TELL ME SUMTHIN GOOD: LEADER NARRATIVES TO UNDERSTAND DATA USE IN BLACK SCHOOL COMMUNITIES

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ABSTRACT

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Schooling experiences for Black students in the US have been shaped historically by antieducation laws, mandates, and initiatives that sustain unjust systemic practices and policies.

These practices and policies often stagnate academic progress and have led to institutional
deficits and the normalization of deficit-orientations towards students in predominantly Black
schools. Accountability expectations set forth by federal legislation is just one example of how
educational policy play a role in sustained deficit orientations toward Black schools through the
utility of student performance information.

State education agencies use student performance information from annual assessments to grade, categorize, and make decisions around support resources for students. This annual data snapshot also determines funding and shapes the allocation of resources for schools despite their need to support students in non-academic ways. Currently, student performance information is constructed in a way that provides a singular view of student performance information based on proficiency leveling and categorical grouping of students. This grouping is centered on students' lack of skill and in turn automatically positions them in a place of deficit within the data. This view of data also shapes the way school leaders draw on, make sense of, and interact with data toward decision-making to improve educational outcomes.

The purpose of this study was to understand the sensemaking of data use through the stories told by school leaders in predominantly Black schools by exploring how leaders accessed,

interacted with, acted on and made sense of their data use practices toward the improvement of educational outcomes in their school. This study used conceptual frames associated with sensemaking theory (Weick, 1995), school leader sensemaking theory (Gannon-Shilon & Schechter, 2018) and data use theory (Coburn & Turner, 2012) as guardrails to better understand elementary school leaders and their data use practices. Data use in school leadership is significant and can serve as a strategy to improve instructional practice. School leaders who have advanced data literacy skill sets can leverage student performance information (data) in ways that bring about insight (knowledge) to inform their leadership practice. School leaders are responsible for many aspects of the school operation and classroom instruction plays a major role toward improvement efforts. The improvement of instructional practice can lead to better educational outcomes for students in Black school communities. This study sought to capture the stories told by school leaders, specifically leaders in predominantly Black schools.

In the analysis of the data, two different approaches helped to broaden leaders' view of the data. In the first approach, leader stories were restoried and aligned to themes set forth by Clandinin and Connolly's (2000) three-dimensional narrative structure; interaction, continuity, and situation to view their experiences along a continuum. In the second approach, an open qualitative analysis was conducted and the leader stories were posited as data for interpretation. The findings brought forth a rich description of the leader's experience from two distinct analytical perspectives. The participant stories situated in the context of Black school communities provided a glimpse into the benefits and challenges leaders faced with data use towards educational improvement. Through these stories their voices are centered to offer insight into how data use practice can either help or hinder their improvement efforts.

I dedicate this dissertation to my brother Auston "A.T." Wards, III, my mother Ronnie Carson McRoy, my father Auston T. Wards, Jr., and my maternal grandmother Nancy Porter. I am forever grateful for your unconditional love, unwavering support, guidance, prayers, words of wisdom, and encouragement. Your presence in my life has helped me to evolve in ways you may never know.

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CHAPTER 1: INTRODUCTION

For far too long the availability of a high-quality, equitable education for racially minoritized youth has been out of reach. Whether or not we take into account the historical injustices that minoritized communities in the United States have endured, we must acknowledge these longstanding societal structures of systemic racism persist. One such structure is the failed reform efforts to mitigate perceived achievement gap, also framed as an opportunity gap (Carter & Welner, 2013), or masterfully articulated in a national speech as an education debt (Ladson-Billings, 2006), this reality still holds true for many minoritized student populations. In particular, the prevalent use of testing data to label, define and set the academic focus in classrooms has run its course. Consequently, this present reality calls for more insight around the implementation of key strategies in education to foster improvement toward equity in education for all students.

One such key strategy is the sensemaking of data use practices from the perspective of leaders in Black schools. This approach has not been thoroughly addressed as school leaders' tirelessly implement school improvement reform geared (Coburn & Turner, 2011; Mausethagen et al., 2019) toward equitable student learning outcomes. The broadening body of research that examines data-driven decision (DDDM) making in schools (Lachat & Smith, 2005; Mandinach et al., 2008; Marsh et al., 2006) has mainly centered on the "what" of data-driven decision making with minimal consideration of the "how" school leaders' make sense of data-driven or data-based decisions (Schildkamp, 2019) for continuous improvement (Park et al., 2018).

Statement of the Problem

One of the main practical problems that confront us is a lack in understanding how school leaders make sense of their data use practices. Data use practice, a key reform strategy intended

to foster improvement, examines the ways in which school leaders draw on or interact with information in the course of decision making for educational improvement (Coburn & Turner, 2012). Without attention to sensemaking, our ability to draw real conclusions and make connections between these professional decisions and student learning outcomes is limited. This study is being undertaken to better understand, on the part of elementary school leaders, how sensemaking of data use practices lead to educational improvement in Black school communities.

Purpose of the Study

The purpose of this narrative inquiry study, therefore, is to understand the stories told by elementary school leaders in predominantly Black school communities and how they employ data use practices to make decisions around educational improvement. Probing deeper to explore what data they use, why they choose those data types, and how the selected data types inform their school leadership sensemaking of data use in practice. Getting a glimpse into how elementary school leaders make sense of their existing data use practices in connection to professional decision making can uncover promising and practical approaches toward instructional practice change in Black schools.

Background & Context

In this era of accountability, many school districts across the country are often characterized metaphorically as data rich and information poor (Slotnik & Orland, 2010). This is a common cliché which means that data is plentiful, yet interpretation of the data is limited. Our inability to transform knowledge derived from data often leads to the recycling of historical inequities and deficit-based practices that persist in predominantly Black school communities (Tatum, 2013). It is unclear within the literature as to what significantly influences elementary

school leaders' sensemaking of data use practices, their professional decision-making (problem-solving) and the role sensemaking of data use practices play in connecting these decisions to their student learning outcomes.

The ways in which school leaders interact with accountability data or any other student performance information to engage in data use practices provide a glimpse into how these practices influence the professional decision making of school leaders. Coburn and Turner (2011) define data use practices as the ways in which actors interact by using test scores, grades and other forms of assessment data in their work. Mausethagen et al. (2019) add to this definition by affirming the potentiality of data use practices as a way to challenge and simultaneously crystallize ideas about educator use of student performance information to improve student achievement. Furthermore, Coburn & Turner assert the practice of data use is out ahead of research and share future implications to engage in research studying the process, context, and consequences of these efforts. In alignment with their assertion regarding data use practices, this qualitative study examines elementary school leaders' narratives to better understand their sensemaking of data use practices towards educational improvement in Black school communities.

Many states across the country use federal guidance to develop their educational accountability plans, which in turn set the guiding tone for local districts to develop and enact accountability criteria such as school quality ratings and other measures of academic progress for schools and their leaders. In Michigan Department of Education's (MDE) *Guiding Principles for Accountability* (2019) document, the core values and model of governance for the accountability team mission states their work is grounded in improving outcomes through student-focused, usable, and understandable data tools and resources. Although these core values and model of

governance for education accountability in Michigan are not particularly new and has been a widespread common practice among state departments of education, the translation of how these core values/governance models influence school leaders sensemaking of data use practices and how this data is linked to instructional supports to improve student learning outcomes is lacking in research efforts.

Like many other states, MDE establishes an accountability policy that holds school leaders accountable for student learning outcomes. For the most part when it comes to being held accountable for improving student learning outcomes, the policy calls for gaps in disaggregated student performance information to be narrowed based on annual proficiency targets. This gap narrowing or perceived increase in opportunity for certain student groups is a common practice that appears to be ineffective. The intent of the policy is to show the differences in progress across subgroups, yet this student performance information fails to provide insight into the actual instructional practice change that must occur in order to arrive at improved student learning outcomes. For example, a large proportion of schools serving racially minoritized students fail to show progress in reading at or above proficiency levels for more than fifty percent of their students. Using data that shows the student population achieved a reading score below the median proficiency target set for reading is limited and inhibits the ability to draw real conclusions about what next steps are necessary for improved student learning outcomes as it concerns instructional practice. Student performance information does not take into consideration the students' current ability to read at their individual grade level, nor does it tell what skills are lacking in order to help the students meet the demands of their grade-level standards which in turn may improve their proficiency levels when assessed in the future. The common practice of elementary school leaders setting arbitrary annual targets to improve by five

to ten percentage points to ultimately close a gap in performance between disaggregated subgroups proves to be ineffective. Instead, school leaders should consider sensemaking of their existing data use practices, paying specific attention to linkages between instructional practice and student learning outcomes. Sensemaking of data use practice offers an alternative way for educators to study student data and to offset the common ineffective practice of attributing students' inability to meet proficiency targets to non-instructional factors such as poverty, income, access to resources, etc. to a more reflective approach that centers instructional practice change as the lever to improve student learning outcomes.

Professor and scholar Heather Hill (2020) contends studying student data does not raise test scores, unless combined with focused professional learning that shifts teacher practice to change student learning outcomes. Hill reviewed empirical research spanning across two decades and of the 23 outcome indicators within her findings, very few studies showed promise for improving student learning outcomes. Conclusively, Hill (2020) asserts a need for district and school leaders to rethink ways in which they promote teacher use of accountability (monitoring) data as a central focus for teacher collaboration. According to Hill, data use practices enacted by leaders such as having teachers analyze test data has yet to be proven as productive. Among the studies she reviewed, researchers found in most instances, teachers were often attributing non-instructional reasons for student failures rather than digging into what the data reveals about student misunderstandings, the thinking that drives student misconceptions and or any other options for teachers to modify their instructional practice.

Similarly, scholar and practitioner Hope Crenshaw (2016) shares her insight about school leaders in the same way with respect to their thinking. Crenshaw asserts data can be informative for decision-making, however data alone is insufficient for arriving at a decision. She affirms a

leader is still subjective to his or her mindset, especially when conscientiously making efforts toward equitable use of data. Although this research is notable and worthy nonetheless, if school leaders engaged deeply into sensemaking of their data use practices, teachers' analysis of data could be redesigned and framed by leadership to consider alternative (i.e., strengths- based, values-oriented, and diversity of thought around cultural introspection) pedagogies and approaches for educational improvement.

Research Questions

In order to gain greater insight into school leaders' sensemaking of data use practices, the following overarching question and sub-questions will guide this study:

How do the stories of elementary school leaders serving in predominantly Black school communities explain how data is used to make decisions toward educational improvement?

This study also sought to answer the following sub-questions:

- 1. What stories do elementary school leaders tell about how they use data to inform their leadership practice?
- 2. What contextual factors influence school leader interactions with data?

Research Methods

This study will use narrative inquiry in order to lift up the voices of elementary school principals in predominantly Black schools. A narrative inquiry allows for the illustration of multi-faceted dimensions, interpretations, and challenges of peoples' lived experiences to be observed and understood. For these reasons, I choose to use a narrative inquiry approach to better understand the stories school leaders tell about how they make sense of data use practices for decision making towards educational improvement in Black schools.

For this narrative study, the research methods were conducted in phases and a story structure was designed to frame the leader stories. The phases included (a) semi-structured interviews with school leaders, (b) transcription and re-storying of school leader stories, (c) stories reviewed by participants for accuracy, (d) first cycle and second cycle coding methods, and (e) analysis and findings.

Phase 1: School Leader Interviews

The first stage in the process included interviews with each participant in a virtual setting. Due to the COVID-19 pandemic restrictions set by the university and the participants' school district, in-person interactions were prohibited. The school leaders gave consent to participate in two 60-minute interviews during the Spring 2021 semester. The participants also agreed to participate in follow-up through phone calls and emails to provide additional information when further information was needed for the study.

Phase 2: Transcription of School Leader Stories and Participant Review

The second phase in the process included having the audio recordings from the school leader interviews professionally transcribed. I used an online professional service (Rev.com) to convert audio recordings to text. After receiving the transcripts, I engaged in a three-reads process to check transcripts for errors. The transcripts and restoried participant narratives were then sent to the participants prior to the second interview to assess the accuracy of their stories and allow for adjustments, modifications, or additions where necessary.

Phase 3: Coding and Analysis

This phase consisted of three iterations of coding to find emerging themes in the participant narratives. The process included first cycle and two iterations of second cycle coding methods to analyze participant stories.

In the utilization of the first-cycle coding method, both Initial and Process Coding techniques were used to examine the school leader narratives for rituals, routines, and sensemaking for problem-solving toward improved educational outcomes. Additionally, pattern coding was used as an analytic strategy to connect specific patterns in the recoded datum to Clandinin and Connolly's (2000) three-dimensional space narrative structure. Second cycle coding took place to recode the data and magnitude coding was used to deepen insight for locating overall trends in the leader stories. This level of coding helped to better assess the contradictions and contrasting views within the leader stories regarding data use and their leadership decision making.

In the final analysis of the data, two different analytical approaches emerged to arrive at a broadened view of the data. In the first approach, leader stories were restoried and aligned to themes set forth by Clandinin and Connolly's (2000) three-dimensional narrative structure; interaction, continuity, and situation to view their experiences along a continuum. In the second approach, an open qualitative analysis was conducted and the leader stories were posited as data for interpretation.

Conceptual Framework

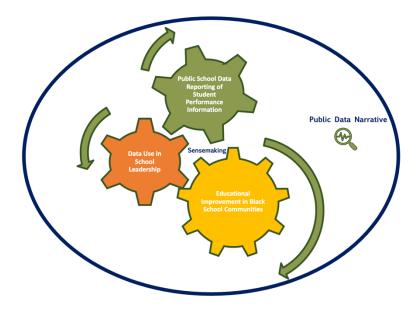
In the quest to find the perfect framework for my study, I realized a needed a framework that was inclusive of sensemaking, data use, and leadership concepts to frame my study. No one theory or framework was suitable, so I utilized multiple frameworks to understand the stories leaders told about how they used data in their practice to inform decisions toward educational improvement. Figure 1 captures the essence of how I used multiple lenses acting on each other to bring forth understanding in my study.

The interconnectedness of the overall concept is symbolic of an iterative process associated with how student performance information can influence school leader decision making when it comes to data use practices. Simultaneously, school leaders are making sense of school performance information and acting on their student outcomes to make decisions toward educational improvement.

The data use in school leadership cog in the system moves in a clockwise direction and represent the ways in which school leaders can sometimes use data in unintended ways when data literacy skills are adequately developed. State policy mandates hold school leaders accountable for the improvement of student performance information whereby proficiency and growth targets are prioritized indicators used to measure school quality. This type of prioritization around proficiency leveling can lead to narrowed views of data that limit the possibilities for school leaders to transform student performance data into instructional insight.

The cog representing the educational improvement in Black schools move in a direction that keeps unfavorable public discourse of persistent failure at the forefront of academic progress in the US. The oppositional motion between these two cogs represents contrast and tension between the two perspectives. The third cog, public school data reporting of student performance information continues in a forward direction with a focus on a status quo approach to accountability (monitoring) policy and legislation centered on inadequate thinking about students and their academic identities. The concept of school leader sensemaking offers a wedge to stop the directionality as it is currently in order to consider the possibility of an alternative way of teaching, thinking and connecting with students academically.

Figure 1Sensemaking Process



Significance of the Study

Considering the inextricable links between society and education, educators have the potential to help equip students with knowledge, tools, attitudes, dispositions, mind-sets, beliefs, and practices to create a world that is truly equitable for its citizenry (Milner, 2019). This study is intended to illuminate the important contributions sensemaking of data use practices towards educational improvement yield in Black student communities. Underneath the pervasive perceptual gap discourse in education lies a deeper-rooted call to action to dismantle bias and discriminatory practices that exist systemically in many educational institutions. Specifically, scholar and mathematician Cathy O'Neil (2016) warns of the pitfalls and weaponization of data in the education context associated with complex mathematical models like AYP (adequate yearly progress). Scholars in related fields like sociology and technology illuminate within their research the warnings and growing areas of concern associated with data use practices like the

automation of racial discrimination (Benjamin, 2019) and surveillance capitalism (Zuboff, 2018). Benjamin often shares her view on ways in which proprietary algorithms embedded in digital tools produce harmful outcomes. Similarly, Zuboff (2018) makes her views on the commodification of personal data for profits known in the fight for responsible use of personal data in our society. In education the proliferation of data use is more prevalent, and many professional decisions are made by school leaders who lack data literacy, an essential skill set, in their leadership toolkit. Strong assertions for educational leaders, specifically school leaders, to believe in data use, acquire training to develop data literacy skills, model data use, and set clear expectations for data use is important (Mandinach & Gummer, 2016). Now that schools are held accountable for student performance information, significant contributions to the field to better understand how school leaders make sense of data use practice move the equity fight forward.

In closing, if we want to commit to decision-making that leads to dismantling educational barriers and work to provide equity in education for all students, we have to be committed to fighting bias and discriminatory practices in our work. School leaders are held accountable for student learning outcomes and we use data to determine our effectiveness. Data alone does not provide enough insight into possible solutions for creating high-quality educational experiences for all students. Specifically, this narrative inquiry study aims to better understand school leaders' sensemaking of data use practice in Black school communities. Through the exploration of story, this study may help other school leaders reflect on their practice to navigate data use practices aligned with alternative frames to improve educational outcomes in their school communities. Through the collection of school leader stories from this study, we are afforded a windows and mirrors view (Bishop, 1990; Style, 1996) into the way data is used in a small sampling of Black school communities.

CHAPTER 2: LITERATURE REVIEW

The literature review highlights the most relevant research pertaining to school leadership sensemaking of data use practices and equity in elementary schools serving minoritized student populations. Specifically, this review is concerned with the scholarship related to understanding how school leaders use sensemaking to understand the link between data use practices and equitable student learning outcomes in Black school communities as an approach to school improvement. Few studies have focused on combining these ideals in the process of educational improvement (Datnow et al., 2017). By historically examining public school data discourse at a national level, this review takes into account the ways in which data has been used over time to substantiate public discourse about Black students and their academic identities. In most instances, data use practices in schools are incorporated to bring about improvement and solutions to an academic progress problem. However, in some situations data use practices can result in the maintenance of a status quo, the reinforcement of unjust barriers, and continued gap narrative discourse in education. Even well intended school improvement initiatives result in data use practices that further marginalize minoritized student populations, especially in predominantly Black school communities. Public school data reporting can be powerful in shifting the tides of improvement efforts, thus affecting the trajectory of improvement towards a high-quality, equitable education for all students.

A litany of information exists in the public domain relative to the educational progress of students attending public school in the US. In support of this progress, federal legislation and accountability policy was enacted to provide guidance and set expectations for the implementation of evidence-based practices in schools. This guidance is two-fold in that it shapes the context for schools regarding improvement and offer frames for profit and non-profit

entities to establish support models for districts and schools. Decision making across many organizations established for the sole purpose of supporting continuous improvement in schools, ensure alignment between their service offerings and improvement reform efforts. States are also required to submit plans on how they plan to enact policy and govern education within their jurisdiction. All of which shape and influence interaction within school communities. Public school data reporting contribute to decisions principals make and the role they play as sense makers. Elementary school leaders, specifically leaders serving in racially minoritized school communities, should concretize sensemaking of data use practices as a critical component of their leadership to disrupt the accountability ethos of the 21st century. In achieving this aim, school leaders will need to better understand sensemaking as a process necessary to overcome the ambiguity of public school narratives in education, be able to discern data use practices within their school communities, and effectively link data use practices with equitable student learning outcomes.

National Public School Data Discourse in Education

For decades, national education policy and the evolution of accountability has been shaped by inherent discriminatory practices and mandated federal legislation intended to solve issues of equality and equity for all students. In the fight to achieve equality in education, resulting from the landmark decision from Brown v. Board of Education, the Coleman Report formally titled Equality of Educational Opportunity, was commissioned to provide insight into the existing inequalities in education among White and Black education spaces (Coleman et al., 1966). For example, this report was one of the first in modern education times to use data to produce a narrative shaping public discourse about disparities in educational outcomes for minoritized students (Horsford et al., 2019). Specifically, it provided data about Black students

as a subgroup demonstrating a gap between them and their White counterparts. Although the Coleman Report (1966) brought forth a plethora of education data it failed to address how educators and education institutions might effectively arrive at solutions to ensure all students were provided with an equitable and quality education. Instead, this report shifted the focus of improvement efforts from increased equality for educational access, which required a commitment to dismantle systemic bias and racism embedded within the established institution of education in this country, to a focus on family background as the defining predictor of academic achievement for Black students.

Historical Public Discourse About Black Students

Drawing from Anderson (2004), Carter (2013), and Ladson-Billings (2006), it is clear from a historical perspective that a moral imperative to consistently provide a high-quality education for Black students at a national level has been a struggle. Despite centuries of evidence validating the cultural and intellectual competence of Black people to achieve at high levels against all odds, hegemonic educational systems and institutions have not effectively made the shift in Black school communities.

In retrospect, some sixty plus years later, the landmark court decision, Brown v. Board of Education missed the mark aimed to dismantle the consequences of racism and schooling of Black youth (Warren, 2017). The results of this national public discourse placed prior influential research examining educational inputs such as, access to equal resources for educating Black students, at the margins as a viable strategy towards educational progress for Black students. If nothing else the Brown decision inaugurated many new challenges for the education of Black people in the United States (Warren, 2017). Consequently, the results of the Coleman Report shifted the focus from providing equal resources, an essential input factor to attain better results

in Black school communities, to family background, an external factor, as the predictor of student academic outcomes. Prior to the Coleman Report, scholar and educational historian James Anderson (2004) provided significant insight into a clear example of data use prior to establishing such a concept in education, illustrating Black student academic progress from the late 1800s to the 1930s. His research offered a more informed perspective than the more popular dominant discourse in education of those times. Contextually, this period was marked by notable achievements within the Black community, one being the greatest number of Blacks elected to political office in the history of the country, thus providing for major progress in black school communities. Particularly for Blacks in the South, education was the great equalizer and many committed to the expansion of education opportunity for Black children. Anderson (2004) produced pioneering scholarship that provided a truer picture of educational progress and the economic costs endured relative to the education debt for Black children in the US.

Offering a counter to the deficit gap narrative discourse, Blacks in the South overcame the unfavorable comparisons and negative public discourse of difference spewed by their White counterparts. The first of such feats Anderson (2004) detailed was the literacy gap (1800s) between Blacks and Whites. Black communities were forbidden to become literate and this was sanctioned by law. Following the closing of the literacy gap, Blacks successfully closed the school attendance gap (1900s) with minimal support. Local Black laborers, farmers and external philanthropic entities help to fund and maintain support for Black school buildings erected all over southern states. Schools were majorly funded from within the Black communities' and these gaps continued to close and reappear to form new gaps. Like the preceding gaps, the closing of the high school completion gap also proved victorious in the fight for equality in education despite egregious White resistance. Blacks put forth paramount effort and sacrifice to sustain the

progress of education in their communities. Critical to note, in order for contemporary families and students of color to appreciate and have confidence in their cultural and intellectual competence, it is important for them to understand that the current test score gap is neither the first nor last achievement gap standing between them and their full equality (Anderson, 2004). Just a few years later after the Anderson (2004) publication, Ladson-Billings (2006) addressed educators at a national conference and argued for a similar stance against the perpetual gap narrative discourse by more accurately positing this national travesty as deliberate acts historically thrust upon minoritized communities of color as an education debt.

National public school data reporting, education policy and student subgroup reporting all influence rhetoric in education at large and shape the way Black students and other minoritized student communities experience schooling in the US. This influential public discourse spill over into the way organizations and institutions structure themselves. In today's era of increased data collection and the commodification of such information for insight, a need for sensemaking of data use practices become even more critical. Accountability policy intended to benefit and reinforce legislation, can be interpreted and implemented in harmful ways and become a detriment toward the original policy intentions. This point questions whether or not as an education collective, are we truly aimed at the appropriate targets to ensure a quality education for all? If we have neglected and carried on about the business of education for generations amassing more debt by the continued marginalization of specific groups of people, especially Black youth, at what point do we question educator instructional and leadership practices. Normalizing standardized summative assessments as a sole information source for student academic progress to improve outcomes is an ineffective practice. Racialized comparisons of individuals ignore the fundamental inequalities that have and continue to produce the very racial

achievement gap that is at the forefront of today's educators' and policy makers' agenda (Anderson, 2004). An alternative would be to focus the attention of educators on data use practices that track student learning outcomes back to unfinished learning (Daro, McCallum, and Zimba, 2012), that is the instruction educators did not teach and the learning students did not acquire.

School Leadership and Teacher Sensemaking of Data Use Practice

School leaders are responsible for interpreting accountability policy and enacting coherent plans that form a connector between policy demands and their school community needs. As an education collective, we need to know more about how school leaders see themselves as change agents for data use practices in their schools. School leaders' understanding of student performance information relative to their goal targets, lead to the facilitation and creation of routinized processes for data use in their schools. These processes help shape the organizational routines that include expectations for the ways in which data will be used in practice (Coburn and Turner, 2012). School leaders' internalization of data use practice serves as a strong indicator of how sensemaking is used to take action and make decisions regarding student learning outcomes. It is critical for school leaders to examine data use practices in their school communities.

Many scholars consider sensemaking a worthy theoretical construct that affords understanding in how and why people arrive at their outcomes (Smerek, 2011; Sumbera, 2014; Weick et. al, 2005). It is of great importance for researchers and policy makers to understand how school leaders operationalize data use practices in their school in coherence with educational policy mandates (Louis and Robinson, 2012). Data use practices matter and this

study intends to add qualitatively to the field and contribute significantly to the literature by acknowledging the unique needs within Black school communities.

Minimal empirical studies have been done to understand how school leaders perform as sense makers (Ganon-Shilon & Schechter, 2016). Sensemaking processes encompass cognitive behaviors associated with internal thoughts and the interworking of the mind. Sensemaking is ongoing and continuous (Maitlis & Christianson, 2014) and also characterized as holistic when creation, interpretation, and enactment are all examined within a single study (Weick, 2009). Studies that undergo sensemaking holistically are rare, however several studies within the last decade have used sensemaking theory to inform their research ethos. Datnow et al. (2012) conducted a qualitative case study across four public high schools and found sensemaking and co-construction to be useful in their understanding of the ways teachers interpret data-driven decision-making policy in their local context. This study highlighted the multi-faceted perspectives and complexities associated with reform interpretation and enactment at the teacher level. The study found teachers' cognitive frameworks for data use were supported by the system and leadership levels but were more significantly influenced by their departmental peers and colleagues. Although there was variance in how teachers made decisions across the four schools, the researchers provided pivotal insight into future implications to include perceptions of students. This novel idea to provide students with a voice in the data conversations promotes greater ownership of learning to collectively produce better outcomes.

In a similar study, Louis & Robinson (2012) drew on sensemaking to understand school leaders as mediating agents between external academic mandates and internal academic goals.

This study extends the sensemaking theoretical frame to include crafting coherence (Honig & Hatch, 2004), and instructional leadership (Hallinger, 2005; Marzano et. al., 2005; O'Day, 2002).

There is ample evidence that shows strong instructional leadership in schools lead to improved student performance (Hallinger & Heck, 2005; Marzano et. al, 2005; Robinson et. al, 2008). Hallinger (2005) defines leadership work focused on the improvement of teaching and learning as instructional leadership. This essentially substantiates instructional practice significantly as a unit of analysis to achieve improved learning outcomes. For school leadership in minoritized school communities, especially in Black school communities, this must be the critical focus alongside sensemaking of data use practices. Contextually, this study conducted during the NCLB legislation, was a sub-study of a large-scale study whereby survey data led to further investigation of school leader narratives. Collection of school leader narratives via in-depth interviews linking school leader internalization of state and district accountability policy to instructional leadership behaviors. The findings in this study is a good illustration of effective data use practices toward equitable student learning outcomes. As this case clearly demonstrates, highly competent instructional leaders use sensemaking of student performance information to craft coherence between external mandates and their internal academic goals to improve instructional practice, thus resulting in better student learning outcomes.

Bertrand and Marsh (2015) applied sensemaking and attribution theory to understand the causes teachers assign student learning outcomes when interacting with and analyzing student performance information for special education and English Language Learners (ELLs). Findings revealed teachers' sensemaking is further complicated by their values and belief systems.

Teacher narrative data collected focused on their explanations and sensemaking of root causes they attributed to the student learning outcome information. The narratives were categorized into mental models and four distinct categories for causes of student outcomes were (a) instruction, (b) student understanding, (c) nature of the test, and (d) student characteristics.

However, the study fails to consider that three of the four categories for mental models place the onus on the student to yield better performance results. The way the data was used to show that teachers pointed back to instruction 40% of the time, masked the deficit narratives held by the majority of the teachers when the other three categories combined- all based on student characteristics- account for nearly 60% of the root causes for the student performance outcomes. Data use practices will have to be embraced as a reform strategy to change organizational practices to improve student learning outcomes and to bring awareness to bias in our practice.

In examining the evolution of teacher data use over time, some scholars believe combing the theories of sensemaking and data use with the everyday practice of teaching to be essential for teacher sensemaking and data use (Riehl et al., 2018 as cited in Barnes & Fives, 2018). In their research case study, teacher use of data situated in their classrooms was found to help inform teacher practice that leads to effective ways to teach. As a result of the study, the researchers arrived at three ways in which teachers use data in their practice; (a) data use for analysis, (b) data use for learning, and (c) data use for sensemaking (Riehl et. al., 2018). These frames for data use add depth for understanding the multi-faceted, complex decision-making teachers make in their everyday practice.

Data use for analysis has a specific focus on what district administrators, school leaders and teachers do to oversee classrooms and schools. This type of data use is associated with an examination of aggregate patterns and trends found in the data to make improvement decisions. These decisions primarily attend to resource allocation, problem solving or any other decisions where choices are made to support the student learning environment. Data use for learning focuses on how teachers notice, interpret and construct implications from data for decision making. This type of data use is associated with close examinations of student work, inquiry

models, learning communities, and any other evidence that bring what students' produce and accomplish to the forefront as a result of what is being taught. Data use for sensemaking focuses on the incorporation of what is known about actors in a school community into daily teacher practice to make decisions around the improvement of instructional practice. This type of data use is associated with the examination of multiple data points to better understand root causes on a specific issue and as a result engage in ongoing decision making to redesign, eliminate, or create an organizational change for instructional improvement.

Instructional Practice and Data Use

Let us now consider examining a few mainstream research narratives overtime to argue convincingly for data use practices toward equitable instructional practice. A useful study by Leslie and Recht (1998) to understand the effects of prior knowledge on readers, also known as the Baseball Study, disrupt conventional discourse about reading comprehension and student access to complex text. The study examined reading behaviors of junior high school students with variance in their prior knowledge about baseball. Findings from the study acknowledge the power of prior knowledge to increase comprehension and access to text. Contrary to popular belief about reading comprehension and access, students with average reading ability and indepth knowledge about baseball performed just as well as students with high reading ability and very little knowledge about baseball. As evidenced in this case, using reading performance information coupled with prior knowledge proved to be a stronger indicator of reading ability.

Another significant study providing an alternative for why school leaders should closely examine data use practices is the 2018 study conducted by The New Teacher Project (TNTP). In their investigation into why so many students were graduating from high school unprepared to meet their goals for college and career, The Opportunity Myth publication challenged public gap

discourse narratives regarding student academic progress. The findings highlighted grade-level appropriate assignments, strong instruction, deep engagement and teacher high-expectations as the four key resources to improve student achievement and close learning gaps. Students spent more than half of their school year, approximately six months, focused on assignments that were not grade-level appropriate and instruction that was not intellectually challenging. Additionally, data from teachers surveyed in the study illuminated the influence belief systems have on student achievement with 82% of the teachers supporting standards for college readiness, but less than only 44% of the teachers in the study actually expected their students could meet the rigorous demands required by the standards. A clear indicator of low expectations held by educators in this study.

Lastly, the recent court ruling in the student-led Detroit literacy case, Gary B. v. Whitmer (Kim, 2020) lifted student voice in their advocacy for improved academic conditions to move improvement efforts forward in their school communities In this case, students led the charge to change their educational outcomes for the better. The students made their case against the state of Michigan and set out to prove their schooling experiences and conditions denying their access to literacy as a violation of their 14th amendment right. The state argued the responsibility was misplaced and that the district system leaders were the more appropriate responsible party. This response posed a contradiction with the current Every Student Succeeds Act requiring state collaboration and communication between local education agencies to support policy implementation. The court ruled in favor of the students in that they do have a constitutional right to basic education; thus, holding the state of Michigan responsible for ensuring evidence-based literacy instruction with a foundation in early phonics in school settings conducive to learning is a basic right afforded by the protections of the 14th amendment of the US constitution.

Overall, these cases support the view that school leaders' sensemaking of data use practices and equity are of critical significance for improving student learning outcomes, especially in Black school communities. These examples are not exhaustive; however, they signify a call for school leaders to think deeper about accountability policy, the public narrative around school accountability and student achievement. Toward a more equitable agenda focused on improved instructional practice, data use practice in Black school communities must go beyond monitoring (accountability) if we desire to achieve better results and ultimately settle the education debt. Hill (2020) asserts rigorous empirical research does not support educators analyzing student performance information as a practice to improve learning outcomes. Although Hill recommends retooling teacher collaborative time provided for a more informed agenda to support teachers in improving their instruction, she fails to provide a viable solution to what this shift would look like in practice. Moreover, as we move further into a more technologically savvy society and commodification of data use increases, school leaders will need to be prepared to lead teaching and learning efforts more efficiently and effectively.

Equity and Data Use

To propose a renewed look at data use practices we cannot exist dismiss attending to equity as an underlying cause in the pursuit of education justice. The persistent failure of reform efforts in American schools has tended to exacerbate inequalities rather than diminish them (Bryk et. al, 2010). Further extending the sentiments in the aforementioned statement, equity is a move towards the inclusiveness of the voices of those normally at the margins for decision-making and direction. Blankstein and Noguera (2016) metaphorically conceptualizes equity as a tide that lifts all boats amidst troubled waters. The authors argue excellence and equity are not at odds and that a high level of excellence is actually attained through the pursuit of equity. Equity

is the commitment to ensure all students, regardless of identity, receive what is needed most to succeed (Noguera, 2001; Blankstein & Noguera, 2016). Data use practices support aims in achieving equity goals and reciprocally equity moves data use practices forward. The significance of qualitative research focused on sensemaking of data use practices toward equitable student learning outcomes advance education in Black school communities.

School leaders who have subscribed to a "big narrative" of accountability- believes the purpose of leadership is to establish schools where students from diverse backgrounds succeedwork relentlessly to shape and influence their school communities even when the "small narrative" of summative assessments offer a distorted view of progress (Louis & Robinson, 2012). Despite "big" and "small" narratives about using student performance informative for accountability, when school leaders are able to make sense of policy/practices, ensure external demands and internal goals align, and leaders are able to keep the focus of their work as instructional leaders on teaching and learning, especially in Black school communities, all students are positioned to succeed.

Herold draws on the expertise of UCLA professor, Louis Gomez to help readers understand our current approach to using student performance information for monitoring (accountability) does not help us improve (Herold, 2018). Specifically, Herold's concern in regards to the current K-12 landscape is that the large focus on an accountability agenda significantly stifles progress to improve accountability outcomes. Instead of enacting deficit-oriented agendas for accountability, we need an accountability policy that monitors for improved instructional practice to move school communities forward. After decades of accountability policy legislation and the ever-growing amount of educational research contributing to the

literature, efforts to continuously improve remain hopeful for the advancement of education in K-12 spaces.

Conclusion

In summary, the current status of academic progress in K-12 education, accountability policy and standardized assessments continue to define the academic progress made as a nation thus, shaping and influencing the academic climate in our schools. The National Center for Education Statistics (NCES) keeps a running record of this progress using a small percentage of students across our nation's schools to highlight key performance indicators of academic progress that drives the reform focus in many of our schools. When a single view of student performance information is used to shape the dominant public discourse for academic achievement therein lies a serious problem. We need research to help usher efforts in a different direction to shed light on specific solutions to this problem. By rethinking leadership behaviors that influence sensemaking of data use practices linked to equitable practices there is hope for improved educational outcomes in our K-12 schools.

CHAPTER 3: METHODOLOGY

Overview

Research has shown the principal role to be significant for leading improvement efforts in schools. Although school leadership priorities vary across demographics, one of the most important aspects of leadership, agnostic of demographics is improving or sustaining high performance as measured by educational outcomes for students. Many argue whether or not principal influence is directly associated with student performance outcomes (Hallinger et. al., 1996; Robinson, 2007; Witziers, et. al., 2003). Nonetheless, school leaders are often held accountable annually for the academic performance outcomes their students as measured by state, district and local education policy.

NCLB and ESSA have historically influenced how student performance information is often centered at the forefront for determining school effectiveness. For many school districts, data resulting from annual state sanctioned summative assessments serve as the most critical indicator of student performance for school progress and overall effectiveness. This knowledge resulting from student performance information often ignores inputs like instructional practice that is directly associated with annual results (an output) based on a summative assessment. Improving student performance outcomes is arguably a priority for most school leaders, yet many leaders, specifically those serving minoritized student populations, have to grapple with a number of factors existing within their school communities extending beyond instructional practice improvements needed in the classroom.

Unfortunately, the single narrative provided by summative assessment data doesn't go far enough to provide insight or direction for meaningful instructional practice change. Therefore, having multiple data points become more and more significant for school leaders to make

decisions that inform their leadership practice and the decisions they make to improve student performance outcomes.

The purpose of this study is to better understand the ways in which school leaders draw on, interact with, and make decisions around data use practices in their school communities. A narrative inquiry approach gives us a research methodology for the study of people's experiences (Clandinin, 2006). In order to increase our understanding of how school leaders make sense of data use practices to improve educational outcomes, this study aims to provide greater insight into their experiences in predominantly Black school communities. The main research questions guiding this study are:

How do the stories of elementary school leaders serving in predominantly Black school communities explain how data is used to make decisions toward educational improvement?

This study also sought to answer the following sub-questions:

- 1. What stories do elementary school leaders tell about how they use data to inform their leadership practice?
- 2. What contextual factors influence school leader interactions with data?

In this chapter, I provide an overview of the methods for this narrative inquiry. This chapter also provides descriptive information about the school district, a narrative for each school, and information about the school leader participants. An explanation of participant selection, data collection, analysis and reporting procedures is discussed. This is followed by a description of credibility, positionality and concludes with study limitations.

Methodology

Narrative inquiry focuses on the experiences or stories people tell about their lives. Clandinin (2006) contends a good narrative illustrates the multi-faceted dimensions, complexities, and challenges people face into the purview of the reader. For these reasons, I choose to use a narrative inquiry approach to better understand the stories school leaders tell about data use practices in Black schools. Rooney et al. (2016) conclude that storytelling uses a valuable methodology for exploring consumer relationships as it allows the researcher to trace the evolution and development of the interaction by analyzing the story topologies associated with each relationship phase. More importantly, this methodology proves beneficial for understanding school leaders' sense-making of data, data utilization and how they act on data towards a target to improve instructional practice which ultimately improve academic achievement outcomes.

Professionally, school sites are considered natural settings for principals shaped by cultural and behavioral norms often influenced by social constructions of race, education policy and socioeconomics. In particular, this study aimed to understand the lived experience of principals in their professional settings, their sensemaking of student performance information, processes on how they utilize and act on student performance information toward improved educational outcomes. Through the stories told about their experiences with student performance information, this study will contribute to the cannon of knowledge in education for practitioners, policy makers and scholars. The potentiality of narrative stories as a forum affords tensions that arise when difficulties implementing policies and practice impact the lives of admin, teachers, and students in minoritized student communities.

This study sought to have conversations with school leaders to bring about insight for how data use practices informed their decision making toward educational improvement. Glesne (2016) asserts engagement through inquiry can lead to the interpretation and sharing of others' perspectives. This form of research is also a way for the researcher to exercise reflexivity, contribute to the multiplicity of voices in the literature, and expand the plurality of knowing. I also felt the narrative inquiry approach would be instrumental in helping to answer my research questions. My research questions were designed to bring forth perspectives through conversations with school leaders to explore the phenomenon of data use practice more deeply.

Conceptual Framework

The conceptual framework guiding this study emerged from the review of literature on data use practices and sensemaking of leadership practices toward educational improvement around Black schooling experiences. Maxwell (2008) assets qualitative research requires a broader, less restrictive concept of design. Thus, the conceptual framework designed for this study consisted of various components within a school context and the ways in which these components may affect or may be affected by each other. Through the utility and interaction of multiple wheel cogs, this abstract conceptual visual offered a lens in which the dimensions of leadership practice associated with public school data reporting of student performance information, data use in school leadership, and educational improvement in Black schools could be understood.

The connection between the concepts and theoretical frames in the study are grounded in a representation of what is happening in K-12 schools when school leaders draw on or interact with student performance information to improve educational outcomes. Relmer and Ryzin (2011) contends that in research social phenomena are complex and we cannot study everything

all at the same time. For this reason, there are many ways in which sensemaking of data use to make decisions can occur. School leaders' internalization of data use practice serves as a strong indicator of how sensemaking is used to take action and make decisions regarding student learning outcomes. Many scholars consider sensemaking a worthy theoretical construct that affords understanding in how and why people arrive at their outcomes (Smerek, 201; Sumbera, 2014; Weick et. Al, 2005). Therefore, the focus of this study is to understand specifically how sensemaking of data use practices is carried out in predominantly Black school communities.

The interconnectedness of the overall concept is symbolic of an iterative process associated with how student performance information can influence school leader decision making when it comes to data use practices. Simultaneously, school leaders are making sense of school performance information and acting on their student outcomes to make decisions toward educational improvement. Through this lens and perspective, visualization of the study became apparent.

The data use in school leadership cog in the system moves in a clockwise direction and represent the ways in which school leaders can sometimes use data in unintended ways when data literacy skills are adequately developed. State policy mandates hold school leaders accountable for the improvement of student performance information whereby proficiency and growth targets are prioritized indicators used to measure school quality. This type of prioritization around proficiency leveling can lead to narrowed views of data that limit the possibilities for school leaders to transform student performance data into instructional insight. With this in mind, the cog that represents educational improvement in Black schools move in a direction that forwards the current public data discourse of persistent failure. The oppositional motion between these two cogs represents a contrast in perspective. That is to say, tension arises

between the data use in school leadership cog and the educational improvement in Black schools' cogs and often times fail to produce favorable academic outcomes toward improvement efforts. The third cog, public school data reporting of student performance information continues in a forward direction with a focus on adhering to accountability policy and legislation centering proficiency leveling and growth targets.

The concept of school leader sensemaking enters the process as a wedge to disrupt the directionality of all the cogs to bring institutionalized ways of understanding accountability to a halt. Alternative ways of holding schools accountable will need to ensure instructional practice is centered and preconstructed data that promote inadequate thinking about student skill development is non-existent.

Research Context

This study started during the 2021 spring semester and ended in the early Fall of 2021. Restrictions mandated by the national COVID-19 pandemic prohibited in person contact with school leaders and all interviews took place in a secured virtual space. Secured virtual rooms were setup and each school leader agreed to participate in two separate, semi-structured 60-minute interviews. A purposive sample of school leaders were selected for the study. The participants had experience in other leadership roles in schools prior to their principal appointments. The participants were all in the third year of their principal assignment. These participants all agreed to implement the new academic plan for improvement within the district which included new literacy and math curriculum resources, progress monitoring tools, professional development training, and ongoing district coaching to support their curriculum implementation efforts. The three schools were all designated as model schools for their implementation efforts. These factors were critical and allowed for consistency in materials,

progress monitoring tools, and professional development resources across all three schools. The schools were geographically located in the midwestern region of the United States of America and served predominantly Black student populations.

Background Context of District and School Communities

The Universe school district is centrally located in the Midwest region of the United States and is considered a medium-sized (based on the student population) public school district. The district has approximately 53,000 students enrolled, 82% of whom were considered Black by federal standards. Like students in the state, students in this district took an annual state assessment and their performance scores are used to determine their school's ranking in the following categories: English Language Arts (ELA) growth, Math growth, ELA proficiency, Math proficiency, assessment participation, school quality and student success.

Historically, the district's student performance information has been indicative of low-performance. Specifically, the K-8 schools scored well below the state proficiency targets for the 2018-2019 academic school year in both reading and math. For example, the 2018-19 state proficiency goal target for ELA was 60% and only 12.6% of the students in the district scored at or above the proficient level for students in grades three through seven. Similarly, the 2018-19 state proficiency goal target for Mathematics was 47.55% and only 9% of the students in the district scored at or above the proficiency level for students in grades three through seven. As a result, more than half the schools within this district were in jeopardy of closing. In response, the district leadership team focused on a continuous improvement plan to provided targeted professional development around the internalization of reading and math content standards. Additionally, the Universe school district adopted highly-aligned standards-based K-12 curriculum materials for implementation over the next 5 years. The state approved their school

improvement model and after two years the district established an internal system to rate the quality of implementation of their improvement plan. Schools within the district that adhered closely with the implementation plan were designated as model schools.

School leaders selected for this study served in their current leadership roles for at least three years and more than 80% of their student population were identified as Black or African-American. The schools in the study also had success with improving the student performance outcomes for at least two consecutive years. Table 1 provides demographic data and Table 2 provides educational outcomes information for all the schools selected to participate in this study.

Table 1School Profile Information and Select Demographic Data

School	School Leader	Grades Served	# of Students	Race Demographics	% Free-Reduced Lunch Eligible
Constellation Prep Elementary (CPE)	Principal Jennings	K-5	525	0% American Indian 0% Asian 98% Black 0.19% Hispanic 0.19% Pacific Islander 0.76% White 0.76% Two or more Races	88.9%
Blue Moon Prep Elementary (BPE)	Principal Claiborne	K-8	361	0.27% American Indian 0% Asian 99.1% Black 0% Hispanic 0% Pacific Islander 0.55% White 0% Two or more Races	88.6%
Gibbons Prep Elementary (GPE)	Principal Boatwright	K-8	350	0% American Indian 0% Asian 100% Black 0% Hispanic 0% Pacific Islander 0% White 0% Two or more Races	72%

 Table 2

 2018-2019 Student Performance Information from State Accountability Department by School

	Constellation Prep Elementary (CPE)	Blue Moon Prep Elementary (BPE)	Gibbons Prep Elementary (GPE)
% of Students Meeting ELA Proficiency Target	91.6%	10.6%	51.4%
At or Above State Average (60.0%)	YES	NO	NO
% of Students Meeting ELA Growth Target	86.3%	11.9%	55.2%
Table 2 (cont'd)			
At or Above State Average (57.2%)	YES	NO	NO
% of Students Meeting Math Proficiency Target	100%	5.2%	50.4%
At or Above State Average (47.5%)	YES	NO	YES
% of Students Meeting Math Growth	100%	6.3%	45.2%
At or Above State Average (50.7%)	YES	NO	NO

Participants

Participant selection was purposive and the school leaders participated in extensive professional development to lead standards-based school reform in order to implement highly-aligned standards-based ELA and Math curriculum in their respective schools. The school leaders selected for this study had at least 3 years of leadership experience serving in a predominantly Black school community. Table 3 provides demographic information for each school leader participant. Pseudonyms were created to protect the identity of the school leader participants in the study.

Table 3
School Leader Demographic Information

Participant Name	Age	Gender	Race/Ethnicity	Years in Role
Principal Jennings	54	Female	White, Caucasian	4

Table 3 (cont'd)

Principal Claiborne	46	Female	Black/ African-American	3	
Principal Boatwright	48	Male	Black/ African-American	4	

Research Methods

Data Collection

Within this study, the interviews were semi-structured in design to allow for conversational dialogue to capture leader stories. The participants answered a set of questions at the beginning of the interview to share their personal and professional demographic information for context around their identities, past schooling experiences, and data literacy professional development. Participants were prompted to recall how they perceived and made decisions based on student performance information at various stages along their leadership journey. Participants shared how they made sense of data, how they utilized data, how they acted on the data during the span of their career and the result of their efforts. Multiple methods used by the researcher in data collection help to gain an articulate, comprehensive view of the phenomenon (Cope, 2014). Further open-ended questions prompted leaders to provide insight into how their narratives shaped their leadership practice and helped them to demonstrate success with data use in Black school communities.

Table 4

Data Collection Timeline and Analytic Approach

Phase Description	Timeline	Analytic Approach	
Phase 1: Participant Interviews	March 2021- April 2021	Semi-structured with focus on sensemaking, data use and instructional practice	
Phase 2: Transcription of Leader Narratives & Participant Narrative Reviews	April 2021- May 2021	Professional transcription and Member Checking	
Phase 3: Analysis & Coding	April 2021- August 2021	Peer Debriefing, Eclectic and Magnitude Coding	

For this narrative study, the research methods were conducted in phases and a story structure was designed to frame the leader stories. The phases included (a) semi-structured interviews with school leaders, (b) transcription and re-storying of school leader stories, and (c) stories reviewed by participants for accuracy.

Phase 1: School Leader Interviews. The first stage in the process included an interview with the participant in a virtual setting. Due to the COVID-19 pandemic restrictions were set by both the university and their school district, in-person interactions were prohibited. The school leaders participated in two virtual interviews that averaged 75 minutes during the Spring 2021 semester. However, due to school breaks and an abrupt change in the assessment schedule for the district, data collection continued over the summer and through early Fall 2021. Additionally, I conducted follow-up phone calls and sent emails to communicate with the participants when further information was needed for the study.

Phase 2: Transcription of School Leader Stories and Participant Review. The second phase in the process included having the audio recordings from the school leader interviews professionally transcribed. I used an online professional service (Rev.com) to convert audio recordings to text. After receiving the transcripts, I engaged in a three-reads process to check for errors. The transcripts and restoried participant narratives were then sent to the participants prior to the second interview to assess the accuracy of their stories and allow for adjustments, modifications, or additions where necessary. All the participant interviews were electronically recorded and transcribed and stored on a secured external drive. I used three distinct reading approaches to internalize and make sense of the transcribed leader stories prior to the coding of the data. The approach was intentionally sequenced and was conducted in the following order:

- 1. I conducted a close read of the text without making any annotations or notes.
- 2. I re-read the transcribed stories and made annotations in the margins of the text.
- 3. I read the transcripts again and charted similarities and differences across the leaders' stories.

This approach primed my thinking before I made a decision on how the data would be thematically coded and analyzed for the study.

Phase 3: Coding and Analysis. This phase consisted of three iterations of coding to find emerging themes in the participant narratives. The process included first cycle and two iterations of second cycle coding methods to analyze participant stories. After taking an extensive read of the transcribed leader stories, I conducted first-cycle and second-cycle coding methods for further analysis of their stories. Saldaña and Omasta (2016) contends that coding is one way of analyzing qualitative data and taking a pragmatic stance toward human inquiry in qualitative research offer a richer perspective. A perspective reflective of a way to better understand diverse patterns and complex meanings of life experiences when a researcher is well-versed in eclectic methods of investigation. In particular, I utilized a first-cycle coding method that integrated both Initial and Process Coding techniques (Bogdan & Biklen, 2007; Charzman, 2014; Corbin & Strauss, 2015) to examine the school leader narratives for rituals, routines, and sensemaking for problem-solving toward improved educational outcomes. Additionally, I used pattern coding as an analytic strategy to connect specific patterns in the recoded datum to Clandinin and Connolly's (2000) three-dimensional space narrative structure.

The three-dimensional space narrative structure imbued a frame for the school leader stories to be analyzed along a dimensional space continuum. With this approach, I was able to restory and analyze the participant stories for three main elements, which included interaction,

continuity, and situation. Clandinin and Connolly (2000) described these elements or spaces as continuums for retelling a story. Interaction included personal and social experiences to consider both the internal and external points of view from the participant stories. Continuity included the past, present and future feelings and experiences within the leader story narratives. The situational aspect of the continuum focused on the setting and spatial boundaries placed on the school leaders in their work as presented in their stories. Lastly, I recoded the restoried data using magnitude coding as a second iteration of the second-cycle coding technique to investigate overall trends in the leader stories. This technique also helped to account for the identification of contradictions and contrasting points of view around data use practices in the leader stories.

Data Analysis

This study used a narrative inquiry approach aimed at understanding and making meaning of experience through conversation and dialogue. School leader interviews were the primary data sources in this qualitative study so that we may broaden our ways of knowing how data use practices in predominantly Black school communities forward continuous improvement efforts. Young and Kim (2010) uphold that when educators use data to inform their instructional decisions, such data use practices correlate positively with teaching and learning. Thus, the stories of school leaders are privileged and can be analyzed to connect back to educational outcomes. Furthermore, the analysis of school leader narratives provided insight beyond what student performance information suggested about a schools' progress to include what school leader intentions, emotions and experiences (Gibbs, 2007).

In the analysis of the data, two different approaches helped to arrive at a broadened view of the data. In the first approach, leader stories were restoried and aligned to themes set forth by Clandinin and Connolly's (2000) three-dimensional narrative structure; interaction, continuity,

and situation to view their experiences along a continuum. In the second approach, an open qualitative analysis was conducted and the leader stories were posited as data for interpretation.

Ethical Considerations

Several precautions were enacted to ensure the ethics of this study. Each study participant signed an informed consent form, a detailed explanation of the study's aim and provided with a digital copy of the consent letter for their records prior to their participation in the study (See Appendix B).

Consent and Confidentiality

To ensure clarity and alignment with research ethics, the researcher provided a verbal overview of the consent form and enabled the electronic consent option for the participants to give consent prior to the zoom interview recording. This additional step required all participants to click on the consent button before proceeding with the interviews. The study participants were also advised of their rights to withdraw from the study at any time without justification or cause.

The participant names, school locations, and information that may be deemed identifiable was removed to protect the anonymity of the study participants. Participants were also made aware of how the information would be stored at the conclusion of this study. To ensure the information collected was secured, data was stored on a password protected device and a backed up on an encrypted external hard drive at the conclusion of this study.

Risks and Benefits

There were minimal risks associated with this study. However, in any research study, the possibility of risk can occur. The study does require participants to recollect stories from their past leadership experiences and this may trigger emotional distress or feelings associated with their leadership and personal schooling experiences. Participants were encouraged to use the

digital tools within the zoom room to hide their video and or take whatever time was necessary to gather their thoughts during moments of discomfort during the interview.

In spite of the risks associated with any research study, the participants were likely to potentially benefit from study. The study provided a safe space for participants to be reflective of their leadership experience and make sense of the decisions made to improve educational outcomes in their school communities.

Credibility

It is widely known among scholars that in conducting qualitative studies, researchers must demonstrate their studies are credible (Creswell & Miller, 2000). This means the credibility, or validity of the study must accurately account for and represent participants' realities of the social phenomena under study (Schwandt, 1997). This study sought to understand the perspective of the participants and their context to better understand sense-making of data use practice in their school communities. As a researcher, I intended to ensure credibility of this qualitative study by conducting research designed to account for multiple lenses to establish validity. By employing best practice measures for qualitative research such as journaling and taking field notes to examine researcher bias.

As I conducted this study, I found solace in the reflective moments I encountered about my own experience allowing deficit thinking to infiltrate my leadership approach in the past.

Those moments affirmed my growth and brought clarity to my personal why for conducting research that advocates for alternative approaches to data use to improve educational outcomes. Additionally, as part of my research design, participants also took part in the research validation process by providing feedback on their restoried narratives to confirm an accurate account of their stories. Common to the reporting of qualitative research, rich quotes from the participants

help to establish confirmability, which also contributed to validity (Cope, 2014). My findings are presented in the next chapter and the participant stories served as the primary data source that framed the emergent themes reflected in this study.

Member Checking. To enhance credibility and trustworthiness, member checking allowed for participants to make edits and thoroughly review the data after it was transcribed for accuracy. Each participant received a copy of their interviews along with the researcher interpretations. These changes were ongoing throughout the process of the data collection and analysis phases of the study. I also informal discussions with the study participants to further clarify what was meant by aspects of their narratives to deepen my understanding as a researcher.

Peer Debriefers. To further substantiate the credibility of my study findings, I called on three of my peers to examine the transcripts and my emergent findings. My peers were recent doctoral students and fellow peers from a special interest group that focuses on K-12 educational leadership, school improvement, and data use in education. This process was ongoing throughout the data collection and analysis phases of the study. Their feedback was extremely valuable and it allowed me to view the findings through a diversity of lenses to further ensure the study was credible.

Researcher Positionality

Transparency in positionality continues to be an important aspect in qualitative research practice and affords space for the researcher to provide both reflective and contextual frames that shape their epistemological ways of knowing and relative interconnectedness toward the study.

As a former education practitioner with over twenty years' experience in K-12 school communities, I enter this research with my own perspective of data use practices as both a

teacher and school leader. As a professional educator, I spent more than fifty percent of my time serving in leadership positions in predominantly Black school communities. Through my personal and professional experiences, I have always loved, owned, and valued my blackness in education spaces and viewed my students as an extension of myself. It has always been important for me to honor the funds of knowledge present in the school communities I served and to center equitable instructional practices through effective coaching in my role as school leader.

Entering this study, I have been educated in public schools, taught in public schools, served in leadership positions in public and private schools and attended mostly public universities in my educational pursuits. It is also important to note that my early educational pursuits took place in predominantly Black school spaces and my later educational pursuits took place in predominantly White institutions. My personal experience in various educational spaces strengthened my ability to navigate racial, cultural, and social dynamics to appreciate diversity in perspective. Acknowledging my past leadership experience, I have a responsibility to suspend judgement and remain objective in this study to understand the viewpoints and perspectives of the school leaders who elect to participate in and share their insights about how they make sense of data use practices.

Prior to becoming a full-time doctoral student, I served as an Executive Director for an educational non-profit organization that designed and led a major professional development initiative in the same school district as the participants in this study. This experience helped to foster relationships with school leaders, gain insight into the local school context and gain access to conduct research in a familiar space. This study aimed to broaden my perspective of school

leader experiences and their sensemaking of data use practices toward educational improvement in Black schools.

Limitations

This study was designed to collect narratives from a small purposive sampling of school leaders. The study focused on the narratives of three current school leaders and the data collected was based on their leadership experiences and perspectives. Both participant sample size and participant perspectives, limit the generalizability of this study. Another limitation of the study was the inability to observe the participants in their normal professional setting. Due to national and institutional restrictions put in place as a result of the COVID-19 pandemic, this study had to be conducted in a virtual environment. This limitation took away the ability to observe the school leaders in their natural setting and how they interacted among their students, staff and families within their school communities.

Chapter 4: FINDINGS

The narrative inquiry study sought to understand elementary school leaders' sensemaking of their experiences with data use practices and professional decision making towards educational improvement in predominantly Black school communities. To further explore the ways school leaders, interact with data (i.e., student performance information) helps to understand their sensemaking and the connection to educational outcomes within their school communities. The goal of this research was to lift the voices of three elementary school leaders and their experiences using data for decision making to improve educational outcomes in their individual school communities. The stories told by these leaders helped to better understand how elementary school leaders in predominantly Black school communities navigate accountability policy and expectations for educational improvement set forth by their state education agencies and the leadership in their school districts. The rich description provided within these elementary school leader narratives reveal how school leaders make sense of data for decision making, the influence of data use on their instructional leadership, and the impact of their district context on data use within their individual school communities.

As stated in chapter one, data use practice in education is a concept used to describe the ways in which actors interact by using student performance and other forms of data in their work for educational improvement (Coburn & Turner, 2011). This concept, when put into practice, could potentially challenge and simultaneously crystallize ideas about educator use of student performance information to improve student achievement (Mausethagen et al., 2019). In this chapter, the participants selected to participate in this study all serve as school leaders in the same district with the same curriculum resources, progress monitoring tools and the same access to district coaching support for teachers. In particular, this school district is centrally located in

the Midwest and is considered a medium-sized public school district based on the student population and number of schools within the district. This district is the largest public school district within its state with approximately 53,000 students enrolled and 82% of the student population is Black. Historically, the district's public accountability data has resulted in performance ratings below the national average in both reading and math. Additionally, the K-8 schools perform well below the state average as measured by annual accountability reporting of student proficiency levels and performance growth targets. An annual state assessment is administered and student performance information is translated into scale scores used to determine a school's ranking in the following categories: English Language Arts (ELA) growth, Math growth, ELA proficiency, Math proficiency, assessment participation, school quality and student success. Approximately 50% of the schools within this district were in jeopardy of closing prior to the adoption of a state approved plan to serve as the district's school improvement model. The plan developed by the district's leadership team in collaboration with national school improvement experts and thought partners, focused on targeted professional development and the implementation of highly aligned K-12 curriculum materials in reading and math classes.

This chapter is divided into two sections. The first section provides an analysis of participant stories utilizing the Clandinin and Connelly (2000) three-dimensional space narrative structure. The restoried participant narratives reflect dimensional spaces as continuums to retell and broaden the view of their stories. The three main elements include interaction (leaders personal and social aspects of their experience pertaining to data use), continuity (leaders' recollection of their experiences from the past, present and their thoughts about possible experiences in the future), and situation (leaders' context within their district, the academic

school year and their physical school setting). In order to ensure coherence of the re-storied narrative, the situational element is presented first to provide context of the school environment and spatial boundaries placed on the school leader as they tell their stories. Secondly, the continuity element is then provided to illuminate the participant's past feelings and experiences connected to shaping their leadership approach, decision-making and sensemaking of data use practices. Lastly, the third subsection concludes with the interaction element to include personal and social experiences to consider a point of view that is reflective of an asset-based, deficit-based or hybrid perspective presented in the participant narratives.

In order to expand my analysis to deepen my understanding of the participants' experiences in Black schools, section two presents an analysis of the participants' experiences in connection with the three emergent themes of the study: (a) District Context and Data Use, (b) Data Rich and Information Poor, and (c) Instructional Leadership and Data Use.

Section I: Principal Narratives

Constellation Prep

Constellation Prep (CPE), one of 106 schools in the Universe School District (USD), has nearly 400 students enrolled – 99% of which are Black students. CPE is a K-8 school in the district and when compared to similar schools, CPE is considered an outlier based on their student performance outcomes on their state accountability measures. Student performance outcomes for CPE exceed the state average in every category. For example, they are prized as a story of exemplary performance, with 100% of their students exceeding proficiency and growth targets in math and more than 80% of their students exceeding proficiency and growth targets in English Language Arts (https://www.mischooldata.org, 2001-2020). Laura Jennings, principal at

CPE, shares a narrative that is consistent with the public data discourse shaped by the state accountability measures. She shared her perspective by stating:

My school is one of the top schools [in this district] as far as improvement...We had huge gains two years ago with our M-STEP scores. I feel like we made such strides in closing the achievement gap...We have been considered a model school in the district.

Principal Jennings uses data from the state accountability system to measure her school's improvement efforts. She also sees this work as pivotal in conversation with the national discourse around achievement gaps.

Leadership Approach & Sensemaking of Data Use Practice. Although CPE has the reputation of exemplary performance, Principal Jennings affirms her leadership is grounded in a whole-child approach when it comes to data use and decision making in her school community. Her whole-child approach to leadership frames her thinking when it comes to data use as she shared her thoughts about accountability saying:

So, I think it's not just about the accountability scores. Unfortunately, that's how I think we're measured from the outside. But in my heart, I know. I always go back to my early childhood degree. It was about the whole child. And I think that's true all the way through. We have to keep in mind the whole child at all times.

Principal Jennings's reflections show how she uses the whole child approach as a frame to make sense of data to inform continuous improvement in her school community.

She further elaborates on her point to connect with the whole-child when asked about how she uses data to make decisions around instructional practice change by saying:

It's not just about the scores, scores are important, but there's a lot of other important aspects... it's the whole child, you're working on the physical, the social-emotional, the

intellectual. I think it's both. I think we can't have and we don't have just this linear vision of the child, "It's just about the scores." We know we've got students and we've got teachers here that are more skilled in some areas more so than they are in others. And so, I think it's necessary to celebrate and separate that. It's not just about the scores, this is about this young man and maybe he didn't reach his full potential on this test, but look what else he's done. Look at the art projects he's created. Look at the social-emotional skills he's gained over this year.

From this perspective, Principal Jennings demonstrates the significance of embracing the child as a whole and not just a part of the child that may need development. She also refers to teachers in the same way when she speaks about ongoing opportunities for skill development.

Principal Jennings' Contrasting Points of View: High Performing Unmotivated Students. Principal Jennings values data use in her role and finds the whole child approach beneficial in her school community. She is proud of her school community's narrative being ranked as high-performing and simultaneously acknowledges how the current pandemic threatens their future rankings with a large percentage of her students learning from their homes. It appears that Principal Jennings is confident when students are learning and progressing in a face-to-face environment, however not so confident in a virtual environment where parents are blamed for student failures. This view is reflective of deficit implications in her approach and contradicts with an asset-based perspective. When asked about data use to make decisions regarding instructional practice change, she shared the following:

Instructional focus on the data was put aside to focus on attendance. So, [prior to the COVID-19 pandemic] we had our weekly data con meetings, bi-weekly grade level meetings, weekly staff meetings immersed in data, data dialogue, data disaggregation...

Now being virtual, we haven't been as rigid, and part of that is my fault... because we've got so many kids with attendance data issues. Yeah, we have shifted to more about engagement and supporting families and trying to get them just online and learning, and little less on the data right now, unfortunately.

Instead of engaging with parents and families to better understand what barriers exist with respect to virtual learning, Principal Jennings sees this dilemma as an opportunity to focus on engagement and a plan to bring students back to learn in a face-to-face environment.

She elaborates on this point and blames parents when asked about the communication and support she receives from the district leadership team. She shares the following in her response by saying:

Yes, we still have our data conversations with the district leaders, and we *have* to be able to explain what's happening, but I think that they understand when you're giving an assessment or a lesson from home [in a virtual environment] there's no telling... You either have those parents that are sitting there helping their kids along the way and giving them [the students] the answers and typing it for them, or you have the parents who are nowhere around and so kids are just putting in anything because there's no motivation for the kids to do it right. Whereas when they're in school teachers are walking around watching and encouraging kids to try their best or provide a reward for working hard.

Herein lies evidence of having little to no confidence in the students and their families for extending educational values into their homes. Principal Jennings presents this dilemma around engagement from two contrasting perspectives in the same narrative. On one hand she frames the students' actions associated with virtual learning engagement as void of motivation, and on the other hand she frames the staff's actions as admirable by highlighting their ability to motivate

and incentivize students for working hard. Principal Jennings exhibit's limitations with her belief in the whole-child approach when she makes contradictory statements around low expectations for Black families to support their students in a virtual learning environment.

In contrast to the student struggles with engagement, Principal Jennings shared how the staff has to continuously focus on the students and their families to improve learning outcomes by stating:

We're [school staff] struggling more with the technology component...so, during staff meetings, instead of looking at data we're sharing some technology tips that the teachers can use virtually with their kids... And I'm not saying that those teachers teaching virtual aren't dedicated, because I know they've got a whole set of different problems that they're dealing with online... So, we've had to shift a little bit with what's happening with the COVID component...to try and meet the needs of our kids and our families. Again, the whole kid, the whole family.

In this response, Principal Jennings admittingly speaks to the staff's struggle with implementing high-quality instruction in a virtual environment, which could very well be a contributing factor to the low student engagement she has observed, yet she continues to place the onus of responsibility and accountability on the students and their families with respect to virtual engagement and learning.

In the CPE school community, data is used mainly for analysis to observe aggregate patterns in various types of data to solve problems. For CPE these problems include poor attendance, student engagement in virtual learning, and teacher technology support for online learning. Although Principal Jennings shares her insight about the systems used to monitor academic progress, sensemaking of data use practices are not leveraged to understand the link

between her whole-child leadership approach and student learning outcomes at CPE. Principal Jennings says data use practices and the whole-child approach informs her leadership and decision making to continuously improve, but at the end of the day the blame and onus of responsibility and accountability is placed on Black students and their families. In her responses, Principal Jennings tends to favor a traditional approach to schooling where parents are spectators in the learning process for their scholars. In the backdrop of her responses, the undertones of inadequate thinking toward Black students and their families are perpetuated in her statements. These statements also bring attention to a need for Principal Jennings to further her leadership to include culturally responsive frames.

Blue Moon Prep

Blue Moon Prep Elementary School (BMS), one of 58 low-performing schools out of the 106 schools within the Universe School District (USD). BMS is a K-8 schools that has nearly 400 students enrolled and 99% of the student population is Black. Compared to similar low-performing schools in the district, BMS is often highlighted by the district's leadership team as a school on the move towards high student performance. Although BMS's student performance is well below the state average in every category, the district leadership team has given BMS the distinction of being a model school in the Universe School District.

Leadership Approach & Connection to Sensemaking of Data Use Practice. Principal Claiborne considers herself a capacity builder when it comes to data use and continuous improvement in her school community by stating:

Blue Moon is a heavy data-driven school. Everything that we do is data and that's because when the superintendent came... that was his conversation. That's how he

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communicates, so I was like, "Okay, this is how I'm going to have to communicate." I think it was one of those things where I just really embraced it because data tells a story. In her response, Principal Claiborne describes the school community as data-driven because her district leader describes the district this way and she wants to use the same language as her leader when she communicates with her staff. This is indicative of Principal Claiborne seeing her district leader from the perspective of a mirror and she asserts a desire to be reflective of this same approach in her leadership.

On the contrary, at a later point in her narrative, Principal Claiborne recollects when she started at BMS and admitted she knew very little about the school data and how to implement best practice strategies when she started in her role in the fall of 2017. Since that time, Principal Claiborne has evolved in her thinking and has used her experience to shape her approach to data use and leadership in the following response, saying:

Within this work, of course you want to make an impact, but how do you make an impact if you don't really know what you need to do, or you don't really know what the [data] story is? You have to dig deep. That's just what we decided to do as a team. What I am saying is that you have to lead from the front, and you have to be at work. It's not a work of where you're delegating a lot. It's work where you're leading the work and within that you're building capacity. Building capacity for others to be able to build, and then at the same time you want to be a multiplier.

Given these points, Principal Claiborne acknowledges she is sensemaking while leading from the front and asserts she is building the capacity of others at the same time. This statement by Principal Claiborne is demonstrative of her willingness to fully entrust in her district leader's story and how he perceives himself to be data-driven rather than leaning into her own

sensemaking of data use practices in her school community. It's as if she constructed her personal leadership perspective based on someone else's view of the work [being data-driven] and took it on as her own despite having very little formal or informal data literacy professional development.

Principal Claiborne sees capacity building as an integral aspect of her leadership when it comes to data use to continuously improve in her school community. She values the guidance and vision set forth by her district leadership team to support improvement efforts at BMS despite the

Principal Claiborne's Contrasting Points of View: The Good Label is Incentivized.

annual assessment results remaining well below average for her students' performance. She celebrates the growth efforts in her school community while reflecting on how much progress

has been made by saying:

The first year, we went from zero to 3.6% with M-STEP proficiency. Last year, we ended at 7% M-STEP proficiency, and then if we would've tested this year [COVID-19 pandemic], we were on our way to 15%. That's what we've been doing here.

Although these efforts are definitely worth celebrating, normalizing low expectations combined with a slow-growth model for improvement is detrimental in Black schools. Principal Claiborne sets a low bar to double the district expectation of having at least 1.8% of the students performing at a proficiency level in her school community. In her goal setting, she upholds an institutional deficit norm as she is complicit in her compliance to build capacity for data use dictated by proficiency leveling.

Principal Claiborne further demonstrates the manifestation of this institutionalized conditioning in ways that appear to her to be beneficial, but in reality, replicate and incentivize

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inadequate thinking about the abilities of her students. This surface level analysis of data lacks sophistication and places deeper interrogation of the data in connection with instructional practice at the margins for teaching and learning. She provides insight into how this looks in her school community for students who met their proficiency targets in the following reflection by sharing an idea that was implemented at BMS:

We took kids who we thought that we could actually get to green by the end of the year, and those were our M-STEP kids. So, then we came up with a high steppers club, similar to the National Jr. Honor Society. So basically, at the beginning of the year, we sent a letter to the parents to inform them of what their student scored, so on and so forth... They're now a part of the high steppers club, and so we need your [parents] support by making sure that your student is in school every day, on time, so on and so forth. So, it became this elite club.

In this specific reflection, Principal Claiborne engages in deficit language when she refers to her students in connection with a label. She puts a positive spin on the deficit data practice associated with labeling students red, yellow, green. This type of labeling is connected to student academic identities. Those students not a part of the high steppers club take on harmful labels that center reading ability on one contextualized way of knowing how to read. Celebratory practices such as this can impact the lived experiences of BMS students – on social and emotional levels – who didn't meet the data benchmark at a specific point and time to be a "high-stepper." This type of decision making on the part of the leader limits the view of the total student population with the implementation of practices that can be perceivably exclusionary and biased in Black schools.

In the matter of instructional learning gaps, Principal Claiborne provides an explanation of how she thinks about potential root causes and barriers to student success by stating:

I think the biggest thing that we see to where kids are struggling is just, reading. It's that informational text part, so it's like if they're not able to read, use context clues to determine what vocabulary is, that is what holds them back... From what we've seen, reading is really the focus because even when you're looking at Math, they have to be able to read the story problems, decipher, and makes determination. Same thing with social studies and science, but if they're not able to comprehend, or interpret, or analyze what certain things are, if they don't have that skill set, then they're not able to do as well.

Principal Claiborne acknowledges instructional gaps exist in her school community, yet capacity building and data use to improve instructional practice seem misaligned. She engages in sensemaking to understand how attending to reading – specifically informational text – would ensure students are not held back in other subject areas yet doesn't provide insight into how teachers would marshal this best practice or even prioritize this strategy in their daily instruction. An even larger point to bring forth would be whether or not she fully understood the role of complex text in the grand scheme of providing equitable access and opportunity for students to practice with these types of texts [informational text] in her school. Within the BMS school community, data is primarily used for surface analysis to solve problems and measure progress toward goal targets. BMS is held accountable for increasing student performance outcomes based on a slow-growth model for achievement and a continued focus on this model keeps this Black school at a major disadvantage.

Gibbous Prep Model Elementary

Gibbous Prep Model Elementary (GPM) is one of the "average" performing K-8 schools within the 106 schools in the Universe School District. GPM has nearly 400 students enrolled and the student population is predominantly Black. According to the state's accountability report and the public data discourse around GPM, students perform better than their peer school groups with similar demographics. Additionally, when subgroup performance is taken into consideration, GPM students perform above average in comparison to students in their peer school groups. Nonetheless – within the state at large – GPM students perform below the state average in growth and proficiency measures yet continue to make above average progress among other schools in their district. The public discourse about GPM tells a singular story based on student performance data with a limited perspective for understanding academic progress.

Leadership Approach & Connection to Sensemaking of Data Use Practice.

Principal Boatwright of GPM takes a relationship-centered approach to data use and improvement in his school community. This leadership approach has resulted in progress towards improved student learning outcomes to counter the limited perspective provided by the public data narrative. Principal Boatwright sees relationships with all stakeholders as a critical lever in his blueprint for change and shared how he candidly speaks with his district leadership team about his improvement efforts by saying;

So, I think I've always made a difference with our [district leader] because he knows that if I have a problem, let's resolve it immediately. That's one thing that has helped me.

When I present, I say here is where we are, this is how we got here, here are some problems, these are the solutions we have for it, this is our end result, and this is what's

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making a difference. And so, it's a matter of not just doing the job. It's not just a checklist. It's not just being compliant.

Principal Boatwright provides insight into his process for improvement and uses sensemaking of data for problem solving to arrive at viable solutions. In his response, he describes how his process for improvement is both iterative and ongoing in his practice.

Similarly, Principal Boatwright takes this same perspective toward fostering meaningful relationships in his school with teachers and students as evidenced by his response when asked how he approaches improving instructional practice by relaying:

It's a matter of trying to create an atmosphere that would make the kids want to be at GPM . . . The teachers are coming with great energy. They're [students] looking forward to coming to school, which will then have them enjoy the lessons, that will then make them want to stay here, have them do well in the curriculum, and do well in assessments. It's a formula I'm using and so far, it is working. Since I've been here, we've shifted and I'm not going to lose that. And data has helped us to maintain that status. It's a matter of looking at it to see where it is, where we've got to go, what we've got to do to get there, and let's do it as a team, and so it's been really important that we have that...

To summarize, Principal Boatwright gives a detailed account of how his relationship-centered leadership approach extends beyond data use and into shifting the climate and culture of the school from how it has been perceived historically in order to continuously improve and grow.

Principal Boatwright's Contrasting Points of View: Student Voice Matters.

Principal Boatwright's relationship-centered approach to leadership carries over into the way he makes sense of how data use practices are implemented in his school. His relationship-centered approach supports a human-centered approach as he leads the work and guides data use practices

to reframe inadequate thinking about student performance data. He values the funds of knowledge brought to the school community by all stakeholders-specifically the students and their families- to generate solutions that result in student success. He elaborates on this point when he shares how the relationship between teachers and families are established early on in the school year by saying:

So in between the September and the January test, teachers make sure they give students attention and they also have an opportunity to partner with parents. So, assessment data helps to know the plan of action for the teacher, the student, the principal; the teacher should know the content, the delivery, and the lessons. Then teachers create that relationship with parents so it's a village working together so the child becomes successful.

Principal Boatwright sets an expectation around data use practice that is communicated to students and their families. He encourages teachers to foster two-way communication and progress checks with parents throughout the school year to ensure student success. Hence, the onus of responsibility for improvement is shared and everyone plays a part in a student's success at GPM.

Equally important, Principal Boatwright works with the teachers in his school community as they analyze, interpret, and take action on their students' data. In the following response he outlines the actual process by stating:

My point is how I connect back to accountability with the teachers. Each teacher gets to have a data discussion with us [principal, assistant principal and data tech] to figure out what they [teachers] will do with the information, what are the focus

targets, and what is the plan of action. So, we look at these things and the teachers have to provide us with data in their individual data chats.

As a result, Principal Boatwright provides his teachers with an opportunity to make sense of how they will engage in data use practices to improve instruction, thus, improving student learning outcomes. With this practice in place for the teachers, Principal Boatwright took the time to extend a similar data use practice to the students and their families.

Data use within the GPM school community is used as a tool to empower and provide guidance for the staff to accelerate learning outcomes. Although goals and targets are set, the efforts to improve instructional practice play a significant role in this predominantly Black school community. Principal Boatwright states early on in the discussion that he looks to find solutions to problems that arise and is transparent in his communication to GPM stakeholders. Although Principal Boatwright is inclusive about making data-informed decisions, his overall decision making is limited and include views of student performance information from traditional data sources. Alternative forms of data, specifically from a humanized view, should include data that lifts and honors student voice in the matter of their experiences academically.

Section Two: Sensemaking of School Leader Data Stories

This section presents the school leaders' experiences in three parts to link their individual experiences to the themes that emerged as a result of this study. A brief explanation of the theme is provided and embedded excerpts from the school leader stories connect their experiences to the theme. Connections were made between each theme and in the final section an overall summary concludes the findings of the study. As a result, this section summarizes their stories and provides an analysis of how school leaders make sense of their data use as instructional leaders. Overall, the school leader stories brought forth insight around their data use experiences

as attributed to three major themes. The first, District Context and Data Use, describes how school district contextual factors influence school leader sensemaking of data use. The school district leadership teams hold school leaders accountable and help to mitigate public scrutiny based on annual achievement results. This also include the district leadership team's guidance to schools for data use to support instruction and foster positive school-community relationships. Secondly, Data Rich, Information Poor, elaborates on the access school leaders have when it comes to data, the types of data they use (academic and non-academic data) and how they use data to make decisions. Lastly, Instructional Leadership and Data Use, refers to the way school leaders use data to inform their leadership, establish routines and shape instructional practice.

District Context and Data Use

District leadership play a significant role in helping to shape the various ways school leaders contextualize their analysis and use student data to improve educational outcomes.

District leadership often set priorities for school-based leadership teams to adhere to state and federal mandates, act on and carry out strategic plans, and frame decision making to advance improvement efforts within the district. These efforts impact and influence school-based instructional leaders and temper their thinking when it comes to sensemaking of data use practices. School leaders rely on their district leadership to provide guidance around effective use of curriculum materials, progress monitoring tools, and access to professional development resources. Additionally, school leaders solicit guidance from district leadership teams to offer support around three subthemes: public scrutiny and accountability, instructional support and data use, and school-community relationships to support students and their families. For these reasons, exploring district leadership support to school leaders aid in understanding the

organizational context school leaders navigate to forward educational improvement in their schools.

Public Scrutiny and Accountability. In the context of this study, participants were asked about the support they received from the district to navigate the public scrutiny resulting from accountability and annual assessment mandates. Principal Jennings shared her thoughts about the district in comparison to the public perception of her school and said:

I feel like our district leaders know what we're up against. I think they know the effort that we've put in to just get our students engaged and our teachers ready and prepared. I guess I don't think it's the district leaders. They don't bother me as much as I feel society does. I feel like the society thinks that the education system is letting kids down, or that teachers are, or the administrators. That makes me sad, whereas I think with the district leaders, I feel they are supportive and they are understanding.

She acknowledges the impact public scrutiny has on her personally, despite all the effort that goes into supporting the students at her school. Principal Jennings also shared in her response a sense of belief in her district leaders and their ability to relate to what schools are dealing with from the public.

Comparatively, Principal Boatwright feels the pressures from accountability, but instead of feeling sad he derives motivation in his response and said:

I think what the district provides regarding data that holds me accountable from this building, from the ceiling all the way to the basement is relevant and it is accurate and it helps me and makes me more driven to outdo my colleagues. This response offered insight from Principal Boatwright into how external pressures resulted in his ability to become intrinsically motivated to improve efforts.

Principal Claiborne offered a different response when asked the same question and shared:

The first year, we went from zero to 3.6% with the annual M-STEP proficiency. Last year, we ended at 7% M-STEP proficiency, and then if we would have tested last year, we were on our way to 15%. It's interesting just even with that work, our school is highlighted quite a bit and the superintendent visits the school often. We are a partnership school and at the same time we are one of the lowest performing schools. Because of all the work we have done with students, and we've had all these increases, this school is a great school to tell the story for the district.

Although the school's performance data are low, according to Principal Claiborne, the motivation to improve and empower is still alive and well at her school. She affirmed the progress made and saw frequent visits by the district leadership team as a form of support. For the most part, the participants communicated through their stories a sense of support from their district leadership team. Principal Jennings leads a school that is considered high performing by state accountability standards and the school is ranked as one of the highest performing schools in the district. Principal Boatwright leads a school that is considered average in their performance relative to state accountability rankings and out performs most of the schools in the district with similar demographics. Principal Claiborne leads a school that is considered one of the lowest performing schools in the district and has received ongoing recognition for their improvement efforts. Despite

having a difference in performance across the schools, all the participants spoke about how the support from the district influenced the way they contextualized public scrutiny and accountability for their individual school communities.

Instructional Support and Data Use. The student performance from the annual state assessment is connected to the instruction students are exposed to during the school year. With this thought in mind, participants were asked about the district's support relative to the progress monitoring tools used to collect data and any initiatives to improve teaching and learning. Principal Claiborne shared, "The data that we really use right now, which is interesting, is the i-Ready data, that's the biggest push." She was asked to further elaborate on how she viewed i-Ready and she said, "We use i-Ready for our progress monitoring and it is a pretty good tool. With this program the kids are tested and you can see where they are right away. There is no inbetween, this is just where they are." She saw the tool as a way to keep a pulse on how the students were scoring at that moment in time. Principal Claiborne was then asked about the program as they navigate the technology woes brought on by the COVID-19 pandemic and she stated, "We are finding out that the i-Ready data is not really as reliable as it was in the past, just because kids are at home, actually taking the test and may have assistance." She continued to discuss how they dealt with this reality at the school level and how the district's expectation was for the students to use the program.

On the contrary, Principal Boatwright thought of the newly adopted reading and math curriculum as the big push and focus of support efforts for the district leadership team. When asked to share more about why he felt this way, Principal Boatwright said:

So, for the reading and math curriculum, the district team would conduct school visits to see who was teaching, who was working with the curriculum, who

received support from the reps and ensuring the implementation was done with fidelity. So, we were one of five schools doing it on a superb level and we received the designation of model school.

Principal Boatwright was asked a follow-up question regarding how they were navigating and being supported with this designation during the COVID-19 pandemic and he shared:

When you look at the instructional practices, of course there is a set of guidelines that has to be followed. I get that. But when I think about the gap in today's world because of COVID and how we are moving six feet, three-feet, virtual, and non-virtual, hybrid, kids coming, kids not coming, teachers, it's so much but nobody's thinking about what is best at the school level and to hear from teachers. Right now, we have learning centers, which means for the working parent if they cannot have their child at home, the child can come to receive breakfast and lunch and be in a room to get support and work on whatever.

His response lifted an important point about having input from leaders and teachers before making decisions that impact the school community. He saw a direct conflict with the instructional goals they needed to follow despite the efforts the district put in place to only support the parent.

Correspondingly, when Principal Jennings was asked the same question, she voiced her concern and sentiments and replied:

It's just been a stressful year in education, in general. But at our school, it's no exception. We have been considered a model school in the district, so we've had the math coaches and reading coaches basically coach my teachers and they'll be

able to be a training school for other schools. I know they do a lot of walkthroughs here. I mean for the most part, the feedback is always pretty positive. They [district leadership team] know I have a dedicated staff over here. Her response shows the serious nature of how being a model school is perceived in the district. In spite of the COVID-19 pandemic, there was a commitment to carry out the instructional plan laid out by the newly adopted curriculum.

To sum up the interview questions pertaining to the district's support of instructional practice and data use, Principal Jennings offered a response and shared, "I feel like our district leaders understand for the most part. They just want to know that we have our pulse on the data and where we're going and what is being done to try and improve it." In the face of a pandemic and having plans thrust upon schools without their input as a result of the pandemic, Principal Jennings saw this as a means to an end as they navigated the COVID-19 pandemic.

Altogether, the participants shed light on the support they received regarding instructional support and data use. The district supported efforts at the school level that were consistent with their newly adopted curriculum and checked in by visiting schools to observe the work in action. The district leadership team supported schools in the compliant use of these programs and acknowledged their efforts by designating select schools as model schools within the district.

School-Community Relationships. The management of the relationships between school leaders and their school community is another way district leadership teams provide support to schools. It is often stated in Black school communities that it takes a village to raise a child. In essence, this means that a collective effort to support a child often results in the child's

success. The participants were asked to share more about their experiences with external partners, their student families and how the district offers support regarding school-community relationships. When asked to speak to this, Principal Claiborne said, "When someone comes in from the district or if someone is coming in to give support, you have to know. You have to know basically what the needs of your students are and the needs of the school." She was asked to provide more detail in what she meant by this and she stated, "Sometimes you have people who come in who are not people of color and you have to be very careful about figuring out what their intentions are." This response prompted a request for her to share an example of how she experienced navigating this situation. Principal Claiborne said, "Where I kind of have to navigate and do some things a little bit different is sometimes with our partnerships." She took a moment to provide context around her school being selected by the curriculum distributor to have a few students from her school speak at an upcoming conference. Principal Claiborne saw this as an honor and an opportunity for her students to showcase their talents. She elaborated more in her next response when she shared:

They asked us [Principal and leadership team] to prepare their speeches, and so my team and I prepared their speeches. We submitted the speeches and afterwards noticed there were quite a few changes made. Both speeches were setup to start off talking about their first time riding on an airplane. Which it was their first time, but I just didn't like the way it came off. So, one of them was raised by his aunt and it was like they wanted him to talk about the absence of his mother and a couple of other things. He's [the student] not looking at it as a bad thing. He still loves his mother, but he knows his mom right now has some things

happening to where she's not able to care for him 24/7. He sees his mother and she's active in his life as she can be.

Principal Claiborne was concerned about the image the partner wanted to portray about the student and his non-traditional family arrangement. She spoke about how this is something that she has to constantly look out for with partnerships to protect her students. Principal Claiborne wanted to ensure the partners did not change the speech to misrepresent the student inaccurately. Ironically, this partner was selected by the district leadership team to provide curriculum materials to schools. Principal Claiborne did not mention support from the district leadership team as she navigated the partner relationship.

By the same token, Principal Jennings found herself in a similar situation when navigating issues related to the validity of their i-Ready data with her students taking their assessments virtually at home. She shared:

Because going home virtually now we had to immerse ourselves in a new way of teaching the curriculum, a new way of trying to get our kids in school, just a new way of trying to do school. So, there's just been a lot of other stuff that has overshadowed the data conversations compared to the way they were.

Principal Jennings was asked to elaborate more on how this has changed in terms of support from the district leadership team; she said:

I mean, yes, we still have our data con with the district leaders and we still have to be able to explain what's happening. But I think that they [district leaders] understand when you are giving an assessment or lesson from home there is no telling with that data. You either have those parents that are sitting there helping

their kids along the way and giving them the answers or you have the parents who are nowhere around and kids put anything because there is no motivation for them to do it right. Whereas when they're [students] in school teachers are walking around watching and so they try to do their best or they are rewarded for working hard.

Principal Jennings acknowledges the challenges with continuing to carry out the district's plan for the implementation of the curriculum and at the same time she is transparent about the lack of confidence she has in the parents to support their students virtually.

Data Rich and Information Poor

School leader sensemaking of student performance data is essential for decision-making to improve educational outcomes. Sensemaking of student performance information involves mental processes and contextual framing. This process is two-way and can be used to make instructional decisions based on past experiences, personal beliefs and knowledge. When school leaders have developed their capacity around data literacy, they interrogate data in ways to make connections to practice. Stated in another way, school leaders who are advanced in their data literacy knowledge, use student performance information to better understand how the outcomes in their data is connected to instructional practice. In many school communities, data is provided ongoing as students are informally and formally assessed to ascertain their academic progress in specified academic subjects. School and district leadership play a role in helping teachers understand what to do with this information to inform their practice. Although data is plentiful for schools (data rich), knowledge around what to do with data is not always apparent to school leaders who may lack guidance and direction from district leadership teams on how to turn data

into insight (information poor). School communities are characterized as data rich and information poor when data is not used to support their decision making in ways that forward their efforts to improve instructional practice, thus improving educational outcomes. During the interviews, the participants spoke about their data access, how they used academic and non-academic data and how decisions were made within their school communities for improvement.

Data Access. The stories shared by school leaders reveal a common theme of having access to a plethora of data centered around student academic performance to inform their decision making for educational improvement. Participants were asked how they came to understand the types of data they had access to, the importance of academic data versus non-academic data, and how the data informed their decision making to forward educational outcomes. The participants shared they prioritized the use of both academic and non-academic data to have a holistic perspective of their students when making decisions. In the context of this study, academic data refers to student information that is collected around teacher instruction, academic concepts from the curriculum and assessments. Non-academic data refers to the student information that is collected around student demographics, enrollment and student attendance information. Additionally, the participants shared their beliefs and motivations for data use to make decisions in support of educational improvement.

Principal Boatwright reflected on how he was driven to stay competitive among his colleagues when he examines district and state assessment data. He stated:

When I look at test scores, whether it is district or state assessment, I look to see what other schools are doing, the grade levels, how they're achieving. When I see that we are achieving higher that makes me feel good. If someone is a little bit close to us, I feel we have to do bigger and better.

This quote highlights the motivation behind his professional drive toward improvement efforts as he leverages his access to public school performance data. Principal Boatwright is able to make comparisons between his school performance data and other schools to gauge his progress overall. After Principal Boatwright shared the inspiration behind his drive, I specifically asked how he used data to improve educational outcomes at his school. He replied:

I am using data to improve, if I can say overall, the school. When I say overall, I'm meaning enrollment, test scores, teacher capabilities, accountability, the success rate for retention, and as teachers from one grade level preparing students for the next grade level.

Principal Boatwright didn't just rely on one data set to measure improvement, he pulled from a variety of data sources that included both academic and non-academic data to gauge his progress and make decisions toward his improvement efforts.

Similarly, when Principal Jennings was asked about how she used data to improve educational outcomes for her school, she replied, "I think collectively, our school is just immersed in data. So, we use it basically for all aspects of what we do." When asked to provide further details around this statement she shared, "We look at attendance data, behavioral data and actual instructional data. We are constantly reviewing data, meeting in teams, figuring out what needs to happen and where we need to go." This is significant to know the various types of data schools have access to in order to inform their decision making for improvement.

In a similar vein, Principal Claiborne and her staff used data in their meetings to have conversations they call data chats. She shares, "Some of the conversation around looking at student data, which we do data chats every year." She further explained what this looked like in practice. She responded, "When we are having these data conversations, we have data in the

hallway, we have data outside the individual classrooms." Later in her interview she referred back to the importance of having this data readily posted in the school helps to foster ongoing data conversations among everyone throughout the school year.

School leaders aligned around the premise that data told a story, but one set of data or one data type did not tell the whole story. The participants often mentioned how the academic data only told one side of a multifaceted story when it pertained to student performance information. Principal Jennings affirmed this and shared:

It's not just about the scores, this is about this young man and maybe he didn't show his full potential on the test. Look at what else he's done. Look at the art project he created. Look at the social and emotional skills he has developed over the years.

She connected this to her belief that education must encompass the whole child and the one time snapshot of data collected from a test does not fully show the total progress made by a student.

Academic vs. Non-Academic Data. Principal Jennings continued these sentiments when asked about the importance of academic data versus non-academic data and stated:

They're [data types] all intertwined. It's not like one is more important than the other, it's we've got to focus on getting kids in school, supporting them with their behaviors with a positive behavior support system, and then we can focus on the academic data.

Principal Jennings provided insight into her thinking around the preliminary needs of a student and what must be put in place before an emphasis on academic data becomes the central focus toward improvement.

Principal Claiborne shared a similar thought when asked about her use with academic data versus non-academic data. She replied, "So it's interesting when we look at some data. We analyze it with the approach of, this is what happened academically. Then we look at it from the social emotional point of view for the students and for the staff." She explained this as a strategy that is used to dig deeper into the analysis of the academic data by examining it alongside non-academic data. Principal Claiborne continued to explain how this played out in leadership team meetings. She shared what happened when she invited the attendance agent to their meeting:

In our ILT [instructional leadership team] meetings, our attendance agent made a connection between some of the red dots [students who scored two levels below their grade]. He was like, she doesn't come to school, no wonder. He immediately saw the attendance as a start and by getting them to school that could help move them out of the red dot category.

This leadership move to include non-academic support staff in the discussion gave more insight into what may have been a root cause for the students' performance and a potential solution to help kids improve their performance. Principal Claiborne shared how her attendance rate has improved over time and their daily attendance rate has consistently stayed between 87% and 89% whether they're attending class face to face or joining class virtually. The non-academic data changes are also celebrated in her school community and seen as a factor to support academic learning.

Principal Boatwright mentioned in his interview the importance of attending to the social and emotional needs of students to support learning. He highlighted this aspect as a non-academic factor critical to their improvement efforts. Principal Boatwright affirmed that when

students knew teachers cared about them and their wellbeing they performed better. When asked about academic data versus non-academic data he replied:

So, I think that when you show that you care on the one hand and you mix that care with the academic progress of it all, and you marry the two, you are able to be successful. So, I think the sum of those two [academic and non-academic data] is what is always helping us move forward.

He supported having non-academic data to make decisions as a necessary part of moving the academic efforts along in his school community.

Data Decision Making. In addition to having access to data and a variety of data types, the school leaders spoke about the prevalence of data informed decision making within their schools. Principal Jennings spoke about why she saw data use as a collective effort among her staff. She said, "They [teachers] need to own it, they need to understand it, they need to know what needs to happen next and they need to come up with a plan to go to the next level..." This supported the leader's openness to a diversity of perspective for noticing, interpreting and acting on student performance data. She provided further details when she shared, "My assistant principal and I, we belong and are part of these teams [teacher teams], but we are not the ones really creating the goals, the teams are. Because I think that it's always been important for me for the staff to embrace the data." This approach to data use created a data culture where everyone was expected to have buy-in and the school leader isn't necessarily the one making all the decisions around how the data will be acted upon among the staff. When asked to share an example of how this played out in the past, Principal Jennings recalled the work she and her staff committed to pre-pandemic [COVID-19] and shared that:

We had huge gains two years ago with our M-STEP scores. But that was all of us working together, pulling kids during their lunch time to have some one-on-one time with them or small group time. The gym teacher was involved in doing some M-STEP practice stuff [test prep] while she was leading gym classes with them.

And she was incorporating a lot of that. The art teacher, the same kind of thing.

She continued to speak about the ongoing conversations and focus on data in the school with teachers and students. Her conversations regarding data with the students were more like quick check-ins to determine how much the students actually knew about their individual progress and data goals. She reiterated:

Data conversation is constant. As I see kids walking in the school now, I'll ask them questions about their i-Ready score [progress monitoring tool]. They should know their score and if not, then those are conversations I might have as a whole group with staff.

Principal Jennings saw this as a way to not only keep staff involved, but also a way for the students in her school community to engage in the conversations around student performance data.

In a similar manner, Principal Claiborne promoted a student-inclusive data culture at her school for decision making as well. She described a recent interaction with students in her response, "Again, we constantly have data chats, so I'm in the data chats with kids. The kids are surprised I know their numbers [scores]. She continued to elaborate on what she asked the kids and said, "Let's find your dot [referring to data displays]. Where do you think your dot is? We refer to the data on the display and just have a conversation about it." She was able to gather information from the students and understood how they perceive their performance data.

Principal Claiborne found these chats useful in making decisions to address instructional gaps that existed for students. She mentioned how this helped her to figure out ways students learn best and how teachers can make small adjustments to the way they approach instruction with students. When asked to expound, she shared:

I definitely would say last year, a lot of it [data chats with students] was within academic ownership. Students wanted to have more voice in their learning.

Communicating with teachers to talk less and allow their students to lead and facilitate their own learning.

This approach provided Principal Claiborne with insight into the students' experience with teaching and learning in her school.

Principal Boatwright shared his thoughts and elaborated on the use of data for decision making during his interview. When asked about the connections he made between data use and their academic outcomes he said:

So, we look at data to understand where we are at the beginning of the year, middle of the year and at the end of the year. We try to see how, who, and what is done to move the students. That starts with the curriculum in the classroom and then branches off into the district assessment, then branched up to the state assessment.

This explanation outlined his thoughts about how their progress monitoring tool connected to the improvement efforts on the annual state summative assessment. Principal Boatwright was then asked to explain how he set and worked toward achieving the goals around these metrics throughout the year. He replied:

So, when we look at this, the goal is to look at this to see who the students are in the green, red, and yellow. You then look to see who moved from the beginning of the year to the middle of the year... We started at 62% in red [two or more grade levels below], by the middle of the year we went to 56% and then towards the end of the year we were at 47%. So, this means we are kind of growing and people are getting familiar with understanding the data. We started the following school year with 44% of our students at two or more grade levels below.

This helped to understand his approach to data analysis and how he monitored their progress throughout the year. He acknowledged the incremental growth by highlighting a focused effort on the movement of students out of the red group and into the yellow and green groups. In this quote Principal Boatwright also admitted having a limited understanding of the data and at the same time he shared that almost fifty percent of his students were two or more grade levels behind.

Principal Claiborne was asked about the connections between data use and academic outcomes. She replied, "The data we really use right now, which is interesting, is the i-Ready data and it's the biggest push in the district." She continued to speak about how it was presented in a user-friendly format and how the colors and categories make it easy for students and staff to understand where they are in terms of their progress. She further explained this point when she said,

I think too it enlightens the kids, because it's like the kids don't really understand at first what the data means. So, okay if I'm [the student] red, I don't really know what red means and why I need to strive to do better. We can explain that red

means you're two or more grade levels behind and we can start having that conversation about how that happened and what is needed for support.

Principal Claiborne saw this as an easy way to get the conversation started with students about how they can make better decisions, set goals to move out of the red, and improve their progress by moving into the yellow and green performance groups. These grouping categories corresponded with the grade-level knowledge and skills needed to support students in their growth throughout the year.

Data use at a surface level understanding was consistent across the findings, whereas data use to support in depth change around instructional decisions rarely surfaced in our conversations about data use to improve educational outcomes. Moreover, these findings supported the theme of schools being characterized as data rich and information poor.

Instructional Leadership and Data Use

School leadership is demanding and there must be a focus on the instructional practice and data use to forward academic achievement efforts. Although many school leaders serve in this role, not all school leaders consider themselves as instructional leaders with advanced data use skills. The most critical aspect of the instructional leadership role is teaching and learning and having data literacy skills is important. In order for teaching and learning to have an impact, school leaders must attend to the curriculum alongside implementation efforts, interact with assessment data, and take action to improve instructional practice. The instructional leader must also set clear goals and have a vision for instructional practice in their respective school communities. School leaders were asked several questions around their instructional leadership practice to explore more deeply the ways in which data use helped to inform their instructional leadership practice. During the interviews the school leaders were able to share insight about

their experiences using data to inform their leadership, data used to establish routines and data used to shape instructional practice.

Data Use to Inform Leadership. During the interview Principal Boatwright voluntarily shared a visual to show the customized report he used when he spoke with staff and set expectations for data use. This report guided the discourse with staff and was based on the student performance scores from their i-Ready assessment. The students took this assessment three times during the year and the content was based on reading and math. The student performance scores were categorized in color groups (red, yellow, and green) and the students who scored in the green group were considered to be on track and performing at their gradelevel. Principal Boatwright took time to explain his interpretation of the report and how the results informed his leadership and stated:

So, what you're looking at... each school in the district for K-8 buildings have the iReady that is for reading and for math. And so, when your students are tested, they're
either going to test in Tier I, which is at grade level, Tier II is one grade level below, or
Tier III is two or more grade levels below. So, when you look at the beginning of the
year, it is common that you're going to have a lot of kids coming off of summer break ...
your Tier III is going to be heavy. ...you're Tier III, two grade levels below, you have a
mixture of comprehension, are we looking at special needs' services, or what's happening
there, which means that they will need more time, which means they also may need
tutoring, pullouts where they can have small groups, work one-on-one, some things like
that because ideally you want to get your Tier II to Tier I, and get your Tier III to Tier II.
So, you want to move everybody up a tier.

Principal Boatwright continued to share tiered data charts with numerical data points for individual classrooms as he told his story. The utility of a visual data chart to accompany his narrative helped to conceptualize the way he used data to inform his leadership practice. During teacher data charts these charts were used as a guide. Teachers were expected to share the practices they planned to use in response to the data and how they were going to help students advance their individual growth goal targets.

Data to Establish Routines. When asked about how data uses established routines within the school community, Principal Jennings shared her thoughts, saying, "We have grade level teams, we have a PBIS [Positive Behavioral Intervention System] team, and we have an attendance team. So, they're constantly reviewing data, meeting, figuring out what needs to happen, and where we need to go." Her response showed how she valued a team approach for setting goals around data use with her staff to improve instructional practice. When asked a follow-up question about her role as the school leader, she shared:

My assistant principal and I belong and are a part of all these teams, but we are not the ones that are really creating the goals, the teams are. I think it has always been important for me for the staff to embrace the data.

Principal Jennings lifted her view of how data was shared across all teams and how this was important for her to establish this expectation as a part of her leadership. She went on to share her thoughts about how things shifted since the COVID-19 pandemic and how it affected the routines she established when she said:

Now being virtual, we haven't been as rigid and part of that is my fault. I think a lot of other things happening in the world and in people's lives and I've not been as focused on the instructional data because we've got so many kids with attendance issues. So those

meetings we may have had were the focus was on instructional data are now focused on attendance. We are working on what we are doing with the kids and how we are going to get them in the school.

Principal Jennings acknowledged a need to adjust and pivot as the leader during the COVID-19 pandemic. She shared how she prioritized attendance to ensure students were in school. This caused a disruption in the normal routines for staff, thus a disruption in the way staff interacted with data during the pandemic and the effect on student performance outcomes.

In a like manner, Principal Claiborne referred mostly to the recently adopted curriculum and how they work to close academic gaps. Principal Claiborne expressed her thoughts:

One thing I would say when you are looking at student data now it is interestingly different from how we responded in years past, I think it's [approach to data use] been flipped. In the past a lot of the focus had been on kids who were years behind. And so, the kids who were somewhat at grade level or above begin to get left behind.

In this statement, Principal Claiborne spoke about how established data routines of the past had changed and instead of the main focus being on low performing students, the focus now included all students to ensure no student would be left behind. This showed how she thought about how the approaches to data use had changed over time. A follow-up question was asked to better understand how her response as a school leader was different now that she had that level of insight. Principal Claiborne replied:

We definitely address students in all tiers for sure. And so of course, even within the district, we have the Orton-Gillingham program that we use for kids who are, I guess I would say, who are in the red [achieving two or more grade levels below]. We do small

group instruction within the classroom and within our EL program, we have all blocks [individual skill development time for students]. So, there are a lot of different ways to where we are actually trying to build a bridge and decrease the gaps.

Principal Claiborne shares in her response how her leadership approach has evolved when it comes to data use. She has seen over the years how students of certain groups did not garner the same amount of attention and focus to improve upon their academic achievement.

Data to Shape Instructional Practice. Principal Boatwright was very involved in the processes to promote data use with his instructional staff. He also held high expectations for his coaches to move the work forward to improve instructional practice. He shared a brief description of how this happens in the following statement:

And so in between the September and the January test you want to make sure that you give those students attention and you also have an opportunity where you partner with parents. Your child, if I have a third-grade teacher, your child in September tested at second grade for reading. This is what we're going to do so that in January they can be at least third grade level. In January, if you find that they're not at the third-grade level then what are the strategies that the teacher, the parent, and the school will use so that when other assessments come, whether it is district and/or state we're prepared and we're able to move forward. So that data there with assessment helps to know the plan of action for the teacher, to the student, the principal, to the teacher because the teacher should know the content, should know the delivery, should know the lessons to understand the assessment and then creating that relationship with parents so that is all that village that's working together so that the child becomes successful. And so, it becomes a lot of

different components but I think that once you to set the tone at the beginning, that data will help the teacher to grow and then it's something that's celebrated at the end."

Principal Boatwright saw this as a continuous process where the teachers used the results from the i-Ready assessment to think about their instructional practice and how they would engage parents to support student learning. The assessment results help to shape the teacher's instructional approach with students. Based on these factors, this in turn helped Principal Boatwright understand ways he could support and how the data shaped instructional practice.

Principal Claiborne also spoke about how the data from the assessment shed light on her thoughts about how this data connected to the curriculum, which directed teacher instructional practice. She shared, "I think the biggest thing that we see to where kids are struggling is reading. It's that informational text part, so like they are not able to read, use context clues and determine what the vocabulary is. That is what holds them back!"

Principal Claiborne continued to discuss the pros of the curriculum and highlighted a feature that helped them move instructional improvement forward when she said:

I would say with the EL curriculum, the other thing we like about it is that it pushes teachers to think differently. Within microphasing [an approach within the program that offers a learning trajectory to advance reading and comprehension skills], this is pretty much where we see where kids are, especially in grade K-2. We do those assessments and we figure out if they recognize letters of the alphabet or recognize sounds and so on and so forth.

In this response, Principal Claiborne saw the aspect of the curriculum as an opportunity to build a bridge to decrease the gaps. She also shared the cons about the curriculum when she stated:

Within the district, a lot of folks feel the EL curriculum does not work. They don't feel it works because the curriculum as we know is on grade level. And if you have quite a few of your kids in a class that are not on grade level and you [referring to the teacher] are not building that bridge and filling those gaps, it's not going to work.

Principal Claiborne is referring to the issues some teachers had implementing the recently adopted curriculum in the district.

Principal Claiborne shared her thoughts about a newly established protocol to improve instructional practice that was implemented at her school as a result of the recently adopted curriculum. She stated:

We actually found it helpful working together when the teachers were able do instructional rounds [a routinely scheduled time for teachers to inspect each other's practice]. Of course, we would have our problem of practice and they would go into each other's classrooms to see how things were working. I actually didn't think of this, but I said wow when I realized they were doing this.

This revealed Principal Claiborne's ability to be open-minded about data use to shape instructional practice. She embraced the idea of instructional rounds to shape instructional practice and assist in the effective implementation of their newly adopted curricula.

Conclusion

In this chapter, the school leaders shared their narratives to provide insight into how they make sense of their leadership experiences with data to make decisions toward educational improvement within their school communities. Therefore, this chapter sheds light on the importance of school leaders having both the knowledge and capacity around data used to influence their instructional leadership. These findings illuminated the impact a district can have

on school leader experiences with data use and their sensemaking of instructional leadership within their school communities. Furthermore, these findings made me think deeply about the intentions for data use toward educational improvement and where the onus of responsibility resides overall.

Moreover, school leaders perceived data use as a way to forward educational improvement. According to the stories told by the participants, there was a minimal focus on how data use actually shaped their sensemaking and the connection to their decision making to their improvement outcomes. The findings from this study, in conversation with school leaders serving in predominantly Black school communities, contribute to deepening our understanding of school leader experiences and the contextual factors that shape their sensemaking of data use. The participant stories helped to understand the district contextual factors that influenced school leader data use to forward their improvement efforts. The use of data at the district level influenced the use of data at the school level which led to normalized slow-growth models for improvement. School leaders focused on pre-constructed data sets that led to goal setting centered on small upticks in student performance over the academic school year. This approach to data use keeps advanced-growth models at the margins and further stagnates academic achievement when educational outcomes are not connected back to instructional practice, especially for students in predominantly Black school communities.

Leadership approaches and perspectives that emerged from the stories told by school leaders serving in Black school communities shed light on how data use is linked to decision making to improve instructional practice; thus, student learning outcomes are improved. The school leaders' stories brought forth a clearer view of how leaders make sense of data in the context of their individual school community, the culture that exists among the school

community actors, and expectations set by accountability policy when making decisions to improve achievement outcomes. Three major themes emerged from the leaders' stories and were interpreted in the findings; (a) District context and data use (b) Data rich and information poor and (c) Instructional leadership and data use. The findings afforded a windows and mirrors view into data use practices through the powerful practice of narrative storytelling.

During this research study it was apparent that each school leader identified an approach to data use shaped by their district context and data literacy skills; thus, their approach to data use. These school leaders shared a common diagnostic assessment tool and they all made reference to the tool in their stories as a key performance indicator for progress measure. This tool was adopted and monitored by their school district and it heavily influenced how the school leaders made decisions around instructional practice in their school communities. The i-Ready tool provided leaders with knowledge to understand where students were performing relative to their grade-levels. Students were labeled "tiered" into red, yellow and green category groups. If students scored in the red group, this meant their performance was consistent with being two or more grade levels below their current grade level. If students scored in the yellow group, this meant their performance was consistent with being one grade level below their current grade level. If the students scored in the green group, this meant their performance was consistent with being on or above their current grade level. Although the dataset from this diagnostic tool was used by all the school leaders in this study, I found their varied leadership approaches to be most influential when data use practices were implemented within their school communities. Without professional development to provide participants' with culturally responsive frames, the participants perpetuate inadequate thinking about student performance in their leadership actions. This further exacerbates a problem in the larger context of education of being aware enough as leaders to know when student academic identities are harmed.

An additional finding in the study, related to this concept of data use and school leaders, were the stories school leaders told about the data practices used to support their leadership approaches. Based on the school leaders' approach, their interaction with data and the actual data types varied across all schools. Although the school leaders' preferred data types were implemented differently in their schools, all the schools were subjected to the public accountability data index and data that informed their school report card. Nonetheless, the public accountability data only provide a one-sided perspective of what's going on in the school community with respect to instructional practice, teaching, and learning. School leaders may lack the tools or capacity to bring multiple data types together in one place to make sense of how their decision making is linked to performance results. School leaders are using multiple data types to make decisions to improve instructional practice, yet accountability reporting data poses limitations to seeing opportunities in the data to change instructional practice. Stated in another way, accountability and school grade reporting provide schools with a general overview of performance, which lack specificity around actual skill development opportunities aligned to improved instructional practice, which may result in higher student performance outcomes. Here, instruction-focused measures as opposed to general proficiency and growth measures from state accountability reporting would assist school leaders in knowing which specific instructional practices contributed to their improvement efforts. This is especially an important consideration for accelerating achievement outcomes in predominantly Black schools. This instruction focused perspective on data use practices may help schools move away from long-standing ahistorical approaches to data use toward those that are asset-based, value-oriented and inclusive of student

voice. This would, furthermore, honor the unique character of a school community - specifically Black school communities like the ones in the context of this study.

In sum, the role accountability policy play in public data discourse reveal one line of sight into what actually happens academically in a school. For some, school accountability reporting data stagnated school improvement efforts based on the public data discourse of a school. And in other instances, accountability reporting data helped schools move toward solutions that promoted improvement in areas not captured by key metrics of accountability (i.e., student engagement in virtual settings). Further, the findings gave rise to a need for a more altered views of accountability data reporting to promote data use for sensemaking to improve instructional practice. This would support dismantling historic systems of oppression, particularly in Black schools.

CHAPTER 5: DISCUSSION

Introduction

Schooling experiences for Black students in the US have been shaped historically by antieducation laws, mandates, and initiatives that sustain unjust systemic practices and policies. These practices and policies often stagnate academic progress and have led to institutional deficits and the normalization of deficit-orientations towards students in predominantly Black schools. Accountability expectations set forth by federal legislation is just one example of how educational policy play a role in sustained deficit orientations toward Black schools through the utility of student performance information. State education agencies use student performance information from annual assessments to grade, categorize, and make decisions around support resources for students. This annual data snapshot also determine funding and shape the allocation of resources for schools despite their need to support students in non-academic ways. Currently, student performance information is constructed in a way that provide a singular view of student performance information based on proficiency leveling and categorical grouping of students. This grouping is centered on students' lack of skill and in turn automatically posits them in a place of deficit within the data. This view of data also shape the way school leaders draw on, make sense of and interact with data toward decision-making to improve educational outcomes. Safir and Dugan (2021) contend those educators who teach children in the margins have been sold a bill of goods about the need to fill, fix, intervene, script, pace, and instruct students into "proficiency." Put in a different way, many school leaders have become more concerned with fixing student deficits by meeting proficiency targets over attending to instructional practice gaps as evidenced by the data which could ultimately lead to improved teaching and learning in K-12 classrooms.

A new approach is needed to inform leadership decision making and support for alternative perspectives with data use to overcome institutional deficits and ineffective use of data in Black schools. To conclude, for the remainder of this chapter I present an overview of the study in conversation with the research questions. Then, I present a brief summary of the study findings. Next, I discuss implications and provide recommendations along with suggested future research to contribute to the field of educational leadership regarding data use practice to improve schooling experiences in Black schools. Finally, I conclude with a personal reflection of how this research has shaped my perspective as a research practitioner.

Overview of the Study

The purpose of this study was to understand the sensemaking of data use through the stories told by school leaders in predominantly Black schools. This study used conceptual frames associated with sensemaking theory (Weick, 1995), school leader sensemaking theory (Gannon-Shilon & Schechter, 2017) and data use theory (Coburn & Turner, 2012) as guardrails to better understand elementary school leaders and their data use practices. Data use in school leadership is significant and can serve as a strategy to improve instructional practice. School leaders who have advanced data literacy skill sets can leverage student performance information (data) in ways that bring about insight (knowledge) to inform their leadership practice. School leaders are responsible for many aspects of the school operation and classroom instruction plays a major role toward improvement efforts. The improvement of instructional practice can lead to better educational outcomes for students in Black school communities. This study sought to capture the stories told by school leaders, specifically leaders in predominantly Black schools. This research study aimed to better understand how leaders accessed, interacted with, acted on and made sense

of their data use practices toward the improvement of educational outcomes in their school. The main research question that guided this study was:

 How do the stories of elementary school leaders serving in predominantly Black school communities explain how data is used to make decisions toward educational improvement?

This study also sought to answer the following sub- questions:

- What stories do elementary school leaders tell about how they use data to inform their leadership practice?
- What contextual factors influence school leader interactions with data?

The purposive sample of participants in this study were part of the same school district and 80% of their student populations at each school site was predominantly Black. The public discourse about the district overall has historically been focused on their reputation for having persistent low student performance and a lack of resources to support student academic achievement. The participants have all been in their current roles for at least three years and all agreed to implement the same academic plan of action for improvement. This plan of improvement included new literacy and math curriculum resources, progress monitoring tools, professional development training, and ongoing district coaching to support curriculum implementation efforts. All three participants achieved status within the district for their schools to be designated as model schools for their commitment to implement the new reading and math curricula. These attributes were critical for the selection of school leaders for the study to ensure all participants had the same materials, access to the same district resources and the same educator professional development. Additionally, these attributes offered a best case scenario to

understand school leader experiences with data in the context of their district, how they use data to inform their leadership practice and their decision-making toward educational improvement. The data was collected from semi-structured leader interviews conducted in a secured virtual environment. In the analysis of the data, two different approaches helped to arrive at a broadened view of the data. In the first approach, leader stories were restoried and aligned to themes set forth by Clandinin and Connolly's (2000) three-dimensional narrative structure; interaction, continuity, and situation to view their experiences along a continuum. In the second approach, an open qualitative analysis was conducted and the leader stories were posited as data for interpretation. Key findings that emerged from the open qualitative analysis included the connectedness of the leaders' experiences to their district context and data use; data rich and information poor; and data use to inform leadership practice. Both analyses afforded the opportunity to go deeper in my understanding of the school leader experiences, their sensemaking of data and how data use informed their decision making toward educational improvement.

Summary of Findings

The findings brought forth a rich description of the leader's experience from two distinct analytical perspectives. The participant stories situated in the context of Black school communities provided a glimpse into the benefits and challenges leaders faced with data use towards educational improvement. Through these stories their voices are centered to offer insight into how data use practice can either help or hinder their improvement efforts. This knowledge is significant in that it can be transferable to other education spaces to inform policy at large and potentially re-story the public discourse around educational improvement in ethnically diverse school communities.

The first analytical approach provided an analysis of the participant's individual stories utilizing the Clandinin and Connelly (2000) three-dimensional space narrative structure. The participant stories were structured to include interaction (leaders personal and social aspects of their experience pertaining to data use), continuity (leaders' recollection of their experiences from the past, present and their thoughts about possible experiences in the future) and situation (leaders' context within their district, the academic school year and their physical school setting). The collective of these dimensions along a continuum offered a broadened view of the leader's stories. The compelling nature of their stories highlighted the complexities associated with being leaders in their respective school communities. Key findings that emerged from the three-dimensional space narrative revealed that the leaders had challenges with their sensemaking of data use and their decision making as evidenced by their normalization of slow-growth models toward improvement.

The challenges the leaders had with their sensemaking of data use was apparent in their stories when they talked about how they analyzed data in seemingly sophisticated ways, but what resulted in their actions was contrary to what they stated. Sensemaking of data use was not sophisticated enough to move the participants beyond a surface level view of the data. For example, one of the participants spoke about the prevalence of data in their established routines of the school and how data can be used to support students academically. However, during the same interview the participant spoke about how they used the red, yellow, green score indicators to incentivize students for improved scores and failed to mention anything about how this data was used for student instructional support needs. The participant stories illuminated how they live in a paradox as they showed up in their roles as school leaders. This tension and similar stories shared by the other participants led to contradictions in their stories between what they

said about data use and what they actually did in their actions. Additionally, the leaders shared how they received support from their district leadership in doing what needed to be done to improve upon their progress monitoring efforts. The challenges associated with sensemaking of data use revealed a need to better support leaders with building their data literacy capacity to connect student performance data back to instructional practice.

The second key finding that emerged from the three-dimensional analysis was in their decision making toward educational improvement was influenced by their understanding of proficiency level targets set by their state accountability policy. The participants came to the work as principals with an understanding that they were expected to make improvements in the percentage of students at their schools scoring at or above proficiency level targets. For so long, accountability policies have upheld a systemic frame in the larger context of education that constructs student performance data in ways that are inherently deficit-oriented. A typical example of this is done by using ethnicity sub-groups to show how Black student performance historically has been lower than their white counterparts. This frame influences the way school leaders see and act on data to set goals toward academic improvement. The participants in this study mainly focused on setting goals that were reflective of small upticks in their state performance measures. For example, one leader specifically spoke about how the goal of ensuring 1.5% of their students' scores at or above proficiency levels was doubled in one year. Another leader spoke about how the comparison of scores with other schools helped to set goals toward improvement. These examples are indicative of ways in which the participants normalize slow-growth models for educational improvement. It is not acceptable to make and set goals that do not include a focus to help all students to achieve at levels that are advanced and beyond average proficient levels. School leaders have a responsibility to critique and think differently

about the way they view data as constructed by accountability policy. Finding alternative ways to visualize and internalize student performance data is necessary if we want school leaders to implore more advanced growth models in schools. This call to action must be fully embraced by district leadership teams to ensure optimal support is provided to school leaders around growth models that advance the academic performance of students.

The second analytical approach provided an analysis of the participant experiences as told in their stories and the emergent themes brought forth a deeper understanding of the factors that influenced how they used data to make decisions toward educational improvement.

The first theme, District Context and Data Use, provided insight into how the district contextual factors influenced their decision making. This theme shed light on how factors such as public scrutiny, accountability, instructional support and school community relationships shaped the district context and thus influenced school leaders' data use. Through their stories, the participants spoke about how they personally dealt with public scrutiny and accountability externally despite having little support from their district leadership. The participants characterized the district leadership as caring and supportive, despite their lack of concrete support. In relation to instructional support, the participants were in agreement with the new academic vision and plan set out by the district leadership team regarding instructional practice. The participants spoke about how their alignment with the new curricula and progressing monitoring tools resulted in their schools being designated as model schools within the district. This internal validation from the district leadership influenced how the participants used data from these resources to inform their leadership. Similar to navigating public scrutiny and accountability, the participants spoke about their efforts to strengthen the relationship between the school and their communities with little support from the district leadership team. A few of

the participants specifically spoke about how it takes a village to ensure students experience academic success. These leaders found it both beneficial and necessary to have ongoing interaction with their parents and school community stakeholders. Consequently, the participants formed a network among themselves to share ideas and make sense of their data alongside their improvement efforts.

The second theme, Data Rich and Information Poor, provided depth to better understand what data (information) leaders had access to, the types of data (academic v. non-academic) leaders valued, and the decisions they made as a result of their interpretations of the data. The participants had access to a multitude of data and data types, but were unable to bring them all together in one place for deeper insight. The participants shared their need to acquire more advanced data literacy skills in that neither their leadership prep programs or their district professional development offered adequate capacity building regarding data literacy skill development. For example, one participant spoke about how teams within the school would come together to speak to the trends in their isolated data sets. In one case in particular, a student who had a low performance score (academic) was also found to have poor attendance (nonacademic) data. As a result, the team determined that an improvement in attendance would improve the student's academic performance. This decision was made without probing deeper for underperformance causes or any other factors that could have contributed to the student's low achievement. Building educator capacity is critically needed for the transformation of knowledge about student performance into insights (Slotnik & Orland, 2010).

The third theme, *Instructional Leadership and Data Use*, revealed the ways in which data was used to inform the participants' leadership practice, how data was embedded into the established school routines, and how data was used by the participants to improve instructional

practice. The participants had similar experiences using their progress monitoring tool to inform and guide their teachers toward instructional practice change. The participants relied on their coaches to directly support teachers with instructional practice change while they focused more on the percentages of students who moved from the low achieving tiered groups into the higher achieving tier group. The promotion of data use was heard across leader stories highlighted the prevalence of data embedded into their routinized school structures, yet very little was shared in their stories about instructional practice change connected back to their student performance data. Despite having a plethora of data to access and interpret, the participants struggled to gleam deeper insight into potential gaps that may have existed between teaching and learning in their schools.

In the context of this study, the school leaders appeared more as passive actors who received pre-constructed data and prioritized its use in compliance-driven ways to substantiate student academic achievement and progress. These findings also suggest an urgent need for school leaders to have clarity around what instructional leadership and the effective use of data looks like in their roles as principals.

Implications

In this new age of information, capacity for data use and the transference of knowledge into actionable insight is critical skills for school leaders to have in their leadership arsenals. Both accountability policies and data-informed decision making in education place some students in a position of deficit, especially Black, Native, Immigrant and Linguistically Diverse student populations. Oftentimes race and cultural knowledge is completely ignored and these deficit perspectives influence teaching and learning. Asset-based pedagogical practices (Gay, 2018; Ladson-Billings, 2009; Paris & Alim, 2012), social constructions of race (Mutegi, 2013),

and capacity for data use (Mandinach & Gummer, 2012) should be taken into consideration to dismantle these perspectives when using data in practice toward educational improvement. We must embrace the elements associated with asset-based (strengths-based) perspectives, specifically in Black school communities by acknowledging that bias and oppressive practices exist in these communities. We must work to dismantle systemic frames of oppression that preserve legacies of white supremacy and dominant white cultural norms in educator practice.

The results of this study lifts the voice of the school leader and highlights the significance in building school leader capacity for data use, especially in predominantly Black schools. Data use that is linked to instructional practice rather than being linked to what students are unable to do, puts the onus on educators to attend to the challenge of improving student learning outcomes through changes in their practice. This new perspective requires a different approach to leadership and necessitates capacity building in processes for data use (Coburn & Turner, 2011; Mandinach et al., 2008) and building cultural competence to counter influential deficit-thinking and beliefs (Delpit, 1995; Ladson-Billings, 2004; Nelson & Guerra, 2014; Valencia, 2012) situated in education contexts.

Additionally, we must improve access to data tools that include ways for school leaders to bring an array of data types together in one platform. This would also include data visualization tools for deeper insight on the part of school leaders to better inform decision making around teaching and learning. The school leader's contributions from this study revealed a need to attend to non-academic data sources in order to support academic progress for the student in their respective school communities. In light of a national COVID-19 pandemic, the participant stories also brought forth a greater need for schools to have data to better support the social and emotional needs of their students and staff to enhance academic achievement.

Equally important, school leaders need adequate support from their district leadership, more time to interact with data, more professional development to help interpret data to identify student instructional needs, and to enhance their ability to use data to inform the quality of their leadership practice. Without the necessary time to draw on and interact with data, school leaders run the risk of allowing systemic educational inequities to persist, thus creating barriers to advanced student learning opportunities and school improvement, specifically in Black schools overall. An avalanche of research validate this point and cite, time for data use is in short supply for teachers, principals, and district leaders (Honig et al., 2010; Ikemoto & Marsh, 2007; Ingram et al., 2004; Little et al., 2003; Marsh et al., 2006; Mean et al., 2007, 2009; Weinbaum, 2009). State and district leadership must support school leaders introspectively to be more agentive and intentional about their decision making and the connection educational outcomes.

Recommendations

In reflecting on this study, there are three areas for consideration to ensure this research moves forward: the continuation of narrative inquiry research, data literacy capacity building for educators, and the adoption of more asset-based approaches to data use. The focus of this research must center Black schooling experiences in order to generate best practice strategies that are practical and relevant to expand to the field of education at large. This must also include research that lifts the student voice to truly make this work both meaningful and affirming.

The first recommendation fills a void to ensure the continuation of narrative inquiry research to lift the voices of leaders in marginalized communities. These leader stories deepen our understanding of their experiences and the challenges leaders encounter when accountability policy is not relevant in their schools. These stories are viable forms of research that can help to

inform and disrupt the school leaders lived institutionalized conditioning around data use practices toward educational improvement.

The second recommendation establishes a need for state education agencies, leader preparation programs and district leadership teams to prioritize data literacy capacity building to support leaders in schools. Leadership preparation institutions and school districts must develop programs to provide the necessary knowledge leaders need to enact advanced data literacy skills in their leadership practice. We can no longer examine the educational progress in Black school communities without taking into consideration the relationships that exist between deficit-orientated mindsets, teacher practice and student learning outcomes.

The third recommendation advocates for more asset-based approaches toward data use. Asset-based perspectives can aid in the disruption of racialized cognitive models and individual epistemologies that all educators hold when examining data for interpretation and analysis. This shift in the cognitive frame moves discourse (public scrutiny) around student performance data away from analysis and interpretation that starts with student grouping based on deficit logic (i.e., far below, basic, and proficiency levels) to a cognitive logic model based on strengths to analyze and interpret student performance information. Asset-based approaches consider a frame that centers the strengths illuminated in student performance information as a starting point to improve upon teaching and learning in schools. In building a container for educators to hold and sustain an asset-based perspective for data use practices, educators would learn to value the funds of knowledge students bring to their classrooms (Vélez-Ibañez & Greenberg, 1992) to support their academic achievement. This type of shift in approach to data use can lead to the development of learning cultures in Black schools that are authentic, meaningful, equitable and operationalized in school contexts to advance learning outcomes. Safir and Dugan (2021)

suggest educators consider a counternarrative to the pedagogy of compliance to focus more on connection with students. This move away from control of students to meaningful connections with students to cultivate their genius (Muhammad, 2020) and help them become the creators, thinkers, designers, dreamers and intellectuals they were born to be (Hammond, 2014; Safir & Dugan, 2021). The ultimate goal of this approach could help school leaders and educators alike reframe their cognitive models and dismantle systemic racism in school systems shaped by racist ideology and dominant White cultural norms in our society.

Future Research

Boundless opportunities exist for future research to further explore school data use. One immediate next step would be to engage more elementary school leaders in Black schools in research to lift their voices and share insight regarding their experiences. Expanding the study to include more school leader stories would enhance or further validate the findings in this study. An example of this would be to consider ways to replicate the ACT's (2017) study on Principals' Use of Data. The ACT (2017) study surveyed over 400 school principals to capture a descriptive account of principal data use for decision making in one state. The survey respondents were 95% white and 52% of the respondents were males. The survey focused on how often data was used, their perceptions of data decision making utility, confidence in data use, and organizational support for data use. In comparison to the stories told by the school leaders in this study, data use, access, agency, and empowerment are vastly different among the two school leader groups. For example, 86% of the principals in the ACT study reported having professional development to assist them with interpreting data to identify student instructional needs and 32% of them reported having training to enhance their use of data. The participants in this study reported they received minimal to no formal training on how to use data to inform instructional practice in

their schools. Additionally, the principals in the ACT study felt very confident in negotiating with political decision makers for the improvement of student educational opportunities, whereas the school leaders in this study never made reference to having the confidence to negotiate with political decision makers to improve student educational opportunities. Therefore, replicating this study with a few adjustments would contribute to the overall understanding of how data use plays a critical role in Black schools.

This research informs education practitioners and offers a fresh perspective for data use in unique school communities. There is a need for education policy to be more practical and relevant if we are working toward the educational improvement of all students. More research is needed to examine the data use practices in Black schools to better understand whether or not data use practices in these schools advance or hinder academic progress for students.

Conclusion

In Michigan, only eight percent of school principals are Black principals, four percent of the school superintendents are Black, and only eighteen percent of the students attending public schools in the state are Black. Academic achievement for Black students in Michigan has been consistently below the national average and minimal academic progress has been made according to the Nation's Report Card released in 2019. It is clear that when it comes to schooling experiences of Black students in Michigan there is an issue of underperformance among Black students and an issue of underrepresentation with Black school leadership in state to support improvement efforts in Black school communities. These disparities show there is a need to provide better support in order to improve Black school communities.

School leadership in Black school communities must be equipped with the skills and talents necessary to create learning environments where students thrive and experience success in

their academic pursuits. For this and many other reasons, Black school communities must be led by principals that have advanced data literacy knowledge and skills. School leaders have more access to student performance data and they must be able to interact with data in ways to support strong instructional practices. School district leadership teams must also have coherent systems of support for school-based leaders to better interpret data in ways that inform leadership practice and decision making around the identification of student instructional needs. As a result, more exploration of school leader sensemaking of data use practices could deepen our understanding and ultimately improve leadership practice in schools. Within the leadership literature, it is unclear as to what significant influential factors contribute to the sensemaking of data use practices and decision making toward improvement efforts in predominantly Black schools. The lack of knowledge and support for advanced data literacy from state education agencies, district leadership, and leadership preparation programs must be improved to better support school leaders. Adaptations to current the growth models for schools can start with providing Black schools with student performance information from an asset-based perspective to change the improvement discourse in these school environments.

Personal Reflection

As a former school leader in one of the largest districts in the country, I spent years perpetuating deficit-oriented practices in my interactions with data. The professional development provided by my district was inadequate and did not help me attain the academic progress I deeply desired for my students. I had to seek out alternative opportunities to better prepare myself to serve my students in a way that advanced their learning and growth as scholars. I learned to interrogate my own epistemologies that posed barriers to my success as an instructional leader. After years of cognitive dissonance and navigating along an arc of

discomfort, I was finally able to arrive at a place where I am now able to move forward and help other school leaders make adaptive changes in their mindsets and beliefs systems regarding data use practices to cultivate and sustain the genius in their students.

APPENDICES

APPENDIX A

Information Consent for Minimal Risk Research

Study Title: Asset-based Data Stories: Elementary School Leaders' sensemaking of data-based decision making in Black school communities.

Principal Investigator: Jada A. Phelps-Moultrie, PhD. – Assistant Professor, K-12 Educational Administration

Researcher: Ronetta P. Wards, PhD Candidate- K-12 Educational Administration

Department: K-12 Educational Administration, College of Education, Michigan State

University

Contact Phone: 904-233-4611

Brief Summary

You are being asked to participate in a research study. Researchers are required to provide a consent form to inform you about the research study, to convey that participation is voluntary, to explain risks and benefits of participation including why you might or might not want to participate, and empower you to make an informed decision. You should feel free to discuss and ask the researchers any questions you may have.

You are being asked to participate in a research study of importance to the field of education as you share your leadership data stories and how you engage in data use practices (data-based decision making) to make decisions around instructional practices. Your participation in this study will take about 2-3 hours in total. You will be asked to participate in two interviews online via a secured virtual platform.

There are no apparent or obvious risks of participating in this study. The study does require participants to recollect stories from their past leadership experiences. This may trigger emotional or feelings associated with your leadership experience.

PURPOSE OF RESEARCH

You are invited to participate in a qualitative study that aims to understand school leader sensemaking of data use practices (data-based decision making) and how data is used to make decisions around instructional practice. Considering the inextricable links between society and education, educators have the potential to help equip students with knowledge, tools, attitudes, dispositions, mind-sets, beliefs, and practices to create a world that is truly equitable for its citizenry (Milner, 2019). This study is intended to illuminate the data stories told by elementary school leaders' serving in Black school communities and how their sensemaking of data use practices (data-based decision making) inform decisions around instructional practices to improve student learning outcomes. Additionally, this study seeks to understand how these stories align or do not align with asset-based perspectives. The overall goal of the study will

provide insight to inform future policy development regarding data use practices and implications on how educators can use data differently to mitigate disparities that exist among ethnic subgroups and their academic achievement resulting in perceive gaps. Underneath the pervasive perceptual gap discourse in education lies a deeper-rooted call to action to dismantle bias and discriminatory practices systemically within educational institutions. You are being invited to participate because you were highly recommended by one of your colleagues who has noticed how you often use data in your decision making as an elementary school leader. Please take the time to thoroughly read this document carefully and ask any questions you may have prior to providing your approval and consent to participate in this study. Ultimately, the outcome of this research endeavor may be published as part of a dissertation.

WHAT YOU WILL BE ASKED TO DO

You will be asked to participate in two interviews in an online setting and provide documentation that supports your school's plan for improvement as it relates to instructional practice. The first interview will take approximately 45-75 minutes and demographic information about you and your professional leadership journey will be asked prior to study interview questions. The second interview will take approximately 45-60 minutes and you will be asked to confirm and provide feedback to ensure accuracy of the leadership story you shared during the first interview. You will also be asked to provide documentation and artifacts related to your school improvement plan or goals you have established in your school community to improve academic outcomes for your school community.

PRIVACY AND CONFIDENTIALITY

All data and identifying information including signed consent forms will be kept for five years. Participant data and documents will be collected electronically and then transferred to a physical external hard drive. The external hard drive will be encrypted, password protected and stored in a secured location. All video and audio recordings will be kept and destroyed after five years. Data and information from this study will not be used for other purposes than this research.

YOUR RIGHT TO PARTICIPATE, SAY NO, OR WITHDRAW

You have the right to say no to participate in the research. You can stop at any time after it has already started. There will be no consequences if you stop and you will not be criticized. You will not lose any benefits that you normally receive.

COSTS AND COMPENSATION FOR BEING IN THE STUDY

Information provided by the participants will be used for research purposed only and there is no cost associated with your participation in this study. You will not receive money or any other form of compensation for participating in this study.

FUTURE RESEARCH

Your information collected as part of the research, even if information that identifies you is removed, will not be used or distributed for future research studies.

CONTACT INFORMATION

You will be given a copy of this form to keep.

If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact Ronetta Wards, 620 Farm Lane, Department of K-12 Administration, Erickson Hall, East Lansing, MI 48824-1034, wardsron@msu.edu, (904) 233-4611.

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or email irb@msu.edu or regular mail at 4000 Collins Rd. Suite 136, Lansing, MI 48910.

Your signature below means that you voluntarily agree to participate in this research study. Signature Date Printed Name

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APPENDIX B

Interview Protocol with Demographic Questions Participant Demographic Questions

- 1. What is your age range?
 - a. 18-28
 - b. 29-39
 - c. 40-50
 - d. 50-60
 - e. 61 and above
- 2. What is your ethnic background?
- 3. What is your gender?
 - a. Male
 - b. Female
 - c. Non-Binary
 - d. Other- Prefer not to disclose
- 4. What is your country of origin? What state(s) have you lived in? Where do you live now?
- 5. What is the highest level of education you have completed?
 - a. Did you originally major in education? If not, what was your first major in college?
 - b. Did you attend a historically black college or university (HBCU)?
 - c. Have you taken any data analysis courses during your leadership career?
- 6. How many hours would you say you work per week as a school leader?
- 7. Do you engage in social media? If so, which ones? Which one do you engage in for professional networking and learning?

Participant Interview Questions

- 8. Tell me about how you use data to make decisions when it comes to improvement or meeting the demands associated with accountability. What types of data do you consider to be the most important for making these decisions?
- 9. Can you explain how you analyze and interpret data to make decisions? Is this mostly done in isolation or do you engage with a team?
- 10. In what area(s) is (are) you prioritizing as a focus for improvement? What have you

identified as reasons or root causes? Is this focus based on data you've analyzed or interpreted?

- 11. How have you used data to tell stories about your school and any progress made during your leadership tenure?
- 12. How has your experience using data shaped instructional practice in your school community?

Additional questions during the semi-structured interview will arise as a result of the participant's responses to the aforementioned questions.

APPENDIX C

Interview Protocol with Category Groups

	Interview Questions	Sensemaking	Data Use	Practice	Comments, Suggestions, or Modifications
1	Tell me about how you use data to make decisions when it comes to improvement or meeting the demands associated with accountability.	Y	Y	Y	
1A	What type of data do you consider to be the most important for making these decisions?		Y		
2	Can you explain how you analyze and interpret data to make decisions.		Y		
	Is done mostly in isolation or do you engage with a		Y		
2A	team? In what area(s) is (are) you prioritizing as a focus for		Ť	V	
3 3A	improvement? What have you identified as root causes?			Y Y	
3B	Is this focused based on data you have analyzed or interpreted?			Υ	
4	How have you used data to tell stories about your school and any progress made during your leadership tenure?	Y	Υ		
5	How has your experience using data shaped instructional practice in your school community?	Υ		Υ	
	Additional Questions:	Sensemaking	Data Use	Practice	Comments, Suggestions, or Modifications
6	Describe your current situation for data use in your practice.	Υ	Υ		
6A	What would you like to see happen in this situation?	Y	'		
7	What gaps do you feel exists (if any) in your quest to improve instructional practice?	Υ			
7A	How would it be helpful for you if these gaps were filled?	Υ			
7B	What will it help you do in your school community?	Υ			
7C	How would you use this information in your role as school leader?	Υ	Υ		
8	Is there a contribution or achievement you are most proud of regarding your professional leadership work.	V			
9	about your school community?	'	Υ		
10	Is there anything else you would like to share?				
	Tell me about your process when establishing routines for using data to improve instructional				
11	practice. Describe how this has looked and felt to you in the		Y	Υ	
11a	past.	Υ			

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