about their accountability ratings prior to students taking state assessments. This is in line with Hattie, 2015, who shared that effective instructional leaders are consistently looking for evidence that learning is taking place.

Six survey items were used to determine the beliefs about how data is used in their district to impact student learning by implementing data-based decision-making. Although there was little variance between "A" and "F" districts there was a significant difference in their beliefs about how confident they are in interpreting what data results show and their ability to use the data to determine their strengths and weaknesses. Datnow and Park (2015) recommend that school leaders take time to reflect on what and how data is collected, to evaluate what the data shows, and to determine how the data should be used to increase student achievement. School leaders focused on academic improvement strive to equip themselves and those they work with to learn all they can about using the best resources available and how to implement those data resources with fidelity.

Furthermore, the data-use theory provides for the necessary behaviors that effective leaders possess to provide systematic data-based decision-making. As reflected in the difference of the mean scores, the "A" district administrators believe more strongly than "F" district administrators that a culture of data-based decision-making will be a determining factor for the success of student academic achievement when it comes to impacting instruction. According to Datnow and Park (2015), effective leaders create a data-use culture that provides the best practices in using data to determine instructional growth while providing timeframes of how often the data will be analyzed.

There were six more items on the survey that explored RQ3 which addressed the school leaders' beliefs about their schools' organizational support in providing schoolwide collaboration for the purpose of using data-based decision-making to drive their teachers' instructional practices. It was obvious that both "A" and "F" districts believe it is important to support their organizations by making decisions concerning instruction backed by data. This is reflected in the work by Marsh and Farrell (2015) where they proposed that, "Teachers are able to apply the knowledge gained from data use to directly improve instruction."

Based on the findings, having a data-driven culture where the data is discussed regularly would create opportunities for school leaders to provide organizational support for teachers who need more assistance. The use of data walls, data walks, and daily discussions would allow school leaders to better evaluate the effectiveness of their teachers' classroom instruction, be better prepared to assist their teachers in obtaining and using instructional resources that provide better academic outcomes, and train teachers to set smart goals for instruction that focus on students' strengths and weaknesses.

Instructional leaders of schools whose objective is to have a focus on academic improvement will need to "weigh decisions" concerning what, how, and when instruction is taught using data to provide the best opportunity for students to be academically successful (Fullan, 2010, p. 12). They will work hard to influence all stakeholders to do the same by creating a culture of data-based decision-making. They will not leave

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learning to chance, but rather they will base instructional practices and decisions on student data.

### Conclusions

Although there are obvious differences between "A" and "F" districts concerning accountability ratings, both are interested in protecting their school leaders' time when it comes to reporting, research, etc. This conclusion comes from the difficult task of soliciting participation for this survey as well as the lack of participation in the MDE's Taskforce survey. Yes, there was a COVID pandemic, but educational research is what allows educators to learn and grow, which is the purpose of all educational goals.

The Mississippi State Department of Education's Accountability Model compares districts and schools based upon student achievement. A standardized curriculum is provided for all grade-level content and mandates that a formal assessment be administered to all students in kindergarten through eighth grade as well as the content areas of Algebra I, English II, Biology I, and U.S. History. Decisions concerning how schools choose to provide instruction is left up to the leaders of each of those districts and their schools. The state's Accountability Model reports the vast difference between districts and schools in being successful in meeting annual academic proficiency.

First, this study was to compare and contrast the use of data by "A" rated districts and "F" rated districts. This was inconclusive due to the lack of response to the survey from the state department of many "F" districts. It was evident that the districts that did respond to the state department survey administer some of the same universal screeners and benchmark assessments as the "A" districts and therefore have access to the same data resources that would enable them to make the same types of decisions concerning instruction.

Secondly, although there was a significant difference noted by the study between the "A" and "F" districts when it comes to self-efficacy concerning what school leaders believe they know about data and how to use it effectively, there was little variance in their beliefs concerning their organizational support. This is very confusing because it appears as if there is a disconnect between what "F" districts indicated that they are confident doing on the one hand and what they then indicated that they implement on the other. One theory is that there are "institutional expectations" (defined as leadership standards) for which school administrators are trained to carry out. They are taught the standards in administrative leadership classes, in professional development, etc. and then attempt to manage the implementation of those standards in their schools. However, school leaders who share the data with their teachers and understand how to set mastery goals for academic achievement are better prepared to make decisions based on their data concerning the resources and instructional goals needed for their organization and be successful in improving student academic achievement.

School leaders should be challenged to make the connections between where the data shows they are and the steps they need to take to influence the behaviors of their stakeholders and their overall instructional program by effectively using the data to make strategic decisions. Hattie (2015) alludes to these leaders as those who relentlessly search out and interrogate evidence of learning. Schools seeking continuous improvement must be diligent in their search for the appropriate data to be used, how to best use that data, and evaluate whether or not it is providing the correlation between instructional

improvement and student academic achievement. School leaders who are confident and understand what the data means are more likely to use it in making decisions concerning instruction and will be better prepared to provide guidance and support through professional development for their teachers. They are also more likely to create a culture of data use that would encourage all stakeholders to recognize the importance and use of data.

Finally, this study has provided some insight into the differences between "A" and "F" district school leaders concerning their use of data-driven decision-making including their decisions that ultimately determine the success or failure of students and schools. Schools currently have access to more options than ever before with federal allocations of funds targeting learning loss. These funds have been made available to all schools based upon their poverty levels to be used to close learning gaps. Schools must first be able to recognize where their gaps exist and then be able to provide intentional, intensified, high dosage tutorial opportunities before, during, and after school as well as purchase data programs that would assist in tracking student learning.

Schools will need to determine the best use of those funds going forward. The additional funds known as CARES money or the American Relief Program is another variable for someone to investigate later; however, the learning gaps that have existed between districts of those who have had adequate funding and those who have had not had adequate funding should diminish while there is such an enormous amount being allocated to school improvement and "learning loss". The state is already claiming that every school in Mississippi is now considered a 1:1 school and has the technological capacity to provide virtual learning environments. Data-driven decisions could be the
difference that is needed in so many of these schools and districts that would improve their overall accountability ratings and student academic success.

Knowing what kinds of data to use is also important. State assessments, universal screeners, and benchmark assessments all allow a school leader to see where students are in learning the curriculum. Better data allows for better decision making. Districts and schools cannot afford to waste the resources they have on bad decisions; therefore, it is recommended that school leaders should be trained in how to properly choose the data they use, be able to determine what data is needed in different situations and then be able to support their organizations by implementing data-based decision-making to drive their instructional practices. The goal of school leaders should be to develop a formula of success and to keep refining it until every student in every school is achieving at the highest level possible.

## APPENDIX – IRB Approval

From: irb@usm.edu <irb@usm.edu>
Sent: Monday, July 20, 2020 8:43 AM
To: Kyna Shelley <Kyna.Shelley@usm.edu>; Teresa Duke <Teresa.Duke@usm.edu>; Sue
Fayard <Sue.Fayard@usm.edu>; Michael Howell <Michael.Howell@usm.edu>; Michaela
Donohue <Michaela.Donohue@usm.edu>
Subject: IRB-19-567 - Initial: Sacco Committee Letter - Exempt





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## NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident template on Cayuse IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

 FACE-TO-FACE DATA COLLECTION WILL NOT COMMENCE UNTIL USM'S IRB MODIFIES THE DIRECTIVE TO HALT NON-ESSENTIAL (NO DIRECT BENEFIT TO PARTICIPANTS) RESEARCH.

PROTOCOL NUMBER: IRB-19-567

PROJECT TITLE: Instructional Leadership and Data-Driven Decision-Making, a Formula for Success SCHOOL/PROGRAM: School of Education, Educational Research and Admin

RESEARCHER(S): Teresa Duke, Kyna Shelley

IRB COMMITTEE ACTION: Exempt CATEGORY: Exempt

Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

APPROVED STARTING: July 19, 2020

Sonald Saccofr.

Donald Sacco, Ph.D. Institutional Review Board Chairperson

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