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The purpose of this research was to determine the moral and ethical challenges principals face when making data-driven decisions guided by annual growth data. Annual growth data is the metric implemented by the North Carolina Department of Public Instruction as a response to the No Child Left Behind Legislation. Under the legislation, states were empowered to hold local education agencies responsible for ensuring all students were performing on grade level. Principals are held responsible by the state accountability equation for ensuring their school obtains annual growth, indicating a student's one year of academic learning. This research sought to understand how principals feel about using growth data and if they believe it is a quality metric to inform decision-making. Basic qualitative research was used to collect and analyze interview data from a pool of high school principal participants. The interview data were analyzed for codes and themes to develop a response to the research questions. Results indicate that principals are morally and ethically challenged when using these data to make instructional decisions but try to ensure that the best interest of the student is at the forefront of the adopted decision.

THE MORAL AND ETHICAL CHALLENGES OF PRINCIPAL DATA-DRIVEN DECISIONS ABOUT ANNUAL GROWTH DATA

by

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Approved by	
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To my family, I dedicate this dissertation to you. Lee, my husband, my love, I could not have done this without you. You sat with me many late nights and encouraged me to push through to the end. I appreciate your love and support more than words can express. Jackson, Lyndon, and Kourtlynd, I am finally "Dr. Mommy." My goal through this process was to put myself in a position to better support your dreams.

APPROVAL PAGE

This dissertation, written by Jamisa C. Williams, has been approved by the
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CHAPTER I

INTRODUCTION

I became a principal in June 2015. Each day I wonder what behaviors and actions it will take to keep my school in high growth status. After my first year as a principal, I received Advanced Placement (AP) scores for my students. In Advanced Placement Human Geography, the mean performance score of my students was level 2, which is not considered passing. Due to the pressure of achieving and maintaining expected growth, I decided to eliminate this AP course and add a course in Civics and Economics instead. The new addition was a course that I knew would yield positive growth data as a North Carolina standardized final exam. At the end of the 2016-17 school year, the results from the Civics and Economics course did yield expected annual growth, or one year of student achievement or learning in that content area. The positive results reassured me that I made the best decision for the school, at least initially. However, some educators would argue that providing students with more challenging subject matter, such as that presented in the AP course, is more value-added to the student learning experience. My example is just one of the many decisions I made to safeguard my school and myself in the age of accountability.

It remains an enigma to me how high school principals at various levels of school performance use their growth data and how their initial thoughts and reactions evolve into decision-making to achieve and/or maintain high-quality outcomes. For example, I

wonder if high school principals sacrifice what might be better long-term decisions for students to solidify expected growth for a school year. I wonder because I still question the decision I made about AP Human Geography.

In the current age of education accountability, administrators and teachers alike are accustomed to using the term "growth" when referring to student achievement models. However, there is often little understanding of both the accountability implications for teachers and principals and the meaning of the actual growth measures themselves among professional educator practitioners. In North Carolina, the Department of Public Education adopted the term growth to indicate a measure of student achievement for an academic school year as determined by results on standardized achievement tests (North Carolina Department of Public Instruction [NCDPI], 2017). While standardized formulas at the state level measure growth, what these data mean can be interpreted in a variety of ways and may vary, depending upon the type of school in which one works—from a high-achieving school to one in which there are many students with unique learning needs. At the heart of this study, I am interested in how school leaders' understanding of growth measures influences their leadership. Growth measures are a part of the state accountability measurement, and ostensibly should be used to ensure teaching leads to academic growth for all students. In this research, I explore the term growth and how it is understood as a means to inform teaching and learning decisions for school leaders at public high schools.

Historical Context

I began my teaching career in 2003. Quickly after I began, I remember the influx of information about the Bush Administration's new legislation on student achievement. In January 2002, President George W. Bush signed the *No Child Left Behind (NCLB) Legislation* into action with overwhelming bi-partisan support. The federal government birthed legislation from data that illustrated that there was an achievement gap, specifically minority or impoverished students performed consistently lower than non-minority, more affluent students of the same age and grade. National fourth-grade reading and math standardized test scores measured the achievement gap data.

Additionally, statistics related to graduate proficiency in math and science indicated that public school graduates were not competitive in the "knowledge-based economy" (Powell & Snellman, 2004). The Bush Administration hoped to increase student achievement by increasing professional educator accountability from the top down. "No Child Left Behind ensures accountability and flexibility as well as increased federal support for education . . . [it] continues the legacy of the Brown v. Board decision by creating an education system that is more inclusive, responsive, and fair" (U.S. Department of Education, 2004, p. 13). This legislation set a goal that all students in the public education system would be at or above grade level proficiency, as measured by standardized tests, by the year 2013.

As state and local governments brainstormed measures to hold schools accountable for achievement and meet the new goal by 2013, high-stakes testing increased to ensure the 2013 goal was met. In the *No Child Left Behind* information

guide released by the U.S. Department of Education (2004), state accountability was addressed. "Under No Child Left Behind, every state is required to 1) set standards for grade-level achievement and 2) develop a system to measure the progress of all students and subgroups of students in meeting those state determined grade-level standards" (p. 18). President Bush allocated funding to support the development and implementation of assessments that gave school stakeholders vital information about the academic standing of their students.

While the NCLB legislation seemed a favorable attempt to address the teaching and learning gaps that existed in public schools, states struggled to create pathways to achieve the lofty goals set in the legislation. In response, North Carolina, the state where this study took place, began to adopt various measures of Adequate Yearly Progress (AYP), or numerical representations of a school's performance compared to scales of state performance expectations, and accountability growth involving data on students, teachers, and principals. The NCDPI (2018a) released a definition of academic growth used for accountability that became the model for the state. The Public Schools of North Carolina provided the following definition:

Academic growth is an indication of the progress that students in the school made over the past year. The standard is roughly equivalent to a year's worth of growth for a year of instruction. Growth is reported for each school and each subgroup within a school as Exceeded Growth Expectations, Met Growth Expectations, or Did Not Meet Growth Expectations as measured by EVAAS, a statistical tool North Carolina uses to measure student growth when common assessments are administered. (p. 2)

The progress indicated in the definition originated from student data; these data came from standardized tests and was presented in school and state reviews that published performance data for every public school in the state. Various measures of growth, or a scale of student academic performance from year to year, became a pivotal data piece in 2008 to determine teacher effectiveness (The Council of Chief State School Officers, 2008).

As I watched the legislation begin to inform the day-to-day operations of teaching and learning, I advanced in my career. A decade after the NCLB legislation, there was still talk about the growing achievement gap. The state mandates regarding accountability measures of school "growth" became an integral part of the teacher evaluation instrument. Furthermore, the North Carolina Education Value-Added Assessment System (EVAAS), which relies on Statistical Analysis Software (SAS) (NCDPI, 2017), contains data based on state-developed standardized assessments. The data produced by this system continues to be published yearly and presented to the public in the form of school performance data using the designation met, not met, or exceeded to indicate growth performance. Accountability increased because of the NCLB legislation and remains high for school leaders.

Researcher Context

The American Educational Research Association (Everson, 2014) defined growth as "a statistical model that measures students' progress on achievement tests by comparing the test scores of the same students over time" (p. 219). The contrasts between the denotation of the term growth, as defined by the American Education

Research Association, and the connotation of the term growth, or the even use of growth data by school leaders and teachers, may be the difference between understanding the numerical equation for accountability and how that information influences approaches to leadership. Since school leaders apply a different meaning to the term growth, the use of data varies. Some leaders rely heavily on the data to make instructional decisions, while others do not. Because there is no consistent regulated expectation for how school leaders should use growth measures, the interpretation and use of the term "growth" for decision-making are dependent upon how each school leader understands the term and the choices they make based on growth data.

As stated, the *NCLB* legislation from the Bush Administration became the standard for developing school accountability goals. In short, this legislation was grounded on the premise that too many students were performing below grade level. For educators during the *No Child Left Behind* era, adopting new pedagogical practices, teaching to the tests, frequent testing, and in some cases differentiating instruction were all ways of increasing test scores and hopefully meeting the goal of grade-level proficiency and student academic growth for all by the designated date. This legislation shaped my professional approach to teaching and school leadership until I encountered a group of students who were already performing on grade level or above. The status of these students challenged my leadership lens for teaching and learning and caused me to question the role of growth data in decision-making.

During the *NCLB* era, most educators, including myself, were scrambling to increase test scores and get students on grade level. On the other hand, many of us failed

to acknowledge that in most school districts, there are students who are already on or beyond grade level. It is not unusual to find these students enrolled in schools that cater to a population of students who perform at levels above their peers and need additional academic challenges. For the most part, advanced students take honors-level courses, and pass the end of grade or end of course exams with proficient scores. As a result, the school growth measure is equivalent to "meet" or "exceed" growth as identified by the NCDPI. These students are not the typical candidates for differentiation, remediation, or intervention; however, these students may be prime candidates for enrichment or other systems designed to produce growth. According to Rogers (2007), high performing students need challenges in their area of talent or giftedness, independent and unique learning opportunities, and an array of content-based acceleration to meet their learning needs. Meeting the needs of high-performing students, as well as other learners is important, but the leadership challenge is maintaining steady levels of student achievement and ensuring continuous annual academic growth for all. Ultimately, the accountability associated with achievement growth data is applicable to all levels of learners in the school system.

In 2014, responding to the *NCLB* legislation, the North Carolina Department Public Education adopted a school grading scale. The grading scale captures both student growth over one school year and school proficiency; here, school proficiency indicates the mean number of students in a school taking a course who scored the minimum identified score to be considered proficient in a specific area of content. The formal

equation used to calculate the measurement of growth is AC = CSc-scale - (0.92 x)ATPAc-scale). According to NCDPI 2007 accountability report,

academic change (AC) is expressed as the difference between a student's actual c-scale [change scale] score for the current year and the student's average of two (in most cases) previous assessments (EOGs and EOCs) with a correction for regression toward the mean. (NCDPI, 2007, p. 4)

The previously mentioned equation measures academic change or growth with the following variables: AC = academic change; CS = current score; ATPA = average of two previous assessment scores (NCDPI, 2007). The growth equation leads to a measure of academic change or growth of every student every year based on their standardized test scores. Teacher effectiveness is assessed based on the numerical result of the equations for the students in their class over an academic year. Ultimately, the combination of the student academic change scale and the teacher effectiveness scale is calculated for all teachers and students in a school; the outcome determines if the school has met the expected annual growth.

School administrators and teachers are held to the standards of accountability defined by the state, meaning teachers and students should, in theory, consistently achieve positive academic growth over each academic year as measured by the numerical equation. Teachers have access to predictions about student performance with the use of the Educator Value-Added Assessment System (EVAAS). EVAAS became a formal part of the state's teacher evaluation and accountability system in 2012 based upon WestEd recommendations (Carolina Institute for Public Policy, 2012).

WestEd, a research and policy development agency, conducted a policy review and made recommendations to the State Board of Education. After recommendations by WestEd and using multiple sources of information, the State Board selected EVAAS as North Carolina's statewide growth model. (NCDPI, 2017, para. 2).

Teachers who have access to student EVAAS data are those who teach specific courses that administer End-of-Grade (EOG), End-of-Course (EOC), or North Carolina Final Exams (NCFE). Accountability is delineated by the Department of Public Instruction in North Carolina based on the application of the previously mentioned equation to a teacher's test scores in EOC, EOG, or NCFE classes to define positive or negative growth. The application of this equation designates the teacher as met, not met, or exceeded expected growth in their North Carolina Educator Evaluation measurement. Schools are also given this designation based on the overall calculations of the teachers in the school (NCDPI, 2017).

What does this all mean for teachers and school administrators? This means that North Carolina has developed and implemented what seems to be a clear process to measure achievement growth and designate a performance index to each teacher based upon the outcomes of their students. The process, as previously mentioned, was the new school grading scale introduced by the NCDPI in 2014. This grading scale included a letter grade that was a weighted combination of school proficiency scores and student growth scores. From my perspective as a school administrator, I noticed an anomaly in Guilford County, North Carolina that piqued my interest regarding how accountability is applied to school administrators inclusive of student achievement scores and growth data.

The number one ranked high school in North Carolina at that time, Early College at Guilford College, did not meet annual growth.

In comparison, STEM Early College at NC A&T, a sister early college high school in the same county with a comparable population (and the school where I am the principal), achieved high growth. How can a school be ranked as the number one high school in the state of North Carolina, yet have negative student growth? Did the lack of student growth defy the North Carolina accountability system? I became intrigued by the conversations I was having with my staff about maintaining annual growth measures. As a practicing school leader, I am convinced that giving voice to principals about instructional behavior and instructional decision-making essential for meeting and maintain growth for all students, despite state accountability demands, is a priority in education.

As if the public accountability of annual achievement growth was not enough to keep principals attuned to teaching and learning within their school setting, a new principal salary schedule aligned with the growth index was released for the 2017-2018 school year. New state budget changes led to decisions to measure principal effectiveness by annual growth measures (NCASA). Because of this legislation, principals are now paid a base salary along with annual leveled compensation based on growth. Essentially, what this means is that principals' salaries are now tied to annual growth measures. Thus, monetary incentives for increasing student growth in each school are supported and applied in North Carolina. Describing this system, Pridemore (2017) notes while there is money tied to improvement, no principal will be hurt by this

new approach as "there is a hold harmless provision that ensures no principal earns less than they are currently making in compensation by moving to the new [salary] schedule" (p. 1). Senior school administrators are admonished by this statement to feel comforted that the pay scale will not change their salary, even when their school does not meet expected annual growth. This legislation implies that if principals are leading highly effective organizations or those that are meeting or exceeding growth, they will be rewarded by increased compensation and salary bonuses. In contrast, principals of schools that are not meeting growth receive no additional compensation and will remain paid at the base salary. Here, the subtle message from the General Assembly is that effective principals achieve growth and should be paid commensurate with the amount of growth they achieve: the more growth, the more pay. However, from my perspective as a principal, measures of annual growth are impacted by many factors—the cohort of students, the retention and recruitment of highly qualified staff, and the everchanging school culture and climate. To add to the confusion, some educators assume that achieving high growth is simple when students are already on grade level or high performing; to the contrary, whether high performing or not, achieving and maintaining high growth in schools requires a unique kind of leadership. Pay scales based on merit in organizations dependent on the human factor add another layer of stress to the instructional decisions made by principals regarding teaching and learning and can exasperate ethical responsibilities to ensuring students are prepared for real-life challenges.

Many school leaders with a history of annual growth may have embraced the new salary schedule or viewed it as motivation to maintain their school's status. Others may have felt undue stress to improve drastically low-performing schools that have had historical growth challenges. What about the principals of schools such as the Early College at Guilford or those state-designated low performing schools? Notably, all schools have a mix of challenges that impact their ability to meet annual growth each year, but does this mean that principals not showing marked improvement in growth are undeserving of increased pay? This amended salary schedule brings to light the side of advocacy to increase principal pay, but it does not include the impact the document had on the day-to-day operations and decision-making of the principal.

Statement of the Problem

The *No Child Left Behind Legislation*, signed into action in 2002, became the driving force of accountability and high stakes testing for all professional educators. This data-driven legislation highlighted existing achievement gaps between minority or low socioeconomic student performance and non-minority or middle to upper-class students in the same grade and the same age.

Currently, administrators and teachers alike are accustomed to using the term "growth" when referring to student achievement models. However, we know little about how educational leaders understand, interpret, and making meaning of student growth measures. The absence of a clear and common understanding of growth data implications for accountability can impede student achievement in some schools as accountability measures often drive administrative decision-making.

Annual growth measures are heavily discussed as a portion of the North Carolina accountability system for teachers and principals. The expectation is that this accountability data should be used to drive instructional decision-making in schools to positively affect student achievement. Depending on how they understand the meaning of the data, teacher and school leaderships' use of growth measures for instructional decision-making can vary. However, we know little about how educational leaders draw on growth data specifically to inform instructional decision-making.

Purpose Statement

While principals do not often publicly share stories of growth-based decision-making, the challenges of accountability remain at the forefront of most school leaders' choices. With the publicity of school grades, readily available school report cards, new principal salary scales based on growth, and school recognitions aligned with growth designations, it is undeniable that principals take very seriously how they are perceived as educational professionals based on the representation of their school's growth outcomes.

The purpose of this qualitative research was to understand how the term *growth* is understood by high school principals and influences their instructional or pedagogical decision-making practices. I wanted to know how school-level administrators make instructional decisions based on their perceptions of growth data to achieve and maintain expected and ideally high growth status. Are the ethical and pedagogical challenges significant enough for principals to make decisions for growth status alone, rather than for what they might believe to be better choices for students? In this dissertation, I examined these complex questions by interviewing principals, who are the stakeholders

closest to the issues (Butin, 2010). In an era of high stakes testing and accountability standards, assessing the perceptions and use of growth measures by school leaders adds to the conversation about instructional and pedagogical decision-making in high schools. It also can help others in education to understand how leaders make meaning of data and use it to inform decision making.

Research Questions

I framed my research around three questions:

- 1. How do high school principals understand the meaning of growth data and use it to inform their decision-making?
- 2. How do the pressures associated with maintaining positive growth impact principal's pedagogical decision making?
- 3. What are the ethical and pedagogical challenges for principals posed by statelevel attention to growth data as part of high stakes accountability?

Overview of Methodology

The purpose of this qualitative research was to explore how accountability associated with annual growth influences high school principals when making instructional decisions. How do high school principals make instructional decisions and devise plans for improvement to achieve and maintain expected and high growth status? A dilemma faced by many principals is whether the instructional decisions they make are ethically sound or whether the decisions are influenced by the pressures of accountability for annual growth. What are salient leadership practices when it comes to interpreting growth measures? I examined these complex questions by conducting a basic qualitative

study. I interviewed high school principals because they are the instructional leaders of the school and the ones who are responsible for making key decisions. In an era of high stakes testing and accountability, understanding the many perspectives and challenges of those impacted by the North Carolina standards is critical and adds to conversations about school leadership in our current climate.

The research design for this study was qualitative; I used a basic qualitative research design because I am focused on "how people [principals] make sense of their own experiences" (Merriam & Tisdell, 2016, p. 15) related to growth measures. All principals in North Carolina realize the pressures of securing positive achievement growth data annually. The designations for positive achievement growth are "met" or "exceeded growth." However, in my experience, there is often uncertainty around these measures and what happens when a school falls below the expected growth designation of "met" for one academic year. I was interested in assessing how principals understand this accountability measure and its aligned expectations.

To collect the data necessary to respond to the research questions, I conducted 10 semi-structured interviews with principals from a school system in the Southeastern part of the United States. I audio-recorded and transcribed each interview, and then coded and analyzed the transcripts, looking for patterns and themes. Study participants were high school principals with varying levels of experience. I used purposeful and strategic participant selection for this research to ensure interviewees were all educational professionals who were knowledgeable in the area of study and could provide useful information regarding the research topic. I employed an interview protocol to obtain data

to answer my research questions. Each interview lasted approximately 60-90 minutes, and the literature informed the interview questions. All interviewees participated in the same interview protocol and the information gained I describe the results in narrative form in my findings chapters to best capture the thoughts and reflections of the interviewees.

Significance of the Study

Fielding, Kerr, and Rosier (2007) suggest,

America is in the midst of a long educational reform. The aim of the reform is to assure that our top 60% of students continue to make annual growth while the remaining 40% of students, who have not achieved minimum state standards, make annual growth plus necessary catch-up growth. (p. 13)

Contrary to Fielding et al.'s suggestion, school reform efforts of this decade have been enacted to close the achievement gap. North Carolina responded with the annual growth equation, which holds teachers accountable for ensuring students had one year of academic growth in a specific content area. The growth equation would become a part of a teacher's evaluation measurement as Standard 6 in the North Carolina Professional Teaching Standards. School principals have the right to recommend a teacher for dismissal if the teacher fails to meet annual achievement growth in addition to aligning principal pay with 3-year growth trends.

The pressures I feel as a principal associated with accountability cause trepidation about decision-making and the impact of my decisions. While my professional morals guide me always to do what is in the best interest of children and learning, I also feel pressured to maintain the growth, sometimes at the expense of providing students with

experiences that enhance their social, emotional, and other cognitive learning and development. Parallel to this ethical challenge, my concern with maintaining my salary and continuing a trend of meeting and exceeding growth at my school affect both my livelihood and professional matriculation.

Even without the added pressure of high-stakes accountability schemes, principals must ensure that all teachers in their schools provide high-quality classroom instruction for all students. If an equation did not measure our work, what other indicators acknowledge quality school leadership? "Considerable research and anecdotal evidence suggest that outstanding principals are a major differentiating factor between high- and low-performing schools" (Lindahl, 2010, p. 34). In many principal meetings, I have noticed that schools that met and exceeded growth are publicly recognized by asking the principal to stand when the school name is called. Furthermore, I have witnessed parking lot conversations about how certain schools obtained growth due to school leadership. It comes as no surprise that school leaders want their school to be successful, and they take pride in the moment that the school name is called and the principal gets to stand among a group of peers affirming the school's annual growth.

Undoubtedly, school leaders and administrators are cognizant of the challenges associated with the growth equation. Prudent leaders must seek out and implement leadership behaviors that yield student growth for all students. This study is significant because it uncovers how growth measures impact leadership decisions in high schools, and how the pressures of NCDPI connected with obtaining and maintaining annual achievement growth may cause ethical and moral dilemmas. For example, to achieve

growth expectations in the high school setting, principals may make decisions that are based only on that goal that may not be pedagogically sound based upon other information. This study is significant because it helps us learn about the pressures faced by principals and the decisions these principals feel forced to make to sustain growth.

Overview of Chapters

In this research, I explored educator perceptions about the meaning of growth and growth data and how such data informed school leadership decisions in the high school setting. The research data, findings, and recommendations are informed by the interviews and by putting these findings in conversation with the literature on this topic, which I review in the next chapter.

Chapter II of this dissertation is an overview of the literature pertinent to providing a foundation for understanding achievement growth measures, principal leadership behaviors, and data-driven decision making. Understanding achievement growth measures informs this topic because the development and initiation of those measures, including the various models and how they are applied in various states, is necessary to decipher the intent of the North Carolina accountability system as aligned with state and federal regulations and outcomes. Principal leadership impacts student achievement. In the case of high schools, research can help us to determine how school leaders make decisions to maintain achievement status. Finally, data-driven decision making is a national trend in leadership behaviors. Each section included in the literature review is connected to the scholarly conversation surrounding growth for all students.

In the third chapter of this dissertation, I describe my research methodology. As previously mentioned, I conducted a basic qualitative study. The themes that emerged from the interviews helped to capture how school administrators use growth measures to make leadership decisions. In Chapter IV, I present the findings from this study, organized by theme. In the final chapter, I answer my research questions, discuss the implications of my findings, make recommendations for practice and future research, and reflect on the study overall.

CHAPTER II

LITERATURE REVIEW

Annually schools and students are expected to show positive gains under the state adopted accountability plan. When the results are positive, celebrations occur! After the celebrations, many of the schools return to business as usual. Few principals articulate the root causes of their success with other principals who are struggling to achieve school growth. Whether the school achieved growth or not, principals and staff need to understand the salient variables and instructional decisions that lead to success. The purpose of this qualitative research study was to explore complex questions associated with annual growth and how instructional decision-making influences growth.

Furthermore, as principals make instructional decisions, how do they resolve ethical challenges relative to high stakes testing? What prominent leadership practices facilitate achieving and maintaining expected and/or high growth status? In an era of high stakes testing and accountability, understanding the many perspectives of those principals impacted by the North Carolina accountability standards is critical and adds to the dialogues of high school principals charged with making instructional decisions.

Nearly 2 decades have passed since the onset of the *NCLB* legislation and a renewed emphasis in schools on accountability. Not one state achieved the goal of 100% student proficiency, which was a major goal of *NCLB*. Nevertheless, in recent years, other national reform efforts have emerged, but student accountability and annual growth

requirements remain in most states, as does high stakes testing. The quest for answers and guidance when making sound instructional decisions and achieving annual growth continues. In this literature review, I provide a background on accountability models developed as a response to NCLB, discuss research that presents an assessment of the gaps in the accountability models, describe information on data-driven decision making as a guiding principle for achieving results, detail principal behaviors that have positive effects on student achievement, and offer an overview of the preferred state of education where all stakeholders are high-performing.

Accountability Models

Growth models became an integral part of student accountability during *NCLB*, as well as post-*NCLB*. A major step in fleshing out information about growth models came from the Council of Chief State School Officers (CCSSO, 2008), an organization comprised of superintendents and other district- and state-level educational professionals. The CCSSO examined various types of school accountability models, assisting states in their pursuit of ensuring success for all students. Among the school accountability models are the status model, the improvement model, and the Value-Added Model (CCSSO, 2008).

The status model, while often contrasted with growth models, focuses on annual measurable objectives (AMOs) that represent the established performance target for one school year. Some educators may refer to this model as cross-sectional because it can cross many grades for data analysis annually. The status model looks at the status or performance of a school in a given year. Using the status model, a district may compare

and rank schools within the district in a specified year according to their attainment of the Annual Measurable Objectives. Critics of the status model question the following:

To what extent is previous student performance influencing current performance? What student background factors are influencing achievement? How does current performance relate to achievement toward the 100% proficiency target? How accurate is the model in identifying schools in need of improvement? (National Center for Research on Evaluation, Standards and Student Testing, 2007, p. 4)

The improvement model is also a status model, but measures change over a year by analyzing the growth of cohort groups. "Such tracking of changes in proficiency levels is used as part of the AYP designations within the Safe Habour Provisions of NCLB" (p. 4). Safe Habour allows a school to achieve AYP for subgroups by showing that a percentage of students from that subgroup made improvement from one year to the next (Wiley, Mathis, & Garcia, 2005).

Unlike the status and improvement models, the growth model analyzes the number of students who achieve grade-level proficiency from one year to the next. This model looks at the same group of students as they move up through the grades. The growth model helps educators discern growth or declines in students' performance from year to year in specific subject areas. "Growth models provide information on student performance and the performance of the school as a whole that goes beyond any single point in time; they measure a school's ability to facilitate continuous academic progress in moving toward achievement targets" (Commission on No Child Left Behind, 2006, p. 5).

Finally, there is the Value-Added Model (VAM). The value-added model takes into account the student's background characteristics, prior achievement, and other statistical information to isolate the value-added effect of the school, specific programs, or the teacher. "The main purpose of the VAM is to separate the effects of non-school related factors from a school's performance at any point in time" (CCSSO, 2008, p. 4). In 2012, North Carolina implemented the Education Value-Added Assessment System (EVAAS), a system developed by SAS, a well-known analytical and software solutions company in Research Triangle Park. According to the NCDPI (2018b), EVAAS electronically provides to educators the kind of data needed to inform instruction, predict and project expected progress of teachers and students, and understand the impact that the teacher, school, and even the district have on the learning of the students in specific classes, subjects, and grades.

Various accountability models may be found nationwide. For example, during the rise of *NCLB*, educators in Pennsylvania, Delaware, Arkansas, and Ohio used both the VAM and the projection model. Additional to the VAM, Pennsylvania, and Delaware also employed a projection model to compare projection calculations to actual individual growth. In Pennsylvania, ". . . school users had difficulty understanding the results from the value-added model and became frustrated when they could not replicate the calculations" (Statewide Longitudinal Data Systems, 2012, p. 8). Nonetheless, in Delaware, Arkansas, and Ohio, educators agreed that VAM emphasizes the importance of growth for students.

Although the energy expended in formulating the various accountability models was plenteous, there remains much room for continuous improvement. Along the way, the anecdotal lessons learned by educators follow: educational leaders must communicate the use of and the accountability implication of the growth model prior to implementation; educational leaders must articulate the type of model that is being used and why and provide training on accessing data and understanding data within the growth model; and, finally, educational leaders must ensure that models do not have punitive implications (Statewide Longitudinal Data Systems, 2012). History revealed that the fine details of full implementation and communication often stood in the way of stakeholder buy-in. The details of the implementation should not undermine the overall value of measuring student achievement (Statewide Longitudinal Data Systems, 2012).

When the first decade of the 21st century ended, educators realized that it was highly unlikely that 100% of public school students would be proficient by 2013. While millions of students in this country are not achieving grade-level proficiency annually, some schools are high achieving, and some students are functioning on grade level and above. The schools and students labeled proficient are most often held to the same accountability measures as schools and students that are not. In North Carolina, the schools are categorized as meeting or exceeding growth or not. Nonetheless, some educators question whether students who are already on grade level are growing from year to year. How is growth defined for those students when they have not been assessed according to their learning ceiling, but rather at "standard" levels?

Gaps in Accountability Models

Various accountability models create a pathway for data collection and data analysis to support continuous improvement for all students. However, when students fail to show growth, the use of data gains a punitive undertone for principals and teachers. Researchers, educators, and critics must engage in discussions in order to understand the positive and negative ramifications of growth models. For example, Ryser and Rambo-Hernandez (2013) viewed growth models with an emphasis on the implications for gifted learners. Gifted learners are those students who are considered high achieving or attend a high-achieving school (Ryser & Rambo-Hernandez, 2013). Ryser and Rambo-Hernandez referenced the Growth Model Pilot Program (GMPP), as printed in the CCSSO paper (2008), which suggested that "the GMPP did not hold promise for measuring the growth of gifted students because its sole purpose was to identify students scoring below proficient in reading or language arts and mathematics as being on-track to proficiency" (p. 17). Thus, the National Association of Gifted Children (2016) responded with the position that growth models should "reflect" growth beyond standard grade level proficiency in order to be inclusive of all student groups.

A study by Goldschmidt, Choi, and Beaudoin (2012) supported Ryser and Rambo-Hernandez's claim that growth models failed to differentiate school ratings from high or low performing schools as there is a vast difference in the outcomes of some students depending on the model. The researchers determined the need for a more statistically sound growth model that includes the collection of student data at three specified data points annually and the comparison of scores over time. Such a structure

would facilitate more accurate instructional decision-making. McCoach, Rambo, and Welsh (2013) entered the conversation stating, "it seems unreasonable to have the same status expectations for schools serving initially low-achieving and initially high-achieving students" (p. 56). Many currently used growth models do not present a well-informed picture of the academic status of the students, but present information about "school gains in the percentage of proficient students . . . or relative change among students" (McCoach et al., 2013, p. 58). The numerical data may not clearly delineate true individual student growth, academic achievement, and performance over time or an academic school year.

McCoach et al. (2013) conducted a study of 171,380 students in 2,000 schools over 3 years from 2006 to 2009. The study used the Measures of Academic Progress (MAP) reading computer-adaptive assessment to gather growth data on students.

Because the assessment was computer adaptive, it continued to adapt to a student's appropriate zone of proximal development, potentially reducing the ceiling effect caused by standards assessments; here, standards assessments are end-of-grade or end-of-course assessments that only measure the proficiency of pre-determined content information.

The Measures of Academic Progress assessment was geared to measure the difference in growth between gifted and non-gifted students at two different points of each academic year, fall and spring. In this study, participants categorized as gifted students scored at least the 98th percentile on the standard assessment, whereas non-gifted students scored between the 16th to the 84th percentile (McCoach et al., 2013). The specific sample presented for study using the MAP computer-adaptive assessment (out of the cohort of

171,380 students) was a school that housed 67 third graders. Only nine students (13.4%) scored at the gifted level of the 98th percentile or higher before the MAP assessment. The findings of the third-grade sample after the MAP assessments suggested that gifted students "experienced virtually identical growth trajectories" over the summer as during the school year, whereas non-gifted students "grew at a faster rate" (McCoach et al., 2013, p. 65) during the school year. In other words, gifted students experienced academic growth over the summer compared to non-gifted students who showed more growth during the school year. McCoach et al. (2013) used this study to support claims that "growth modeling can provide a very different perspective than static achievement measures about instructional efficacy and about the degree to which we are meeting the educational needs of our most advanced learners" (p. 64). This means that the MAP assessment used in the study adapted to student academic knowledge over time as opposed to a static standards assessment that only has singular measurement ability. In order to give an accurate representation of student growth, there should be at least three data points over a designated period; these should occur at an adequate and meaningful time, and be comparable across time. In this study, the notable difference came from adaptive assessments, meaning the computer adjusted the assessment criteria to the appropriate zone of proximal development for each student in order to reduce the growth ceiling effect. Concerning gifted students or advanced learners, the absence of the assessment ceiling made the growth results more reliable.

Summary of Growth Models

Many organizations and researchers have critiqued the various growth approaches and provided recommendations for improvements. However, in the final analysis, the state governing body determines if measures of growth are appropriate for assessing student performance and for holding teachers and administrators accountable within individual states. In the case of the NCDPI, there is both a standard growth system for student performance and a value-added growth system for student, educator, and school accountability. While the growth systems were not developed to be punitive, they can be used that way. For example, when a teacher or school fails to meet expected growth, the perception by many is that the job is not being done within the school. To make matters worse in North Carolina, beginning in 2018, salary increases for principals are directly tied to student growth.

Data-driven Decision-making

The literature associated with accountability includes research on the topic of data-driven decision making (DDDM) and approaches to school reform. In an era of accountability, data-driven decision making is an essential leadership behavior.

According to Marsh, Pane, and Hamilton (2006), DDDM refers to "teachers, principals, and administrators systematically collecting and analyzing various types of data, including input, process, outcome and satisfaction data, to guide a range of decisions to help improve the success of students and schools" (p. 1). In what follows, I describe the various approaches to data-driven decision making, from the central office level, to the principal's desk, and to the teacher level.

Marsh et al. (2006) synthesized four existing studies on data-driven decision making. The studies focused on "familiarity with, use of, perceived usefulness of, and support for using different types of data" (p. 2). Using various forms of qualitative research for data collection, Marsh et al. found that educators use student achievement test scores most prevalently in instructional decision-making on the school and district level. Further, Marsh et al. found that not only did the principals use data for making instructional decisions, but also using the value-added growth model was particularly helpful in providing historical student data that facilitated prescriptive decision-making.

Similar to Marsh et al.'s (2006) framework for data-driven decision-making, and following Marzano's (2003) 11 high-impact strategies (2003), Shen, Ma, Cooley, and Burt (2016) found that certain principal leadership behaviors positively influence student achievement, school culture, and teacher data-driven decision-making. In 2003, Robert Marzano published a book that synthesized his research related to leadership actions that lead to increased student achievement. His premise, referenced by Shen et al. (2016), was that the following the 11 high-impact leadership behaviors and actions has a significant positive impact on student achievement (Marzano, 2003):

- 1. Guaranteed and Viable Curriculum
- 2. Challenging Goals and Effective Feedback
- 3. Parent and Community Involvement
- 4. Safe and Orderly Environment
- 5. Collegiality and Professionalism
- 6. Instructional Strategies

- 7. Classroom Management
- 8. Classroom Curriculum Design
- 9. Home Environment
- 10. Learning Intelligence/ Background Knowledge
- 11. Motivation

Shen et al. (2016) use these strategies as a cross-reference for the 2015 study on principal data-driven decisions and student achievement: "The study's objective is to contribute to the knowledge based on principals' mediated effect on student achievement by (a) focusing on a relatively new phenomenon of principalship leadership as related to data-informed decision making" (p. 373). The researchers highlight that although the movement towards data-based decisions shows a long-term positive effect, the processes used are often lacking proper data and data instruments.

Shen et al. (2016) worked with the Michigan Association of Secondary School Principals and the Michigan Elementary and Middle School Principals Association to assess the influence and impact of principal's data-informed decision-making on the culture of the school. In other words, they asked whether it becomes the norm of the school when the principal employs data-driven decision-making. This study queried whether there is a positive impact on student achievement when a principal embodies Marzano's (2003) 11 High Impact Strategies. A 42-item survey aligned with Marzano's 11 strategies was used in data collection. Responses were collected from 258 principals and 703 teachers. School participation was allowed if one teacher and the principal both responded to the data collection instrument (Shen et al., 2016).

The researchers used statistical equation modeling to analyze principal results from teacher results separately. The findings showed that teachers are in a better position to determine if principal leadership behaviors influence school culture and student achievement than the principal. The study also showed that principal leadership behaviors aligned with the 11 high impact strategies (Marzano, 2003) more positively influenced school culture and encouraged teacher data-driven decision-making.

In a later study, Marsh and Farrell (2015) sought to understand how effective school leaders support teachers with data-driven decision making to build overall teaching efficacy and capacity. The study examined the use of capacity-building interventions (CBIs) for data-driven decision making with building level data teams and literacy coaches. When analyzing the data sets, the CBI process for teachers involved the following: created actionable plans based on the dataset; determined the next best approaches to instruction because of the data; and analyzed the outcomes of the instructional adjustment.

In this year-long study, the six participating schools were from four districts in one state, each school serving more than 75% Latino students, more than 60% eligible for free or reduced lunch, and more than 25% labeled as English Language Learners or ELL. The six schools had majority-minority students who failed to meet accountability goals. All the participating schools used CBIs with literacy coaches, data coaches, or data teams. Data were collected in the form of interviews with teachers, principals, district leaders, selected CBI leads, and focus groups with non-study teachers, with additional observations and document analysis. The researchers concluded that CBI leaders support

teachers in gaining new knowledge and skills related to data-driven decision-making by interacting with their teachers and providing pedagogical feedback.

Data-driven decision-making, especially when led by the school leader, has positive implications for student growth as proven by the research, but there are certain cautions tied to the use of data. Some problematic variables in ensuring data-driven decision-making include the ability to collect the most useful or relevant data [or multi-sources of data] to support the school issues or gaps, the ability to accurately analyze the data, the capacity to navigate data technology, and the capacity to appropriately use data to inform instructional decisions and to build capacity in teachers and other school leaders.

Providing a contrasting perspective, in his book *Cage-Busting Leadership*, Hess (2013) calls data-driven decision-making "the New Stupid." Quite simply, Hess indicates that educators are constantly inundated with information about data decisions and research-based practices to the point of saturation. He suggests that "unless we're careful, today's enthusiastic embrace of data can lead to reflexive reliance on a few simple metrics and stand in for careful thought" (Hess, 2013, p. 72). He outlines three key mistakes of data use: using data in half-baked ways, translating research simplistically, and giving short shrift to management data. In other words, principals and educational leaders may misuse data when they fail to disaggregate the data fully for meaning, and when they fail to translate the data into meaningful work or instructional priorities. Furthermore, educational leaders may be guilty of relying too heavily on snapshot data. The availability of multi-sources of data is essential. Hess (2013) also

warns against letting data impede the ability to lead and make decisions for the good of the school, students, and community. He concludes that data must be used to solve problems, not to create new ones.

Principal Behaviors

Following Marzano's 11 strategies, the effective use of data on the part of school leaders must emerge as part of the positive school culture. Because of the teacher shortage and other factors, teachers have choices of where they choose to work. Often prospective teachers choose schools because of the leadership and decision-making qualities of the school leaders. Many educators would agree that principal behaviors and leadership styles impact school culture and climate, and concurrently, student achievement and growth. Barnes (2017) wrote a newspaper article titled "Teachers Quit Principals, Not Schools" that went viral on social media. Barnes highlighted the insensitive actions of a principal towards a teacher when the teacher's father died. Barnes (2017) suggests that many passionate teachers with positive academic results leave the profession because of their school leader or an administrator. As related to this study, key literature findings suggest that effective principals foster teacher growth, instructional leadership, and positive school culture. The way that a principal manages the school or behaves may be the main factor that impacts achievement, despite the accountability measures. Effective principals foster teacher growth, instructional leadership, and positive school culture.

Specific principal leadership behaviors influence overall school performance, as evidenced by Waters, Marzano, and McNulty (2005). Using meta-analysis, these

researchers synthesized over three decades [1970-2000] of data about leadership behaviors or actions. Their analyses included quantitative student achievement data, student achievement as a dependent variable, and teacher perceptions of school leadership as an independent variable. The data were collected from 2,894 schools, 1.1 million students, and 14,000 teachers.

The outcomes from the meta-analysis suggest that there is "a substantial relationship between leadership [behavior] and student achievement" in an effect size of .25. The researchers further explain that the effect size of .25 in leadership behaviors led to an increase in student performance of 50% to 60%. As a result of their analyses, the researchers identified 21 leadership behaviors or responsibilities that have positive effects on student achievement. The top 10 behaviors that yield an increase are develops shared beliefs and sense of culture, promotes discipline and order, provides faculty with sufficient resources for job-related functions, advocates for the school to stakeholders, shares decision-making with faculty, celebrates school and individual accomplishments, works as a change agent, communicates beliefs and vision, shows awareness and transparency of school and community issues, and models the tenets of instructional leadership. Notably, the researchers also found that poor principal [behaviors] effects can have adverse outcomes on student achievement.

In a similar study during the same time period, O'Donnell and White (2005) analyzed major leadership behaviors and their impact on student achievement.

O'Donnell and White (2005) "defined principal instructional leadership to include four areas of responsibilities: 1) resource provider 2) instructional resource 3) communicator

and 4) visible presence in the school" (p. 57). All of these leadership behaviors and responsibilities align with the findings of Waters et al. (2005). O'Donnell and White (2005) gathered qualitative feedback from 75 middle school principals and 250 eighth-grade English and Math teachers in Pennslyvania, using an instrument called the Hallingers Principal Instructional Management Rating Scale (PIMRS), developed in 1987 by Phillip Hallinger. This instrument focuses on several dimensions of instructional leadership such as school mission, instructional programming, and school learning climate. An additional phase of the study correlated principal behaviors with student achievement data in reading and math. The findings showed a direct positive correlation between instructional leadership behaviors as measured by PIMRS and student achievement in reading and math. "These findings indicate that higher teacher perceptions of principal instructional leadership behaviors relate to higher student achievement and vice versa" (O'Donnell & White, 2005, p. 65).

Several years after the Waters et al. (2005) study and the O'Donnell and White (2005) study, Lindahl (2010) analyzed differences in principal leadership behaviors in high and low performing schools. Lindahl (2010) asserted that there is already proof that leadership behaviors impact student achievement, but there may be specific or unique leadership behaviors in place in higher-achieving schools. The purpose of Lindahl's (2010) study was to determine the teachers' perception of specific principal behaviors in high-performing elementary and middle schools.

In order to differentiate the behaviors of principals at low performing versus high performing schools, Lindahl used six key standards to assess the teacher perception of

their leaders using the *Take20:* Alabama Teaching and Learning Conditions Survey.

Because the study was previously used in seven states before the Alabama implementation, it had already been deemed reliable and valid. The data were collected by surveying all public school, licensed personnel in Alabama. Overall, nearly 47% or 30,000 school-based licensed educator responses were used to assess teacher perceptions. Lindahl (2010) hoped to illuminate differences in leadership behaviors in high performing versus low-performing schools when the school population was held constant; the focus schools in this research all had over 70% of all students receiving free or reduced lunch. Additionally, in the schools that fit the criteria, more than 40% of the licensed staff were required to complete the survey. Lastly, the schools that qualified for the study also had at least 70% of their students scoring proficient on the Alabama Reading and Math test; in Alabama, these schools are designated as "Torch Bearer Schools" (Lindahl, 2010).

Many perceive that school leaders in low-performing, low socioeconomic schools are less effective as compared with those in high-performing, higher socioeconomic schools. In this study, Lindahl focused on six key standards to assess teacher perception of their leaders using the *Take20: Alabama Teaching and Learning Conditions Survey*. The six key standards assessed by the survey were: effective principals lead schools in a way that places students and adult learning at the center to create a learning culture; set high standards; demand content and instruction that ensure student achievement of agreed-upon academic standards—teachers are high performing; create a culture of continuous learning for adults; use multiple sources of data as diagnostic tools to assess,

identify, and apply instructional improvement; and actively engage the community to create shared responsibility for student and school success (Lindahl, 2010).

The results from the "Torch Bearer Schools" were compared to like elementary and middle schools (70% free or reduced lunch with 40% staff completing the survey but were not high performing). Data analyses were conducted using only the survey questions related to principal behaviors by calculating the mean and standard deviations of the responses. When compared with the above six key standards identified in the *Take20: Alabama Teaching and Learning Conditions Survey*, the findings below are aligned and indicate leadership behaviors at Torch Bearer schools:

- Torch Bearer schools were viewed as having better access to educational resources for teaching and learning, which aligned with Standard 1: Leaders create a culture of continuous learning.
- "Torch Bearer Schools' principals scored considerably higher on all questions related to a culture of high expectations than did their comparison schools" (Lindahl, 2010, p. 42).
- 3. Torch Bearer schools saw their leaders as more skilled at building teacher capacity through instructional coaching than leaders with less emphasis on instructional coaching; this is an indication of a requirement that teacher's master content standards and delivery methods.
- 4. Torch Bearer principals at high performing schools showed higher ratings than those at low performing schools in all 13 related survey questions regarding a culture of lifelong learning for professional adults.

- 5. "Teachers perceived them [principals] to be more effective at facilitating [the] use of student data to improve student learning" (Lindahl, 2010, p. 42).
- 6. The data suggested very little difference in the responses between low performing and high performing schools with questions related to this standard. This indicates that Torch Bearer principals create a shared sense of responsibility for all stakeholders that correlates with non-Torch Bearer schools.

In five of the six standards assessed, school leaders in Torch Bearer schools were perceived by their teachers as significantly more proficient. Only in standard 6 (effective principals actively engage the community to create shared responsibility for student and school success) did the data indicated a small tilt towards the low-performing schools. "Torch Bearer school principals were also more effective in facilitating participation of their faculty in key educational and instructional decisions" (Lindahl, 2010, p. 42).

In conclusion, this study further substantiated that there are key indicators that support the view that school leaders at high performing schools are more proficient at certain leadership behaviors that yield positive student achievement than their counterparts at low-performing schools. In this study, not only was this difference reflected in student achievement scores on standardized tests, but also in the perceptions of teachers in each school. This study helps to corroborate the argument that principals of high achieving schools have a collection of leadership behaviors that bring out the best performance in all school stakeholders. Furthermore, the behaviors that were measured

in the *Take20 Teacher Survey* mostly mirror the leadership behaviors presented by Waters et al. (2005).

Lindahl synthesized research presented by Waters et al. (2005) to substantiate the well-known awareness that solid school leadership is an indispensable element of successful schools and is foundational for school reform and leading a school to its apex. Desravines, Aquino, and Fenton (2016) state, "if you, as a leader, ever doubt the impact you can have on each student at your school, plenty of research confirms that great principals play an instrumental role in student success . . . a principal accounts for 25% of a school's total impact on student achievement (National Conference of State Legislatures, 2012)" (p. 7).

Achieving annual growth and beyond is highly unlikely in the absence of strong leadership. Strong leadership is usually organic. It happens over time, resulting from trial and error, communication with and learning from others, on-going education, and a host of other variables. Strong leadership behavior can be a byproduct of tinkering around with ideas and research. Tyack and Cuban (1995) stated that both positive and negative illustrations of tinkering and utopian thinking are present in records of educational reform. Nevertheless, with dedication to continuous improvement, it is possible that school leaders with less than stellar results can learn the necessary skills for making and incorporating instructional decisions that propel their schools to achieve. For this study, giving voice to principals may generate a collection of desirable instructional decision-making habits as well as leadership behaviors that underpin the realization of annual growth attainment and beyond. Tyack and Cuban (1995) stated, "Good teachers

re-invent the world every day for the children in their classes" (p. 133). Maybe it is time for school leaders to re-invent their leadership approaches and behaviors, especially if success has not been the norm at these schools.

Summary

The *NCLB* legislation of the early 2000s created a mark in educational history, especially as it relates to expected student growth and accountability. The legislation caused state educational entities to examine metrics that would help create a pathway to goal attainment. Growth measures became an integral tool available to school leaders to increase accountability while simultaneously capturing pertinent data over time about student and teacher performance. Various accountability models were used throughout the country. Nearly 20 years after NCLB, data collection processes and the use of data to inform instruction are still emerging and prolific in many states. The variances in state growth measures and the impact on student achievement and school accountability are far and wide; it is the prerogative and responsibility of the school leader to determine whether the growth measures as outlined by state statute will be the major determinant for instructional decision-making and teacher accountability.

As principals learn about the value and usefulness of growth measures for their individual schools, strong instructional decisions must stand front and center. Thus, sound principal leadership behaviors and decision-making skills are essential. The decisions made by school leaders not only influence the school culture, but ultimately, student achievement (Desravines et al., 2016). Principals who exhibit the top 10

leadership behaviors, as outlined by the National Conference of State Legislatures (2012), are noteworthy and useful in developing a model for success and goal attainment.

The related literature shows that when the leader of the school consistently models the usefulness of multi-sources of data set to inform instruction, it catches on with the instructional staff. Nevertheless, Hess (2013) warns that misuse or even use of data just because it is an expectation can be dangerous and yield damaging results for the overall school culture. Prudent leaders understand that instructional decision-making involves more than numbers; instead, decisions involve data sets plus other factors.

In my research, I studied the impact of annual student achievement growth data on the ethical and pedagogical decisions made by school principals. This research is grounded in the introduction of growth measures by NCDPI in 2012. Since that time, growth measures have become an integral part of school accountability systems.

Beginning in 2018, principal bonuses are linked to school growth data (Pridemore, 2017). Per the related literature and my personal experience as a high school principal, I have found that leadership decision-making based on accountability measures, including annual growth expectations, places enormous pressure on principals. Marsh and Farrell (2015) believe that data-driven decision-making is a best practice and is a "framework for capacity building" for both school administrators and teachers. However, moral and pedagogical dissonance may arise when school leaders make decisions with only the data in mind. Numerical algorithms, such as the growth formula, should not take precedence over informed ethical instructional decisions that add value to the educational experience of all students; the school leaders must utilize a range of skills in order to achieve and

maintain growth and beyond. The findings of this study yield a different perspective on the use of growth data to inform instruction, and ultimately, to grow students at all levels.

CHAPTER III

RESEARCH METHODOLOGY

School leaders face enormous pressures to lead schools. Just after the turn of the century, under the No Child Left Behind Legislation (U.S. Department of Education, 2004), states were faced with a federal requirement to implement an accountability system that would close the achievement gap. At this writing, nearly 20 years post No Child Left Behind, student accountability remains a primary concern, especially as there are still significant achievement gaps between student populations. Critics may assert that innate to student accountability and high stakes testing are ethical and moral decision-making. Each year, as growth data are published in North Carolina, principals anxiously await their schools' designation of met, not met, or exceeded growth as the confirmation that their work was valuable, and that students in their school are successfully learning. Because growth data outcomes seem to be the defining factor for principal effectiveness, there is significant pressure to perform and maintain high growth status. Furthermore, in North Carolina, principal salaries are now attached to a 3-year trend of growth data. Given the pressures to grow student achievement, how do school principals make instructional decisions, and what principal behaviors promote the attainment of state standards?

The purpose of this qualitative research was to explore how school accountability associated with annual student growth influences high school principals' instructional

decisions. Further, I was interested in the ethical challenges principals face as they make decisions related to growth data. How do high school principals make instructional decisions and devise plans for improvement to achieve and maintain expected and high growth status? What leadership practices yield positive growth? Do principals face ethical and moral compromises when making instructional decisions? In this research study, I examined these complex questions. Understanding the many perspectives of those impacted by the North Carolina standards is critical and adds to the conversations of high school principals charged with making sound and effective instructional decisions.

The research design for this study was qualitative; I used a basic qualitative research design because I was focused on "how people make sense of their own experiences" (Merriam & Tisdell, 2016, p. 15). All principals in North Carolina feel the pressure to secure positive achievement growth data each year. I have been a principal for the past 4 years, and each year I face the stress of ensuring growth for all of my students. In light of my own experiences, and those shared with me by my peers, I was interested in exploring how other principals address the state accountability measures in their day-to-day principal behaviors.

Research Questions

For this research, the following questions framed the study:

1. How do high school principals understand the meaning of growth data and use it to inform their daily decision-making?

- 2. How do the pressures associated with maintaining positive growth impact principal's pedagogical decision-making?
- 3. What are the ethical and pedagogical challenges for principals posed by statelevel attention to growth data as part of high stakes accountability?

Methods

In order to answer the three research questions, I conducted interviews with high school principals, following the five stages of interview inquiry: interviewing, transcribing the interview data, analyzing the data, verifying the reliability and generalizability of the findings, and reporting the study (Kvale & Brinkmann, 2009). Before the interview sessions, I created an *Interview Protocol* based on the relevant literature and my research questions. The interview protocol included an alignment matrix in which I articulated the interview questions with the relevant research question. The purpose of this alignment was to ensure that research participants are addressing the research questions during the interview.

I used the protocol I created during the data collection for the research. I presented my research plan to the interviewee to set the stage and described the purpose of the interview. To collect additional and relevant data, I asked follow-up questions during the interviews to increase response clarity and depth when necessary. I transcribed the t recorded interviews using Temi software. Finally, I analyzed the transcriptions by coding data, aggregating the data, and identifying key themes. I used these themes to answer the research questions.

The geographic location of the research site was a large southeastern school district. I refer to this school district as GGG in the research study; this is a pseudonym for one of the top 10 largest school districts in North Carolina

Selection of Participants

Sampling the right people is vital to the success of any study. Describing qualitative research, Creswell (2012) asserted, "it is typical to study a few individuals or cases . . . large numbers can become unwieldy" (p. 209). I selected a purposeful sample of 10 principals from District GGG for this study. Purposeful sampling means "the inquirer selects individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study" (Creswell, 2013, p. 156). The pool of participants was comprised of high school principals with varying levels of school administrative experience. I sought current high school principals that of different age groups, genders, races, and levels of experience. Table 1 represents the descriptions and demographic data of the study participants.

Table 1 captures some pertinent data of the study participants. Based on these data, 70% of all participants could be considered veteran principals, having more than 5 years of experience as a principal. Next, I selected participants who lead different types of high schools to capture a range of understandings of growth. In this study, six out of 10, or 60% of principals have served as principals in the traditional and non-traditional school settings. For this research study, the non-traditional school setting may be considered a magnet or theme school, alternative school, choice school, and early or middle college high school.

Table 1
Study Participant Descriptions and Demographic Data

					Description			
	Pseudonym	Years as a Principal	Gender	Race	Principal Experience in School Type	Served as principal in multiple schools and school districts	School Growth Status	Additional Information
1	Principal Lisa	0-5	F	Black	Traditional School	Y	Not met	Concerned with accountability but maintains that students are the first priority
2	Principal Harry	6-10	M	White	Non-traditional/ Traditional School	Y	Not met	Completed first year in new school during research phase and encountered not meeting growth for first time in career
3	Principal James	6-10	M	Black	Non-traditional/ Traditional School	Y	Met	Multi-level principal with belief that growth data are due to teacher affect
4	Principal Larry	0-5	M	White	Traditional School	N	Met	Contrasted difference between growth and proficiency but did not explicitly define the growth metric
5	Principal Paul	11-15	M	White	Non-traditional/ Traditional School	Y	Met	Veteran principal with instructional mindset based on data

Table 1
Cont.

				Race	Principal Experience in School Type	Description		
	Pseudonym	Years as a Principal	Gender			Served as principal in multiple schools and school districts	School Growth Status	Additional Information
6	Principal Tommy	0-5	М	Black	Non-traditional School	N	Met	Communicates confidence for maintaining met growth status each year
7	Principal Tara	6-10	F	Black	Non-traditional/ Traditional School	Y	Met	Multi-level principal who expresses concern with growth data for accountability
8	Principal Lynette	16-20	F	White	Non-traditional/ Traditional School	Y	Met	Veteran principals who makes decisions to benefit the whole child
9	Principal Michael	6-10	M	Black	Non-traditional/ Traditional School	Y	Not met	Multi-level principal with varied perspective on how growth data should be used
10	Principal Jane	0-5	F	White	Non-traditional School	N	Met	Believes growth data should drive instructional decisions

Additionally, 70% of the participants have either served in multiple schools or multiple school districts in the state in the role of principal. This means that many of the participants have a broad scope of experience in managing and understanding growth data. The principals in this study also came from schools with various designations within the growth model, meaning the school may be designated as met, not met, or exceeded growth; this research sample provided a variety of responses regarding the implications of the accountability model. The study participant descriptions and demographics indicate that the data collected from these participants have a full breadth of educational credence regarding firsthand experience with growth data. Ultimately, having a broad candidate pool with diverse perspectives and experiences added to the range of responses given to questions and allowed me to capture a rich picture of how a small sample of principals make meaning of growth data.

I used a snowball sample, working from people whom I knew would be good candidates and asking them for suggestions, contacting them via email, to see if they were interested in the study. Upon receiving their affirmative email, I scheduled an appointment with each interviewee and secured a date and a quiet location for the interviews. Each interview lasted 60–90 minutes.

Data Analysis

Systematic data analysis is crucial to drawing trustworthy conclusions, especially when the data collected is significant, as was the case of interviewing 10 participants.

Each interview session was audio-taped, recorded, and transcribed using Temi software.

Temi is an application that uses advanced speech recognition software to transcribe

recordings. Upon the collection of interview data, I used the Temi software and transcribed the audio interviews into word files. Next, I read through the word files along with the audio recordings to check for transcription accuracy, correcting the transcript when the software did not capture all the comments exactly as they were worded. Once all transcriptions were checked and edited for accuracy, I organized participant responses by interview question aligned with the research question. For example, Interview Question 2 (indicated in the interview protocol in Appendix A) aligned with Research Question 1. More specifically, Interview Question 2 asked study participants to discuss their perceptions of school growth data and how it is a part of their job; the above interview question aligned with Research Question 1 because I asked participants to share how they understand growth data and used it as part of their job to inform decisionmaking. For example, in response to Interview Question 2, Principal Michael shared that growth data supports the "purpose of schooling" and it is a part of his job because he uses the data to make decisions about "scheduling, who is teaching what, and determining if my students are really learning and growing." I evaluated responses like this to determine how the participant answered the driving research question. In this case, the initial understanding of growth as the "purpose of schooling" became a code that supported a major theme associated with planning for decision-making. From here, I made margin notes of possible themes and codes (Creswell, 2013) on the transcriptions. Codes and categories typically point to a theme or an overarching "dominant idea" within the research (Savin-Baden, 2013, p. 427). During the coding process, I made specific notes about words, phrases, or comments that study participants had in common. In so

doing, specific codes and themes became more prominent. Ultimately, coding, categorizing, and finding themes within the research data are necessary for the researcher to answer the research question. Each part of the data analysis process informs the other.

Trustworthiness

In qualitative research, researchers must take steps to ensure that their findings are trustworthy. There is a range of strategies that they can use to illustrate trustworthiness. According to Guba and Lincoln (1985, as cited in Schwandt, 2007), peer debriefing is one procedure that helps to ensure findings and interpretations are credible. I used peer debriefing as one strategy to enhance the quality and usefulness of my findings. I used the peer debriefer as a sounding board and asked them for feedback and critical questions on my preliminary analyses and findings. As part of the peer debriefing process, I confided in a professional colleague about my "evolving attempts at describing and analyzing qualitative [interview data] in order to achieve . . . consensual validation" (Schwandt, 2007, p. 222) and asked them to reflect on issues that I might be overlooking. In this case, my peer debriefer was a professional colleague who currently serves as a school support officer or principal supervisor and who has more than 20 years of educational experience. They also engage in practitioner-oriented research and wrote a qualitative doctoral research dissertation. During the debriefing sessions, my colleague challenged me to work to differentiate my positionality clearly from the participant responses. The interviews often provided me with a comparison lens with which to assess the transcripts. Here, the peer debriefer would encourage me to consider a more analytical and critical lens for coding the responses. A particular example is that as a

principal, I do not believe that growth data is substantial enough to use for decision-making, whereas many of the interviewees systematically use growth data for decision-making. In these instances, my peer debriefer would ask me to further analyze the participant's narrative and background for these responses as opposed to my initial surface-level personal comparison analysis.

A second step I took to ensure trustworthiness was to discuss my background and lens coming into this research, engaging in what scholars call reflexivity, for this dissertation. Creswell (2016) states that "a qualitative account becomes more valid if we know the biases and beliefs the researcher brings to the study and how these biases and beliefs shape the researcher's interpretation" (p. 102). As a principal in the field, my experiences with growth data and school accountability have shaped my perspective on instructional design and data-driven decision making. Thus, I hold some beliefs (and probably unconscious biases) based on my personal and professional experiences on the topic and research questions. Presenting my biases and beliefs on the subject of the ethical and moral challenges of using growth data to inform instructional decisions provides the participants and the readers a lens with which to situate my accounts or interpretations within the presentation of the research findings. One example of this type of reflexivity is the story I shared at the opening of this dissertation about where I made a pedagogical decision based on growth data that I have since been second-guessing.

Limitations

All studies have some limitations. Limitations are potential weaknesses in the research and reasons why the research might not be relevant in other contexts.

Articulating the limitations informs the reader in advance of potential deficiencies as well as the extent to which the findings of this study may or may not generalize to other populations (Creswell, 2012). One limitation of this study was the small sample size of 10 respondents. However, small sample sizes are common in qualitative research and allow the researcher to generate rich, thick description in a particular context. Another limitation was that all participants came from the same school district which may have influenced how they responded to my questions (especially as they all work under the same central office and superintendent). Also, I only conducted one interview per participant. While they shared valuable information, through additional interviews, I may have been able to uncover more nuance in their responses.

Research Positionality

In this dissertation, I wanted to understand how high school principals make instructional decisions to achieve annual growth. All principals in North Carolina are under pressure to secure positive achievement growth data each year. In my tenure as a high school principal, I sometimes must make decisions that I consider morally or ethically compromised or suspect to safeguard my growth data. I realize I make these decisions, although district office leadership has not clearly communicated what achievement growth data measures are (in any complex way) and how I am supposed to use it to inform my decisions. I have been a principal for the past 4 years, so I was interested in assessing if other principals understand this accountability measure and its aligned expectations. In this study, I reported the voices of practicing principals and

provide a window into the world of principals and how they make meaning of growth data and how they make decisions based on that data.

As I currently work as a high school principal, I have strong feelings on the issue of accountability and growth. I am keenly aware of how growth data and measures impact both my professional and personal life. As a result, in conducting the interviews for this study, I needed to be cognizant of these personal feelings and bracket them so that they did not unduly influence my interpretation of the collected data. In the process, I was hoping to "develop a complex understanding that forces reflection on my own 'biases and experiences'" (Creswell, 2016, p. 6). Furthermore, given that this was a qualitative study of a topic in which I share the experiences of my participants, this gave me a unique opportunity to get rich data. As Biklen and Casella (2007) write, qualitative research is so valuable in part because the researchers are able and encouraged to "discuss their personal experiences in the field, to communicate to readers what about themselves is relevant to a particular project in order to counteract the 'view from nowhere' kind of science writing" (p. 21). A critical strength of this study was that as a high school principal, I related to the experiences, challenges, and pressures that my participants faced concerning making meaning of growth data.

Summary

This qualitative research study design helped me to understand how principals make sense of achievement data and used it to make decisions in their schools. I was most interested in whether principals feel ethically conflicted in the face of achievement data, or feel pressured to make decisions to grow superficial measures of achievement

that may not be in the best interests of students in the long run. As a school principal, I felt I had to make certain choices based on data that I only loosely understood; looking back at these choices, I feel conflicted and wonder if I made them for the best reasons. It was informative to analyze the participant's responses in the study and determine if they had a similar orientation towards data-driven decision making and their overall perception of how to apply growth data. In the next chapter, I share findings from these interviews, organized by theme.

CHAPTER IV

RESEARCH FINDINGS

The purpose of this qualitative research study was to understand the moral and ethical challenges faced by principals when using growth data for instructional decision-making. In this study, I sought to explore the pressures associated with high school principal understanding and use of growth data, as well as how they perceive the data for decision-making. I had three questions when I started this study: how do high school principals understand and make meaning of growth data, how do they use it to make decisions (knowing the high-stakes that surround the job), and if they felt any ethical or pedagogical challenges related to growth data.

To collect the data necessary for answering the above research questions, I interviewed 10 high school principals. I selected current high school principals in a large southeastern school district to participate in the study. The participant pool included four females and six males, with experience ranging from 2 to 29 years in school administration. The related literature served as a foundation for developing the interview questions. As I mentioned in the methodology chapter, once the interviews were completed, I used a software program to transcribe them for analysis. I then coded the transcripts and identified themes.

I identified three key themes in the data related to planning, scheduling, and unspoken obligations. The principals use the annual growth data for *planning* methods

for building teacher instructional capacity and goal setting. I describe this theme in the first section of this chapter. The second important theme from the data is *scheduling*. Growth data allowed the principals to make prudent scheduling decisions for both teachers and students, as I describe in the second section of this chapter. Finally, the principals believed that an unspoken obligation of their job is to apply the annual growth data in their professional language and their plans of action. Figure 1 illustrates the prominent themes that are echoed throughout the data.

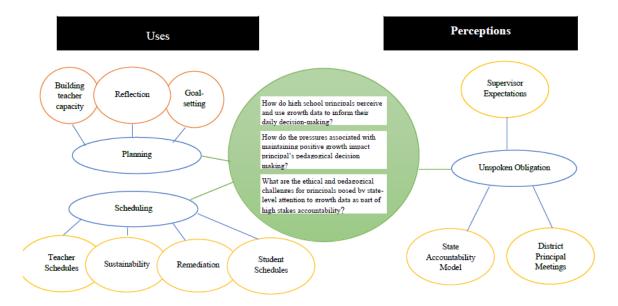


Figure 1. Thematic Results from Principal Interviews Regarding the Uses and Perceptions of Annual School Growth Data.

I used pseudonyms for each of the principals and occasionally edited their comments for grammar and clarity.

As I have discussed, a major focus of this research was to determine how principals understand growth data as a part of their work. All principals in this study articulated that growth data is an accountability metric implemented by the NCDPI that

measures student learning over a school year. Principals understand that growth data is a representation of student learning and teacher effect during the school year. Furthermore, the principals in this study perceive that making sense of growth data is a part of their job and must be used for decision-making. While all the principals provided different examples of how they use growth data, it was clear that the decision to use growth data to inform decision-making was a result of the correlation between growth data and the design of the state accountability model. During the interviews, principals highlighted that the expectation to use growth data was implied and spoken by their direct supervisor. Principals in this study internalized these spoken and unspoken implications and responded by making decisions based on these data. In some cases, principals reflected on their discomfort with these decisions because they did not believe that growth data offered a complete or multi-faceted reflection of student learning. While there was expressed discomfort with their own leadership decisions, no principal troubled the implied obligation to use growth data with their direct supervisor. Instead, principals in this study appeased the "expectation" and used growth data to drive decisions in the school. All principals in this study shared stories of ways they used growth data for decision-making, and several clear themes emerged. I discuss these themes below in sections on planning, scheduling, and unspoken obligations.

Planning

The theme of planning, as mentioned above, was articulated over 50 times by the principals, and emerged as a major theme for understanding and using growth data for decision-making. Two sub-themes developed from the theme *planning*: (a) planning to

set overall goals for student growth, and (b) planning to build teacher instructional capacity. Principals in this study understood the importance of planning as a prerequisite for achieving expected annual growth. Whether done formally in a plan of action or verbally when reflecting on the data with teachers, the principals perceive growth data as instrumental in creating a roadmap to successful student outcomes. For the principals in this study, *planning* encompasses instructional goal-setting and decision-making.

Setting Overall Goals for Student Growth

The principals understood the importance of using growth data to set overall goals for annual student growth. The application of growth data helped set the tone for instructional planning conversations. For example, Principal Larry stated, "Growth data is really why we're here." He understood that student growth is the most important outcome of quality teaching and learning. As principals are working with teachers to set goals based on student growth data, there is an understanding that the use of data is imperative to attaining goals. Believing that teachers are an integral part of both planning and goal-setting, Principal Tara stated, "We put the data in their [teachers] hands." This means that teachers are intimately engaged in the process of data analysis and that Principal Tara empowers them to use these data to make improvements to their practice. Similarly, Principal James stated that he begins each school year with a forum to discuss student data with the instructional staff. "We have them bring their spreadsheets of student scores, and we talk about each individual's scores. What's working? What's not? What are we going to do to make sure that we don't have a repeat, especially if students failed to achieve?" The data session supports the idea that goal-setting is

reflective and requires a close look at practices that support student growth. Likewise, Principal Lisa articulated, "I show them [the teachers] the data . . . And then we talk about it." Principal James said, "We look at the trend data from where our growth indices have been, and we set goals for where we want to be in the coming year." Here, the hope is that setting goals will help the students and the school to meet and maintain the annual student growth expectations. Principal Tommy, in conjunction with his teachers, uses the data to determine where "we missed the ball with them [the students]." The implication here is that "missing the ball" entails failing to ensure and support student growth due to a lack of proper planning. Thus, Principal Tommy begins conversations with his teachers by questioning what happened previously to provide insights for future decisions. Principal Larry questions, "what was the reason that they did not meet growth?" All of the principals seemed to agree that planning and goal setting requires conversations across the entire school family. Deep data dives and teacher transparency are essential in identifying behaviors that support academic achievement and growth. The data dives may include an analysis of the growth data for all content areas and all grade levels with all key stakeholders in the building. Furthermore, establishing a culture where data are shared and discussed in terms of how the data will inform schoolwide decision-making allows key stakeholders, such as teachers and administrators, to understand the direction of the school, plan accordingly, and internalize the necessary accountability response. Setting goals for student growth is only one step in the planning process. It is also critical that instruction that positively affects student growth is in place.

Continuing the theme of planning, one principal believes it is necessary to have an ongoing dialogue with teachers about the instructional foci in order for students to be successful. Principal Lisa wants teachers to have a clear depiction of what they want their students to know and be able to do similar to DuFour's four questions for professional learning communities; that takes planning. Principal Lisa offered,

We talk about the duality (conflict of working towards growth or proficiency) of working towards proficiency because that's also what the state requires of us. However, the bottom line is we want every kid in our building to grow, and sometimes when we're working with the EVAAS data and we're talking about selecting students for let's say, additional support or remediation, um, it becomes difficult because you want to provide that support to all kids (by scheduling with the best teacher). But that's not feasible. And so, using that data kind of puts you in that weird space. Like if I'm providing it to one group of students but not to another, we get into—I guess conversations about equity . . . My message has been we want all kids to grow, and if you're providing excellent instruction every day, then we're going to grow every kid sitting in front of you from point a to point b.

Principal Tommy believes that planning and overall goal-setting with data entails not just looking at the success of the school, but looking at the challenges. Most principals are quick to celebrate success, but it takes strong leadership to give equal time to the challenges. He asks of the data, "Who did we miss? Did we miss? . . . The twos, threes, and fours may have all been in the same classroom. What else could we have done and why didn't we see that struggle?" He further explained,

I like growth data more than I like proficiency because, in my opinion, you get to know how much they were projected to grow versus how far they actually grew. Letting me know and letting my staff know that hey, we taught them something, they retained something.

Principal Tara agreed with Principal Tommy. She argued that "school growth is more important than proficiency." The principals in this study perceived that quality schools grow students, even disadvantaged students. Growth for all does not occur magically. It is very much a function of intense planning and goal-setting.

Principal James described how growth data gives one a problem to solve as an administrator. If some students are not growing, then you need to figure out why. He mentioned that it is imperative that students grow and not only pass the tests, but also grow as individuals. For Principal James, the concept of addressing the needs of the whole child centers his work; however, he remains keenly aware of how his decisions impact student annual growth data that is reported to the state. Maintaining a focus on growth and seeing positive outcomes confirms his approach. Only when we see growth in students over time do "we know that we are in fact doing our job." He went on to say that he thinks growth data are more valuable than just data about proficiency, because the growth allows you to see where students may have been deficient before. "You're now able to see where they have now mastered that content, and then you can take that and construct to some additional learnings on that." Ultimately, he argues that good teachers understand where students are successful and where they struggle based on the growth data, and then plan lessons accordingly. Good principals support their teachers in making these decisions.

Building Teacher Capacity

Strong teachers are imperative for student growth. The principals in this study are aware that a strong instructional staff is a prerequisite to meeting annual growth. They

also know that many teachers lack some of the tools and skills needed to achieve instructional objectives; thus, building teachers' pedagogical capacity is often an ongoing goal, as well as a major component of the schools' plans of action.

Principal Tara discussed how growth data serves to help identify areas for professional development for teachers. Similarly, Principal Lisa asserted, "I have meetings every month with individual teachers." The purpose of the meetings is to look at the EVAAS data and other data and to assess needs, including the needs of teachers so that they can most effectively teach content. Lisa added that "Everyone realizes it takes a village to raise a child, and we all work together." In working together, both the principal and the teacher can reflect on the data to identify best practices and to focus their efforts on increasing pedagogical requirements necessary for improved student performance.

Building teacher capacity is one way that principals can to address annual growth data expectations. As the principals in this study discuss ways that they work to build capacity, critical conversations about data is a key strategy they shared to encourage reflection that impacts teaching and learning goals. Principal Lynette said, "We have conversations where I pull their classroom data, and so we [the teachers and instructional team] talk about what that data means and what it looks like, for the students in that classroom, this means we need to focus more on the instructional goals." Such dialogue helps teachers learn and plan effective methods to impact student growth. Further, focusing on instructional goals leads to teacher growth and development. Principal Tara explained that in smaller schools, the principals do not have many options to adjust teaching assignments; therefore, they must be strategic in planning staff development and

for budget allocations. Principal Lynette stated, "We use the data, number one, for trying to figure out which students might need remediation. Similarly, Principal Harry shared, "I'm not Title I [a Title I School], so I spent \$38,000-\$39,000 of instructional funds on tutoring for math and instructional coaching for math." The implication from the above statement is that when dollars are sparse, spending must be focused and deliberate. Thus, the pressures associated with maintaining positive growth dictate spending decisions on areas that will maximize growth.

Scheduling

When principals were asked about their use of growth data, *scheduling* emerged as another major theme. Repeatedly, all of the interviewees discussed how growth data highly influenced both teacher scheduling decisions and student scheduling decisions. I discuss each of these in the ensuing subsections.

Teacher Scheduling

A reasonable inference obtained from the interview data substantiates the ritual of how principals initiate their new school year by studying the growth data statistics attained from the previous year. Five of the 10 high school principals in the study explicitly communicated that their growth data are prominent and influence decisions about teacher placement and *scheduling*. The other five principals also referenced the use of growth data as a necessity in teacher *scheduling*. Principal Paul uses data to answer the questions: "What are we doing? How did we miss the ball with them [the students]?" A step toward answering these questions is reflecting on individual teachers' historical data—the growth of each student in their classes the previous year—before *scheduling*

students or teachers for any given semester. Principal Larry asserted, "You know if we don't meet growth, it is as if our school was not valuable to student learning." As stated by Principal Paul, growth is the reason "we're here."

The principals I interviewed felt that student growth is a function of pairing the appropriate teachers with the appropriate students. Often, strong principals make decisions in the best interest of students, but these decisions may not necessarily be in the best interests of teachers (or match their wishes). An example of this is to schedule challenging students with strong teachers, with this student needs drive the teachers' schedules. Principal Michael reflected on the importance of making decisions about teacher placement as a function of obtaining annual student growth.

We met or exceeded growth for the past 3 years; nevertheless, it is still important that we figure out what works and then appropriately place students according to the teacher's academic strengths . . . I use it [growth data] to inform *scheduling* decisions for both teachers and students.

The data show that these principals attend carefully to which teachers consistently show student growth and which teachers are inconsistent in meeting the instructional objectives. For example, Principal Lisa stated,

We look at growth data when we are doing the matrix [for scheduling teachers and classes], trying to figure out which teachers will be the best fit teaching which courses, and we also use it as part of our evaluation process and as part of those conversations that we have with teachers about their effectiveness and whether or not they are in the right fit for them [the students].

What Lisa alludes to here is that instructional goals are hampered when there is an incompatibility of teacher strengths with student needs, regardless of the teacher's history

of teaching a particular course. What is most important to the principal, it seems, is what the data suggests about the teacher's performance. When discussing the decision-making associated with scheduling and assigning teachers, Principal Harry communicated the following example of a decision he made about teacher scheduling:

I have one teacher who is a veteran, has been around for a while, actually retired and then came back. And as an important member of our school community, [they are] a graduate of the former [school name]. His sister was one of the 26 kids that staged the Woolworth sit in Greensboro, very well respected in our community, is great with kids and great for kids, but didn't meet expected growth. This is the kind of stuff you're talking about . . . this is the heart of what you're looking at it. And so, then I had another brand-new teacher who came in – one who is good for kids, right? African American male, relatively young. He's in his mid-thirties, um, gets kids, understands kids and those kinds of things, but also didn't meet growth. It wasn't like he was like negative 11, you know, or anything like that. He was like a negative three or something along those lines. When you look at their performance composites, they were relatively flat. So, like that experienced veteran math teacher, I moved him.

In the previous quote, the principal makes decisions to change teaching assignments based on the growth data. Despite years of experience, micropolitical connection, or even racial demographic, Principal Harry describes that if a teacher is not "growing" students, a change must be made. The change may be as simple as moving a teacher from a tested area to a non-tested area to avoid negative growth impact. Teachers who have a history of growing students are then scheduled to remain in tested subjects to continue to contribute to the school's overall growth. For the principal, both the teacher and students are growing, leading to positive outcomes for all. On the contrary, a teacher failing to grow students may be moved around to various seats in the school while feeling the pressures associated with growth accountability; in such a case, much like some of

the principals in this study, the teacher may feel as if they are not doing their job if not exited by the principal first. Principal Harry's story attests to the urgency that these principals place on the use of growth data when making teaching assignments in accordance with their teaching performance defined by growth data. As shared in his narrative account, micro-political factors often impact some school decisions regarding teacher scheduling but should not prejudice and/or influence instructional decisions that may adversely affect students. In the final analysis, Principal Harry acknowledges his responsibility as it affects teacher scheduling changes that may ensure growth for students.

Principal Larry revealed the following thoughts about teacher scheduling and growth data that are worth quoting at length as they reveal some of the thought process he goes through:

So, we try to break down how did we make this growth, and what were the key factors for the teachers who met? Who helped students achieve growth and exceed growth? We look at their schedules for the next couple of units and for next year to see which students need that kind of support. How did they [the teachers] push and drive those students? Um, but then the crap comes with the teachers who did not meet growth, and what do we do with that? What was the reason they did not meet growth? We had a really great language arts teacher, who was phenomenal. She was actually my reading specialist or our reading coach. She did not meet growth, but you couldn't tell me that kids in her class were not learning and more knowledgeable. But according to that test, she did not grow them.

Principal Larry suggests that this teacher was meeting the social-emotional learning needs of students, by his own observation. The dilemma is that her approach to teaching and learning did not yield positive growth outcomes on the standardized tests the students

were required to take. Here, he is caught between knowing that the teacher is "growing" the "whole" child, but the growth outcomes do not meet the accountability expectation. While the principal was convinced that students were learning, he was also aware of the gap between the learning and the evidence on the state assessment. Principal Larry clearly expresses his frustration with how to handle this situation in the face of accountability pressures. His continued reflection below captures the heart of his moral challenge as well as his next steps in decision-making.

If you ever visit her classes, they were the most engaging, inviting classes you've ever seen. It [her teaching] just didn't match [the tests] at the moment. She taught good structure. She taught English-you know what I mean? She taught content, but it wasn't test driven. It was student driven. I think that's a Catch 22.

Principal Larry's account, as seen above, demonstrates the importance of choosing the most appropriate teacher for a specific educational challenge. Whereas the English teacher may have possessed the academic qualities that may appear as compatible with the social-emotional context or the specific learning needs of students in another grade level or situation, the instructor's teaching style was misaligned with the test blueprint assigned to this particular group of students. Fortunately, the principal was perceptive enough to see that even though the instructor described above was a good teacher, a placement change to a non-tested subject was necessary if the principal sought to meet annual growth objectives. His hope was that this teacher will continue to effect positive change (growth) with social-emotional learning without the pressures of meeting the accountability growth expectation.

Principal Harry shared the following conclusion. There is persistent pressure to "slide your teachers [around] and master your schedule based on growth data." This means that for this study, principals perceive that effective teacher placement is a necessary planning step toward achieving positive annual growth. Consequently, the expectation is cause and effect; this means that because effective teachers are in tested areas, the effect is positive student growth data. This certainly raises another moral challenge. If the most effective teachers are teaching "to the test" and getting positive gains, what happens to the teachers who were not meeting growth expectations? The hopes of the principals in this study are that all students have great learning experiences and great growth outcomes; however, at some point, a student may encounter a teacher who is "underperforming" in terms of not meeting expected growth. According to Principal Harry's reflection, this teacher could be the result of the slip and slide placement planning process that occurs in the interest of growth. When this happens, the moral challenge is knowing that students of that teacher may not receive encounter the teaching and learning experience deserved. In this situation, growth data was the measure used to move a perceived underperforming teacher to another classroom in another content area: the bottom line is that this teacher still affects students. Hence, principals should have professional access and the ability to plan decisions for those teachers as well.

Student Scheduling

Principals in this study also used student growth data to make placement decisions for students. To the principals in this study, scheduling students with teachers who have

a history of success is a priority. Growth data serves as the impetus for such decisions. Principal Michael communicated, "We use it [data] to inform scheduling for both teachers and students, and then we monitor the impact of the instruction provided." Simply put, strategic scheduling practices allow both the teachers and the principals to monitor student performance over time as a means of predicting student performance on standardized assessments. They offered that analyzing historical student assessment data before making teacher assignments informs the process. When this happens, teacher assignments are the best match for prior student strengths and styles and may be a recipe for positive teaching and learning experiences.

Additional to assigning students to teachers, the growth data helps the instructional staff identify additional student needs. Often students require additional scaffolding or even enrichment. The principals' attention to the details of the growth data helps them make appropriate decisions about adding necessary classes or even encumbering expenditures that will help ensure student success. Principal Lisa described this process in her own use of growth data.

Well, we use it [data] quite a bit. We use the data number one for trying to figure out which students might need remediation. We use it most often in the summer as we look at our students who are coming up from middle school. We use it for scheduling purposes, specifically looking at our math one students, and students who might need Foundations of Math one, and which students can go directly into math one. We also added a preparatory course for English too. And so, we use student probability data to determine which students would be great candidates for that class as well.

In a similar revelation, Principal Tara affirmed that her scheduling is reliant upon data for student placement and scheduling, helping to ensure that students are placed in the appropriate level classes. "It is just a part of what we do." Principal Tara further indicated that using data for scheduling takes a lot of time and energy, but that the use of data in student scheduling is "valuable" for making accurate decisions and predictions about student success. The absence of such strategic planning may be the difference between meeting or not meeting expected growth as students who are placed in classes too far above their current ability level are not likely to achieve growth.

Principal Tommy and Principal Lynette articulated the importance of using data to prevent students from "falling through the cracks." Principal James added that sometimes you might hear teachers say we have "kids that are already so high up on the growth scale." This statement means that certain students have a history of obtaining growth equivalent to one school year or more. For the teacher, this is an indication that these students may not require high levels of teacher attention to continue to grow academically. Thus, the teacher may focus their efforts toward growing lowerperforming students in order to gain growth on behalf of both student and teacher. This instructional strategy, while beneficial for the teacher's growth data outcomes, may leave those higher-performing or consistently growing students out of the planning and execution cycles of the teacher. Teachers may choose to teach to the bottom performers or academically struggling students to accumulate greater gains in the overall growth metric. Moreover, the data helps in scheduling not only those students who are struggling, but also those students already function on or above grade level. Principal James describes how growth data can facilitate conversations with teachers about scheduling and working with students who are already proficient:

So, you know, what else can we do? Well, there's a whole lot we can do. Let's talk about what they [the students] have done, and let's look at what the research says. Let's put those two things together to enhance this learning even more. It's about getting teachers to take a look at their individual student's data and assess how they have historically performed. Next, see what measures they [teacher] can put in place to enhance the learning even more.

The statement from Principal James indicates that teachers should not assume that students who are already performing on grade level will continue this level of proficiency without quality instruction. Strategic planning and scheduling are necessary for students at all levels. Regardless of whether the students are functioning on grade level or not, principals must expect teachers to use growth data effectively to guide their instruction, ensuring that every student has an equal opportunity for success.

Principal Larry articulated that while he uses data for student scheduling, teachers may not always understand why it is impractical to change student schedules throughout the school year. Likewise, parents may not understand why requests for placements may not be granted until they understand the rationale for why scheduling decisions were made. Therefore, data-driven decisions may not settle well with some teachers, parents, or students. The principals in this study speak to the importance of transparency for data-driven decisions; however, the intimate details of personnel decisions are confidential and may leave gaps in the overarching understanding of why certain scheduling decisions are made. A principal cannot tell a family that a student's schedule because the teacher is not "growing" student learning. Nevertheless, as shared by Principal Tara, "We are always looking for ways to get better. It is never perfect until 100% of our students are proficient." Principal James said: "The real tragedy is not that they can't do it when they

come to us. The tragedy is that they still can't do it when they leave us." This statement by Principal James adds to the explanation of why the use of growth data can be fundamentally important to instructional planning and decision-making.

Ethical and Pedagogical Challenges for Principals

During the interviews, the principals I spoke with discussed many challenges they face in applying growth data for instructional decision making. A consistent theme that emerged from many of the principal is the unspoken obligation to use growth data. Simply put, the *unspoken obligation* means that despite the principals' personal feelings regarding the importance of using growth data to "grow" the students academically, they believe because it is a component of the North Carolina accountability equation, it is vital to measuring school and principal success. The unspoken obligation to use growth data may be counterintuitive to some principal's perception of the real value of growth data. Three of the 10 believed that growth data are integral to their instructional decisionmaking, while the other seven were less convinced of its value. The three principals that value growth data for instructional decision-making believe that this metric is a fair assessment of teacher performance and should be used as a primary means for datadriven decisions. The remaining seven principals believe that growth data is a singular metric in a world of data that should be considered but is not the key driver for datadriven decisions. Nevertheless, all principals implied that growth data is one indication of their success as a school leader. Principal Paul believes that growth data substantiates the work of the principal. Paul offered,

they want to see numbers . . . when we go to principal's meetings or we have scorecard reviews, don't let yourself feel beat down. I do feel like there's sometimes a culture of what aren't you doing? Why aren't you doing well? Your numbers aren't where they need to be.

It seems that even if a principal feels that he or she is meeting the needs of students in other ways, if the singular measure of growth data is below expectation, the work becomes suspect.

Principals in this study were not happy about the perception that growth data may be the only public quantifiable metric of their success. Principal Michael argued that "it is a part of my job [to use growth data] because I need to use it to make decisions for my school about scheduling, who is teaching what and determining if my students are really learning and growing." The *unspoken obligation* to use growth data impacts how principals go about their day-to-day instructional duties. While principals may consider other information in making school-based decisions, growth data is the most important.

The NCDPI publishes a school's growth data in the fall of each school year. When the data are made public, stakeholders can use it to make their own judgments about the success of the school. Even in situations where a principal may be comfortable with his/her leadership, negative growth data publicized in the media can reverse the community's perception of the principal. Principal Harry discussed feeling the sting of not meeting growth: "when we did not meet growth last year (and I don't know whether I expected us to make it or not), I was disappointed. I don't know that I was surprised necessarily, but I was definitely disappointed." Principal Harry implies that it was not until the public revelation of his school's negative growth that he became disappointed in

his work. In the case of Principal Harry, and other principals in this study, they did not seem to concern themselves with the growth designation as a leading data point until it became public. It is with that public announcement that Principal Harry and staff reestablished their goals and used the data to make changes. Principal Larry states, "because of our growth, and because we want to have success in our school, we have to use this marker [growth] to see how we should be moving our kids." Principal Larry explained that "if we don't meet the test expectations and students don't show growth, it's as if our school is not valuable for student learning." Here Principal Larry echoed the general perception among many school stakeholders regarding the expectation that schools meet annual growth. If that school fails to do so, community members gain a negative impression about teaching and learning at that school. Failing to meet the growth standard, in the minds of these principals, means leading a failing school.

Some of the principals perceive that achieving annual growth is an *unspoken obligation* and an implied expectation from district-level administrators. While eight of 10 principals in this study indicated that their direct district-level administrator has not directly mandated the use of growth data to inform their professional practice, they nonetheless feel the *unspoken obligation* to achieve annual growth. Principal James said, "my supervisor has never said, this is the growth I expect; but, she has asked the question, 'what are you doing to make sure that you can exceed growth,' you know. So that tells me that there is an implied expectation that we work to exceed growth." The *unspoken obligation* in the above scenario does not come in the form of a mandate, but rather in the form of questions about strategies or methods used to achieve "exceed

growth." Obviously, the principal feels pressured by the administrator's interrogation despite the absence of a directive. Principal Harry notes that "it's [the expectation of growth] not been communicated very well." He goes on to explain that it may be because there are unclear expectations from the district level leader. Despite this confusion, he feels that there is transparency in the conversation with his supervisor about approaches to achieving and/or maintaining growth status. Principal Harry's example supports the idea that meeting annual growth is a priority for the supervisor.

From a different perspective, Principal Lynette believes that the *unspoken* obligation is apparent when the district administrator feels the need to discuss teacher data with the principal. It is important to note that teachers also have access to their individual growth data from the Educator Value-Added Assessment System at the same time that the school-based growth data are published. While district-level administrators do not always explicitly address the school-based growth data score, individual teacher growth data is another way to denote progress [or not] indirectly. Ultimately, teacher growth data is part of the school-based scorecard. Addressing teacher data is one way to single out or pinpoint areas of weakness that negatively impact overall school performance. To the principal, having a conversation with a supervisor about individual teacher data advances the *unspoken obligation* to meet annual growth expectations. Principal Lynette shares, "I think so far that communication has been about the teacher effect data, not necessary the EVAAS growth data . . . I've never been asked by my district supervisor to use that data to do anything." Principal Paul echoes that "they [the district supervisors] are more focused on my staff. What are you doing with your staff?"

Principal Tommy faces the same conversation from his district-level administrator. He shared,

so the way that I feel is it is supposed to be used . . . I struggled with the district supervisor looking at it and saying, hey, this person needs an action plan. So essentially, I feel like we're being told to scare them [teachers] into becoming a green or a blue teacher.

This is a significant statement because it implies punitive measures for teachers who are not meeting growth. In the above example, the supervisor did not give attention to student data but instead focused on individual teacher data that could negatively impact the school-based outcomes. The *unspoken obligation* is further compounded when principals face indirect cues. Those cues, from supervisors and community leaders, are questions about teacher performance without direct association to growth data as a performance accountability measure, but as a lens to determine teacher affect. The underlying message is that a teacher not meeting growth does not have a positive effect on student learning and may require additional support.

Contrary to the narratives of Principals Lynette and Harry, Principal Tara has been explicitly told by her district-level supervisor that she is expected to meet annual growth. Principal Tara said, "my supervisor said to me, 'I expect you to meet growth . . . I need you to reach this area because if you meet this, then you will align with the district meeting their target goals." Also, Principal Lisa stated, "I have been told that I must meet expected growth each year." Despite the explicit directive from supervisors, whether articulated or implied, the expectation of meeting or exceeding annual growth expectations exacerbates moral and ethical challenges as principals wrestle with the

decision to apply growth data to decisions or take the bold gamble not to use the data.

The *unspoken obligation* a principal feels to meet growth because of district goals or even because of the implications from conversations with supervisors compounds the feeling that meeting or exceeding annual growth is part of the principals' performance expectations.

During the interviews, principals narrated stories of challenges they faced when using growth data for decision making. These stories capture the ethical leadership challenges along with the *unspoken obligation* to meet or maintain annual growth status. Below is the story of Principal James and his *unspoken obligation* to use growth data:

Longevity in teaching a particular course does not necessarily translate into being the best person for the job. Unfortunately, some 25-year veteran teachers possess first year teaching skills. Principals get to the point where they think that these teachers should be the meat of education, but they find instead, they are still in the infantile phase of education. Often, the negative growth data of a 25-year veteran teacher suggests that s/he may not be the best choice for teaching a tested course. A lot of times you'll find them [veteran teachers] teaching upper level courses, [the honors and the AP courses] because of teachers' longevity. Consequently, students will show gaps in their learning because they need the expertise of highly effective teachers. So, to meet growth, as expected, I had to move a veteran teacher who was teaching all honors or AP level. I said to her, you know what, I need you to teach a College Prep (CP) level course. Because if anybody can grow these students, you can. As a result, growth was met. Of course, it [the move] was met with some opposition. She told me, 'you know what, I've been doing this a lot. I've paid my dues.' Well, if you paid your dues, it's time you go to the house. You did not get into education to teach AP students or IB students, honors students or CP students for that matter. You got into education to teach. So that's what I'm asking you to do. I'm not asking you to do anything outside of what you got into it [teaching] for in the first place. If you know, if there's going to be an issue, then you let me know now so we can go ahead and start trying to identify a replacement. I want to make sure that our students get what they need. I expect any strong school principal would have those kinds of conversations. I don't think anybody in their right mind likes conflict, but conflict is a part of our job. So, you don't have great schools by not having conflict. You have conflict all the time. Morally, my question is, am I doing right by the children in this

school? If I can answer that question—yes, then, it's morally fine to me; it's ethically acceptable.

Principal James's story implies that he uses growth data to substantiate his decision to make a change in a teaching assignment. As stated by Principal James, moving a veteran teacher to a teaching assignment that is in the best interest of both ensuring growth on standardized assessments and growing the students in that class often meets opposition from the teachers. This principal clearly understands that conflict is part of what happens when making tough decisions that affect students. His decision is based on the idea that a strong teacher with positive results has the capacity and teaching expertise to reframe and reflect accordingly to meet the needs of a new group of learners. Principal James somehow knew that using growth data for decision making did not make him immune from conflict, but instead, it helped him decide based on facts [statistical data], not personalities. Understanding the importance of using growth data effectively, Principal James knew that his decision was the right choice for his school. In the above example, Principal James decided to change teaching assignments to meet the needs of students and improve test scores. Moving a high-performing veteran teacher to a new teaching assignment to "grow" those students provided all involved parties with a new opportunity for growth in learning. When these changes happen, the underperforming teacher may still be in the building. Certainly, the principal will continue to grapple with the best placement for that teacher and their impact on students. The moral challenge to do what is best for that teacher and the students who might be in their classroom persists.

Principal Lynette disclosed an ethical encounter similar to the situation described by Principal James. Lynette believes one of the most difficult tasks that she has had to face as an instructional leader is linking growth data to decisions about which courses teachers will be assigned. Paramount in such choices is determining whether students are achieving or meeting the expectations set forth for them with particular teachers. Principal Lynette admits,

I made several changes based on what I see from staff and the EVAAS data that we got in November. When the (EVAAS growth) data shows that a particular teacher will work better teaching a different course because of historical data in different courses or failing to meet expected growth, that can be a difficult conversation.

What makes the conversation so intense is that teachers take it as a "personal assault" instead of a decision made with students in mind. Principal Lynette implies that she knows that in many cases, teachers have probably done the best they could have done, but moving teachers with integrity and simultaneously maintaining their dignity in the process is quite a dilemma.

But at the end of the day, I have to protect the integrity of our school, and I have to have those conversations in a way that I can feel comfortable saying—I did right by you. That's big to me, whether they walk away from that conversation feeling the same way that I do is always open to interpretation.

For Principal Lynette, protecting the sanctity of the school is an important goal.

An implication from Lynette's story is that using growth data to make difficult instructional decisions is an essential step when trying to protect the school's reputation and trying to advance student growth. Lynette and other principals in this study

understand that in the final analysis, student growth is the goal. The principals struggle with accepting the growth metric as a meaningful representation of their work. However, after analysis of their decision with growth data, they all agree that it is necessary to deliver the ultimate goal of meeting expected growth based upon the day-to-day leadership decisions. The moral dilemma in these stories is that the principals felt pressured to make the changes solely based on the accountability model and sometimes single test scores. In these cases, the principals relied on growth data expectation to drive the decision for the teacher and the students. If the principals in this study were not pressured to meet growth data expectations as a part of their job, they might have determined from their own experiences and observations that the teachers were effective and not made changes. Principal Lynette's decision was to protect the reputation of the school so that teachers and students were not exposed to negative publicity. Principal James told a story more about school-level politics and the backlash of teacher unhappiness on school culture. In both scenarios, the principals felt uncomfortable and reluctant to make the changes and expressed a desire for other options, but the stresses associated with annual growth data persuaded them to make decisions that they knew had the best chance of impacting growth scores. Their moral compass was not at the heart of these decisions, growth data was, making it a moral challenge.

While the previous two stories scrutinize moral dilemmas relative to teacher placement using data, Principal Harry shares a story about resource allocation and challenges with maintaining transparency. He explained his ritual of standing in front of his faculty, reviewing the growth data with them, and revealing, "We did not meet

growth in math." Therefore, he tells his teachers that funds would be diverted to improve the school's status in math.

And we talk about the money. I show them this is where we are spending the money. This is what we are doing. Then somebody raised a hand. It was an English teacher who asked, 'well what about ELA?' I was like, I hear you, but remember I showed you that we are negative growth for math. We have got to fix that, right?

In his scenario, Principal Harry did not shy away from what he thought was best for the school—improving math achievement in order to meet expected growth. Principal Harry did share that the money invested in math could have gone towards other resources or field trips that would develop other characteristics of the students; however, the pressure he felt to meet growth outweighed other options for resource allocation. The moral dilemma is depriving students of those other resources just to meet a math goal defined by a state assessment. However, he was so vested in this goal that he was willing to put the money where he thought it was most needed at the time—and where it was most likely to impact publicly available achievement scores.

Before seeing the math data, Principal Harry said, "We felt like we were in a good place. Everybody was feeling pretty good, and we were rocking and rolling until then." Nevertheless, the data brought a sense of reality to the principal and faculty. Harry revealed, "I don't want to be the principal who just makes everybody feel good. Right?" Although there was some good news in the earlier data, the math statistic showed math as an area of weakness in the school. Harry asserted, "We are just transparent with

everybody and with everything that we do, and they know they have been told that this [math] is our focus because we didn't meet growth in math."

The principals in this study shared several stories about the use of data for building school-wide matrices and companion scheduling. Some of these discussions indicated that principals struggled with the idea of offering high-level courses, such as Advanced Placement courses, when other students have difficulty passing high school graduation requirements. Despite the dilemmas faced by these principals, the *unspoken obligation* to meet district goals adds additional stressors. The story I share below narrates an experience by Principal Michael and the *unspoken obligation* of his leadership decisions based on growth data:

Principal Michael reflected on the pressure he feels to increase the Advanced Placement (AP) offerings at his school.

Ironically, the feeder school has single digit proficiencies such as 8, 9, and 10 percent of the students function on grade level in reading and math. The expectation is that we increase our AP offerings. While I do not ever settle or have minimalistic expectations for students, I question which students would you like for me to put in AP? At present, about 15 percent of the students take one or more AP courses, that is above where my proficiency rating is for them coming into my school.

Principal Michael wants the students to achieve and to be challenged, but he does not want to set students up for failure.

We gotta find that balance. I do not want to overwhelm my kids. I don't want them just to step away and be like I am good, I do not ever want to do this again in life. So, we're looking at it from a couple of different points. I'm not going to take a kid from CP and put him/her in AP without there being some substantial [academic] pieces in place.

For Principal Michael, building on the data requires an incremental process of moving some students from college preparation (CP) classes to honors with the hopes of eventually progressing to AP courses, or moving some students who are currently in honors into AP courses based on their performance and growth projections. The goal of increasing the number of students in AP courses is confounded when students have the attitude that "I am just trying to graduate, and I am not trying to do all the extra stuff; I'm just trying to get through." Principal Michael further shares, "The dilemma for me is that I am trying to meet the district needs and expectations, but am I actually meeting the needs of students?" Students can go to college and be successful without an AP course.

However, the data speaks highly about the level of success of students who take AP courses. So, then it made me go back and reflect on the idea that AP might not necessarily be where I need to start. I need to add rigor to my CP courses and my honors level courses so that I can make sure that students are growing and preparing for the next level. What does my growth data look like in those CP courses? If students are not growing and teachers are not showing growth, then maybe we are not ready to just take 200 kids and throw them in the AP courses.

Nevertheless, the felt obligation to increase AP placements and scores continues to resonate with Principal Michael.

As principals shared stories about the moral and ethical implications of their decisions, they also shared their perspectives on the *unspoken obligation* to use growth data. Principal Tommy stated, "the moral part is making sure that, you know, they're not just focusing on just the accountability measures. We're looking at the entire school." In this regard, Principal Tommy implies that there is more to being a principal than making decisions based on test data. He goes on to explain that he has worked with leaders who

only focus on the courses with standardized assessments that count towards growth and proficiency. Their perspectives often close the door to "growing" the whole child.

Principal Lisa agrees and shares:

if you are a person who only sees inside the box, you're going to miss so much. You're going to miss a critical and imperative piece of students growing up. Not just student achievement growth but students growing up, but that's a card that we have been given. Whether it's right or not, we help children grow up.

Principal Lisa finds that witnessing students literally growing up ("the card we have been given") into citizens in school is a huge responsibility that principals should honor when making decisions. The implication from Principal Lisa's statement is that principal leadership decisions should be focused on the moral obligation to do what is right for children, even if beyond the standard measurements of growth accountability. This principal believes that educating youth reaches beyond numbers. Hence, she believes the test data is a "snapshot" of the student at that moment and should not be the driving force for all other leadership decisions. Principal Jane says, "I think that you've just gotta be okay with lashing back about your decisions as long as you aren't using growth data as a personal thing to harm people, teachers and students included." Simply put, internal stakeholders, such as faculty and staff, may publicly disagree with the decisions that are being made. However, Principal Jane's assertion may be that decision-making is not to harm, but to ensure the greater good for teachers and students.

Because meeting expected annual growth is built into the North Carolina

Accountability model for teachers and schools, it can be assumed that ensuring the

greater good is putting both teachers and students a position of success as measured by

growth data. Success is both teacher and student meeting or exceeding expected growth. A principal must be willing to stand for what he/she believes is the right moral or ethical decision despite the reactions or opinions of others, including supervisors. Principal James provides the following reflection of deciding for the greater good despite the opinions of others:

the other challenge is pushback from teachers. Pushback is that reluctance to change and to get on board with the right decision for students. That's probably the better way to describe it. Just a reluctance to change. Complacency is another issue. Complacency is the enemy of continuous improvement.

Ultimately, principal decisions must support continuous improvement in teaching and learning. Principal James' knows that principals are morally and ethically responsible for making prudent instructional decisions regardless of pushback from teachers or other administrators. Although the *unspoken obligations* may subconsciously influence certain decisions, the moral compass of the principals in this study is grounded in doing right by students and seeking growth for all.

Summary

The purpose of this research study was to gain greater insight into how high school principals understand annual growth data and use it to influence instructional decisions. I wanted to understand both how principals think about test score data and if the added pressures associated with obtaining and maintaining positive annual growth caused ethical and moral challenges.

Despite the inherent challenges linked to the use of growth data, the principals in this study believe that growth data is vital to their work because growth data is a public

representation of the performance of the school. To some stakeholders and principals, negative growth indicates that a school is not meeting the learning needs of the students. Furthermore, all principals were able to verbalize the definition of annual growth and to discuss how it encompasses both teacher and student data. The principals shared that student growth data were calculated based on student performance on standardized tests over time, paired with a projection of performance on future assessments. They also discussed how teacher growth data derived from teacher effect on students based on standardized test performance. Moreover, the standard definition given was a student's learning in a course or subject during a school year reaching an equivalent of one year of learning. While these principals did not discuss (or seem to really care about) the technical calculation of growth, I described the range of nuanced reflections about the implication of the data. The principals in this study receive the ideal that growth data is important to their work because it is a portion of the accountability model. At the same time, only three of 10 principals believe that the use of growth data should be significant enough to impact "high stakes" accountability. The other seven principals believe that growth data is only one piece of the multi-piece accountability puzzle. The implication is that throughout the school year, students engage in formative and summative assessments in the classroom, and the measure of their learning is more than "one snapshot on one day," as shared by Principal Lisa. However, despite valuing more holistic assessments, principals relied heavily on growth data in their decision making, particularly as it was approved and supported by district-level and state-level administrators. The principals

use growth data for planning and scheduling because of the *unspoken obligation* to meet expected annual growth.

Three major themes emerged from exploring how and why principals draw use growth data: *planning, scheduling,* and *unspoken obligation*. All the principals indicated that growth data is a vital tool when planning, goal-setting, and making decisions that could best lead to expected growth. The data show that principals understand and use growth data as a means to inform decision-making, thus achieving annual growth. It is not uncommon for the principals in this study to begin the school year by putting the data in the hands of the teachers. Together, the principals and teachers discuss the results and discuss the strategies and programs that worked well for the students in the past and need to be continued and those that need to be discontinued in the future. Thus, growth data served as a guide when having conversations with teachers and planning for continuous improvement. The data also influence the decisions and actions that will be carried out by teachers for the remainder of the school year. Throughout the school year, growth data are used to reset goals as needed and for building teacher capacity.

Growth data also served as a guide for *teacher scheduling* and *student scheduling*. The principals rely on growth data to help determine which teachers are best suited to teach specific courses. Growth data also helps dictate necessary changes in teacher assignments. As would be expected, principals face moral and ethical dilemmas as personnel challenges when a veteran teacher fails to achieve expected growth because of their position in the faculty as a longstanding and possibly effective teacher. Even

though a teacher may fail to show growth year after year, the political expectation is for that teacher to continue teaching that specific course because of his/her longevity.

Principal Larry shared a story about a veteran teacher who did not meet growth expectations. In his reflection, he implies that growth goals were not met because the teacher was more attuned to the social and emotional needs than the cognitive learning needs of children. Although children were learning in his estimation, the learning did not translate into growth scores. In other words, the principal believed that the teacher was playing an important role in the school that could not be captured by test scores. The ethical conflict was that he felt that he had to act on moving this teacher into another teaching area despite his confidence in the teacher's ability to positively impact students. His story is just one of many where principals grapple with determining why growth is not met, particularly in cases with teachers who have strong student and parent support. Ironically, in some cases, teachers perceived as quality may be unable to help their students achieve growth as measured by the current system. Although a principal may perceive that a teacher is meeting the social and emotional needs of the students, because the teacher is unable to meet growth standards, the principal was unwilling to defend the good qualities of that teacher. The above example shows how a tough decision is exacerbated by moral challenge; here, the principal is caught trying to meet other socialemotional needs of students beyond the test by supporting a teacher who is not meeting the predetermined data points that speak to teaching success. Such moral challenges compound the *unspoken obligation* to achieve growth each year. Just as growth data impacts teacher scheduling, so does it affect student scheduling. Several of the principals expressed the importance of assigning students to teachers who can best meet their instructional needs.

Several of the principals stated that they believe it is part of their job expectations to achieve growth. On the other hand, principals referenced the unspoken obligation to achieve annual growth. In this analysis, principals shared some of the most pertinent stories about moral and ethical challenges, but all of the principals shared some personal accounts of difficult leadership decisions that may defy the unspoken obligation to achieve growth with the use of growth data. Some of them preferred looking at the whole child instead of a "snapshot" in time. Nevertheless, a risk of defying the unspoken obligation is not meeting annual growth and the expectations of the school district. It is interesting to note that because of the *unspoken obligation*, many of the principals complied by digging deeper into their own growth data and devising goals for improvement. At no point in my interviews did principals indicate their willingness to trouble the data with a district-level administrator to challenge their growth data designation. In other words, if a school did not meet the expected growth defined by the accountability model, the principal was not confident in confronting their supervisor or administrator to debate decisions about student learning, teacher assignment, or other mitigating factors that had positive influence on the school culture or "whole" student growth. Instead, principals troubleshoot next steps to "fix" the designation and reclaim the former reputation of the teachers and school with the school district and school community.

In general, the principals want to do what is right for children instructionally over following "cookie-cutter" mandates or unspoken obligations as a blanket solution for meeting the expectation of annual growth accountability. While there may be a contradiction between what principals feel and do, the underlying fact is that if a student, teacher, and school show positive growth, then it appears a student has learned one year of expected content. Hence, the unspoken obligation was achieved. Presuming that we can trust that growth data is an accurate way of assessing student learning, then obviously all principals want to ensure that students achieve growth. Alternatively, not meeting expected annual growth requires deep reflection, goal setting, and decision making on the part of the principal to ensure the school designation changes in the future. As implied earlier by one interviewee, it is not a tragedy for them to enter a school not knowing all that they should, but the real tragedy is if they leave the school and remain uninformed. Thus, as Principal Lisa shared, the weight of being responsible for supporting the development of growing citizens and Principal Tommy shuns a former boss who only focused on test data in the prior examples, I found that many of the principals prefer to provide a quality educational experience even when growth data may not support their decisions, recognizing that important changes to student learning may not happen in just one year.

CHAPTER V

CONCLUSION

This research study was designed to explore principals' understanding of growth data, how they apply or use growth data, and how they navigate ethical and moral challenges associated with data-driven decisions. As a sitting principal, I observe other principals grappling with best practices for using annual growth data when making decisions. As previously stated, annual growth data emerged as a component of North Carolina's Accountability System, which emerged in response to President Bush's No Child Left Behind Legislation. This federal legislation required states to institute procedures or methodologies for ensuring that all students were on grade level by 2013, which never happened. North Carolina adopted an accountability system that measured student performance on standardized tests; later, the Educator Value-Added Assessment System (EVAAS) was implemented to measure teacher performance based on students' standardized test scores. Standardized test results indicate whether a student has learned at least one year of content for one year of instruction and provide a numerical metric of the teacher's impact on student learning. This numerical metric is the growth score. A favorable growth designation results when a school meets or exceeds expected growth. Embedded in the annual accountability model is the expectation that both teacher and student meet annual growth. Principals receive the growth information for each teacher, and the school growth designation is available to the public.

To gather data for this study, I interviewed 10 high school principals, asking them a series of questions about how they make meaning of and use growth data. During the interviews, principals also shared personal stories of their challenges related to these data (and the accountability system more generally) and how they used growth data when making leadership decisions. I analyzed their responses, identifying first codes, then collapsing the codes into categories before uncovering themes in their responses. I found that principals primarily use growth data for planning and scheduling. Ethical dilemmas arose when principals experienced the unspoken obligation from their superior to achieve growth at all costs. Before discussing the conclusions and implications I draw from this study, I answer each of the research questions directly in the next section.

Research Questions Answered

In order to answer the research questions, I interviewed 10 principals with a diverse range of experiences and who work at several different types of high schools all within a large school district in central North Carolina. In what follows, I present each of the three research questions, in turn summarizing the responses after each question.

1. How do high school principals understand the meaning of growth data and use it to inform their decision-making?

The principals in this study understand that growth is defined as students showing at least one year of growth for one year of instruction. While no principal provided a complex or technical definition inclusive of the equation used to calculate annual growth, all principals understood the predetermined growth scale of 0-1.0 to be equal to one year of learning or growth for both the student and the teacher. Principals expressed that

growth of 1.0 is indicative of meeting expected growth and is the goal of the annual growth scale expectation for accountability. Principal Tommy explained that the trend data depicts their growth over the years. Essential to achieving growth is understanding the school's initial status under the accountability model and then deciding on necessary strategies that will facilitate growth in the future. The principal respondents in this study understand that historical data points help predict how students will perform on future standardized tests. Despite the principals' understanding of growth data calculation and measurement—at least what it is supposed to mean, they are unclear about the district and state expectations for using growth data and the ensuing impact it should have on instructional decisions. In short, the principals understand the tool (growth data), but they lack clarity on the application of the tool, growth data. As a result of this application deficit, principals often presume an unspoken obligation to use data as part of their instructional decision-making, sometimes even when those decisions go against what they think might be best practices. For example, some move well-regarded teachers out of tested classes in order to bring in another teacher who has a better track-record at increasing test scores. As I mentioned in my narrative at the opening of this dissertation, I eliminated a challenging AP course in my school because students were underperforming in that class, complicating my own growth data. Ultimately, principals in this study felt comfortable discussing their understanding of growth data as an indicator of one year of successful teaching and learning, but there is an apparent level of discomfort discussing how this metric should be applied to instructional decision-making. Principals use growth data in their decision-making because they assume there is an

expectation to do so because growth data is a part of the state accountability score. Their jobs (and salaries) are at stake when they do not achieve expected growth, so it is no surprise that they make decisions aimed at achieving and sustaining acceptable (and ideally exemplary) growth measures.

Based on the data obtained from this study, principals use growth data for planning. Principals, leadership teams, and teachers use individual student data to determine if students need remediation, advanced courses, or scheduling changes. Interestingly, the principals of schools that failed to meet annual growth indicated that they were more apt to use growth data for teacher placement as compared to principals in schools where students typically met annual growth expectations. For example, a principal indicated that if a teacher is categorized as red (did not meet growth), that teacher is likely to be reassigned to a non-tested area and replaced by a stronger (blue or green—meet or exceeded growth) teacher. Similarly, the placement of, and the scheduling of students is equally as important for those schools not meeting growth as for those that did. Thus, students who did not meet growth in prior years or semesters were placed in classrooms with teachers who historically met growth in order to address the growth deficits. For principals of schools that met expected growth, they did not necessarily use the data for teacher placement, but more often tended to use it to identify students who could benefit from additional support in increasing their proficiency score. The assumption is that those students who are already proficient could obtain an even higher proficiency rating with the additional interventions. The use of growth data provides the principals with information about teacher performance; it shows a principal

if a teacher is having positive effects on student learning outcomes, at least as measured by a specific, standardized, content-based assessment. Finally, principals argued that student growth data clarify more precisely than other measures available to them which students need additional learning support.

2. How do the pressures associated with maintaining growth impact principal's pedagogical decision-making?

Succinctly describing the importance of information on student performance, Principal Paul stated, "growth data is really why we're here." This thought was echoed throughout the comments from principals. Principals perceive that achieving and maintaining growth data is a major job expectation. Based on the perceptions of the principals, the unspoken obligation to achieve annual growth surfaced as a major theme in their comments. With the unspoken obligation to meet annual goals comes the expectation of using the growth data to inform instructional decision-making. These expectations are unspoken mandates on the part of district level supervisors. These unspoken mandates resonated with all the principals as they implied in their language and demeanor the pressure associated with the unspoken obligation. For example, eight of 10 principals said that their direct supervisor never gave them explicit directives related to the use of growth data, but they were questioned about how they planned to obtain or maintain the school's growth status. The remaining two principals in the study said they were told that they must meet growth by their supervisor, but they were not told how or given any guidance about how to analyze, interpret, and build upon growth data in making pedagogical decisions. Hence, whether stated or implied, every principal in this

study uses growth data to drive instructional decisions in his or her school. Ironically, only three of the participants stated that they think growth data should provide the sole impetus for instructional decision-making. This outcome is ironic because all principals share an unspoken obligation to use growth data despite their perception of its value to the decision-making process. The other seven principals perceive growth data as a "snapshot" of a student's performance. It is a revelation of student performance one day in time. While they believe growth data may be an element for decision-making, they do not believe it should serve as the basis for annual pedagogical decisions, which may adversely affect students' lives. Even though they believe in a more holistic measure of student growth, they still sometimes make important placement and pedagogical decisions on the snapshot data that growth measures offer.

All the principals in this study felt the "unspoken nudge" from their supervisor to apply growth data to instructional actions and decision-making. Moreover, principals linked growth data to teacher and student scheduling. If a teacher is underperforming based on the data, that teacher is moved. If a student is underperforming based on the data, the student is moved to another teacher who has a history of success. The academic support may require additional expenditures. One principal said that he decided to focus only on the content area that did not meet growth, which in his case was math. He spent tens of thousands of dollars in instructional money to purchase resources for the math teachers. His goal was to adequately address the growth gap, as presented by the data deficit. Obviously, this principal felt pressured to address the growth gap by allocating substantial resources towards the problem. His action clearly indicates that it was more

important to address not meeting growth than forwarding those monetary resources towards other efforts. Since it is assumed that students benefit from academic growth because of the growth score, the principal may have addressed an opportunity gap had he chosen to support overall student "growth" such as social-emotional learning or even field trips with those resources. In summary, the findings of this study revealed that all the principals felt pressure, which influenced their instructional decisions regardless of whether or not their hearts were attached to these choices. Mostly, however, through their choices and actions in the face of these growth measures, the principals treated these measures as meaningful and important.

3. What are the ethical and moral challenges for principals posed by state level attention to growth data as part of high stakes accountability?

Principals in this study provided compelling and heartfelt responses to the ethical and moral challenges they face daily, especially in terms of ensuring that all students in their charge are learning. Each response was based on unique leadership experiences with teachers, students, school communities, and supervisors. Their stories substantiate the idea that all principals face moral and ethical dilemmas when using growth data as a major influence for decision making. Principal Lynette gave the analogy that growth data is "in the box" and that it is one way of seeing a student. Her premise indicates that basing important student decisions on one data point can be unethical. She implied that there are so many other influential factors in student learning that are "outside of the box." Principal Lynette said she likes to assess the whole child when making instructional decisions despite high stakes accountability. In her opinion, children are

more apt to learn and grow when all of their needs are met both in and out of the "box" or classroom. Principal Lynette's analogy represents many of the thoughts and feelings of the other principals in the study. Each participant spoke to addressing the whole child in the context of growth. The perception is that if a leader only uses growth data to make decisions, they are neglecting the social-emotional needs of children. The data shows that all of the participants believe that addressing the social-emotional needs of students underpins achieving a positive growth score.

Furthermore, as the principals pondered the questions about ethical and moral challenges, they indicated a fear of communicating their true feelings about growth expectations to the teachers and especially to their supervisors. Principals believe that only considering growth data when making instructional decisions may overshadow the social-emotional needs of students. Additionally, placing too much emphasis on growth data may create a culture of fear within the school, which all of the principals alluded to in this study, although they did not always state this directly. A toxic culture may negatively affect how teachers plan and execute lessons. Adverse growth outcomes exacerbate principal and teacher concerns; however, belaboring the point may damage working relationships. Without positive relationships within the building, professional learning communities are hampered, and teachers are often unwilling to take instructional risks that invite innovative classrooms and cutting-edge learning environments. Often principals must perform balancing acts brought on by the how, when, and with whom to use growth data versus maintaining a healthy school culture.

In conclusion, the principals communicated moral and ethical challenges of requiring students to take high level courses, placing only certain teachers in tested areas, defending the designations of met or unmet to the school community, handling the implied nudges from their supervisors, and deciding what to do when a school does not meet growth. The bottom-line is that all principals in this study believe in doing what is right for children; however, no principal in the study was willing to challenge a supervisor even when he or she has a strong belief about meeting the holistic needs of each child. More specifically, the principals never stated that they agreed with the growth data metric; instead, they felt it was something they were required to address in their job, even as they expressed discomfort with using growth data as a singular measure for instructional decision-making. As principals wrestle with how to manage these challenges, they make the best decisions possible by using growth data as the backdrop for helping all the pieces of student learning to fit together. For each principal, the moral challenge becomes making the right decision despite the outside pressures. For the purpose of this study, principals determine what is right for students based on how they perceive the value of learning experiences for all. An example of this is best shared by Principal Lisa. She believes that as students "grow" up in school, the true growth in the schooling experience is if the student leaves as a functioning citizen. Ultimately, the growth score only goes as far as the K-12 experiences; the true measure of student growth is the ability to function, learn, and grow as an independent, caring, thoughtful, and active adult. If a principal can make decisions that benefit the whole student, this is the right decision.

Interpretation of the Findings

The findings taken from this study are comparable to a Global Positioning System (GPS). A GPS sends information to receivers to help them determine their locational status. In this study, high school principals are the recipients of information; this information is the growth data. The growth data determines the status of each school as it relates to the North Carolina accountability system. A school's status under the accountability system enables principals to establish steps for improvement. Whether the status (data) is good or limited, it centers them by showing them their location or where they are as it relates to annual growth expectations, and compared to their peers at other schools in the district and state. When the data are analyzed effectively, principals understand the navigational decisions set before them. Also, the growth data helps define whether past navigational (instructional) decisions were effective or ineffective. In the words of Principal Larry, the data helps depict what worked or what did not work to the students' advantage. What routes and turns are important to reaching the goal ahead? Will there be tolls ahead? What necessary expenditures will the school encounter in order to reach the desired destiny? The destiny for each principal is achieving expected growth.

As with most journeys, the GPS offers more than one route to a successful destination. Some routes are quicker than others, and some are more efficient than others, depending on the time of the day, the weather conditions, or other unexpected occurrences. The growth data are supplied to principals with the expectation that principals will use it to choose the best or most productive route for his or her school.

Most principals experience the unspoken obligation to follow a somewhat narrow or predetermined route with growth data. The predetermined route in the GPS is the route indicated the fastest route, not the alternate route. Likewise, for the principal, the predetermined route is one where growth data are used for instructional decision-making without further question or exploration of alternate routes. Alternatively, others find that alternate routes are prudent for their school's success despite the time of day, weather conditions, or unexpected delays. The hope is that regardless of the route taken, all will successfully arrive at the same destination. This destination is comprehensive success of meeting or exceeding annual growth which is what is expected by the North Carolina educational mandate.

Since there is an unspoken obligation to apply growth data to decision-making, the high school principals in this study use it as a positioning system for planning and goal-setting. Relying solely on the preset positioning system may limit their creativity with instructional decisions. For instance, if principals allow their direct district supervisor to dictate how they apply growth data, whether from fear or mandate, the principal denies their own ability to initiate, implement, and evaluate creative and innovative educational pedagogy for the school. Instead, the same old approach to addressing learning misconceptions through basic data-drive instruction techniques persists. Those presets may include reteaching using mini-lessons or tutorial versus using games or apps to the same end. Some of the principals see growth data as a snapshot in time with little consideration given by those who celebrate this accountability measure to unforeseen circumstances. This concern is comparable to encountering a newly

established thoroughfare, but the GPS has not updated its maps to accommodate this new option. Most often, the mechanical nature of a GPS sends the driver in what is presumed to be the most efficient route. However, the driver may choose to explore and understand newly-laid routes during the journey. What if the principal wants to consider the whole child before scheduling or before making life changing decisions that impact the child and teacher? The GPS allows for such an option. Unfortunately, the principal may not feel that they have this latitude.

Recommendations for Educational Practice

Scholars of education recognize data-driven instruction and decision-making as best practices. Many researchers, practitioners, and authors such as Richard DuFour, Julie Marsh, and Robert Marzano endorse data-driven instructional practices as they are considered high-quality and have been implemented across the nation with positive results. For the purpose of this research, the work of the aforementioned professionals helped to substantiate the need for this study. According to Marsh et al. (2006),

data driven decision-making in education refers to teachers, principals, and administrators systematically collecting and analyzing various types of data, including input, process, outcome, and satisfaction data to guide a range of decisions to help improve the success of students and schools. (p. 1)

The above statement published by Marsh et al. impacts the recommendations for educational practice as their strategies have had positive effects on student achievement. While this study sought to analyze the moral and ethical challenges of data-driven decisions and how principals understand growth data, many of the conversations that

informed the research questions are derived from how principals feel about data-driven decisions.

The principals in this study understand the broad meaning of growth data, and many of them shared the way they use it to inform their instructional decision-making. Principals perceive there is an unspoken obligation to use growth data; thus, they apply the data. One question for educators is whether principals should be given explicit directions and protocol for using growth data to inform instructional decision-making. The NCDPI highlights the worth of growth data as it relates to Educator Value-Added Assessment System (EVAAS). As an example, the 2017-2018 North Carolina Accountability Framework Background Brief states,

per North Carolina statute, School Performance Grades and EVAAS growth data are used to determine whether a school or a district is low-performing. . . . Low-performing schools are those that receive a School Performance Grade of D or F and a school accountability growth designation of not meeting expected growth. (NCDPI, 2018a, p. 4)

The implication is that failing to meet growth negatively impacts the school performance grade leading to a low-performing designation. While none of the participants in the study indicate a failing or low-performing designation, some participants did not meet expected growth.

One recommendation for educational practice is to devise some potential protocols for growth data application. If NCDPI continues to use the current accountability model, an educational imperative may be the development options that outline the expected use of growth data for making instructional decisions. For example,

Principal Harry suggested that when his school failed to meet expected growth, his response was to identify the area where growth was not met and to concentrate his fiscal and human resources in that content area to address the gaps in learning for students. In contrast, Principal James believes in adjusting teacher placement when growth gaps exist. Without appropriate guidance or the use of a data protocol, principal decisions may be varied and unstructured, and it will be difficult to track what worked so that other principals can learn from those choices. However, the state-level accountability plan published clear directives about how the data outcomes will be used to label schools. It seems that with these accountability terms in place, there would also be guidelines for data usage. Proposed guidelines may require principals to evaluate individual teacher EVAAS (growth) data to determine if growth was met. If the teacher does not meet expected growth, a framework for building teacher capacity that addresses lesson planning, standards alignment, and content pacing may become a part of an annual professional development plan. In this regard, a teacher failing to "grow" students would receive wraparound support to increase the quality of teaching. Providing protocols or guidelines in response to growth data outcomes dissipates principal confusion about how to use the data and dissipates any indication that the data are not being properly used to inform decisions.

Second, based on my research, I argue that supervisors be transparent with their expectations for principals. During the interviews, many participants expressed confusion and even frustration regarding communication with their direct supervisor about the expectations required to meet expected growth. Only two participants were

clear about their performance expectations; the remaining eight talked about implied expectations. The perceptions of unspoken obligations to use growth data emerged among participants. Because growth data is a component of the North Carolina Accountability Framework, school districts must make decisions about how state outcomes impact local decisions. Those decisions should be communicated to principals. I recommend that school districts adhere to state accountability terms, and devise and communicate a plan of implementation that is shared with school- and district-level administrators.

The participants in this study are clear that growth data are used for school-level accountability and that the results, whether positive or negative, may impact the community's perception of the school's effectiveness. However, the impact of the accountability results on the principal's professional longevity remains unclear. District administrators may consider composing some guidelines for how a school's accountability designation should affect a principal's longevity at that particular school. The creation of a memorandum of understanding that highlights the district's definition of growth data, the designations, the expected use (defined by the state), and the next steps if failure to meet growth occurs may facilitate transparency. While these recommendations may add increased pressure for principals, it is important to note that the unspoken obligation of accountability is already in play, but the expectations are ambiguous and often lead to the frustration of principals. In terms of developing shared goals and transparency, Lunenburg (2010) states,

the key for being successful in the contemporary school is the ability of the school administrator to work with other school stakeholders (faculty, support staff, community members, parents, central office) and develop a shared sense of what the school/school district is attempting to accomplish—where it wants to go, a shared sense of commitments that people have to make in order to advance the school/school district toward a shared vision and clarity of goals. (p. 3)

Principals armed with information about expectations can make proactive decisions in the interest of students and teachers.

Study Limitations and Recommendations for Further Research

The focus of this research study was to analyze principals' understanding and use of growth data and the moral and ethical challenges of using these data to make instructional decisions. There are several limitations to this study. The first limitation may be sample size. The participant pool included only 10 high school principals. Although the participants had a range of experiences and came from diverse backgrounds, a larger sample size may have led to more conclusive findings and may have rendered the findings generalizable to a larger population. While significant themes emerged from the 10 participants, a larger sample size may have strengthened the reliability of the themes. With such a small sample, it was also difficult to connect principal comments to other variables—including the type of school they worked at, whether they met growth status, and their demographic information, such as years of experience.

An additional factor affecting this research was the researcher's positionality.

Serving as a high school principal, I struggled to bracket my preconceived notions about the topic as I was analyzing the data. I am very familiar with the accountability model,

and over the years have developed certain assumptions and feelings about the actions of my colleagues. I incorrectly assumed that most principals shared my sentiments about growth data. Those sentiments are that growth data is a useful measure of teaching and learning, but not the only one. Growth data provides information about the instructional approaches in the school and could be used as a lens for improvement; while it is insightful for analyzing teaching and learning, growth data are not powerful or meaningful enough to drive holistic instructional decisions for the entire school. However, many of the responses given by my colleagues were contrary to my assumptions and elicited deep thought on my part. Because many of the responses did not align with my initial thoughts, I questioned my logic. Upon reflection and analysis, I realize that my interview protocol did adequately address the research questions and now realize that there are areas where I would like to follow up with my peers—to dig deeper into their understandings and thoughts related to high stakes accountability. I believe that growth data is a metric for consideration, among many other data points, when making instructional decisions and does not define my success or my school's success. The contrast, as highlighted by some of the participant responses, is that growth data is perceived as the most important indicator of school success.

Given the sample size and research protocol, this study was largely exploratory. However, the research findings point to the need for future research. Since the tenure of President Bush, the *No Child Left Behind* legislation has undergone two revisions impacting the North Carolina accountability model. President Barack Obama enacted the *Race to the Top* legislation, followed by the *Every Student Succeeds Act*. This research

was based on the growth accountability model developed from the *No Child Left Behind* legislation that is still in use in North Carolina. Although the growth model has not changed, the federal goals and accountability measures have been revised. For future studies, it is important to analyze the changes in federal legislation over time and how these changes influence state decisions regarding the application of growth data.

Additional research that may stem from this study includes exploring the moral and ethical challenges faced by principals when district-level administrators favor the use of growth data as the most essential tool for instructional decision making. As I learned in this study, eight principals asserted that their district-level administrator failed to give directives involving growth data decisions, but they implied in other ways that the data should be taken seriously and used in their pedagogical decisions, even when they were meeting and exceeding expected growth status. I question why district-level administrators shy away from overtly addressing high-stakes accountability issues with principals. Since meeting annual growth is a component of the state-level accountability, then school districts may have goals and plans for addressing the designations. If so, why hide the goals and plans from the principals? In order to build principal capacity, district-level administrators need to balance accountability with ethical leadership. For this reason, delving into the actions, thoughts, and feelings of the district-level administrator may serve as fertile soil for future research. It would also be valuable to replicate this research in other contexts and states, as well as with sub-groups, such as with only principals not meeting expected growth designations or failing according to

state-level accountability measures. It is likely that this group of principals would face the most significant ethical challenges and dilemmas.

Ethical Leadership in the Age of Accountability

Strike (2007) believed that ethical leadership is based on two very important questions: What is good and what is right? For the purposes of accountability, I believe questioning what is right is most important, though the two are obviously related. What is right for instructional decision-making is embedded in what Strike claimed as the fundamental aim of the school—to provide students with a good education. It is the responsibility of professional educators to define a good education for their students. Strike explained that educators define a good education through collaboration and unity of purpose. Legitimate decisions about a good education are best made by those who are entitled to do so. The entitled persons are those affected by it. "Good reasoning is a group activity" (Strike, 2007, p. 115). As a veteran principal, I believe that instructional decisions about the use of growth data must rest in the hands of school-level personnel. The principals in this study agree with this belief as they discussed the various reasons that school-level personnel are closest to the data and can most often offer the best resolution to data gaps. They know the intricate and cognitive needs of their students. However, I also believe that principals need support and guidance in using data to make instructional decisions. I realize there is somewhat of a paradox here as I am calling for both autonomy of school-level personnel and more direction from the central office and the state on how to use data. While I do not think supervisors should dictate how to use data in decision-making, I think they can be more transparent about expectations and

more forthcoming of options for data use that have worked in other contexts to raise student achievement ethically.

Strike (2007) also believed that the aim of school must be inclusiveness such that all students learn not only basic skills, but also skills that enable them to flourish in a liberal democratic society. Schools must teach students how to become good citizens, help them define how they will live their lives, and what they will live for. Therefore, Strike (2007) writes that "rather than thinking of decisions as data driven, think of them as evidence driven. The point is to recognize a wider range of what counts as evidence than test scores" (p. 111). In an era of data-driven decision-making, the principals in this study referenced various data sets that are included in decision-making. Only one principal spoke to the myriad of other qualitative data that can inform decisions in the interest of students; this one principal was willing to trouble the data and navigate the ethical implications of making decisions as a school leader. Principal Lynette was clear that student needs drive her instructional decisions more than growth data. She shared the following reflection regarding using growth data to make decisions:

I think that my supervisor knows to leave me alone because we are going to be successful with student learning . . . we have talked about growth data and we've talked about the achievement gap. I can tell her every student's score and how they did because I know every student and she knows that. I know it because I care and I'm in each classroom every day. I can attest to what they are learning even if it is not on the test. I will not be pressured to use growth data to make my decisions because I think it's wrong. I think that that is leading with fear and is totally unacceptable in my eyes, and I have been a leader for decades.

When only one of 10 is willing to negotiate the definition of a good education for future citizens or students, I question what the remaining nine have to say about ethical

decision-making beyond acting with some sense of fidelity on the numerical data sets that are provided and/or required. Strike (2007) claimed that the anatomy of an ethical decision includes evidence and deliberation, the assertion that the evidence-based decision will most likely achieve the aims of the school, and that the agreed-upon decision is implemented morally. Strike writes,

If educators are to be accountable, what they need to be accountable for is providing their students with a good education. How well students do on tests may be one measure of good education, but it is not the full meaning of a good education. If this is correct, then educators have a duty to their students to have in mind a conception of the nature of a good education toward which to aim. They may employ data as they receive from the test scores of their students along with other evidence to make informed judgments as to how they can better serve their students. This kind of reflection is a collective and collegial activity. (p. 133)

As I reflect on this exploratory research project now that I have completed it, I am convinced that there are uneven and varying understandings of the expectations of how to apply growth data among the 10 principals. If Strike is correct, and I believe he is, growth data must not serve as the sole determinant of instructional decision-making. It is understandable that the anatomy of ethical decision-making in accordance with Strike's writing may be limited or in infancy stage with the principals in this study as their connotation of a good education may be overshadowed by the pressures they feel to use of growth data in concrete ways to improve test scores in an era of high stake accountability. Principals in this study were clear that growth data drives decision-making. I believe that Strike would challenge these principals to reflect more deeply about other qualitative evidence that is available to inform decision-making, and even to question if the growth data itself is meaningful. This challenge would come from a place

of promoting better democracy and good education that supports the aim of citizenship and self-sufficiency, not just ever-growing test scores. Also, he may urge principals to reject pressures associated with the *unspoken obligation* to use growth data narrowly and instead encourage them to paint a more comprehensive picture of the learning environment, climate, culture, and human outcomes of the school. Doing so would open the doors of reflection more widely for principals as ethical leaders who are saturated with data. The door for capacity building among the principals in the study stands is still open. Finally, the work of Strike (2007) should cause educators to question whether we are conditioned to focus on achieving annual metrics, or are we concerned about providing students with a good education and creating citizens who will flourish well in a democratic society?

Final Thoughts

My initial interest in this research topic was prompted by overhearing "parking lot" conversations that some principals had about how to use growth data in their schools. I sought to determine whether principals were challenged to use the data to help them make decisions about teacher placement, student learning progress, or if they were even concerned about these issues. I sometimes wondered if they even understood the data, even as I know most of them treated it as real and meaningful. As a high school principal leading a high performing school, I am often consumed with finding new and innovative ways to maintain annual growth status, even as I know from other more qualitative assessments, as well as post-graduation successes, that my students are learning and thriving. In conjunction with my professional obligation, my moral compass tells me that

growth data is "one piece" of a much larger puzzle and that the growth score is the result of an assessment or snapshot of a student on that particular day. It seems as though at least some of the principals in this study and that I have talked with feel as though maintaining annual expected growth is more about the community's perception of the school than it is the value of the data. In other words, protecting the reputation of the school as a place that ensures students are learning one year of information each year is more important than securing growth data as an informative metric that greatly influences instructional decisions.

This research study has proven influential on my professional perspectives in many ways. During the interviews, I had intimate conversations with exceptional leaders. The tone of all respondents, regardless of their status and whether or not they always achieved expected growth, was to do what is best for all children in every school every day. There were respectful exchanges between the interviewees and me regarding high stakes testing and accountability. Some principals felt comfortable enough to look me in the eye and say, "I don't know what to do with the data." However, they usually then were able to give thoughtful responses about what they indeed did with the data and why. They shared their frustrations about the impact on their salaries when they fail to meet expected growth. Nonetheless, with confidence, they implied that it mattered little what the check said as long as children learned. I learned that principals truly grapple with data-driven decisions and have a strong desire to follow the unspoken rules of accountability to use growth data, whether implied or written, but mostly likely rely on their gut instincts when leading positive change.

While laying the preliminary groundwork for this study, I received an email from my supervisor telling me that any teacher who did not meet expected growth in the past 2 years must go on an action plan. I was disturbed because of the mandate, in part because I had a good teacher who was directly impacted by this mandate. I was disturbed because this teacher was a huge positive influence on our school culture and climate. I was disturbed because of the many facets of the person as the teacher that were unaccounted for. I knew so much more than the data showed, which could potentially be explained by a bad test or test day for students. I thought that the email substantiated the need for this research study. My treatment of this teacher is an example of a moral challenge faced by principals when wedged between the expectation and mandates of district, state, teachers, students, and parents. In this study, the respondents shared story after story of decisionmaking that felt good to them but was second-guessed by other stakeholders. I learned that principals are the key communicators of their organization and must be equipped with the skills to communicate the meaning and ramifications of growth data decisions, and to be successful, they must take these data seriously.

Furthermore, I was interested in this study because I wanted to know if principals really understood growth data: what it actually measures, how it is calculated, and its strengths and limitations. I asked that question directly to each interviewee. Each had their own understanding of growth data, but most of them had to include their definition of proficiency in order to explain growth data. The principals in this study do not care about the equation that is used to compute the growth designation; they care if a child is one year better academically and believe that the data that they are given do show

whether or not students have made adequate yearly progress—at least in terms of mastering content in different areas. However, at least some principals want to know that their school added value to the child's life even more than can be shown with a snapshot test score. The growth scores provide principals with some confirmation or not that students are getting better each day, but they can never measure all that matters in schools.

In conclusion, the principals in this study have a clear understanding of what they believe annual growth data represents, but are less certain of how to apply the data for instructional decision making. Accountability is important, and growth scores enable a quantifiable metric for what is the largely qualitative work of teachers; growth scores allow school districts and the general public to assess accountability. Every principal in this study shared stories of how they have been ethically or morally challenged when making decisions with growth data. One principal shared a challenge that included knowing a teacher had a positive effect on the social-emotional needs of children but did not meet growth; consequently, a decision about teaching placement was made, as a result of the data, not the other benefits for children. Also, a challenge presented dealt with scheduling struggling students with the stronger or "growing" teachers compared with the potential educational stagnation of the students not scheduled with strong teachers.

Nevertheless, every principal shared stories of victories and successes with students "growing" beyond the data designation. Every principal in this study implied that he or she leads from the heart and not just the mind. In my opinion, as a principal

leader, leading from the heart is the purpose of our work. While I agree that all children should learn the content that is necessary for advancement to the next level, students should also learn how to be good people and how to function in a democracy. They should also learn how to work with others or speak with confidence among their peers and teachers. These are just a few examples of learning and "growing" that cannot be quantified on a standardized test. Principal Lisa made a profound acknowledgement when she said that we (principals) literally watch children grow up. My heart delighted at the realization that my work could potentially shape the approaches children take to navigating the world as learners. Thus, I am not intimidated by the mandate to write up a teacher who does not have growth, because I can validate this teacher in other ways and see value in that teacher's ability to teach children to think critically beyond the classroom. Yet I also think I may be able to help them to also to be more effective with their students in terms of the current accountability systems, especially with structured support and guidance. I urge my colleagues to consider Strike's position on ethical leadership and seek more evidence of learning and growing, all the while holding a healthy and nuanced perspective about growth data. My role, from my heart, is to fearlessly and unapologetically challenge the system directives when they hurt students, use accountability measures carefully and thoughtfully, and champion practices that I know are positive affect for our "growing" well-rounded and academically competent young citizens every single day.

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APPENDIX A

INTERVIEW PROTOCOL

Script: Good morning/afternoon. Thank you so much for the opportunity to speak with you today. As I shared with you prior to this interview, the purpose of this interview is to collect data on how high school principals perceive growth data and the implication for your work. This interview will be used to analyze data pertaining to this topic for my dissertation. The interview should take about 60 minutes. I will ask you about 10 questions directly related to this topic. With your permission, I would like to voice record your responses; however, it you become uncomfortable with the questions and wish to discontinue the recording or the interview, please let me know. Your responses will remain confidential and your personal information will not be revealed. I have a list of questions that I will ask you. Please feel free to ask me to restate the question or state it in other words. In addition, if you speak to more than one question in your response, I may ask some additional probing questions. I am interested in what you have to say and this is a reason that I have requested your permission to ask you these questions for this research study.

Thank you again for allowing me to do this. Let us begin.

Interview Questions	Background Information	Perception and use of growth data	Pressures associated with growth data use	Ethical and pedagogical challenges
Please tell me about				
your professional				
background experience.				
Discuss your perception				
of school growth data,				
how it is a part of your				
job, and what you do				
with the data.				
Are there other factors				
that lead to student				
growth that you have				
not already talked				
about?				

Interview Questions	Background Information	Perception and use of growth data	Pressures associated with growth data use	Ethical and pedagogical challenges
How do you actually use achievement growth				
data at your school?				
Describe some				
leadership decisions you				
have made that were				
impacted by growth				
data.				
How do you				
communicate your				
expectations of				
achievement growth to				
your teachers?				
How do you				
expect/require/ask				
teachers to use EVAAS				
data to inform their				
instructional planning?				
Tell me how you				
perceive the relationship				
between instructional				
practices and student				
growth.				
What are some				
instructional practices				
you believe lead to				
student achievement?				
What are your thoughts				
about how these				
instructional practices				
impact school growth				
outcomes?				
What are your				
expectations of				
instructional practices in your school that lead to				
student growth?				
How would you				
describe a high				
describe a mgn				

Interview Questions	Background Information	Perception and use of growth data	Pressures associated with growth data use	Ethical and pedagogical challenges
achieving school? How				
does student growth				
data influence your				
description?				
What are some				
behaviors that you				
engage in as a principal				
that contribute to				
student growth?				
What other factors at				
your school influence				
student achievement				
and growth?				
How do you understand				
the differences between				
student achievement				
and growth as measured				
by the state?				
Describe measures				
beyond classroom				
instruction that may				
lead to student growth?				
Discuss if you believe				
that there are some				
factors that should be				
changed or included in				
measures of student				
growth beyond what the state has defined.				
How do you perceive				
achievement growth				
data are expected to be used?				
Now that your salary				
has implications from				
growth data, how has				
this impacted your				
decision-making for				
accioion making ioi				

APPENDIX B

INFORMED CONSENT

The Moral and Ethical Challenges of Principal Data-drive Decisions about Annual Growth Data

Informed Consent

All information obtained in this study is strictly confidential unless disclosure is required by law.

Purpose:

You are invited to participate in a research study about the moral and ethical challenges of principal data-driven decisions with annual growth data. The study is being conducted by me, Jamisa Williams, at the University of North Carolina, Greensboro. The purpose of this qualitative research is to understand how the term *growth* is understood by high school principals and influences their instructional or pedagogical decision-making practices.

Procedures:

Your participation will involve a face-to-face interview with the principal investigator. The interview will last approximately 60-90 minutes and will be guided by a set of predetermined interview questions.

Risks and Benefits of Participation:

Your participation in this study poses minimal risk to your personal and professional life. There is currently no expected benefit to you for participation in this study. However, your participation will help inform the body of knowledge regarding the moral and ethical challenges of principal data-driven decisions with annual growth data.

Confidentiality:

I will make every effort to maintain your confidentiality as a participant in this study. Your identity will not be revealed or released in any print publication, report, data file, or other writing or presentation related to this study. I will collect your interview responses with audio recording and it will be securely stored in a password protected cellular or other electronic device. Further, your interview transcripts will be stored in a digital storage space that is password protected; this digital storage method is Box.

Voluntary Participation:

As stated in the email recruitment letter, your participation in this study is voluntary. If at any point in the study you decide that you wish to withdraw from the study, you may do

so without penalty. If you withdraw after having completed an interview, your interview data will be removed from the research data.

IRB Review:

The Institutional Review Board for the University of North Carolina at Greensboro has reviewed the study. The IRB assesses research study for the protection of human research participants. If you have any questions about this study, you may contact the principal investigator, Jamisa Williams, by email at jcwill8@uncg.edu or by phone at (910) 365-8577; you may also contact faculty advisor, Dr. Kathy Hytten by email at kahytten@uncg.edu or by phone at (618) 521-8419. If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Informed Consent:

By participating in the interview, you are agreeing to participate in the study The Moral and Ethical Challenges of Principal Data-drive Decisions about Annual Growth Data conducted by Jamisa Williams.