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An Explorational Study of Educational Leaders' Attitudes, Opinions, Understanding, and Application of Student Growth Percentile (SGP) Data

J. Lyn Turnell

Kennesaw State University

A Dissertation Presented in Partial Fulfillment

of the Requirements for the Degree of Doctor of Education in the

Bagwell College of Education

Susan Banke, PhD, Chair

Susan Padgett-Harrison, EdD, Committee Member

Sheryl Croft, PhD, Committee Member

Arvin D. Johnson, EdD, Committee Member

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To my loving family - Mom, Bert, Rick, Melinda, Susie, Jeff, Joshua, Anna, and Jamie: Thank you for your understanding in those times when I missed out on family fun because I was writing. Thank you for making space in the car for the laptop and my research on our family vacations and for giving my quiet time when I needed it to work. Joshua – I hope that I have inspired you to know that you can do anything that you dream you can do. Anna and Jamie – Aunt Lyn has finally finished her homework and is ready for that sleepover.

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To the Mountain Ridge School District: Thank you for your willingness to allow me to conduct this research, for your collaboration that provided a richer perspective to the project and for your enthusiasm for the topic.

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Dedication

I dedicate this work in loving memory of my father who always knew that I could do this and always knew that I would do this. I cherish the conversations that we had about my theories and ideas when I started this process. I wish you were here at the end of it all for me to tell you what I found.

Abstract

Student Growth Percentiles have recently become popular as a way to report student progress over time. Because of the perception that they are relatively simple to understand, they have also become a popular tool to use when evaluating teachers and school-based administrators, even though this is not the purpose of their design. Previous studies have examined the impact of student growth measures on teachers who are evaluated annually with a tool that includes a component of student growth. This study builds on the previous work of Clauser, Keller, and McDermott (2016) and Collins (2014). It examines the actions and opinions of school-based leaders in a suburban school district in Metro Atlanta evaluated with the Georgia Leader Keys Effectiveness System, of which Student Growth Percentiles will be a component beginning in the 2021-2022 school year. Research participants completed an online survey and participated in a semistructured interview to identify what leaders think of these measures, how they utilize these measures in their educational practice, how they interpret these measures, and what decisions they make in response to these measures. The researcher identifies misinterpretations and misunderstandings of how to interpret Student Growth Percentile data and discusses their implications for future leader development. Because this study is limited to a single school district, there are many areas identified for future research.

Keywords: Student Growth Percentiles (SGP), Georgia Leader Keys Effectiveness System (LKES), school-based leaders, principal, assistant principal

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Chapter 1: Introduction

Numerous accounts show that politicians and business leaders blame education for the economic problems in the United States. Both businesses and the government have called for consistent educational practices and catapulted American public schools into the age of accountability, dominated by using standardized testing to measure and grade schools. Educational decision making shifted from local to state authorities and a push for standardized testing that would hold teachers and students accountable began. Most states responded by creating subject area standards that were assessed by standardized tests to measure student achievement (Hursh, 2005; Madaus & Clarke, 2001).

The No Child Left Behind Act (NCLB), signed into law by President George Bush in January of 2002, required all states that received federal funds to administer a standardized test each year to all students and document Adequate Yearly Progress (AYP) for all subgroups of students each year or face sanctions (U. S. Department of Education, 2010). AYP reported the performance of teachers and schools based on student achievement and set benchmarks each year for how many students should be achieving to specific criteria. AYP indicated how much progress was made each year toward NCLB's requirement of 100% of all students achieving proficiency ratings by the year 2014.

NCLB is purported to "ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education." (NCLB, 2002). NCLB aimed to improve education for low-income and minority students, and proponents of NCLB touted it as the only way to ensure that all students had the opportunity to learn and to create equitable access to education for everyone (Hursh, 2005). Many opponents challenged the notion that it created greater educational equity for all. One argument against NCLB was that many at-risk students

(and the schools that served them) were already so far below the standard, a measure that did not take into account student growth toward the standard was failing to recognize many successful schools that were growing students. Under NCLB, some schools were deemed as unsuccessful for not meeting the required level in a single snapshot based only on student achievement (Betebenner, 2008; Betebenner, 2009a; Betebenner, 2009b Castellano & Ho, 2013; Council of Chief State School Officers, 2017; Fuller & Hollingworth, 2014; Goldhaber, Walch, & Gabele, 2012; Institute of Education Sciences [IES], 2012).

As a result, in November 2005, the Growth Model Pilot program was announced by then Secretary of Education, Margaret Spellings, to begin looking at student growth measures as an alternative way for states to document student achievement and satisfy AYP requirements. The desire was for growth measures to replace achievement scores alone to increase student achievement, decreasing achievement gaps and improving educator and school effectiveness. In response, Betebenner (2009b) introduced Student Growth Percentiles as one way to report student growth, in this case, based on group norms instead of achievement status. In other words, Student Growth Percentiles report a student's current growth in relation to a group of students with past achievement scores similar to his or her own (Betebenner, 2008; Castellano & Ho, 2013; Council of Chief State School Officers, 2017; Fuller & Hollingworth, 2014; Goldhaber et al., 2012; IES, 2012).

The student growth measures movement expanded in 2010 under President Barrack Obama's Race to the Top (RT3) competitive grant program that gave states the opportunity to opt out of NCLB accountability requirements in exchange for creating comprehensive school evaluations based on student growth. In 2012, student growth measures had begun to be a component of annual teacher and principal evaluation, with at least 24 states adopting a model

like Student Growth Percentiles (Fuller & Hollingworth, 2014). By 2015, all but eight states consider state student achievement to some degree in both annual teacher and principal evaluations. (Doherty & Jacobs, 2015).

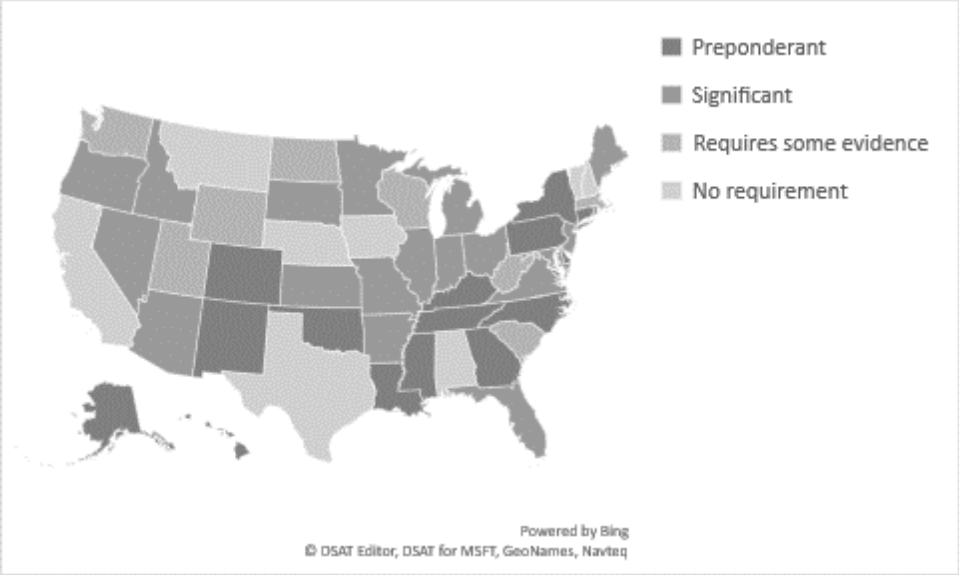

Figure 1.1. 2015 states' requirements for objective measures of student achievement as part of annual teacher evaluation

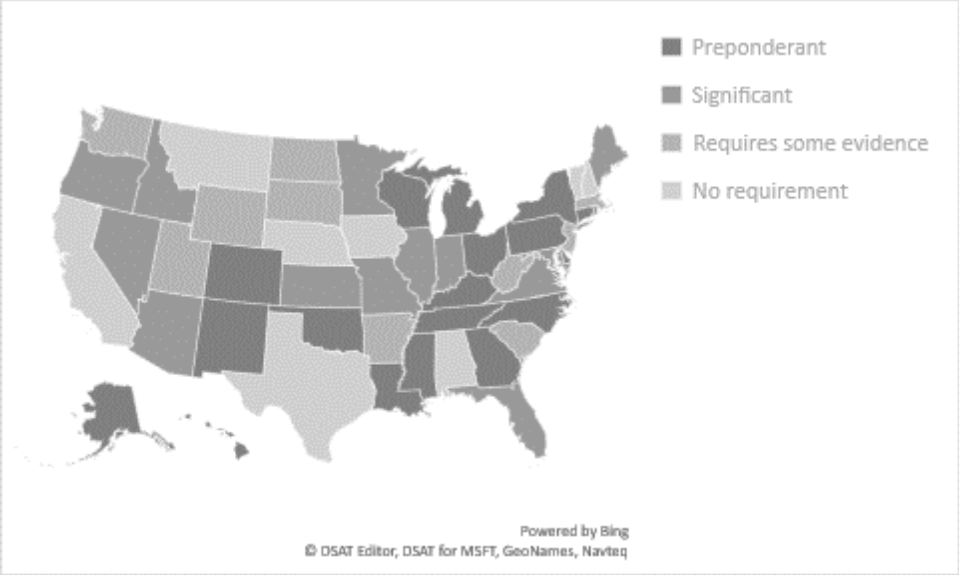

Figure 1.2. 2015 states' requirements for objective measures of student achievement as part of annual principal evaluation

Statement of the Problem

Introduced in 2009 as a tool for reporting annual student progress, Student Growth Percentiles were designed to be a descriptive measure considered in context with other data. Student Growth Percentiles were not intended for use as a high stakes measure. As such, this type of measure was never intended to be used to evaluate teacher effectiveness (Betebenner, 2009a; Betebenner, 2009b). These measures are popular with legislators and policymakers because they are a relatively simple way to speak about student growth. Researchers have not evaluated their validity for this purpose. (Baker, Oluwole, & Green, 2013; Castellano & Ho, 2013; Fuller & Hollingworth, 2014; Guarino, Reckase, Stacy, & Wooldridge, 2014; Neal, 2013).

Existing research on the consequences of the use of growth measures for evaluation purpose has previously focused on teacher's responses to the measures with very little consideration of the actions of principal's and other school leaders (Harris & Herrington, 2015; Collins, 2014). Principal attitudes, interpretations, and decision making based on Student Growth Percentiles are all areas that indicate the need for further research.

Leaders' attitudes toward Student Growth Percentiles with a skilled understanding of how to interpret and apply the measures all impact their decision making. These decisions are what contribute to their ability to serve as the instructional leader of the school, guiding and supporting teachers in effective use of these measures for effective instructional practices. If leaders respond similarly to teachers in previous studies (Amrein-Beardsley & Collins, 2012; Collins, 2014), they may be engaging in practices that are counterproductive to the effectiveness of the schools they serve.

Research Questions

The author conducted an explorational mixed method, convergent parallel design: quan + QUAL study related to Student Growth Percentiles and school administrator annual evaluation, specifically with the Georgia LKES assessment tool. The research question is:

How does the use of Student Growth Percentiles in annual LKES evaluations for school administrators impact the actions of education leaders?

Purpose and Significance of the Study

The purpose of this study is to understand how the use of student growth measures in the annual evaluation of educational leaders informs leader actions. In 2010, President Barrack Obama introduced the Race to the Top (RT3) competitive grant program. States who participated in the RT3 grant program were given the opportunity to opt out of No Child Left Behind's accountability requirements if they developed comprehensive school evaluations based on student growth. The state of Georgia applied for and was awarded grant money from this program. The Leader Keys Effectiveness System (LKES) annual evaluation tool used to evaluate school leaders developed under this program, and Student Growth Percentiles became a component of this evaluation.

Conceptual Framework

The construct for this study is a mixed method study of Georgia school administrators who have Student Growth Percentiles as a part of their annual CCRPI and LKES evaluations. The study seeks to understand how Georgia school administrators use student growth measures in their schools. The researcher is interested in learning how these administrators interpret Student Growth Percentiles and what decisions they make in their schools in response to these measures. Additionally, the researcher seeks to understand Georgia school administrators'

attitudes and opinions regarding Student Growth Percentiles and their value for evaluation of schools and administrators.

Review of Relevant Terms

Two of the most common student growth measures are student growth percentiles and value-added measures (VAMs). Because there are numerous growth measures currently in use, it is essential to distinguish between a few of these descriptors as well as to define some key terms and their use for this project. Because many of the terms have different meanings across the current literature, an operational definition will help distinguish how the author is using these terms in this project.

The term *student growth measures* is used here as a general term to describe any tool used to measure, report, predict, or quantify student academic progress over time. These may be norm-referenced or criterion-based, may or may not be applied in a manner that creates high stakes (for student, schools, or educators), and could be based on a single measure or built around multiple measures.

Some researchers use the term *value-added measure* to describe any growth component that has a high stake attached to it, such as weight in educator evaluation, financial incentive based on scores, tenure, and decisions regarding student placement or retention. In a more specific definition, value-added measure is the statistical model that seeks to quantify the impact an individual teacher has on the progress of a student. These models are highly complex and are used in many states to measure student progress and evaluate teachers. The second definition is the terminology used here.

Student growth percentiles are the focus of this project. Simply stated, student growth percentiles are measures that describe a student's academic progress relative to a group of similar

academic peers (Georgia Department of Education, 2012a; Georgia Department of Education, 2014). Like value-added measures, student growth percentiles inform educator accountability in several states. In the state of Georgia, an individual student growth percentile score ranges from 1 to 99 to describe the amount a student has grown relative to students who are academically-similar from across the state (Georgia Department of Education, 2012a; Georgia Department of Education, 2014). These scores consider where the student started and then measure how far they moved from that starting point. All students can demonstrate growth, even if they do not score at the proficient level on a state assessment. A lower percentile score indicates low growth and higher percentile scores indicate higher growth. A student is considered to have typical growth if they score a 35 or above. A student with a score of 66 or above is considered to have high growth. The Georgia Department of Education's (n.d.) Georgia Student Growth Model handout, a one-page document that summarizes student growth percentiles in the state of Georgia, can be found in Appendix B.

For teachers and school leaders, student growth percentiles provide data in several different ways. These scores could be averaged by teacher or school to report the *mean* (or average) growth percentile, or the score could report the *median* score, meaning the number for that class or school at which half of all students' scores fall above that number and half fall below.

Georgia's Milestones Assessment System is the statewide, annual criterion-referenced assessment. The *Georgia Milestone End of Grade (EOG)* assessment evaluates every student in grade 3 – 8 at the end of the school year. All students test in English/language arts and math. Students in grades 5 and 8 also test in science and social studies. The *Georgia Milestone End of Course (EOC)* tests students upon completion of eight core content courses required for high

school graduation. These tests count as 20% of the student's final course grade and are given in 9th Grade Literature, American Literature, Algebra 1, Geometry, United States History, Economics, Physical Science and Biology. These EOG and EOC assessments are used to calculate a student's annual student growth percentile. A student must have at least 2 years of Milestone test data to calculate a student growth percentile score. For EOG, this would be 2 consecutive years of test data. For EOC, a student must have two years of appropriate test history because EOCs for high school level courses are not always given in consecutive years.

Georgia's Teacher Keys Evaluation System (TKES) and *Georgia's Leader Keys Evaluation System (LKES)* are the annual evaluation tools used to measure teacher or leader effectiveness in the state of Georgia. These tools utilize multiple sources of data, including student growth percentiles, to rate educator effectiveness and support continued growth and improvement. In the state of Georgia, repeated low performance on these evaluation measures can negatively impact an educator's ability to renew their teaching certificate. The annual score generated by these evaluation systems is the *Teacher Effectiveness Measure (TEM)* and *Leader Effectiveness Measure (LEM)* respectively.

Georgia's *College and Career Readiness Performance Index (CCRPI)* is the current accountability tool for all public schools in Georgia. This tool also considers multiple measures, including student growth percentiles, to provide a comprehensive report to stakeholders regarding a school's effectiveness and progress with school improvement measures. It replaced the previous accountability tool, Adequate Yearly Progress (AYP), which required all students reach grade-level proficiency by the year 2014 on a standardized achievement test in reading, English/language arts and math without regard for student disabilities, language acquisition, or other at-risk categories. For elementary and middle schools, student growth accounts for 50% of

the school's CCRPI score. For high schools, student growth accounts for 40% of the CCRPI score.

Georgia's *State Longitudinal Data System (SLDS)* is a tool for state, district, local schools, and teachers to have a comprehensive collection of multiple current and historical data sources related to school, classroom, and individual student performance. One component of SLDS is the student growth percentiles data reported at the state, district, school, classroom, and individual student level. The growth percentile data reported for the state, district, school, and classroom level is the median score, meaning the number at which half of all students scored below and half scored above. The growth percentile component of this tool provides schools with a visual representation of their growth as indicated in Figure 1.3. The horizontal axis is student growth, and the vertical axis is student achievement. There are four quadrants on the chart. The top right quadrant represents high student growth and high student achievement and is the target for each school. The bottom left quadrant is low student growth and low student achievement. The size of the bubble indicates the size of the class that it represents.

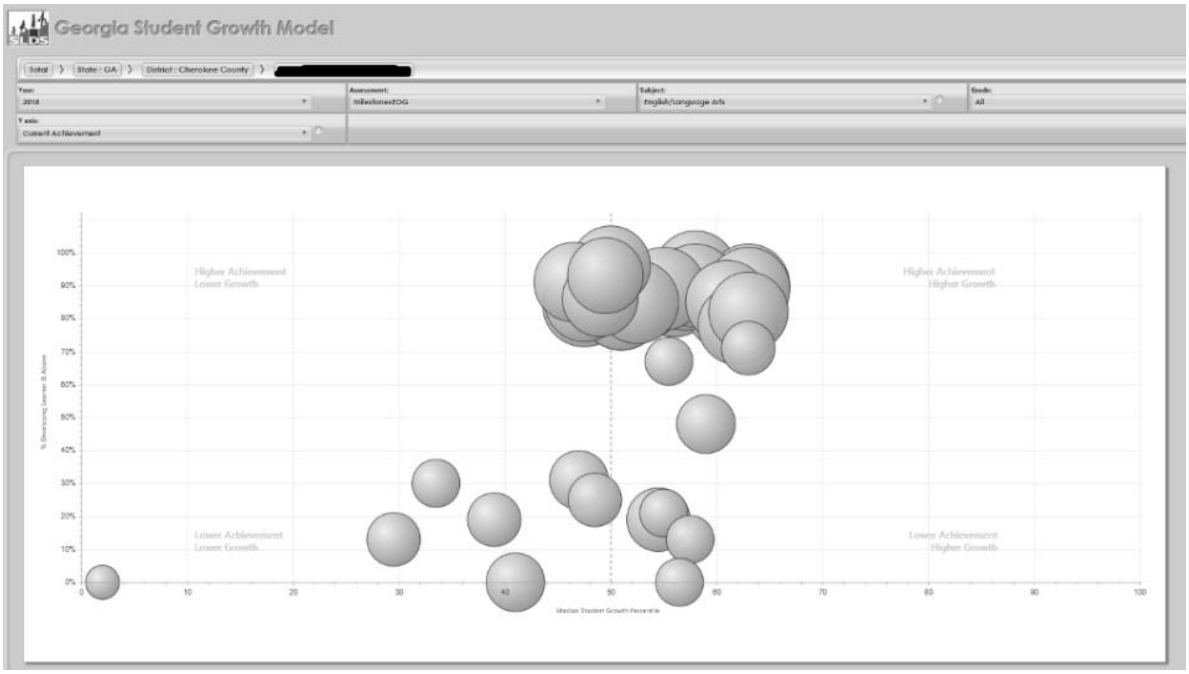

Figure 1.3. Georgia State Longitudinal Data System (SLDS) student growth model

Organization of Study

The study is designed to identify how administrators make educational decisions in the context of student growth measures. Chapter 2 reviews the literature related to the use of growth measures in teacher, administrator, and school effectiveness. Chapter 3 explains the methodology of the study, including the design, data collection, data analysis, validity, limitations, and ethical considerations of the study. Chapter 4 contains detailed analyses of the identified themes and the findings of the study. Chapter 5 contains a summary of the results, the conclusions of the study, and recommendations for conducting future studies.

Chapter 2: Literature Review

Introduction

This study considers the actions, attitudes, knowledge, and understanding of school-based leaders who are evaluated annually with a tool that includes student growth percentiles as a component. The comprehensive literature review that follows examines existing research regarding student growth percentiles and educator evaluation. It considers the history and evolution of student growth percentiles, their use in educator evaluation, the response of various stakeholder groups to the use of these measures, and the outcomes, including unintended consequences, attached to their use for educator evaluation.

The History of the Accountability Movement

The No Child Left Behind Act (NCLB), signed into law by President George Bush in January of 2002, required all states that received federal funds to administer a standardized test each year to all students and document Adequate Yearly Progress (AYP) for all subgroups of students each year or face sanctions (U. S. Department of Education, 2010). AYP evaluated teachers and schools based on student achievement and established benchmarks each year

defining how many students should be achieving to specific criteria, with the goal of 100% of students achieving proficiency ratings by the year 2014. NCLB aimed to improve education for low-income and minority students, and proponents of NCLB touted it as the only way to ensure that all students had the opportunity to learn and to create equitable access to education for everyone (Hursh, 2005).

NCLB faced many opponents who challenged the notion that it created greater educational equity for all. One argument against it was that many at-risk students (and the schools that served them) were already far below the standard, so a measure that did not take into account student growth toward the standard was failing to recognize many successful schools who were growing students. Those schools are unfairly deemed unsuccessful for not meeting the required level in a single snapshot based only on student achievement. As a result, the Growth Model Pilot Program was announced by the Secretary of Education, Margaret Spellings, in November 2005 to begin looking at student growth measures as an alternative way for states to document student achievement and satisfy AYP requirements. The desire was for growth measures to replace achievement scores to increase student achievement, decrease achievement gaps, and improve educator and school effectiveness. In response, student growth percentiles were introduced as one way to report student growth, in this case, reporting how much a student grew relative a group who scored similarly on previous assessments instead of an achievement status based on a performance score (Betebenner, 2008; Castellano & Ho, 2013; Council of Chief State School Officers, 2017; Fuller & Hollingworth, 2014; Goldhaber et al., 2012; IES, 2012).

The student growth measures movement expanded in 2010 under President Barrack Obama's Race to the Top competitive grant program that gave states the opportunity to opt-out

of NCLB accountability requirements in exchange for creating comprehensive school evaluations based on student growth. By 2012, numerous states adopted some form of student growth measures as a component of teacher and principal evaluation, with at least 24 states adopting a model like student growth percentiles (Fuller & Hollingworth, 2014). It is interesting to note that there was no research on principal effectiveness before the introduction and adoption of these evaluation tools for principals despite numerous studies on teacher effectiveness (Baker et al., 2013; Fuller & Hollingworth, 2014).

As of 2015, 17 states, including Georgia, consider growth measures as the preponderant criterion in teacher evaluation. An additional 18 states include growth measures as an essential criterion in teacher evaluation. Only five states have no formal policy to take student achievement measures into account for teacher evaluations. When one considers the fact that student growth measures existed in teacher evaluation in only two states in 2007, this area has seen rapid, exponential change over the last eleven years (Doherty & Jacobs, 2015).

The number of states considering student growth measures in principal annual evaluation is the same as that of teachers. However, the weight of these measures varies slightly. The state of Georgia, along with 18 other states, include growth measures as the preponderant criterion in principal evaluation. In an additional 14 states, growth measures are an essential criterion in teacher evaluation. Arkansas, New Jersey, and South Dakota consider student growth more heavily on annual teacher evaluation than on principal annual evaluation with Michigan, Ohio, and Wisconsin putting more consideration on student growth scores for principal evaluation than for teachers (Doherty & Jacobs, 2015).

Introduction to student growth measures. Student growth models seek to mathematically represent the contribution of all students in the accountability equation, not just

those who are achieving at or above the established level of proficiency. The Institute of Education Sciences (2012) Statewide Longitudinal Data Systems (SLDS) Grant Program outlines five different types of growth models being utilized by states to measure student growth in teacher evaluation: trajectory, projection, value table, value-added, and the Colorado student growth model. As the Colorado model is the model that was used to develop student growth percentiles in the state of Georgia, it is the only one the author will address in this paper.

The Colorado growth model began in 2009 after four years of research and development. It moved away from the concept of examining a snapshot of scores across an annual summative assessment to comparing the history of a student's progress compared to students who scored similarly in previous years on the same assessment. It reports, in the form of a percentile, the current ranking of students who in prior years had a similar score as that student. In other words, it is the percentage of academic peer students scoring lower on the current assessment than that student. This model could also yield a predictor score from past years' data to project where a student should be at a certain point in the future (Betebenner, 2008; Betebenner, 2009a; Betebenner, 2009b; Betebenner, 2011; Betebenner, DePascale, Marion, Domaleski, & Martineau, 2016; Castellano & Ho, 2013; Goldhaber et al., 2012; IES, 2012).

Student growth percentiles were not intended to measure educator effectiveness; Thus, researchers have previously not considered their use as a factor in evaluation systems. There is a body of research that exists relative to growth measures in general as a part of teacher evaluation, with very little focus on school administrators. Almost nothing exists in current literature specific to student growth percentiles as a factor in leader evaluation tools.

Development of student growth percentiles. In 2009b, Betebenner identified the questions, related to growth, that are most important to parents, teachers, and administrators.

The overarching theme identified was understanding whether student growth was reasonable or appropriate. As a result, student growth percentiles were introduced "an alternative to punitive accountability systems geared toward assigning blame for success or failure" (p. 43). While individual states must define adequate growth, student growth percentiles are a descriptive tool that helps stakeholders answer the questions about students' progress (Betebenner, 2009a; Betebenner, 2009b; Castellano & Ho, 2013; Guarino et al., 2014).

Because student growth percentiles are more than a snapshot of student achievement at a given time, they require at least two points of data for calculation. A vertically scaled achievement test is not necessary because growth is relative to an identified academic peer group, based on past performance, rather than to established criteria. Sorting students into their identified academic peer group requires a large sample size, with a recommended minimum of 5,000 (Betebenner, 2008; Betebenner, 2009a; Betebenner, 2009b; Castellano & Ho, 2013).

Researchers have identified some uses for student growth percentiles relative to screening and communication. Student growth percentiles are a relatively easy-to-understand method for communicating student growth to parents and stakeholders. Student growth percentiles, used in conjunction with achievement score data, can help stakeholders understand how much more growth may be needed to reach a certain level of success and determine if growth was adequate for a full year of instruction. They serve as a prescreening tool that helps identify what problems may exist for individual students and help teachers plan appropriate instruction as a result. Because low growth does not necessarily mean low achievement, this is especially useful for typically high-achieving students who may have gaps in learning not identified when considering academic achievement alone. Comparison of students to their academic peers can identify areas where growth did not occur as expected. Achievement status and growth data should always be

considered together to make the most appropriate educational decisions (Baker et al., 2013; Betebenner, 2008; Castellano & Ho, 2013; Fuller & Hollingworth, 2014; Guarino et al., 2014; RAND Corporation, 2012).

Considering the bell curve for a normal distribution, one-fifth of all students will demonstrate growth at or below the 20th percentile. It is hard to identify this 20% of students when just considering a single indicator based on a set achievement. Student growth percentiles help parents, teachers, and stakeholders more easily identify those students in need of remediation (Betebenner et al., 2016).

When considering student growth percentiles at the classroom or school level, aggregate measures report either a mean or median score of all students in that class or school to provide another descriptive, used in conjunction with others, for decision-making purposes. Aggregate mean or median student growth percentiles can be used to measure the effectiveness of specific programs or initiatives. School administrators can use mean growth percentiles to identify which classrooms may require additional or more frequent observation. School median growth percentiles can flag schools where review for possible improvement may be needed (Castellano & Ho, 2013; Fuller & Hollingworth, 2014; RAND Corporation, 2012). Appendix C contains a one-page description of student growth percentiles from the RAND Corporation (2012).

Anderman, Gimbert, O'Connell, & Riegel (2015) identified some advantages of using student growth percentile data over a single point-in-time achievement measure. The authors suggest that student growth percentiles are more equitable because they consider students based on their initial level of success. Growth is tied less to socioeconomics instead of overall achievement. Growth allows recognition of schools for improvements in learning instead of high achievement.

One characteristic of student growth percentiles that distinguish them from other value-added measures is that subgroup data or school characteristics are not factored (Baker et al., 2013; Betebenner, 2008; Betebenner, 2009a; Betebenner, 2009b; Castellano & Ho, 2013; Fuller & Hollingworth, 2014; Goldhaber et al., 2012; Guarino et al., 2014; McCaffrey & Castellano, 2014; Wyse & Seo, 2014). One of the reasons student growth percentiles are not appropriate for attributing the variation of scores to a school or teacher is that this assumes the teacher or principal has complete control over all factors that contribute to a student's change in test score from one year to the next (Fuller & Hollingworth, 2014). Additionally, student growth percentiles for students in the extraordinarily high or deficient performance academic peer group may be highly variable because there is a much lower comparison group in these outlying areas (Castellano & Ho, 2013; Wyse & Seo, 2014).

By comparing student growth percentiles and mean growth percentile results to other value-added measures that consider demographic data, researchers identified the most negative correlations with schools who are high poverty schools. Teachers and leaders in economically disadvantaged schools may have mean growth percentiles that are underestimated compared to those in economically advantaged schools. This portends that effective educators and leaders in economically disadvantaged schools may receive mean growth percentiles that are too low while ineffective teachers and leaders in economically advantaged schools may be rated too high (Ehlert, Koedel, Parsons, & Podgursky, 2014; Goldhaber et al., 2012; Herrmann & Ross, 2016; McCaffrey & Castellano, 2014).

When comparing mean growth percentiles and considering factors of economically disadvantaged students as well as the percentage of African-American students in the classroom, the teacher mean growth percentile ratings went down as the proportion of these students in the

class went up. This class composition effect was found to be greater in reading than in math (Goldhaber et al., 2012; Marion, 2014; McCaffrey & Castellano, 2014).

Further research considered classes with high mobility rates and found this to have an adverse impact on mean growth percentiles over and above the effect of racial or economic makeup. This compounding of effect on mean growth percentiles suggests that teachers and administrators in schools with factors deemed at-risk may not always accurately evaluate as effective or ineffective. The reality is that teachers and schools may have more stable mean growth percentiles from year to year because they are teaching similar populations of students from year to year rather than being assigned a genuinely random sample of students (Marion, 2014; McCaffrey & Castellano, 2014; McCaffrey, Castellano, & Lockwood, 2014.)

Georgia context of student growth measures. In 2010, the Georgia Department of Education received a grant from President Obama's Race to the Top initiative to overhaul its teacher and leader annual evaluation system. From January 2012 – May 2012, 26 school districts participated in a pilot program for the Teacher Keys (TKES) and Leader Keys (LKES) Effectiveness Systems. Participating school districts ran the pilot test parallel to their existing evaluation systems, meaning administrators were conducting TKES and LKES evaluations at the same time that they were completing their regular, district-required evaluation system. Nineteen of the participating districts chose to use an across-school model for this pilot where the state randomly selected 10% of teachers and 25% of leaders across the system for participation (Georgia Department of Education, 2012c).

Additionally, seven districts chose to use a whole-school model for the pilot, evaluating all leaders and teacher in selected schools to represent 10% of the total teacher and leader population in the district. In total, 5,800 teachers out of 48,000 total Georgia teachers were

selected for participation. Student growth percentiles were not a component of the pilot project (Georgia Department of Education, 2012c).

Following this small pilot program, the state of Georgia began using student growth percentiles in the 2012-2013 implementation of its Teacher (TKES) and Leader (LKES) Key Effectiveness System. In July 2013, the handbook (Georgia Department of Education, 2012b) that the state provided schools for this implementation introduced student growth percentiles for use in the calculation in a teacher's overall score as 50% of the overall weight of the evaluation. The handbook included the caveat that these scores were a "hold harmless" rating for contract purposes for those evaluated, meaning a teacher deemed ineffective based on these scores would not be at-risk for nonrenewal of his or her annual contract (Georgia Department of Education, 2012b, p. 22). The Georgia Department of Education was also considering the length of a student's enrollment required for inclusion in the calculation of a teacher's end of year growth measure (Georgia Department of Education, 2012a).

During the 2013-14 legislative session, House Bill 244 (HB244) passed. This bill called for student growth to remain at 50% of an educator's overall TKES or LKES annual evaluation. Additionally, it called for student growth percentiles in English language arts (ELA)/reading, math, science, and social studies for teachers in a tested subject area. However, HB244 mandated that a student must be enrolled 65% of the school year in order to calculate in a teacher's or leader's end of year growth measure (Georgia General Assembly, 2013).

Since the implementation of TKES and LKES, the method for applying student growth percentiles has undergone many revisions. The Georgia General Assembly again revisited student growth percentiles during the 2016-17 legislative session. Senate Bill 364 (SB364) removed science and social studies from the tested subjects that yield a student growth percentile

for TKES and LKES evaluations. It added the requirement that a student must attend 90% of their instructional days to calculate in the final student growth percentiles. Additionally, a teacher must have at least 15 students to generate student growth percentiles for their annual evaluation (Georgia Department of Education, 2016; Georgia General Assembly, 2016).

The weight for student growth percentiles is 30% of a teacher's annual evaluation. Removing science and social studies from the calculation of student growth percentiles means that there are now only 14 courses in K-12 that yield student growth percentiles. For teachers who do not teach English language arts or math, the local educational agency will now determine from a set of options provided by the state what growth measure is appropriate for that teacher. One option for teachers of nontestested subjects is the application of the school or district mean student growth percentiles for 30% of that teacher's final evaluation (Georgia Department of Education, 2016; Georgia General Assembly, 2013).

Beginning with the 2017-2018 school year, principal and assistant principals' annual LKES evaluations will include student growth percentiles as 40% of their annual evaluations. This score will be generated from the grand mean of student growth percentiles for all students and courses for the 2 years before the year of the annual evaluation (Georgia Department of Education, 2017a; Georgia General Assembly, 2016). Figure 2.1 provides a visual representation of all the components of the current Georgia LKES annual score for school leaders (Georgia Department of Education, 2018b). Appendix A contains a complete overview of Georgia's Student Growth Model (Georgia Department of Education, 2017b).

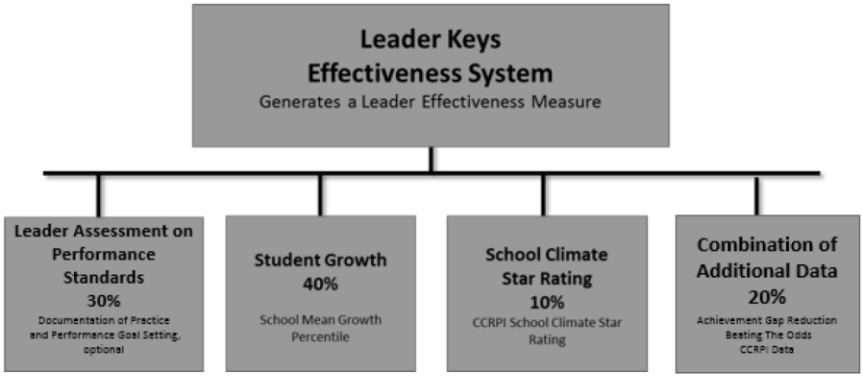

Figure 2.1. Components of the Georgia Leader Keys Effectiveness System (LKES)

The school district will determine what measure to use for administrators of schools who do not have any student growth percentiles courses. In K-2 schools, if all students matriculate to the same school, the district may choose to apply that school's student growth percentiles to the K-2 administrator's annual evaluation. If those students in K-2 matriculate to multiple district schools, the district will apply the district's student growth percentiles (Georgia Department of Education, 2018b); Georgia General Assembly, 2016).

The TKES/LKES evaluation model as well as the Georgia student growth model have been through several revisions since inception. The chart in Figure 2.2 outlines the different uses of student growth percentiles for teacher and leader annual evaluation, including the weight of these scores and timeline of these changes.

		TKES		LKES		CCRPI		SLDS
School Year	Subjects	Reports	Total Weight	Reports	Total Weight	Reports	Total Weight	Reports
2011-2012	ELA, Math, Sci, SS	Not included - Pilot Year				Percentage of students above 35	15%	Median SGP
2012-2013	ELA, Math, Sci, SS	Teacher Grand Mean of SGP (Hold harmless)	50%	School Grand Mean of SGP (Hold harmless)	50%	Percentage of students above 35	25%	Median SGP
2013-2014	ELA, Math, Sci, SS	Teacher Grand Mean of SGP (Hold harmless)	50%	School Grand Mean of SGP (Hold harmless)	50%	Percentage of students above 35	25%	Median SGP
2014-2015	ELA, Math, Sci, SS	Teacher Grand Mean of SGP (Hold harmless)	50%	School Grand Mean of SGP (Hold harmless)	50%	Percentage of students above 35	40%	Median SGP
2015-2016	ELA, Math, Sci, SS	Teacher Grand Mean of SGP (Hold harmless)	50%	School Grand Mean of SGP (Hold harmless)	50%	Percentage of students above 35	40%	Median SGP
2016-2017	ELA, Math, Sci, SS	Teacher Grand Mean of SGP (Hold harmless)	30%	School Grand Mean of SGP (Hold harmless)	40%	Percentage of students above 35	40%	Median SGP
2017-2018	ELA and Math ONLY	Teacher Grand Mean of SGP (Hold harmless)	30%	School Grand Mean of SGP (Hold harmless)	40%	Percentage based on: .5 point for students 30-40 1 point for students 41 - 65 1.5 point for students 66 and above	31.5% (ES/MS) 27% (HS)	Median SGP
2018-2019	ELA and Math ONLY	Teacher Grand Mean of SGP (Hold harmless)	30%	School Grand Mean of SGP (Hold harmless)	40%	Percentage based on: .5 point for students 30-40 1 point for students 41 - 65 1.5 point for students 66 and above	31.5% (ES/MS) 27% (HS)	Median SGP
2021-2022		Official score generated to include SGP		Offical score generated to include SGP				

**Not reflected in this chart is the change of business rules that flucutate each year to determine what students are included in the SGP calculations based on enrollment, attendance, etc.*

Figure 2.2. Timeline and use of student growth percentiles

Review of the Literature

The controversy surrounding student growth percentiles. Student growth percentiles or value-added measures as a part of teacher evaluation, and by extension, school improvement, has proven controversial. However, as Harris and Herrington (2015) suggest, these student growth measures could have significant effects on classroom instruction and student learning if the research would focus more on the application and use of these measures. The authors point out that teachers will respond to these measures based on their "perceptions, beliefs, information, motivation and incentives" (p. 72). They further generate a list of questions to be considered that are like the points of analysis considered in this project.

Several authors (Goldhaber, 2015; Goldring et al., 2015; Jiang, Sporte, & Luppescu, 2015) examine the buy-in of educators to these systems of evaluation and consider the impact of the use of student growth measures on educator morale and the future job market for education. While it is too soon to anticipate what effect student growth measures will have on attracting qualified practitioners to the field of education, how current educators, both teachers and administrators, respond to these systems will influence this. Additionally, how higher learning institutions' education programs address the use of student growth will impact the pool of qualified teachers and educational leaders.

Researcher concerns for student growth percentiles use in teacher evaluation. There is much controversial research regarding student growth percentiles or value-added measures as a part of teacher evaluation. Many organizations, lobby groups, and education think tanks have published reports that caution against the use of these tools because of concerns about the validity, reliability and extensive variability of these measures (American Statistical Association, 2014; Darling-Hammond, 2015; Darling-Hammond, Amrein-Beardsley, Haertel, & Rothstein,

2012; Newton, Darling-Hammond, Haertel, & Thomas, 2010). Student growth percentiles and value-added measures are designed to use statistical measures to evaluate changes in student test scores over time in the context of their learning characteristics and other factors that influence achievement to point to the influence that the specific teacher has on student growth.

Measuring teacher effect on student growth. According to Darling-Hammond et al. (2012), research suggests that the composition of a teacher's classroom has a more significant impact on student growth than who the teacher is. School factors, including class size, instructional resources, and instructional time also impact student growth. Individual student needs, abilities, health, and attendance, as well as the achievement culture of their peers, are not factored into student growth measures. Student growth measures are not able to separate the impact of previous teachers and school experiences from the impact that the current teacher has made. The researchers suggest that this is why these measures are not appropriate as part of annual teacher evaluation.

In a 2010 study, Newton et al. used ANOVA analysis to determine that prior student achievement was a significant predictor in all cases that they reviewed. The specific class the students took was predictive 11 out of 16 times, but the teacher was predictive in only three out of 16 circumstances. They interpreted these results to state that "course effect" was a stronger predictor of student achievement gains than "teacher effect." Also, they found that teacher rankings fluctuated across courses taught and from one year to the next. When correlating these scores from one year to the next, none of these correlations approached the level of reliability usually required as a basis for consequential decisions affecting individuals.

Newton et al. (2010) reviewed teacher effectiveness ratings based on value-added measures and found that the most fluctuation in scores was due to the classes a teacher taught

and years they taught that same subject. Student characteristics, such as low socioeconomic status, limited English proficiency, and disabilities, provided the most dramatic impact on scores. Newton et al. cautioned against the use of these measures in a high-stakes manner, especially when the criteria are tests of specific grade-level standards instead of a vertical scale built on a broad continuum of learning. The authors recommend that the concept of teacher effectiveness be broadened to differentiate between context-specific settings instead of treating these scores as if they are context-free.

Student growth and school improvement. When considering student growth and school improvement, Braun (2015) points out that there is little overlap in the literature on accountability and the research on school improvement. The author says that, often, the research tries to connect student growth to indicators of effective teaching used in evaluation practices. It is a challenge to correlate these two as, often, the comparison is a previous year's VAM to a current year's observation. When one considers that VAM scores suffer from high variance and small year-to-year stability, the comparison of past results to current practices yields little information of value.

Reliability and variability of student growth measures. Studies considering the reliability and variability of student growth measures (Darling-Hammond, 2015; Darling-Hammond et al., 2012) found teachers rated as highly effective in one year are often found to be ineffective the following year. The data from five separate school districts showed that only about 20 – 30% of the teachers who scored at the top of the scale in one year scored in the same part of the distribution the following year (Darling-Hammond, 2015, p. 133; Darling-Hammond et al., 2012, p. 9). In the same study, only about a quarter of teachers who scored in the bottom 20% of scores one year stayed in the lowest 20% the following year while about 50% of them

scored in the top half of the scores (Darling-Hammond, 2015, p. 133; Darling-Hammond et al., 2012, p. 9).

Additionally, scores varied drastically based on the type of achievement measure used (standardized, multiple-choice, basic proficiency question tests vs. more constructed-response, open-ended tests – only about a 25% overlap in effectiveness score) and the statistical model used to calculate the value-added measure. When researchers applied a different statistical model to the value-added scores published in the local paper for ELA and math, they found that 40 – 55% of those teachers would get noticeably different results depending on the model used. Finally, 20 – 30% of teachers who were in the top quartile of growth measures on a basic skills state assessment scored in the bottom half for more cognitively demanding tests and vice versa (Darling-Hammond, 2015; Darling-Hammond et al., 2012).

One of the most recent studies (Lash, Makkonen, Tran, & Huang, 2016) examined the student growth percentiles in one Nevada school district to determine if the learning of students in a teacher's classroom could predict the learning of the teacher's future students based on mean growth percentiles. The study reviewed three years of scores in reading and math for elementary and middle school teachers to consider the stability of mean growth percentiles. The researchers found that 50% or more of the variance in these scores attributed to factors other than faculty and caution against the use of mean growth percentiles for high-stakes decisions related to teacher accountability.

The response from educators. Researchers (Goldring et al., 2015; Jiang et al., 2015) have found that, overall, both teachers and administrators have responded positively to the new teacher evaluation systems but are cautious about the student growth component itself. Goldring et al. (2015) suggest that administrators put more stock in what they can observe in the

classroom and the teacher's instructional practices than in a statistical measure of growth generated from a high-stakes assessment that is, at times, controversial and, statistically, such variable measures. Jiang et al. (2015) found similar concerns among the teachers they studied. Teachers reported too much reliance on standardized test scores to determine teacher effectiveness. Teachers of students with disabilities expressed concern that the assessments used do not align with their curriculum and instructional practices that target student deficits due to disabilities. Additionally, respondent concerns indicated most teachers are in nontested subject areas that use locally created measures of student growth with statistical properties that are unknown to evaluate teacher effectiveness. (Jiang et al., 2015).

In addition to overreliance on test scores, teachers reported feelings of stress and decreased job satisfaction because of student growth measures. Forty-two percent of teachers polled indicated weak to moderate understanding of the calculation of these ratings and raised concerns about their instructional value and fairness (Jiang et al., 2015). Finally, Jiang et al. (2015) indicated that most teachers surveyed are still misinformed or unclear on how student growth measures contributed to teacher evaluation.

The sections that follow consider the unintended consequences of using student growth percentiles for educator evaluation. A discussion from the current literature of the findings and theories regarding these findings is included. Current litigation, a growing response to the use of these measures, is examined in depth in a section below.

Unintended consequences. Just as NCLB's focus on student achievement led to unintended, negative consequences in instructional practice and equal student opportunities for education, Collins (2014) identified some unexpected responses to value-added measures. The author found teachers were less likely to want to work with gifted or high-achieving students

who were at the ceiling. Additionally, teachers reported less desire to work with first-year English-Language Learner students or with classes composed of high proportions of students with disabilities and second language learners. Teachers who previously would loop from one year to the next with their classes no longer wanted to do so because they did not see the effects in the second year of instruction that they found in the first. Some of these teachers even flip-flopped in the second year from high growth to low growth. Finally, teachers reported unprofessional and unethical behaviors, such as cheating, as well as high levels of competition that contributed to distrust and low morale, ultimately leading to a loss of collaboration among professional colleagues.

Educator buy-in can have a profound impact on how initiatives impact the field of teaching. Harris and Herrington (2015) suggest that student growth measures could have significant effects on classroom instruction and student learning, both positive and negative if the research would explore more of those applications instead of merely focusing on their statistical properties. The authors point out those teachers will respond to measures based on their "perceptions, beliefs, information, motivation and incentives (p. 72)." Several authors (Goldhaber, 2015; Goldring et al., 2015; Jiang et al., 2015) examined the buy-in of educators to these systems of evaluation and considered the impact of the use of student growth measures on teacher morale and the future job market for education. These authors suggest that while it is too soon to anticipate what effect student growth measures will have on attracting qualified practitioners to the teaching field, how current educators, both teachers and administrators, respond to evaluation systems that include an emphasis on student growth measures will influence this. Additionally, how education programs in institutions of higher learning address the use of student growth will change the pool of qualified teachers and educational leaders.

Student growth and lawsuits. One unintended result of the use of student growth percentile/value-added measures in teacher evaluation has been increased litigation. To date, at least 15 lawsuits exist across seven states, led primarily by the American Federation of Teachers (AFT) and the National Education Association (NEA) and their local affiliates. These lawsuits challenge the implementation of the new systems, the use of test scores to judge all teachers and the impact of the evaluation on merit-pay provisions. Additionally, the firing of tenured teachers and fairness of systems based on flawed or incomplete data or the failure to consider at-risk student demographics such as poverty has been challenged (Sawchuk, 2015, p. 15).

According to Thompson (2015), *Cook v. Bennett*, filed April 16, 2013, appears to be the first decision rendered by a federal appellate court related to value-added measures used for teacher evaluation. The suit alleges that teachers in nontested subjects (those subjects that do not have state-mandated standardized assessments) were judged unfairly because their value-added measure utilized a "schoolwide" growth formula which considered the progress of students they did not teach or in subjects they did not teach (Sawchuk, 2015, p. 15). According to an article in *The Washington Post* (Strauss, 2013), among the seven teachers who filed the suit was Kim Cook, a Teacher of the Year at Irby Elementary School. The author indicates that because Irby is a K – 2 school without a statewide assessment, 40% of Cook's evaluation was based on Florida Comprehensive Assessment Test scores from third graders at the elementary school her school feeds to and were students that she never actually taught. These same scores were used to determine the value-added measure of every teacher in her school. The suit alleged that this was a violation of the Equal Protection and Due Process Clause of the Constitution. A federal court judge did not agree, and the U.S. Court of Appeals upheld his decision.

In *Lederman v. King*, a suit filed October 24, 2014, New York teacher Sheri Lederman challenged the inconsistencies of the state's method for ranking teachers. She rated "effective" one year and "ineffective" the following year, despite similar student achievement scores in both years and ELA and math scores that were consistently higher than that state average. John King, the former New York state education commissioner and a top advisor to former U.S. Education Secretary Arne Duncan was one of the state officials named in this suit. Lederman is a veteran teacher who, according to affidavits published in *The Washington Post* (Strauss, 2015b), is considered by her district superintendent to be "highly regarded as an educator [with a]…flawless record" (para. 2). Another affidavit from public education expert Linda Darling-Hammond described Lederman's evaluation as "irrational." Additional expert affidavits were presented on her behalf from nationally and locally recognized education experts who had no connection with Lederman. The suit is challenging the use of predictor scores to determine how a student is supposed to perform, calling the formula an "educational black box" that is complicated to understand, theoretically based, and not at all fair, accurate, or reliable. Oral arguments began in this case in August of this year and could influence the use of value-added measures across the country based on its outcome (Sawchuk, 2015, p. 15; Strauss, 2015b, para. 6.; Strauss, 2015a, para. 3.).

In Florida, *Robinson v. Stewart*, filed September 14, 2011, argued that the merit-pay provision of the teacher evaluation law conflicts with the ability for teachers to collectively bargain wages as guaranteed by the state Constitution. The state court judge ruled for the state. On June 7, 2012, *Louisiana Federation of Teachers v. Louisiana* was filed alleging that because the teacher evaluation law tied to tenure and to pay scales, it violated a constitutional provision that legislation could only pertain to one topic. While a state court struck down the law in

contention of this case, the state supreme court reversed the lower court's ruling in October of 2014. When New Mexico's education secretary Hanna Skadera issued new teacher-evaluation regulations in September 2013 after legislation failed to do so, AFT-New Mexico charged in *State ex rel. Stapleton v. Skandera* that this was a violation of the state's School Personnel Act. A state court judge and the appeals court both rejected this suit. A federal lawsuit filed February 5, 2015, in Tennessee by the Tennessee Education Association challenges the use of school-wide growth measures for evaluating nontested teachers like art and music. A federal court judge dismissed *Wagner v. Haslam* in June 2015 (Sawchuk, 2015).

Additional lawsuits regarding the use of student growth measures in teacher evaluation are ongoing in Nevada, New Mexico, New York, Tennessee, and Texas. *Leff et al. v. Clark County School District* in Nevada alleges that a tenured teacher terminated after two ineffective evaluation should have received a due process hearing because those teachers tenured before the new law went into effect have vested contractual rights. In New York, *Urbanski v. King* and *Ahern v. King* are similar in their suits in that both are alleging that the state does not adequately account for the impact of poverty on the student growth measure and therefore unfairly penalizes some teachers. New Mexico's *State ex rel. Stewart v. Public Education Department* and Tennessee's *Taylor v. Haslam* as well as *Trout v. Knox County Board of Education* all challenge ratings linked to flawed or incomplete data. The Tennessee cases go a step further in that they both additionally allege that teachers missed bonus pay opportunities because of these evaluations. Finally, *Houston Federation of Teachers v. Houston Independent School District* argues that the assessment system's standard for what constitutes enough growth is vague, the statistical model utilized is opaque and teachers of at-risk subgroups are at risk of lower scores than others (Sawchuk, 2015).

The response from stakeholders. One of the challenges currently facing states is the recent transition to assessments that go beyond just multiple-choice items to match the rigor of Common Core standards and how this shift will influence student growth measures. Betebenner, Diaz-Bilello, Marion, Domaleski, & National Center for the Improvement of Educational Assessment (2014) examine this challenge and suggest that the most significant challenge facing states will be communicating with their stakeholders how to understand the anticipated changes related to student growth with these new assessments. They suggest that states will lose stakeholder trust and ownership in the use of student growth as a central component of teacher accountability.

Student growth percentiles and school administrators. While not specific to leader evaluation, Clauser et al. (2016) examine principals' uses and interpretation of student growth percentile data to determine their understanding, use, interpretations and misconceptions related to student growth percentile. Herrmann & Ross (2016) reviewed the results of the New Jersey principal evaluation tool, implemented approximately the same time that Georgia implemented the LKES and, like Georgia, using median student growth percentiles to measure 30% of the overall principal evaluation. The author will analyze both critical studies in greater detail below.

Principals' uses and interpretations of student growth percentile data. In this study, Clauser et al. (2016) suggest that although student growth percentiles are descriptive, they derive from a statistically complex model that might make interpreting and reporting them to stakeholders challenging. The authors suggest that currently, training exists on using data for educational decision making; however, very little of this training explicitly addresses how to use growth measures in data-driven decision making. The authors assert that student growth percentiles are relatively new models that support student progress with which training practices

may not have kept pace. The authors also suggest that defining student growth relative to an academic peer group may confuse leaders accustomed to speaking regarding student achievement against a specific criterion, especially when a student growth percentile score of 75 does not mean the same things for every student. One student with a student growth percentile of 75 may have shown a massive increase in achievement scores while the other student may have seen scores that dropped.

Clauser et al. surveyed 317 Massachusetts principals and asked them to identify how they use student growth percentile data in their schools, to identify students needing interventions based on their interpretation of some student growth percentiles provided by the evaluators, and to interpret and identify school-level responses they would make based on provided MGPs. The results of this study indicated that, in general, principals were using student growth percentiles as they are intended. Most commonly, 81%, respondents were using these measures to provide additional information about the school's overall performance. Another regular practice is the use of student growth percentiles to identify students needing extra help (72.5%) or making exceptional gains (56.3%). Forty percent of principals reported using student growth percentiles to formally or informally assess staff performance (Clauser et al., 2016).

When principals were asked to interpret student-level student growth percentiles and school-level median growth percentiles and then identify interventions, if any, they would recommend based on this data, in general, principals seemed to interpret and respond to student-level student growth percentile data accurately. The researchers noted one area of concern in that only 39.7% of principals would recommend remediation for a student with a low achievement score but a high student growth percentile. The authors suggest that principals in this study

misunderstood high student growth percentiles to indicate that a student is not at risk for academic failure (Clauser et al., 2016).

When asked to interpret classroom, grade-level, and school level median student growth percentiles, over half of the principals incorrectly interpreted the scores because they mistook median scores for mean scores. Clauser et al. (2016) noted that, even if the participants responded accurately, the correct steps to take based on mean growth percentile data would be unclear to school leaders, as these scores only describe how that group performed overall. The researchers indicate that a mean growth percentile does not compare that group of students to others because each student in that group has a different academic peer group that changes from year to year (based on the student performance). The authors assert that considering trends over time could be misleading (Clauser et al., 2016).

This study (Clauser et al, 2016) highlights the importance of school leaders understanding and correctly applying these student growth percentile models. The authors point out that there is the potential for extreme consequences for both teachers and students if these models are not applied appropriately. The study highlights how school leaders adapt their practices when student growth data is a part of the data-decision-making process. The authors suggest that misinterpretation of this data, along with the high-stakes nature of the data, can lead to instructional leadership practices that do not contribute to the school, teacher, or student effectiveness (Clauser et al., 2016).

Herrmann & Ross (2016). The New Jersey statewide principal evaluation system began implementation in the 2013-2014 school year. In a quantitative study, the authors examined the variation in overall and component measure ratings, how these components correlate to each other, how stable these components are from year to year and how the component measure

ratings correlate to the characteristics of students in those schools. One of these elements is mean growth percentiles for schools with grades 4 – 8 (Herrmann & Ross, 2016).

This study found little variability in overall principal ratings with 99% of principals rated as effective or highly effective. However, the percentage of principals evaluated with mean growth percentiles who were found highly effective was lower than those who did not have a mean growth percentile in their evaluation. Additionally, several components, including mean growth percentile, negatively correlated for principals serving low socioeconomic schools. Finally, a school's mean growth percentile was more variable across schools with fewer than 500 students than others, changing by as much as 24 – 31 percentile points from one to the next (Herrmann & Ross, 2016).

An interesting finding in this study is that school mean growth percentiles remained similar for schools where the principal changed, suggesting that school-specific factors may have a more significant impact on school performance than the principal. This study did not include assistant principals because they have different job responsibilities than principals, so the implications of the same assistant principal(s) at a school where the principal changed could not be determined (Herrmann & Ross, 2016).

The authors of this study expressed concern that the impact socioeconomic status appears to have on mean growth percentiles may lead effective principals away from working in schools with disadvantaged students. Given that previous research indicates there are already challenges for these schools to attract and retain administrators, the researchers advocate for additional studies that point to alternative measures for evaluating principal effectiveness that are not subject to this negative correlation (Herrmann & Ross, 2016).

This study did not consider the subcomponents or standard ratings that contributed to overall scores because these do not report to the state (Herrmann & Ross, 2016). Subcomponent and standard ratings and their correlation to other components of annual administrator evaluation should be considered an area for future research.

Summary and Implications of the Literature Review

Little research exists on using student growth percentiles for determining educator effectiveness. These measures are popular with legislators and policymakers because they are a relatively simple way to speak about student growth. However, because this measure was never intended to be used to measure teacher effectiveness, researchers have not evaluated their validity for this purpose. Teacher and principal effectiveness are more than just the ability to effect changes in student test scores, which is what student growth percentiles describe. Future research needs to consider student growth percentiles and mean or median growth percentiles in the context of research-based characteristics of educator effectiveness like student engagement, school culture, communication, and educator behaviors (Baker et al., 2013; Castellano & Ho, 2013; Fuller & Hollingworth, 2014; Guarino et al., 2014; Neal, 2013).

Existing research on the consequences of the use of growth measures for evaluation purpose has previously focused on teacher's responses to the measures with very little consideration for the actions of principal's and other school leaders. Principal attitudes, interpretations, and decision making based on student growth percentiles are all areas that indicate the need for further research.

The risk of underidentifying high-performing educators in at-risk schools calls into question the validity of student growth percentiles for high-stakes purposes. In the state of Georgia, mean and median growth percentile data count for a significant portion of teacher and

administrator evaluation. The Georgia Professional Standards Commission will tie teachers' and administrators' ability to renew their certificate to these evaluation scores. These high stakes suggests that further research is needed to determine if student growth percentile and the mean or median data it provides is fair, reliable, and valid for use in educator evaluation.

Chapter 3: Methodology

Using student growth measures in teacher evaluation has grown significantly since the introduction of these measures in 2009, and a large body of research exists related to teacher evaluation and student growth percentiles. Past research has considered teacher attitudes toward these measures and the actions that they take as a result (Collins, 2014; Goldhaber, 2015; Goldring et al., 2015; Jiang et al., 2015). Student growth measures expanded recently to administrator evaluations. The literature review in Chapter 2 documents that very little research exists specific to the use of these measures for administrator evaluation. A previous study (Clauser et al., 2016) considered Massachusetts school administrators' knowledge of student growth percentiles.

The researcher in this study examined administrator attitudes and actions related to student growth measures. Additionally, this study sought to evaluate administrator knowledge and application of these measures. The results of this study will help identify additional areas for research as well as areas for professional development of school administrators.

The researcher completed the Collaborative Institutional Training Institute (CITI) training regarding human research that is required by Kennesaw State University's Institutional Review Board (IRB) policy. Approval to conduct this research was granted by Kennesaw State University's IRB on May 21, 2018 (Appendix D).

A request to conduct research was submitted to a metro-Atlanta area school district, referred to in this project as the Mountain Ridge School District. This request was approved by the Director of Student Assessment and the Deputy Superintendent of Schools on March 21, 2018 (Appendix E). At this time, the Mountain Ridge School District requested the opportunity to collaborate with the researcher on certain aspects of the project. This collaboration is described in further detail later in this chapter.

Research Question

This mixed methods study considered the actions of school-based leaders evaluated with the Georgia LKES tool with regard to student growth percentiles. The research question is:

How does the use of student growth percentiles in annual LKES evaluations for school administrators impact the actions of education leaders?

The researcher identified eight topics related to the research as areas of interest. These topics include: administrator trust in the system; perceived value of student growth percentiles for educational decision making; impact of student growth percentiles on administrator stress/morale; administrator misconceptions about student growth percentiles; how administrators interpret student growth percentiles; professional development for administrators regarding student growth percentiles; actions administrators take based on the data provided by student growth percentiles; and the unintended consequences of using student growth percentiles as part of annual administrator evaluations. These topics generated a list of informational questions that led to specific categories of analysis for the study. These categories of analysis are similar to the themes coded by Harris & Herrington (2015) related to teacher perception and beliefs about student growth percentile, but this research considers the perspective of administrators instead.

Research Design

This exploratory study (Bryant, 2004; Creswell, 2015) sought to understand how school leaders, evaluated with a component that includes student growth percentiles, utilize, understand, and interpret student growth percentiles and the data they provide. To respond to the research question, the researcher relied on input from the following.

The researcher conducted a mixed methods study of current principals and assistant principals evaluated by the Georgia Department of Education's Leader Keys Effectiveness System (LKES). An online survey and semistructured interviews were used to identify themes in the context of administrator attitudes and opinions regarding growth measures, knowledge and understanding of these growth measures, and the actions administrators take as educational leaders in the context of these measures.

The research helped to identify professional development needs for the Mountain Ridge School District related to student assessment and accountability, leadership development, and executive coaching. Additionally, the research helped identify administrator attitudes and opinions regarding the value of student growth percentiles. Finally, the researcher reviewed the educational decisions that administrators make in response to student growth percentile data.

This interview protocol was also reviewed by former school administrators currently serving in district leadership positions who provided insight and feedback on these questions in the context of the current study. Recognizing the value of the research for its potential contribution to the Mountain Ridge School District Superintendent's Leadership Academy for future leaders and the executive coaching provided by the Office of School Operations for existing school leaders, the school district requested to collaborate with the researcher on these interview questions.

The researcher adapted items from the surveys used by Clauser et al. (2016) and Collins (2014) to reflect terms that are specific to Georgia growth measures instead of that of Texas and Massachusetts. A small pilot test and a focus group with former school-based administrators who now work at the central office was utilized to evaluate the usefulness of the instrument. These responses were excluded from the final data set but did assist the researcher in identifying items for revision that did not address the intended categories of analysis.

A smaller sample of school-based leaders was identified using purposeful sampling methods (Creswell, 2015) to provide an additional voice to this data through semistructured, face-to-face interviews. An interview protocol (Appendix G) was developed by the researcher based on items for analysis from the anticipated data reduction model previously described to provide for greater depth of response than the survey items could provide (Creswell, 2013).

The convergent parallel design (Creswell, 2015) of this study, represented as quan + QUAL (Butin, 2010), meant that that quantitative data from survey respondents were collected and analyzed parallel to the qualitative data garnered from interview participants. The two data sets were collected and analyzed concurrently and independent of each other and then merged for interpretation of the combined results. The researcher reports both quantitative and qualitative results for triangulation and validation purposes. In this study, priority was given to the qualitative data as symbolized by the uppercase letters in the formula above.

Value of Specific Methodology

In a mixed methods study, both qualitative and quantitative data work together to provide a better understanding of the research problem. These mixed methods work together to extend and elaborate the dataset to provide alternative perspectives in the study. Cross-sectional survey design measures current attitudes or practices and can collect a large amount of information in a

short amount of time (Creswell, 2014; Creswell, 2015). Semistructured interviews provide additional insight into the survey responses and can help clarify unclear or incomplete responses in the survey (Creswell, 2015).

Setting

This study surveyed public school principals and assistant principals in the Mountain Ridge School District, a suburban district located just outside metropolitan Atlanta area in the state of Georgia. The area covered by the school district is unique in that the south end of the county is what is considered a "bedroom community" in which many residents are commuters for employment. The northern part of the county is rural with many farms and agricultural areas. The school district performed better than 91.1% of the other districts in its state in 2017.

In 2017, the district served approximately 41,291 students in 24 elementary schools, 7 middle schools, 6 high schools, and four specialized centers. The student population is predominantly White (70.54%), with 16.77 % Hispanic and 7.3% African American. Approximately 5.2% of students are considered English Language Learners and an Individualized Education Plan (IEP) serves 11% of students under the Individuals with Disabilities Act (IDEA). District-wide, the rate of students receiving free or reduced lunch is 30.81%. The school district has a student/teacher ratio of 16:5 and a school administrator ratio of 363:1.

Overall and Sample Populations

The school district where this research is being conducted currently employs approximately 125 school-based principals and assistant principals. The minimum educational requirement for a school-based administrator is a Master's level degree from an accredited university program, and 16.6% of the administrators in this district are at this level.

Administrators holding a Specialist Degree make up 62.3% of this population, and 20.5% hold a Doctorate Degree. Certification from the Georgia Professional Standards Commission in Educational Leadership is also required to hold such a position. Females constitute 66.2% of the administrator population. The administrator population is predominately white (91%) with too few statistically to report in other racial categories. The average years of leadership experience are 9.1 years with 30.1% of leaders having 5 or fewer years of leadership experience, 30.1% with 6 – 10 years of experience, 24.8% with 11 – 15 years of experience, and 15% with 16+ years of experience.

Access to Site

The researcher has access to this population as an administrator in the school district that is the subject of this study. It is important to note that the researcher was serving as a high school assistant principal at the time that permission was requested to conduct research in this district. Shortly after approval was granted, the researcher transferred to a new position in the central office as an administrator on special assignment in the Division of Curriculum and Instruction to work with student assessment and accountability. Chapter 5 discussed the implications of this change of position and its impact on the study.

In order to provide the researcher with a broad perspective in the semistructured interviews, the district provided the researcher with a list of 18 school-based leaders serving in either a principal or assistant principal position. These participants represented equally distributed respondents across the elementary, middle, and high school level. These 18 leaders represented a range of annual LKES and growth percentile scores. This range of scores was not disclosed to the researcher but represented a characteristic pool of administrators that the district felt was most useful to identify needs or validate existing practices in its current leadership

development program for this study. The researcher did not receive any information regarding the leaders' annual LEM score.

The list was sorted into alphabetical order by last name and each administrator was given a number based on this order. Using the random number generator located at http://stattrek.com/statistics/random-number-generator.aspx, eight names were selected for participation. Those selected were solicited via their district provided email to request an interview (Appendix H). This email included a description of the study and provided a method for willing participants to contact the researcher outside of the school system email.

Additionally, the researcher received access to the districtwide email distribution list for all principals and assistant principals. This email list was used to distribute the online survey and request administrator participation.

Instrumentation (Reliability and Validity)

The survey used for this study is an adaptation of the surveys previously used by Clauser et al. (2016) and Collins (2014). It has been modified to reflect Georgia processes and assessment data. Additionally, questions were included that consider professional development relative to student growth measures at the request of the district in which this study was conducted.

Data Collection Procedures

Surveys. The survey and semistructured interview questions were designed to elicit participant responses regarding specific characteristics or categories of interest to the researcher. Additionally, constructed-response items and the semistructured nature of the interviews provided multiple opportunities for participants to elaborate on their ideas or understanding to

provide the researcher with a deep understanding of the themes of study through the rich breadth and depth that the participants provided in their response.

Principals and assistant principals received a link to the online survey via the district-provided email distribution lists with a request for their voluntary participation in the study (Appendix I). Included in this email request was a description of the study and a copy of the online informed consent form for participants to review before going online to complete the survey. Distributing a link to the survey via email instead of distributing the survey itself via email provided the participants with complete anonymity so that they were free to be honest in their responses without concern about how they would be perceived based on their answers. The survey remained open for one month, and a follow-up email was sent again to all members of the distribution list one-week before the close of the survey to give all who wished to provide a voice to the study the chance to do so.

The researcher collected survey data via Qualtrics, which was available through the supervising university to any student collecting data via online surveys. A survey was designed based on the previous works of Clauser et al. (2016) and Collins (2014). The survey items include Likert scale, multiple choice, and open-ended questions to identify the administrator attitudes toward and understanding of student growth percentiles and consequent actions.. Demographic items were also included to understand if these variables correlate with the attitudes, actions, and understanding of student growth percentiles. Open-ended response items permitted respondents to elaborate and expand on their answers when Likert or multiple-choice items were limiting. Participants entered their responses, and these were coded and reported precisely as the respondent wrote them.

This cross-sectional survey collected responses from a convenience sample of school administrators in the Mountain Ridge School District to examine current attitudes, beliefs, opinions, and practices of school administrators related to student growth percentiles (Creswell, 2015). The survey (Appendix F) included multiple-choice, Likert scale, and open-ended response questions, as well as questions for demographic purposes. Additionally, questions addressed opinion related to usefulness and accuracy; ways that administrators utilize student growth percentile data for educational decision making and school improvement; professional development experiences and needs; and, finally, interpretation of student growth percentile data.

Interviews. Interview protocols were designed to guide administrator interviews conducted to triangulate the survey data. However, the nature of the exploratory study means that these interviews were semistructured to allow the participants to share their experiences freely (Creswell, 2013). The researcher recorded these interviews in order to have them transcribed verbatim.

These interviews occurred over a 3-month period at a location that was preferable to the interview participant. The names of those who agreed to interviews were not disclosed to the school district to protect their privacy and encourage them to be open in their responses to the researcher. These interviews were all audio-recorded and then transcribed using a reputable, secure, confidential online platform at rev.com. The transcripts were converted to Word documents used for coding. All identifying information regarding the interview participants or the school that they served was removed from the transcripts.

Data Analysis

An anticipated data reduction activity was conducted to identify categories for analysis related to the research question. As outlined in Figure 3.1, the anticipated data reduction indicates three issues relative to this research question and eight topics related to these issues.

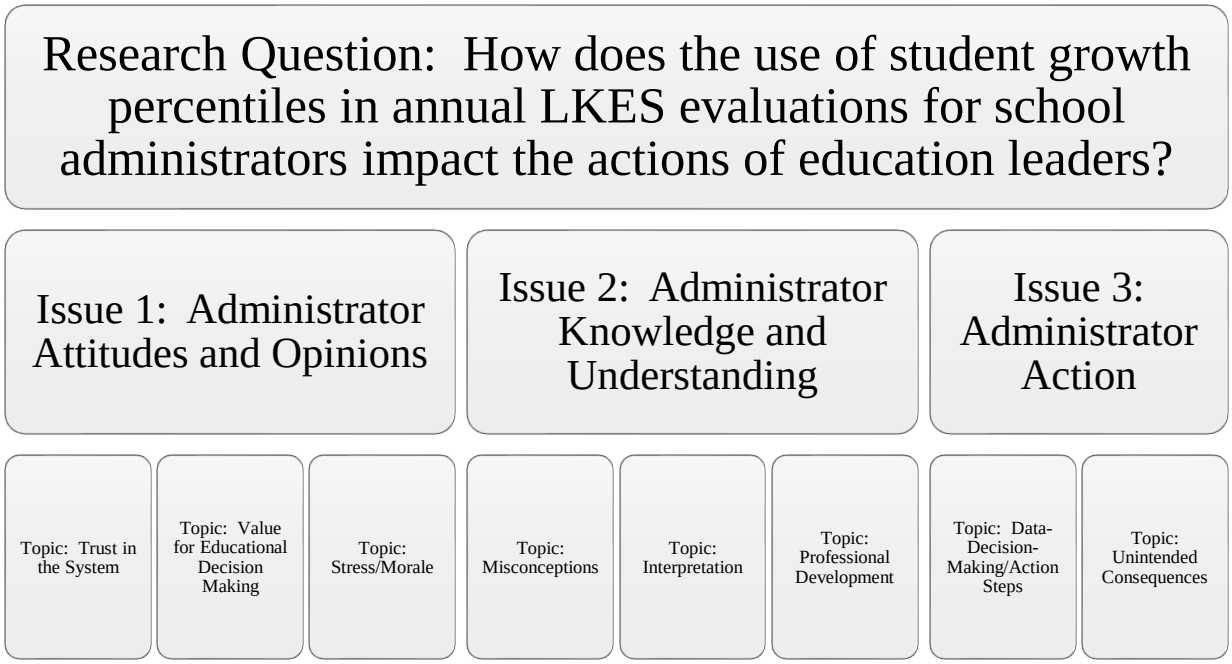

Figure 3.1. Anticipated data reduction

Issue 1 considers administrator attitudes and opinions related to student growth percentiles in annual LKES evaluations. The items related to this issue include how much administrators trust this system, the value they place on student growth percentiles for educational decision making and how student growth percentiles in administrator evaluation impact leader morale and job stress.

Issue 2 explores administrator knowledge and understanding of student growth percentiles. Topics related to this issue analyze misconceptions administrators may have about student growth percentiles and how they interpret these descriptive measures based on their

current knowledge and understanding. Professional development is another topic related to this issue.

Finally, issue 3 identifies the decisions that administrators make in the context of student growth percentiles to impact the schools they lead. This issue considers action steps taken by school administrators based on their student growth percentiles data and identifies actions that may be counter to those intended by policymakers who implemented the use of these measures in leader evaluation.

Interviews were audio recorded and then transcribed into a text document for coding. Codes were generated based on the items of analysis from the anticipated data reduction and placed in coding families according to the topics in the anticipated data reduction. The researcher hand-coded all the text documents generated from interviews.

Additionally, the researcher coded by hand the data from the optional or constructed response survey items as well. The coded data from both the survey and interviews was reduced into themes and then organized manually by theme and categories in the ways that best reported the outcome of the research. Themes that emerged from text documents that were not previously anticipated were also identified and utilized for data reporting.

IBM SPSS Statistics version 25 was used to analyze quantitative survey data. This software provides a comprehensive set of statistical tools to run descriptive and advanced statistics. It integrates easily with Microsoft Office products to allow the researcher to create charts and tables to import into a Word document for reporting of results. SPSS was utilized to generate descriptive statistics from the survey items.

Strategies to Ensure Trustworthiness

Trustworthiness is essential in qualitative research. It is comparable to what would be considered reliability and validity in quantitative research. If research is not trustworthy, the researcher runs the risk of losing the opportunity to impact any change or benefit gained by giving participants a voice. Trustworthiness comes from credibility, transferability, dependability, and confirmability.

In this project, several steps were taken to ensure credibility. First, triangulation of the data occurred through the interviews and surveys as well as from different sources of information and theoretical data from the literature that supports the research. The researcher utilized member checking by touching base with informants to verify that the information included in the study accurately reflects what they had to say in their interviews. The use of vignettes to represent the voice of participants helped contribute to a thick description of the project and the standard of transferability and replication.

Overlapping methods by using interviews and document analysis contributed to the dependability of the project. Additionally, feedback from the dissertation committee, district personnel, and peer review of the project itself was a part of the inquiry audit that contributed to the dependability of the research.

Limitations and Delimitations

Because this study was conducted in a bound system, the results from this study are limited to school administrators in the Mountain Ridge School District in the state of Georgia. While the results from the study may identify themes that are common in other school districts in Georgia or other states, one cannot assume this without conducting similar research in other school districts or states. Additionally, this study considers a phenomenon that is specific to

educators in brick and mortar Georgia public schools and thus is not applicable to private, charter, or virtual school settings.

Ethical Considerations

The ethical principles that guided this research are as follows:

1. Nothing in the research project put participants in any form of danger or harm. There should not be any adverse response to the study by participants.
2. No identifying information was documented in order to protect the identities of the participants. Quotations from the interviews are limited in scope so that the reader does not inadvertently identify the speaker.
3. Participants were able to speak freely about their experiences with student growth percentiles without fear or concern for punishment or negative consequences because information received by the researcher is to be protected and was not shared with others.
4. All participants received informed consent before participating in the project. Survey participants provided acknowledgment of the informed consent description at the beginning of the survey (Appendix J). For those that failed to acknowledge informed consent, the survey terminated without any survey items being presented to the participant. Interview participants provided both signed and verbal consent for participation (Appendix K).
5. All interview participants were asked to identify the date, time, and place for the interview to take place so that their participation in the project did not intrude on their personal or professional lives.

6. No inappropriate interactions of a personal or sexual nature occurred between the researcher and participants. The researcher acknowledges that her position in the district and length of employment in the district does provide the researcher with a level of familiarity with the subjects of the research and the implications for this are discussed further in Chapter 5.
7. The researcher has carefully reported all data accurately and fairly. Field notes and observations helped the researcher identify possible biases and personal interpretations so that the project was not manipulated to reflect the researcher's opinion instead of the outcomes of the research.
8. The researcher did not gain financial or other benefits from this study other than the final degree conferred (Doctor of Education) at the end of the research. As previously stated, the researcher's position within the district changed shortly after the approval of this research. The job change was based on the researcher's professional experience outside of the scope of this research and should not be interpreted as compensation for any particular result or as a way for the district to manipulate the outcome of the research. Other than the collaboration outlined in this chapter, the district had no other influence on the design, data collection, or reporting of the results of the project.

Chapter 4: Findings

Introduction

These findings derive from an online survey, administered to 127 Principals and Assistant Principals in the Mountain Ridge School District with a response rate of 45.7%. Further triangulation of the data came from interviews, conducted with seven additional school-based

leaders identified through the collaborative efforts of the Mountain Ridge School District and the researcher to ensure a diverse group of respondents was included.

Vignette

An elementary school assistant principal called her district office to discuss an application to conduct research for her dissertation. She expressed a keen interest in studying student growth percentiles and teacher efficacy. She shared several ideas she had for her research design and the administrator at the district office discussed the different challenges that assistant principal might encounter with other school districts related to IRB and roadblocks to some of the data she might need for each design.

Even though many challenges were identified, the assistant principal was not deterred. Her enthusiasm for the student growth percentile measures never waned. She indicated that many people did not understand why she saw such value in student growth percentiles and hoped that her research could bring to light why she was so in favor of using this data as another way to look at students.

As she and the district administrator reached the end of their phone call, the assistant principal asked, “Would you like to know what it is about student growth percentiles that excites me the most?” The district administrator responded affirmatively, and the assistant principal stated,

> I have always worked in schools where there are high needs, and my students are often deemed as failures because they don’t achieve at the same level as other schools in our district. Student growth percentiles help show what my students are doing. When the middle school complains that my school is sending them students that are below grade level, I can point to when they were three years below grade level the year before and

> show that they have made tremendous growth with the teacher who taught them this year. They may not be achieving on grade-level, but our students and our school should be proud of the amount of growth they have made. Before student growth percentile data, we couldn't show those gains. Now we have another tool at our disposal that helps give a clearer picture of each student we serve. I want my research to help identify how schools can capitalize on this growth for greater outcomes for each student.

The preceding vignette reflects the intended use of student growth percentile data – as a descriptive tool used in conjunction with other data to describe student and school achievement. However, what happens when this data is used in a high-stakes fashion where school leader evaluation is tied to these student growth percentile measures? This study seeks to explore leader attitudes and opinions about these measures. Additionally, the study seeks to identify what kind of understanding school-based leaders have about these measures and how they apply these measures to the decisions they make as school administrators. Chapter 4 provides the results of this research gathered through survey methods and semistructured interviews with school leaders in the Mountain Ridge School District, located in northwest Georgia.

Data Collection

The online survey was conducted via Qualtrics. A link to the online survey was sent to all principals and assistant principals in the Mountain Ridge School District via the district email distribution list. A follow-up email was sent one week before the close of the survey. A total of 88 Assistant Principals and 39 Principals were invited to participate through convenience sampling.

The majority of survey respondents were female (n = 36/58; 62.1%), employed as assistant principals (n = 37/58; 63.8%), serving at the elementary school level (n = 31/57; 54.4%)

and identifying as Caucasian/White (*n* = 57/58; 98.3%) (Tables 4.1, 4.2, 4.3, and 4.4). Nearly one-third of the respondents (Table 4.5) indicated that they had been a school-based administrator for 1 – 3 years (*n* = 18/58; 31%). The amount of time that a respondent has been serving in their current school setting ranged from 1 to 11 years, with an average of 3.34 years. Most respondents (Table 4.6) have been in education for a total of 21+ years (*n* = 35/58; 60.3%). More than half of those responding to the survey indicated that their school serves students with average academic needs (*n* = 33/58; 56.9%) and average socioeconomic needs (*n* = 30/58; 51.7%) (Table 4.7 and Table 4.8).

Table 4.1

What Is Your Gender?

	Frequency	Percentage
Male	22	37.9%
Female	36	62.1%
Total	58	100.0%

Table 4.2

What Is Your Current Position?

Position	Frequency	Percentage
Principal	21	36.2%
Assistant Principal	37	63.8%
Total	58	100.0%

Table 4.3

At What Grade Level Are You Currently a School Administrator?

Level	Frequency	Percentage
Elementary School	31	53.4%
Middle School	18	31.0%
High School	8	13.8%
Total	57	98.3%
Missing	1	1.7%
Total	58	100.0%

Table 4.4

What Is Your Identified Race?

	Frequency	Percentage
Hispanic/Latino	1	1.7%
Caucasian/White	57	98.3%
Total	58	100.0%

Note: Participants identified no other races

Table 4.5

How Many Years Have You Been a School Administrator?

	Frequency	Percentage
This is my first year as a school administrator	1	1.7%
1 - 3	18	31.0%
4 - 5	15	25.9%
6 - 10	12	20.7%
11 - 15	7	12.1%
16 - 20	5	8.6%
Total	58	100.0%

Table 4.6

How Many Years Have You Been in Education Total?

	Frequency	Percentage
6 - 10	1	1.7%
11 - 15	8	13.8%
16 - 20	14	24.1%
21+	35	60.3%
Total	58	100.0%

Table 4.7

How Would You Classify the Academic Status of Students in Your School?

	Frequency	Percentage
Very high needs	8	13.8%
High needs	5	8.6%
Average	33	56.9%
Low needs	12	20.7%
Total	58	100.0%

Note: The researcher did not define these terms for respondents nor were respondents provided with a standard metric to measure these categories (i.e., standardized tests, grades). The response is based on the administrator's professional opinion of how he or she defined these terms and chose to rate the school in comparison.

Table 4.8

How Would You Describe the Socioeconomic Needs of Your School?

	Frequency	Percentage
Very high needs	7	12.1%
High needs	8	13.8%
Average	30	51.7%
Low needs	10	17.2%
Very low needs	2	3.4%
Unsure	1	1.7%
Total	58	100.0%

Note: The researcher did not define these terms for respondents nor were respondents provided with a standard metric to measure these categories (i.e., free/reduced lunch rates, transiency, title status). The response is based on the administrator's professional opinion of how he or she defined these terms and chose to rate the school in comparison.

Additionally, a total of eight school-based leaders were invited to participate in semistructured, face-to-face individual interviews through purposeful sampling methods. While eight leaders consented to participation in these interviews, scheduling challenges for one participant prevented a full interview from taking place. An informal conversation between the researcher and that school leader occurred and, where appropriate, insight from this conversation based on the researcher's notes and journaling is included in these results. Table 4.9 includes the demographic composition of these administrators. As described in Chapter 3, a copy of the interview protocol questions is included in Appendix G.

Table 4.9

Demographic Composition of Interview Participants

	Frequency	Percentage
Elementary School	3	37.5%
Middle School	3	37.5%
High School	2	25%
Male	5	62.5%
Female	3	37.5%
Principal	5	62.5%
Assistant Principal	3	37.5%
Average Years in Current Position	5.25 years	
Average Total Years in Education	18.625 years	

Unlike survey participants, most interview participants were male (n = 5/8; 62.5%) and employed as principals (n = 5/8; 62.5%). Participants were evenly distributed across each level with three (37.5%) from Elementary School, three (37.5%) from Middle School, and two (25%) from High School. The amount of time that these leaders have been in their current positions ranged from 1 – 11 years with a median of 3.5 years.

Data Analysis

The survey and semistructured interview questions were designed to elicit participant responses regarding specific characteristics or categories of interest to the researcher. Additionally, constructed-response items and the semistructured nature of the interviews provided multiple opportunities for participants to elaborate on their ideas or understanding to provide the researcher with a deep understanding of the themes of study through the rich breadth and depth that the participants provided in their response.

School scores. Survey participants were asked to respond to a few questions about student growth percentile scores for their specific school. Every respondent did not answer all of the questions, so the data is described relative to the number of responses to the question rather than based on the number of survey participants. Survey questions 10, 11, 12, 13, and 14 related

to student growth percentiles specific to the respondent's school. As stated in Chapter 3, the complete set of survey questions are included in Appendix F.

When considering the school's performance over the past 2 years relative to other schools of its kind, the majority of respondents indicate their school performed better than other schools of its kind (n = 23/55; 41.8%) followed by those who reported that their school performed about the same as schools of its kind (n = 21/55; 38.2%). Almost 20% (n = 11/55) indicated that based on student growth percentiles over the past two years, their schools performed less than other schools of its kind. It is important to note that the researcher did not define what "schools of its kind" meant, so respondents could have interpreted this to mean schools of the same level (elementary, middle, high), schools with similar socioeconomic makeup, with similar student population compositions based on race/ethnicity, or with similar academic need. This was done so that the researcher could capture the respondent's opinion based on the metric that the school administrator uses to compare what they consider a school like their own. Defining "other schools of its kind" for the respondent could have yielded a limited response if the criteria were different from that of the administrator and influencing the data by changing the decisions of the administrator in a different context.

Administrators who had been in a school for more than one year were asked to indicate whether or not their student growth percentile scores had been consistent over time. The majority of respondents indicated that the scores for their school were consistent over time (n = 36/46; 78.3%) compared to those who reported inconsistent scores over time (n = 10/46; 21.7%).

Respondents whose scores were inconsistent were provided the opportunity to explain the inconsistencies, and all 10 of them did so. In these explanations, four respondents indicated in some fashion that scores were rising, and four respondents indicated that scores were dropping.

One of the administrators who indicated that scores were falling over the past two years added the statement that "Overall, achievement was high." Because the question was open-ended, two participants did not indicate what was happening with the scores. Instead, one replied, "We have several new curriculum initiatives we are implementing." The other respondent simply stated, "There has been some fluctuation in scores." In a later open-ended response question, three additional respondents reported increasing student growth percentile scores at their school.

All survey participants were given the opportunity to share anything they would like regarding their school's student growth percentile scores. The type of responses reflected a wide range of information that survey participants felt was important to share. Only responses that describe the school's student growth percentile score relative to other schools or score consistency will be included in this section, but other coded responses that apply to additional categories of analysis will be included in later sections.

One respondent described their school circumstances:

> For the socioeconomic status of this school, the students are not performing to the level as other like schools or the district in some areas. It is my job to change this and change the mindset of the teachers. The rigor needs to be increased, and we are working on this in each grade level in PLCs (Professional Learning Communities). I am hoping to see a change this coming year….

Another respondent indicated, "We've had a record the past 3 years of down, up, down. This demonstrates a lack of consistent change either positively or negatively. I interpret this as meaning we have yet to identify how to effectively grow students."

Administrator use of student growth percentile data. Survey respondents overwhelmingly indicated that they utilize student growth percentile scores in their educational

decision making (n = 47/51; 92.2%). The researcher did not define "educational decision making" and asked that those who responded affirmatively explain how they utilize these scores. Allowing participants to define "educational decision making" provided the researcher with a broad range of responses instead of a narrow focus that might have overlooked ways administrators make decisions with these scores if they were considered in a limited scope.

Survey participants were asked to indicate from a list of commonly identified uses for student growth percentile data which ones they utilize. It should be noted that this list does not necessarily reflect best practices or appropriate uses, but rather reflects current practices noted in the existing literature. This question allowed respondents to choose multiple responses, so the percentages reported reflect the popularity of the answer choice among all of the options.

The highest reported use of student growth percentile data (n = 48; 94.1%) is as additional information about how well a school is performing. Eighty-six percent of responses (n = 44) indicates that the second most popular use of student growth percentile data is for informal use in staff evaluation followed by identifying students in need of additional help (n = 43; 84.3%). It is worth noting that the least cited use of student growth percentile data is for formal staff evaluation (n = 23; 45.1%). A discussion of the use of student growth percentile data for evaluation of staff in the context of Georgia's current and anticipated weight and use of this data for both teacher and leader evaluation will follow in Chapter 5. All responses to this question are included in Figure 4.1 below.

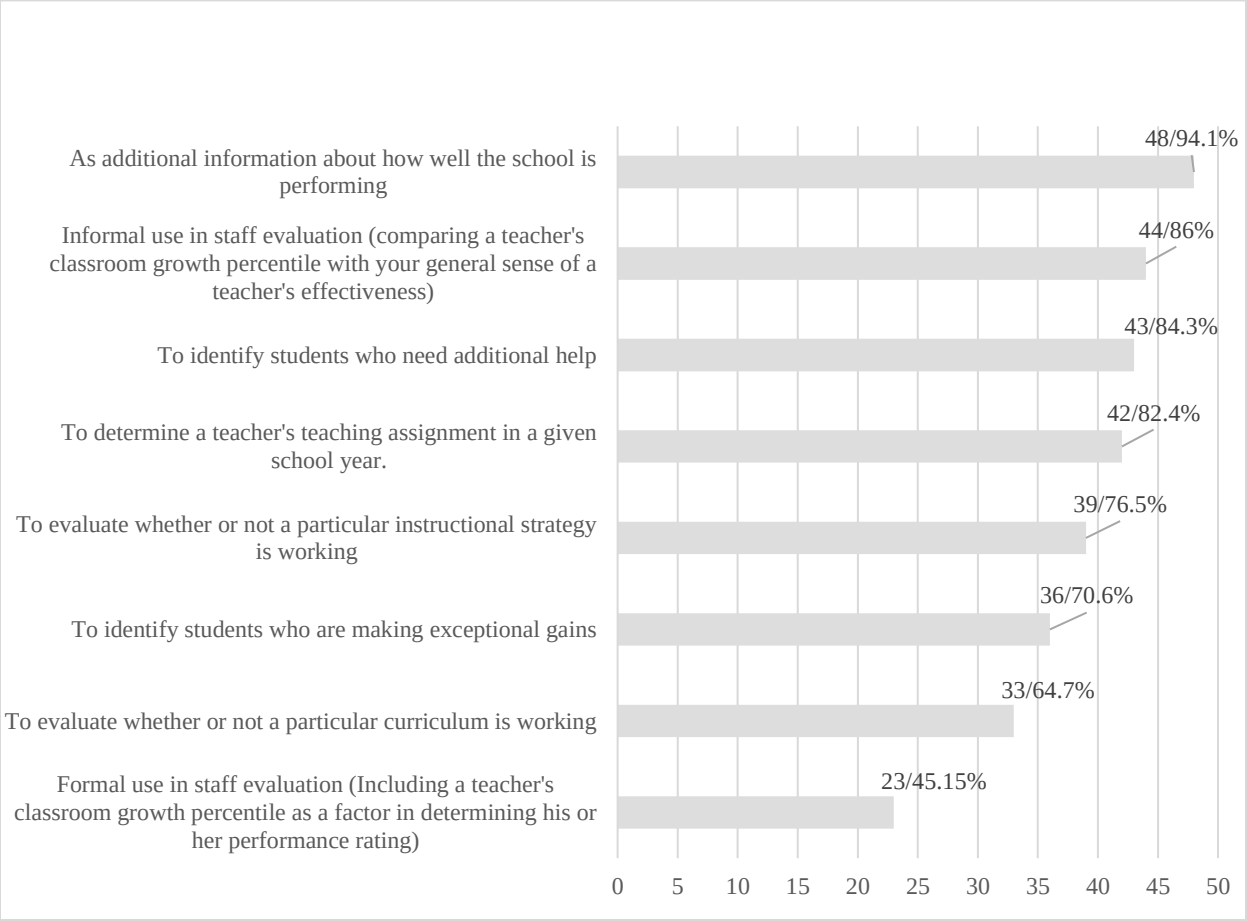

Figure 4.1. How (if at all) have you used your school's student growth percentile data?

Additional explanation of how school-based administrators utilize this data in their educational decision making was provided when survey participants were given the opportunities to provide additional information about how they utilize student growth percentile data in their educational decision making. A total of 31 respondents provided this additional response. Because of the free-response item, respondents could have indicated multiple uses in a single response. Coding of these responses indicated that typically they fell in the categories of school-improvement planning (n = 4), the work of professional learning communities (n = 6), providing school-wide professional development (n = 4), identifying teacher leaders (n = 4), supporting

student achievement (n = 6), and making teaching assignments for the following term or school year (n = 11).

Teaching assignments. Interview responses revealed that teaching assignments could be in response to either high or low student growth percentiles. One administrator noted, "I put teachers showing strongest growth in my most critical grade levels." Another echoes this statement, responding, "It helps me place teachers in areas where they can impact students the most." When student growth percentiles are low, an administrator had this to say, "If students are continually not making growth under a specific teacher, that teacher might be asked to teach a different subject/grade level."

Interviewees also expressed how they used student growth percentile data for teacher assignments. Like the responses above, this could be based on high growth or low growth as seen in the statements that follow. One interview participant indicated:

> Well, that teacher had a 17-growth percentile, which is very, very low. You know he's a good teacher. He built relationships with the kids; the kids liked him just fine. He needed to change. I felt, along with the other administrators, we felt that he was teaching information that was no longer part of the standards. So, we got . . . the teacher out of that situation and then moved him to a different grade level, and he did show some improvement . . . . So yes, it is beneficial to use student growth percentiles so that we can maneuver teachers or do other things to see where we're lacking in curriculum. . . . for that one teacher, it was basically (based on) the student growth percentile. That teacher . . . . everything was working well but that one, the test scores did not measure up to other students across the state, so we felt like a change had to be made. It was starting

> to be a pattern. It had slowly declined over the last couple years, and as we observed that teacher through the student growth . . . . we noticed that things weren't changing.

Another administrator talked about keeping teachers with low student growth percentiles in place but providing additional support to their instruction:

> Specifically, we had two fourth-grade teachers who, when we looked at their SGPs for math, (were) very weak. And although we kept them both in math for that following year to allow for growth . . . we were able to get our ILS (Instructional Lead Strategist) in there to work on math centers because the teachers were teaching just whole group, no centers, no math talks, things like that.

Teachers were not always given new teaching assignments due to low growth. One administrator described how a teacher was given a leadership position due to demonstrating consistent high growth:

> We moved somebody out of a math classroom, and into a different position where they can impact us with data and RTI (Response to Intervention), because of their previous growth scales in the classroom. And, you would think, "Well, why would you move them out of the classroom." Now, they can impact 1,800 kids, whereas before, they could only impact 150, with two planning periods. Now, they are doing ISS (In-school suspension), and can work with those students, but can really do some data and help other teachers with the strategies that work.

One administrator shared a scenario where she discovered that a high growth percentile is not always reflective of the teacher. She described a teacher in her building who was an average teacher based on Milestone scores, classroom observations, and other data the principal was reviewing, but the teacher consistently got very high student growth percentiles each year. The

principal could not find an explanation for the high scores until she started looking at the students' histories before being in this teacher's classroom. By looking at previous grade data, she realized that the students with a teacher in the previous grade were making very little progress, which was inflating the growth score the following year. This experience changed how the principal considered student growth percentiles after that.

This middle school assistant principal describes another example of how to utilize student growth percentiles with other data to work with teachers:

> This week, we had received some complaints . . . . A veteran teacher . . . made a poor judgment in telling parents at curriculum night that they do not give out A's easily. . . . So, that prompted the admin team to start doing some investigation. We go through ASPEN (the student information system) . . . to get a grade distribution list. What's interesting is on the level that teacher is right on par with everybody else. However, in the advanced classes, that teacher was significantly lower. Two to three times lower on the A's than everybody else… We then went back into the student growth percentiles with that particular teacher in that grade level and noticed that there wasn't a significant (difference), they were all in the same area. So, it wasn't that anybody was significantly higher or significantly lower. So, the students are achieving similar to the other teachers in that grade level for that subject, yet they're not reflected in their grades.

Coding of the constructed-response survey items and interview transcripts indicated that many administrators use student growth percentile data in some fashion during annual teacher evaluation. One respondent notes,

> I always make sure that the teacher understands we, the administration, . . . understands there are a whole lot of other variables and therefore, it's not the most important meter stick that's used for their evaluation. . . . it's a discussion piece.

Another indicates,

> Every year at the end for the summative, we do look at those . . . (with) very much a qualitative viewpoint of it, of what do you think of these scores? Where do you want to move forward with them and use them as discussion points instead of ... we don't necessarily make value statements as to whether they're too high or too low or anything else. Most professional educators are already going to beat themselves up over it.

Other data considered. Administrators who completed the survey (Q16) and who participated in semistructured interviews indicated a variety of data considered in conjunction with or instead of student growth percentile data. Administrators cite most frequently (n = 19; 14.39%) the use of progress monitoring and universal screener data through the Easy CBM program used for progress monitoring with the school district's Response to Intervention program. The second most frequently cited source (n = 18; 13.64%) is the use of standardized achievement test scores through the Georgia Milestone End of Grade or End of Course test. The wide range of sources cited for consideration when making educational decisions suggests that, in general, school-based leaders consider a variety of sources of data rather than looking at one thing in isolation. Table 4.10 includes all responses from both the survey respondents and interview participants. Many of the items in this table are instructional resources that are a part of the curriculum of the Mountain Ridge School District. A complete definition or description of these items is included in Appendix L.

Table 4.10

Sources School-Based Leaders Cited for Consideration in Educational Decision Making

Source	Frequency	Percentage
Easy CBM	19	14.39%
Milestone/Achievement Data	18	13.64%
iReady	16	12.12%
Common Formative/Summative Results	10	7.58%
Grades	8	6.06%
Discipline	8	6.06%
SRI Reading	8	6.06%
Attendance	5	3.79%
RTI Data	4	3.03%
Demographics/Classroom Composition	4	3.03%
RCD Unit Assessments	4	3.03%
TKES	3	2.27%
Cognitive Assessment Data	3	2.27%
Lexile Data	3	2.27%
ACCESS	3	2.27%
Wilson Reading	2	1.52%
Professional Learning Community Data	2	1.52%
Pre/Post Assessments	2	1.52%
Do the Math	2	1.52%
Stakeholder Relationships	1	0.76%
IEP Data Collection	1	0.76%
Graduation Rate	1	0.76%
GKIDS	1	0.76%
CCRPI	1	0.76%
AP Scores	1	0.76%
Anecdotal Data	1	0.76%

Note: Because respondents could indicate multiple, substantive responses to constructed response survey items or open-ended interview questions, the percentage should be considered as the popularity of the answer choice instead of a representation of the percentage of respondents who indicated that response.

Application of student growth percentile data. Clauser et al. (2016) suggest that because of the complex nature of student growth percentile measures, school-based leaders may be prone to misinterpret this data and thus respond to this data based on incorrect inferences and inaccurate interpretations. In an interview, a principal expressed his concern that school-based leaders may not understand fully what student growth percentiles are, stating:

> Most people seem to say, "Okay," they understand that. They don't; they still want to link it directly to achievement, in terms of, if your score goes up from last year, that's good. And, if it doesn't, that's bad. That's not necessarily what growth is.

Building on the work of Clauser et al. (2016), the researcher presented survey participants with scenarios to determine how current participants might interpret and use student growth percentile data. Specifically, participants were asked to interpret a grade-level mean growth percentile and identify how they would respond to this mean growth percentile. Additionally, they were asked to identify the students they would recommend for additional support based on student-specific data that included the student growth percentile data.

Because survey participants represented all school levels, the researcher had to consider how to present achievement data in these scenarios in a way that all administrators would understand. The Georgia Milestone End of Grade (EOG) assessment is given to all students in grades 3 – 8 while the Georgia Milestone End of Course (EOC) assessment is given to high school students at the point of completion of eight core content classes required for high school graduation. While the scale scores differ on these exams, all students are rated with a categorical achievement level of either beginning learner, developing learner, proficient learner, and distinguished learner. A full description of these categorial achievement levels can be found on the Georgia Department of Education website at http://www.gadoe.org/Curriculum-Instruction-

and-Assessment/Assessment/Pages/Georgia-Milestones-ALD.aspx (Georgia Department of Education, 2018). A screenshot from this webpage to summarize these categories is found in Appendix M. Generally, speaking, these categories mean the same the same thing on both the EOG and the EOC and were used instead of scale scores to describe student assessment scores for this project. Using the categorical descriptions removed the need to ensure that survey respondents from high school setting knew what a scale score on the EOG meant and vice versa for elementary and middle school administrators relative to the EOC. These achievement scores are also the ones that are used to calculate a student's growth percentile over time.

As indicated above, more than 84% of those surveyed indicated that one of the ways they use student growth percentile data is to identify students requiring additional support. These results make accurate interpretation and application of standardized test results in conjunction with student growth percentile data critical. Survey question 26 presented participants with six different student profiles based on a combination of Milestone achievement categories and student growth percentile scores and asked them to select the students that they would recommend for additional assistance.

The student profile that was selected most commonly as one that would be referred for additional support (n = 41; 89.1%) was a student with a Milestone score in the developing learner category who also had a low (38) student growth percentile. In contrast, only 26.1% (n = 12) would refer a student who rated as a distinguished learner with a low (38) student growth percentile for additional support. This result is similar to the outcome of Clauser et al. (2016) and suggests that student growth percentile data is not always utilized to identify students needing additional support when a high achievement score accompanies a low SGP.

When considering the profile with a high student growth percentile (80), less than one-third of respondents (*n* = 13; 28.3%) would refer a student with a Milestone score in the developing learner category for support. If the student achievement score in this profile was considered in isolation, this student might have typically been recommended for additional support. The additional consideration of the high growth score may have been misleading to survey respondents who interpreted it to mean that the student was making adequate progress despite a lower achievement score. Such an interpretation fails to recognize that an 80 student growth percentile only means that student performed better than 80% of his or her academic peers (those who had an achievement score like this student in previous years). It does not mean that the student showed 80% growth in grade-level expectations or content; thus, the decision to not include this student for additional support may not be the correct one. All student profiles and the corresponding selection from respondents are included in Figure 4.2 below.

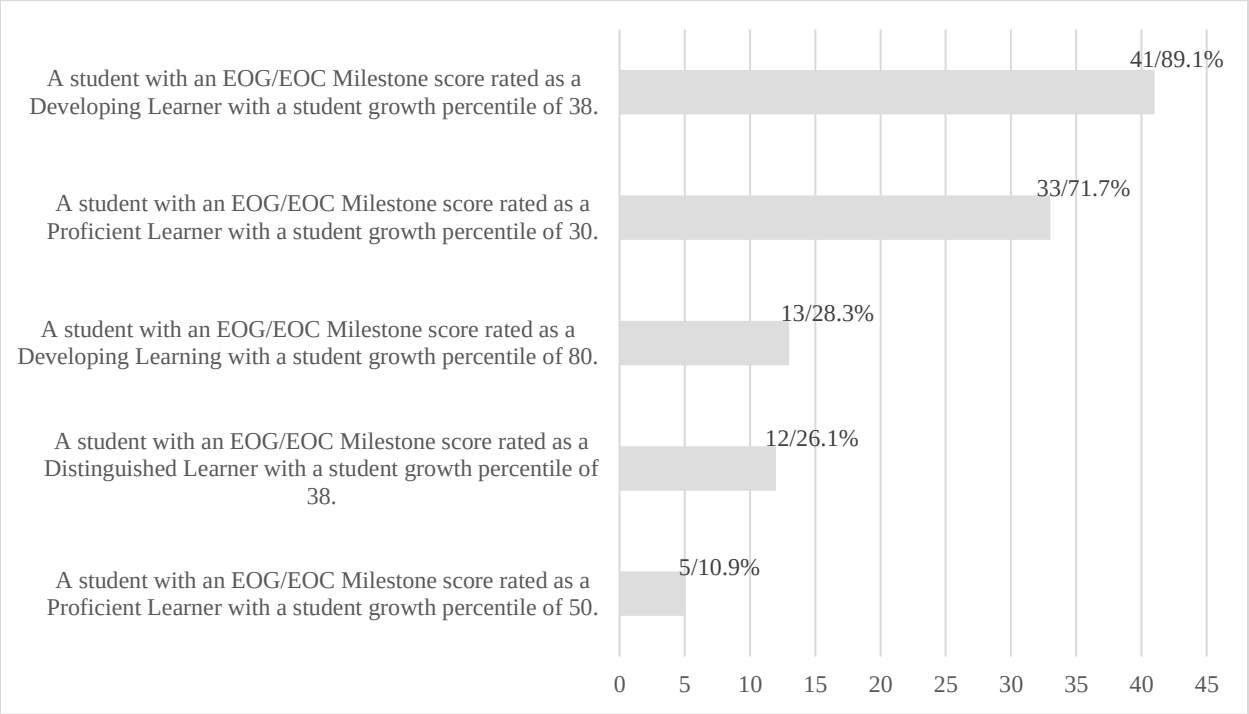

Figure 4.2. Which of the following students would you recommend for additional support based on their subject area EOG/EOC Milestone score and student growth percentile?

Respondents were given the opportunity to explain any of the choices that they made in this exercise. Only three participants chose to do so, but the insight provided in these explanations brings a voice to these responses that is important. One respondent demonstrated a deeper understanding of this data, stating,

> Students scoring at the developing learning level will always need additional support. In this case, the learning (*sic*) with growth of 80 made major strides from the previous year but needs more support to continue. The Proficient Learner with growth of 30 is in danger of taking steps backward down to Developing. The Distinguished learner with growth 38 doesn't need additional support but rather additional challenges through differentiation to improve growth.

This idea is echoed in the sentiment, "I would want to provide all developing learners extra support regardless of growth percentiles. I would also want to provide [opportunities to] all proficient and distinguished [students] to improve for the upcoming year." Another said, "In a few of those cases, I would also give the teachers support through PD [professional development]," indicating a more global application of using this data also to inform support for teachers.

Administrators were also asked in the survey to help a fellow administrator interpret a schools' 8th grade English language arts growth percentile of 42. Only 9 (19.15%) school leaders responded correctly that this score reflected the median value for the school's 8th grade English language arts student growth percentile scores. The high percentage of respondents (n = 19, 40.3%) who indicated that the 8th grade students grew more than 42% of other 8th grade students in the state points to a level of misunderstanding about the nature of these scores and suggests an application of school-level student growth percentile that looks more like the application of

individual student growth percentiles. This misunderstanding will be discussed with more elaboration in Chapter 5.

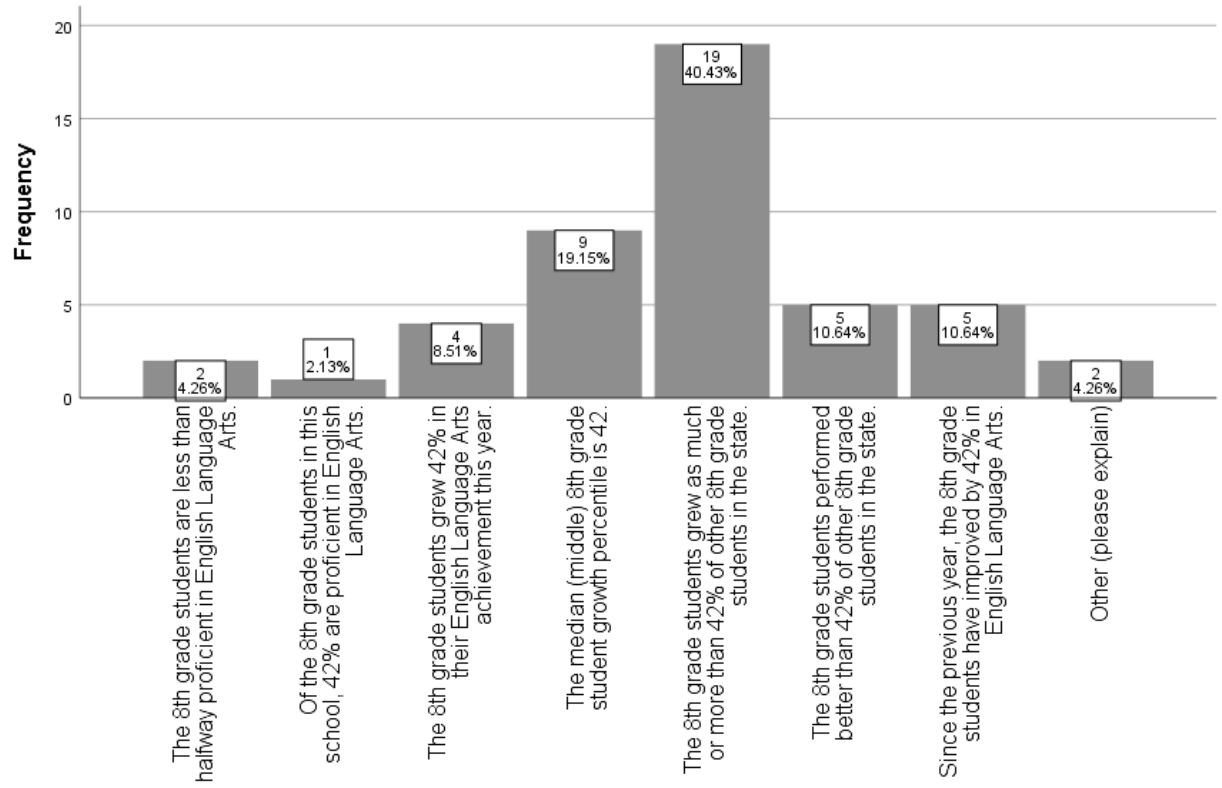

Figure 4.3. How would you help a fellow school administrator interpret a school's 8th grade English language arts growth percentile of 42?

Even though the response of school-based leaders suggests a misunderstanding in how to interpret and apply these scores, respondents still may have taken the correct action based on the outcome described. A median score does not provide the school-based leader with any indication of how their students did relative to any other school or against other students either district- or state-wide. Thus, it is difficult to point to one specific action that should be taken because of these scores. The state of Georgia defines adequate growth for a student as a score of 35 or above. In the scenario described above, half of the school's 8th-grade students SGP in ELA was above a 42, and a half were below. As such, any choice may be the correct action if these scores

are used for descriptive purposes in conjunction with other data instead of being used solely to define how the school as a whole is performing in ELA in the 8th grade.

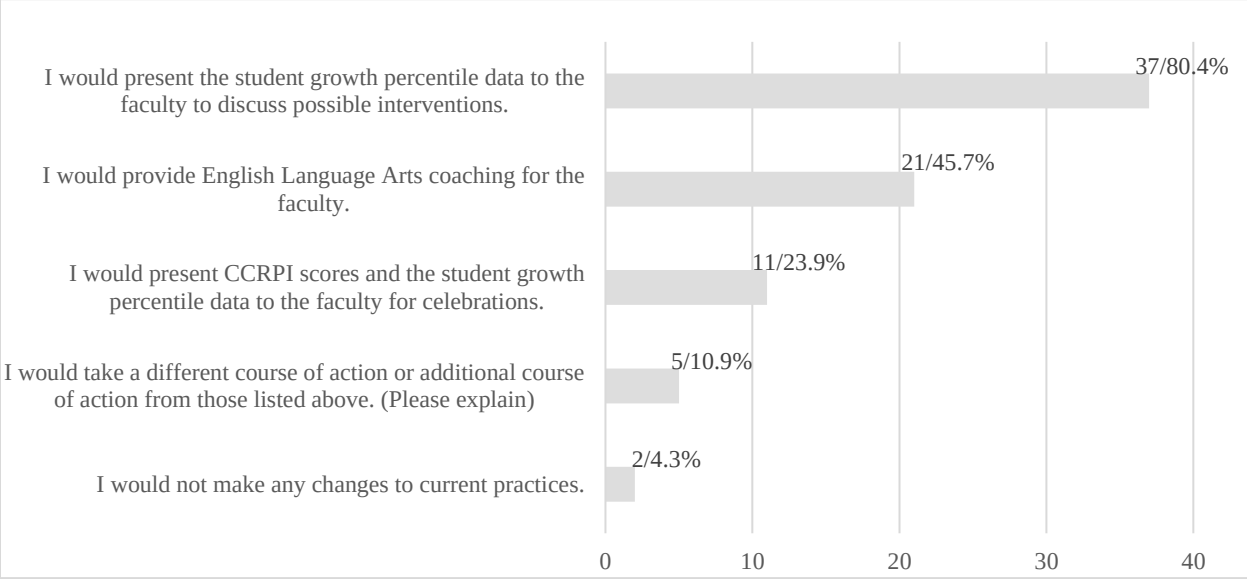

Figure 4.4. If you were the school administrator at the school described above, which of the following actions would you take based on the student growth percentile data?

Training. A majority of respondents (*n* = 31, 60.78%) indicated that they had participated in professional learning opportunities in the past year relative to student growth percentile data. The survey did not ask for the type of training, the source of training, or scope of training. However, interview participants elaborated on their training experiences and indicated a wide range of experience.

One principal stated:

> I don't think I've ever had real, direct, here's what growth percentiles are. I think, that's because most people, not that they don't care. But, it's a hard concept to understand. Again, if your background is math, you have a better, you have somewhat understanding of it, without training. And, if your background is not math, you don't want the training.

Several administrators talked about being self-directed in learning about student growth percentiles. Respondents indicated that they had used resources available on the Georgia Department of Education website or the teacher evaluation online platform to expand their understanding of student growth percentiles. Others indicated that meetings with the Mountain Ridge Division of Curriculum and Instruction, or Office of Student Assessment have been useful in building their understanding of these measures as student growth percentile is discussed in the context of other things such as College and Career Ready Performance Index (CCRPI) scores or school improvement plans.

Participant responses (n = 28, 58%) indicate that while most administrators feel comfortable using student growth percentile data to inform educational decision making, they would like additional training to feel fully competent. A small number (n = 2, 3.92%) indicate that they do not understand at all how to utilize student growth percentile data in their educational decision making. Given that student growth percentile data has been available to schools, school administrators, teachers, and students since the 2009-2010 school year, this demonstrates that some educators are lagging in their understanding of these tools.

Open-ended response items and interview participants provide insight into the areas where training may be needed. For many, the opportunity for a frequent refresher was indicated as something that would be useful. One principal stated:

> The challenge with student growth percentiles is it's not like riding a bike. You ride a bike, you learn how to ride a bike, you go 10 years without riding a bike, you get back on it, and you can ride. With student growth percentiles, if we're not steadily immersed with this, it's almost like a language. That's a better term for me. It's almost like a language. If you don't use it, you do lose it. Being able to refresh yourself and say, "Okay, I need to sit

> down and remember all the nuances of being able to disaggregate this information, so I can put it in terms of which stakeholders can understand." . . . For me, I would like to see a little more frequency, just refreshers every once a quarter type thing, to where we can just say, "Oh, yeah. That's exactly right," because while we're doing it in the schoolhouse, the worst thing that you can do is be doing something wrong continually. Even if it's not for anything except affirmation to say, "I got it."

An assistant principal shared a similar sentiment:

> I think the more that we talk about it every year, to hear from C&I (Mountain Ridge Division of Curriculum and Instruction) . . . . it may be beneficial just like we did with the yearly tribunal training to have a yearly student growth percentiles training, especially for us non-math people. This is how this is calculated . . . . this is how it's used. . . . This is how you share it with your parents. This is how you share it with your teachers. . . .

Participants provided multiple examples of what would be most useful to them in training related to student growth percentiles. Some participants discussed the model of the delivery. One example:

> I have been in a training, actually, within the last 8 months, where we went really in-depth into some of that stuff . . . . A lot of it . . . "Here is a spreadsheet that I made for you. Now, I'm going to explain what the spreadsheet says." Okay, look, that's the part I needed. Having the spreadsheet in front of me, and a light explanation, I was able to go in and work on it myself. What I liked was having something handed to me that had scores in it, or that had totals in it. And, I was able to go in and figure out the rest myself.

Another would prefer less independent work and more collaboration either by level or position:

> A middle school administrator PLC (Professional Learning Community). Wouldn't that be awesome? Now, the principals have their principal's meeting. But we APs (Assistant Principals) do not. Again, that would be a very difficult, touchy situation in that one; nobody's got time. There's too many other jobs. . . . . we're in a small enough district, that seven of us in the middle school level, getting together and doing all that, would be great. Now the problem again, time, location, and all that.

Another participant pointed out that different administrators have different levels of comfort with student growth percentiles that should be considered when planning training:

> I definitely think just (like) in a classroom of children there's going to be a differentiation of learning. I think that some principals are probably more comfortable with it than others. There are some that are naturally data-driven folks; there are some folks that are school operations folks. It depends on their strengths and weaknesses. . . .

Administrators commented on the content of the type of training that would increase their confidence in using student growth percentile data. One respondent wanted to start with the basics:

> I would think that first of all, to explain exactly what an SGP is, the purpose of it, the benefits of looking at the student growth percentile and all the things that it could be used for. As an administrator, then going forth with planning purposes. If a teacher is in a fifth-grade class and year after year, the SGP's are low, maybe looking at moving that teacher out of such a critical year and things like that.

Another wanted support with using the student growth percentile component of the Statewide Longitudinal Data System (SLDS):

> Although I have some understanding, I feel like ... I would just love a clean, fresh, here are the basics in building up from there. So, . . . this is a student growth percentile quadrant. This is where you want to be. This is where you don't want to be and things like that. Just break it down. This is what goes into it. I feel like I have the understanding of how to toggle through (SLDS), but just the why behind it, how it is collected, formed, and then some best practices . . . about what you can use SGPs for.

One new assistant principal talked about how comfortable she had been with using student growth percentile data in her classroom but was not so sure how to apply that in her new role as a school leader:

> (I want to know) How to look at them from the school's perspective. I had an idea of how to do that as a teacher, but as an administrator when it doesn't necessarily directly impact all the teachers in the school (because not all teachers are in test subject areas), I need some guidance on that and what should be the focus and how to do that.

Teacher training. While the purpose of this study is specific to school-based leader's and student growth percentiles, the data suggests that the administrators who participated in the study see value in making sure that teachers also have a firm understanding of these scores and how to use them. An administrator indicated in the survey, "I believe that further PD is required in order for staff to effectively usr (*sic*) this information." Another administrator stated, "I feel teachers would benefit from PD on using this info to inform their instructional decision making."

A response from an elementary school leader suggests that educating all teachers on student growth percentile data is essential:

> I think SGPs are beneficial for school leaders, but I do not believe elementary school teachers understand them well enough to use them for improving instructional practices.

Perhaps training for teachers would be a suggestion. However, SGPs only affect teachers in grades 4 and 5. It is very challenging to get teachers in grades K-3 to understand their role in creating and (*sic*) entire student body with high growth SGPs.

Opinions and attitudes. A series of questions were designed to gauge administrator attitudes and opinions about student growth percentiles. Given survey question using a Likert scale that rated opinions of the respondent, administrators were asked in Question 10 to reflect on their most recent CCRPI report and indicate how useful they found student growth percentile data specific to their school included in this report. CCRPI was used because the use of student growth measures as a percentage of school administrator annual review is not yet operational in the state of Georgia. Respondents rated on a scale from 1 (extremely useful) to 5 (not useful at all) to indicate the usefulness of this information to them. The mean value for this item based on 55 responses was 2.27 with a standard deviation of 1.12 indicating that the average administrator responding to this question found these measures to be somewhat useful. In fact, 36.36% of respondents (n = 20) rated this item at a 2. The next highest level of response was by those who rated this question as a 1 or extremely useful (n = 16, 29.09%). Table 4.11 includes all responses.

Table 4.11

Responses to Survey Question 10

Response	*N*	Percentage
1	16	29.09%
2	20	36.36%
3	8	14.55%
4	10	18.18%
5	1	1.82%

The participants were also asked in Question 11 to consider that same growth percentile data and rate from 1 (most accurate) to 5 (least accurate) how accurately they think this data

reflect the quality of teaching and learning occur at their school. The mean value for this item based on 55 responses was 2.49 with a standard deviation of 0.91 indicating that the average administrator responding to this question found these measures to be somewhat accurate. As in the question above, 36.36% of respondents (n = 20) rated this item at a 2. The next highest level of response was by those who rated this question as a 3 or neutral on the accuracy of this data (n = 19, 34.55%). Table 4.12 includes all responses to this item.

Table 4.12

Responses to Survey Question 11

Response	*N*	Percentage
1	8	14.55%
2	20	36.36%
3	19	34.55%
4	8	14.55%
5	0	0%

Finally, a series of questions were asked to gauge administrators' opinions about student growth percentile scores in general. The Likert scale for these items was on a 7-point scale with the following values: Strongly Agree (SA) = 1, Agree (A) = 2, Somewhat Agree (SWA) = 3, Neither Agree nor Disagree (N) = 4, Somewhat Disagree (SWD) = 5, Disagree (D) = 6 and Strongly Disagree (SD) = 7. Table 4.13 lists the descriptive statistics for each item in this section of the survey. A table for all Likert item responses is included in Appendix N.

Table 4.13

Respondents' Opinions Regarding Student Growth Percentiles

Item	Statement	*N*	*M*	*SD*
3	Student Growth Percentiles help create school improvement plan goals.	50	2.12	1.003
11	Overall, Student Growth Percentiles are beneficial to me as a school leader.	50	2.12	1.003
6	Student Growth Percentiles help me become a more effective school leader.	50	2.32	0.913
12	Overall, Student Growth Percentiles are beneficial to my school district.	50	2.34	1.379
2	Student Growth Percentiles help create professional goals for school administrators.	50	2.40	0.990
4	Student Growth Percentiles help improve instruction.	50	2.50	1.111
1	Student Growth Percentiles are simple to use.	50	2.60	1.069
5	Student Growth Percentiles help increase student learning.	50	2.72	1.213
8	Student Growth Percentiles provide incentives for good practices.	50	2.74	1.291
9	Student Growth Percentiles enhance the school environment.	50	3.14	1.512
10	Student Growth Percentiles enhance working conditions.	50	3.60	1.552
7	Student Growth Percentiles help identify and remove ineffective school leaders.	50	3.70	1.374

Note: Items are sorted by *M* in ascending order

As the table indicates, the mean values of all items were between 2.12 and 3.60 indicating that the average administrator responding to these survey items agreed more than they disagreed with each of the value statements presented in this section of the survey. On all but one item, more than 50% of respondents agreed to some degree with the statements. The exception to this is statement 7 which states "Student Growth Percentiles help identify and remove ineffective school leaders." On this statement, a large percentage of respondents were neutral (n = 14, 28%) and more than 20% of administrators disagreed to some extent with this statement (n = 12, 24%).

Opinions regarding using student growth percentile data for leader evaluation. Several respondents had something to say about the use of student growth percentile data for school leader evaluation. One principal had this to say:

> I think growth percentiles are positive when you combine them with achievement. Using it for evaluations, though, I mean, as a small part of it, I could understand. But, as a large part of it, I don't really think that's necessarily fair. Kids are different every year. . . . Administrators, we know from research, have an indirect, but significant, impact on student achievement. But, to really tie that in, I don't necessarily agree.

One assistant principal did not know that with the state's proposed plan no longer has student growth percentiles counting as 70% of an administrator's annual review, and had this to say:

> I disagree with the 70%. That to me is more of a quantitative viewpoint. You either do it, or you don't. My current school, I don't have a problem. If I were at a title I school, they're setting those professionals up for failure . . . . I do agree that I should be questioned on student growth percentiles, both as an AP (assistant principal) and the principal should be questioned by district staff. I do believe that our answers should be part of that evaluation. If I can't answer it correctly, then that's a problem. If I don't have a plan, that's a problem. If I'm not aware of my school's scores, then that's a problem.

In one interview, a middle school assistant principal had this to say about using student growth percentile data in school leader evaluation:

> I would say there is (value) because if you have an administrator where status quo is just fine, you're not going to grow. It doesn't matter where your strengths and weaknesses lie. If you don't identify those and do something about it, then your student growth percentile's not going to be effective. So yeah. There is a value in that, but even though we're not doing the teaching, we have a great hand in seeing that it gets done. Providing

> the curriculum, instruction, and things, delivering other things to the teachers, that will help them find success.
>
> Finally, this interview participant expressed a somewhat neutral position:
>
> I think there's pros and cons to that. I think the challenge comes in that you have to consider demographics in which you're the administrator of the school. If you have a high performing high demographic area, you're probably going to be able to see the student growth more readily. However, if you're in a lower performing area, things such as that, I think it's very challenging to hold an administrator solely accountable for their annual evaluation, or even as part of the annual evaluation as how the students perform.

Opinions regarding the impact of student growth percentiles on working conditions. In the survey, statement 10, "Student Growth Percentiles enhance working conditions," met with some level of disagreement from respondents (n = 12, 24%). The examples provided seem to be more about the working environment for teachers, which is consistent with previous research. As one survey participant stated,

> SGP is very helpful, but a detriment to the environment as teachers who aren't at the top when compared to their peers view the data as flawed. They view the data as dependent on student effort and resent the implication of poor instruction on their part.
>
> An assistant principal stated during his interview:
>
> I love having SGPs for conversation pieces. . . . I tell (teachers) right up front . . ."Let's look at your bubbles (in the Statewide Longitudinal Data System)." And some of them are, I have to give them a brown paper bag. They're hyperventilating . . . . I had a 6th-grade teacher who actually had the highest (student growth percentile) . . . . She had a three-inch binder and had ten goals for the next year . . . . I let her talk for about five

> minutes. I was like, "You need to stop. What are you wanting to do with that?" She goes, "Well I got to get into that corner (in SLDS), don't I?" I go, "That means that 100% of your kids grew 100% and they all aced the test. That's never going to happen." So, I had to pull her off the ledge and just like RTI (Response to Intervention) go, "I only want you to have one or two goals at the most. If all ten are in place, how do you know what worked and what didn't?"

Opinions regarding using student growth percentile data for school improvement planning. One interview participant described the power of looking at student growth percentile data for school improvement planning when a group of principals sat down together to consider their school data:

> What we found, was that, in every subject and every subgroup grade level, everyone that was tested. Everyone's growth dropped between two and, I think, it was 13%. And, we went, "Hm. That's a problem." Because, we did well in some areas, but achievement-wise. So, we literally saw, by sitting down and looking at the year to year comparison, and we tried to cohort it out. . . . We said, "That's the problem. That's the thing we need to target." Every subgroup, no matter what color you were, everyone's growth dropped. So, when we talk about school improvement planning, that was huge.

Best practices. In general, participants were not able to specifically identify best practices that they had observed or experienced related to the use of student growth percentile data by school leaders. Two interview participants did reveal activities that they had been a part of that were of value to them. The first one described their experience like this:

> One of the other principals emailed, and said, "Hey, we've got all of our scores. Let's get together and hammer this out." And, literally, we all met, except for a couple who had

other commitments, at a school, and wrote down subjects, grade levels. We started writing down every school and the averages and comparing who's doing well, where. So, that's not growth, that's the achievement. Then, we went, "What was this course last year? Let's look at the cohort." So, we got a different color marker, and we literally wrote in how everybody did the previous year for that cohort. But, not just, “How's your eighth grade” (but) “How's your eighth-grade last year? How was your eighth grade this year? How was your seventh-grade last year?” And then, started doing some comparisons. “Did everybody grow, did everybody shrink? Did some people go up?” And, you know, we got it all in (a) document. We have not taken it a step further. But, sitting in a room together, and talking, and working that collaborative piece. That's huge. And, none of us were afraid to put our school scores up there, because nobody was judging anybody. It was, "All right, so-and-so school kicked butt in math. How and why? Was it because of your student population?" And, I hesitate to say that, that's a factor, that's not a reason. But, you get what I'm saying. It started with how eighth grade, seventh grade, and sixth-grade achievement itself looked. Then, we started looking at the cohort, as best we could. We really tracked lit and math from; I think we even tried to go back to when those eighth graders were in sixth grade. So, the first thing we did, was who achieved the most. The second thing we did, was who had the most growth. Interestingly, some schools that didn't have the strong achievement did have really strong growth. And, that's where that growth became so important. Because, maybe, my school was third. But, maybe, we had the number one growth. And so, it shows you're making progress. It's not just one number, now, it's multiple numbers. It's how they did over years, and it's the contribution of not just one math teacher, it's now multiple math teachers.

Another administrator shared this experience when meeting with teachers:

> We take a look at our (school) bubbles through SLDS (Statewide Longitudinal Data System) and take a look at their (teacher) bubbles. Then we also look at other teacher's bubbles without any identifiers so that they see where they match up. Then we start the discussion process of how do feel about this? Where would you like this to go? What are the problems that you have?

Summary

Chapter 4 provides the findings of this study. The research sought to provide quantitative data regarding school administrator attitudes, opinions, understanding, and application of student growth percentile data. The use of qualitative data provides a vibrant voice to those in the field by sharing responses in their own words exactly as they expressed them.

Chapter 5 will discuss the significant findings of this research and areas for further research to build on these outcomes. Additionally, the implications of the use of student growth percentile data will be discussed.

Chapter 5: Discussion, Conclusions, and Implications

The purpose of this mixed methods study is to examine how school-based administrators utilize student growth percentile data that is a component of the annual Georgia Leader Keys Evaluation System (LKES). It seeks to understand the decisions that leaders make based on this data, evaluate the attitudes and opinions that leaders have regarding these measures, and identify unintended consequences of using these measures as a part of annual leader evaluation. Additionally, this study seeks to identify best practices of leaders in the utility of these measures as well as areas where additional training for school-based leaders is needed relative to these measures.

Discussion of Findings

This section will consider three major areas with findings that were significant relative to the current study: administrator use of student growth percentile data; administrator interpretation and application of student growth percentile data; and administrator attitudes and opinions regarding student growth percentile data.

Administrator use of student growth percentile data. The most commonly cited use of student growth percentile data was as an additional piece of information about how a school is performing. Clauser et al. (2016) found that this was also the most commonly cited use of student growth percentile data for Massachusetts administrators. The previous study found the second most cited use of student growth percentiles was to identify students who need additional help. The current study found the identification of students who need additional help to be the third most commonly cited use.

The second most commonly cited use of student growth percentile data in this study was informal teacher evaluation. The informal evaluation was much more frequently reported (86% of the time) than the 45% found in previous research (Clauser et al., 2016). In the Massachusetts study, teacher evaluation mandated the use of student growth percentile data beginning the following school year, but only approximately 40% of the respondents were already using these measures either formally or informally in teacher evaluation. Student growth percentile data will not officially calculate as part of teacher evaluation in the state of Georgia for at least three more years, yet 67% percent of respondents indicate that they already consider this data in some way for teacher evaluation. The implications of this are discussed later in this chapter.

Administrators identified a wide range of other tools used for consideration of how the school is performing. Utilizing other measures with student growth percentile data suggests to

the researcher that, in general, administrators utilize student growth percentiles as they were intended much of the time.

Administrator interpretation and application of student growth percentile data. This study has identified many ways that administrators indicate that they use student growth percentile data in their role as a school-based leader. It is critical for administrators to know how to interpret the data that they receive from these measures and understand this data so that they make decisions based on accurate information and not misinterpretations of the information provided. A detailed discussion of some specific areas of concerns noted in the interpretation and application of student growth percentile data follows in this section.

When presented in the survey with opportunities to interpret student growth percentile data and make decisions regarding that data, administrators revealed some misunderstandings about this information.

Identifying students in need of remediation and support. When considering students who needed additional learning support based on an individual student profile that included a growth percentile score and an achievement score, students with a high growth percentile score were often overlooked for support regardless of their achievement score. Having a high student growth percentile does not mean that a student does not require remediation or support. Considering the student growth percentile alone fails to consider where the student began and how much growth was needed for the student to be working with grade level standards.

A student growth percentile does not measure content knowledge or student understanding. A student can make tremendous growth in a school year but still require a significant amount of support and remediation in order to achieve at the same level as grade level peers. Conversely, a very high achieving student may demonstrate very little growth when being

compared against other very high achieving students. Such a profile does not necessarily mean that the student requires remediation or additional support. Administrators must consider student growth percentiles in context with other measures. When school leaders are making decisions about how to support students based on a misinterpretation of student growth percentile data, there is a risk of over- or under-identifying students in need of support and remediation.

Interpreting classroom level or school-level growth percentile data. When considering classroom or school-level growth percentile data, a high percentage of administrators interpreted these scores in the same way as an individual score. In other words, a classroom level growth percentile of 62 was interpreted as "This class grow more than 62% of other classes." Depending on the type of report that includes the score, 62 could be reporting a median or a grand mean score. For a median score, the 62 would mean that half of all students in the class had a student growth percentile that was less than 62 and a half had a student growth percentile that was more than 62. A grand mean score means that the average growth of all students in the class was 62. Because a student growth percentile reports each student in comparison to a different set of similar peers, this score cannot be interpreted to say how the group performed relative to other groups because the groups are not the same.

Given that the state of Georgia reports and measures student growth percentiles in different ways for different purposes, it is easy to understand why administrators would be confused about these scores and what they mean. A median SGP cannot determine what class or school is performing better than others because it only reports a midpoint of growth scores. Additionally, it does not measure the academic performance of students in the class. Consider that a median growth score of 62 can represent a wide variety of class profiles, some with scores that are all clustered around a 62 and others that could range from a very low 10 to a very high

99. Administrators must consider these scores in the context of other information that is available regarding the class or school that it describes.

Attributing teacher value to the scores that does not exist. Research participants have indicated the use of student growth percentile data for some teacher evaluation, and examples provided of decisions for teaching assignments based on these scores demonstrate one way this occurs. Making these types of decisions in the context of the misinterpretation and misunderstandings of these scores described above gives the researcher cause for concern. School leaders must be very cautious to not attribute "value" to these growth percentiles that does not exist.

In Chapter 1, the researcher described value-added measures as a highly complex statistical model that seeks to measure the impact of an individual teacher on student achievement over time. Like student growth percentiles, it is a commonly used metric in many states for annual teacher evaluation, but it is not the same thing as a student growth percentile.

A student growth percentile is the measure of a student's academic progress over time relative to a similar academic group of students (Georgia Department of Education, 2012a). They were an alternative descriptive measure of student achievement that moved away from stringent systems that sought to attribute blame for success or failure. By the very nature of their design, student growth percentiles are not intended to attribute credit for the growth to a particular teacher as the value-added measures do.

The results of this study suggest that many leaders are attributing teacher value to these scores that may not exist. Attributing teacher value to these scores could be the result of a misunderstanding of how to interpret this data, or it could be an assumption on the part of school-based leaders that implied value exists for these scores by the nature of their use in the

TKES process. Regardless, the implication of this practice and its potential for punitive actions against teachers is an area of concern to the researcher. The researcher does not wish to suggest that administrators should not use these measures at all for these types of decisions. Instead, they should consider the context of all other data available regarding a specific teacher, classroom, or school and not just growth scores in isolation.

One example that supports this concern is from a principal of a small school who described a teacher receiving very high growth scores year after year even though her classroom observations and student achievement scores were not as stellar. When the principal began to look at other factors outside of the teacher, she discovered that the high growth appeared to have less to do with the current instruction that the students received and more to do with the previous grade teacher who consistently struggled with growth and achievement. Because the school was so small, most of the same students had the teacher with exceptional growth scores the year following weak instruction in the previous grade, suggesting that the current scores had as much to do with the current teacher as the previous teacher. In this situation, the administrator had been making a judgment based on the current year alone. A student growth percentile measures growth from one year to the next and requires at least 2 years of data. This example illustrates the importance of considering previous year data as well as current year data.

Administrator attitudes and opinions regarding student growth percentiles. In general, administrators expressed a positive response to student growth percentiles. Administrators were more neutral or in slight disagreement with the statement that "student growth percentile help identify and remove ineffective school leaders." The mixed responses to the use of student growth percentiles as a component for annual leader evaluation echo this opinion. In general, no statements solicited a strong negative reaction.

It is interesting to note that previous research (Collins, 2014) with teachers evaluated with value-added measures found that more teachers disagreed with the value statements than agreed. The results in the current study are significantly different and could be because the impact on school administrators of these measures is different from the impact on teachers. Additionally, because value-added measures are designed to measure teacher effectiveness instead of student performance, there could be a more negative impact than the student growth percentiles. Finally, the measures of the previous study were in full effect for teacher evaluation, but the state of Georgia is not yet officially including student growth percentile data.

Attitudes and opinions of principals versus assistant principals. The researcher anticipated that there might be different responses to these statements from those who were in a principal position versus those who served as assistant principals. A chi-square analysis on the Likert items for these two mutually exclusive groups was conducted to see how they differ, but too many cells returned with the count expected as less than 5, indicating that this type of analysis was not appropriate (Coolidge, 2013; Muijs, 2011). The limitation of the sample size of this study could have contributed to this result.

Limitations of Findings

The previous section indicated a limitation of the sample size on the results of this study. The sections below outline and discuss other limitations identified by the researcher.

Researcher's employment change. In Chapter 3, the researcher pointed out that her position in the school district changed between the time that the permission to conduct research was approved and when the project began. This section considers the impact that the researcher's new position within the district has on the outcome of the research.

The researcher designed the study while serving as a high school assistant principal in the district. The researcher moved to a district level administrator position as Administrator of Special Assignment in the Division of Curriculum and Instruction in the Department of Student Assessment before conducting the study. While contractually, this is a lateral position change, there is a subtle difference for participants answering questions from a school-based administrative peer and participants answering questions from an administrator who works in the department that oversees the assessment and accountability program that generates student growth percentiles.

The personal notes and journaling of the researcher that capture interactions that occurred after the audio recorder was turned off in the face-to-face interviews or comments made outside the context of the survey point to this. The researcher has noted several times that interview participants asked outside of the audio recording, “Did I get it right?” or “What is it that I should be doing with this?” In these cases, the researcher assured the participants that there were not any right or wrong answers and that their honest responses were appreciated. The researcher reviewed again the benefits of the study and how their honest response could help impact the findings. Finally, the researcher assured interview participants that their participation was confidential and that there was no risk of a punitive outcome for their responses.

In a district-level meeting at a central office location, a school-based assistant principal approached the researcher to inquire about the progress of the survey. During the conversation, she indicated to the researcher that many of the survey items were hard to answer and then inquired as to whether many people responded correctly to the items. The researcher provided the same assurances that had been given to interview participants and indicated that any response provided was the right answer for the research. The administrator concluded the conversation by

indicating that she only participated because the web-based survey was anonymous and stated that she would have been “embarrassed” otherwise not to know the correct answers.

If the researcher was asked directly about the specific items regarding student growth percentiles or questions regarding student growth percentile concepts, the researcher made a note of the question and the person who asked it. To keep from influencing the outcome of the study, the researcher delayed responding to the conclusion of the study. In all cases where this occurred, the administrator asking the question understood the researcher’s concerns with answering questions or providing guidance before the end of the study.

The researcher suspects that Likert items regarding opinions are overly favorable due to the researcher's position within the district. One inconsistency that caught the attention of the researcher is the fact that 72% of survey respondents indicated that they found student growth percentile data useful to them at the school, but only 56% of respondents felt that this data accurately reflected their school. The researcher is now directly involved in providing this data to schools and questions if the additional 16% who found it helpful even though they did not think they were accurate were responding to the service provided by the researcher and the department in which she is employed instead of to the data itself. Other sections of this chapter explore additional reasons for overly positive responses.

Representative sample. It is essential to consider the representative sample population related to the total population being represented to see if any group has been over- or under-represented in the study. The total population of school-based administrators in this county who are female is approximately 62.1%. Considering both survey respondents and interview participants, about 59% of those were female. This rate of response suggests that females and males were probably appropriately represented in this study.

Respondents identified themselves as White 98.3% of the time. This district is predominately white with about 91% of the administrators in this category, so the researchers expected a high number in this category. However, this rate of response indicates that there is no voice for minority racial groups. These results should not be interpreted to reflect the opinions or actions of school leaders in these minority groups.

Approximately 65% of the schools in this district are elementary schools. Middle schools make up 19% of the schools in the district, and high schools are 16%. This study appropriately represents the voice of high school administrators with 15.4% of respondents serving at this level. However, middle school administrators may be overrepresented with 32.3% of respondents falling into the category, compared to 52% who are currently at the elementary school level. The elementary school administrators in this district may be underrepresented.

Additionally, the voice of inexperienced leaders may be overrepresented in this study with 58.6% of those responding indicating that they have served in a leadership position for 5 years or less. As a district, only about 30.1% of administrators have been serving for less than 5 years. Almost 40% of the leaders in this district have 11 or more years of administrative experience, but only 20.7% of those participating in this study reported the same level of experience. That means experienced school leaders are underrepresented by almost half. As such, the results of this study could be due to inexperience and not representative of experienced leaders.

Student growth percentiles not yet officially used in annual leader evaluation in the state of Georgia. Student growth percentiles are relatively new in the state of Georgia, introduced to the annual LKES evaluation system in the 2012-2013 school year. The intention is that by the 2021-2022 school year, these scores will officially carry weight in the total score that

a teacher or school administrator receives on their annual evaluation. As previously noted, repeated legislative agendas have changed the weight that these measures will carry and have the changed the date that they will officially begin to count as part of these evaluations. As a result, many school leaders are skeptical that they will ever carry a high stake and leaders are engaging with this type of data as if there are no high stakes attached.

However, many suggest that they would feel differently and would approach their jobs differently if student growth measures carried the weight anticipated for leader evaluation. Consider the response of one administrator who was asked, after he described all the innovative practices that he felt his administrative team were currently engaged in, would that look different if student growth scores were 70% of his annual evaluation score (the weight it was given prior to Georgia Senate Bill 364, passed in 2016):

> No. No. No. Because it'd be a completely different conversation. All right, I'll give you an example from a social studies perspective. During the Cold War, the Soviet Union had such requirements on washing machine production. And so they had to produce X number of washing machines, but they judged them on their weight. So, the theory was, the heavier the washing machine, the more effective it was, right? Somebody, some bureaucrat had done that. So, then they started producing. Some of them were up to a ton, for a washing machine. You couldn't even get it into the home, but it didn't work worth a damn. So, when you set those quantitative requirements, yeah, we'll meet it. We'll meet it. [But] it [isn't] going to do anybody any good.

The strong sentiment expressed in this administrator's statement suggests that the collective experience of school-based leaders evaluated with student growth percentile measures will be different when it officially counts as a part of their annual evaluation than it is under the

"hold harmless" conditions that currently exist. The conditions that the researcher was trying to measure cannot be measured yet due to the shifting date of implementation and parameters for application of student growth percentiles on the LKES annual evaluation of school-based leaders.

Applicability to other states or districts. Because this study occurred in the bound system of the Mountain Ridge School District, the results are specific only to this district and represent the collective experiences of school-based leaders currently serving here. Researchers may replicate these results in other school districts in the state of Georgia. However, without completing this study in those districts, the results and recommendations should not be applied to other areas. Additionally, the schools in this district are all brick and mortar, traditional public schools. There are no virtual schools, charter schools, or private schools represented from Mountain Ridge in this study.

Relationship of Findings to the Previous Literature

This study yielded similar findings to Clauser et al. (2016) in regards to an administrator's ability to interpret and apply student growth percentile data. As indicated above, the current research yielded similar results.

However, the attitudes, opinions, and unanticipated consequences previously reported with teachers and value-added measures as a component of annual evaluation are not the same as those expressed by school administrators evaluated using student growth percentiles. The difference could be related to the fact that these scores are still considered "hold harmless" for school-based leaders, and implications for further research follow in the section below.

It is interesting that while administrators did not identify unintended consequences or a negative impact for school leaders evaluated with student growth percentile data, some responses

from leaders identified this for teachers evaluated with student growth percentile data. One survey respondent stated,

> SGP (student growth percentile) is very helpful, but a detriment to the environment as teachers who aren't at the top when compared to their peers view the data as flawed. They . . . resent the implication of poor instruction on their part.

The previous statement is similar to what teachers expressed (Collins, 2014) regarding value-added measures in teacher evaluation.

Implications for Future Practice in the Local Context

Consideration for implication for future practice in the local context is dependent on how local context is defined. In this study, the researcher has chosen to consider the local context of the Mountain Ridge School District in which the study was conducted as well as in the context of the state of Georgia where student growth components are scheduled to become a part of teacher and leader annual evaluation through the TKES and LKES process in the 2021-2022 school year. The researcher can have the most immediate impact in the local district as a result of this study but acknowledges that this study can have implications in the context of the state of Georgia.

Mountain Ridge School District. Almost 62% of participants indicated the need for some level of training and professional development for both school-based leaders and teachers. The section of this chapter related to administrator application and interpretation of student growth percentile data also points to a need to correct misinterpretations and misunderstandings.

The outcome of this study suggests that a differentiated approach for training is needed as leaders are at different levels of competence and confidence in using these tools. Student growth percentiles are still relatively new, and a comprehensive professional development program regarding student growth percentile data requires starting with the basics for many school leaders

who participated in this study. Given that almost 59% of respondents have been in leadership positions 5 years or less, it is critical that they receive the opportunity to understand what student growth percentiles are, how to calculate them, and how to use them. If these scores are going to have a significant impact on teacher and leader evaluation, it could be helpful for a component of new leader induction programs or preparatory programs like coaching and mentoring include student growth percentiles.

Other administrators may only need a refresher course on the basics but could benefit from more opportunities to work with interpretation and application of this data in the school setting. A differentiated approach that provides optional offerings through a blended learning model would allow administrators to participate in what best fit their needs, minimizing the time taken away from their building to sit in training that provides them with little new skills or information.

Many participants indicated that they are self-directed learners when it comes to student growth percentiles, suggesting that much of what they know comes from seeking opportunities to grow in this area on their own. The power of blended learning and independent study opportunities should exist when designing a professional development program that supports the needs of all school-based leaders.

Study participants highlight the power of collaborative work sessions. Being able to have an open lab or Professional Learning Community where attendees are actively working in with their school-specific data provides them with a real-world learning experience that impacts them immediately rather than a theoretical training scenario that requires they return to their setting and replicate the experience. For administrators who are comfortable with this type of data, this

provides a useful training experience that minimizes time away from their building and provides actionable insight that they can immediately apply when they return.

In addition to understanding these scores, participants indicated a desire to understand better how to use these scores with stakeholder groups. Training that supports administrators' work with teachers would look different than how to work with parents or students. Work with stakeholders is an essential component of a comprehensive professional development opportunity for school-based leaders regarding student growth percentiles.

The state of Georgia. The State Board of Education, Georgia Professional Standards Commission and Governor's Office of Student Achievement all make policy decisions regarding the use of student growth percentiles in school, leader, and teacher evaluation. Sharing the findings of this research with these agencies and organizations can provide clearer perceptions of the benefits as well as the adverse outcomes of using student growth percentiles in these various evaluation tools.

Independent schools. Georgia has many independent, private, and parochial schools throughout the state. These schools also have data teams, data coaches, or instructional coaches who use data that would be interested in the findings regarding student growth percentiles as a measure of evaluation of teacher or leader effectiveness.

Educational leadership programs. This study has implications for the certification and degree programs that prepare future Georgia leaders. Coursework in data analysis, educational evaluation, personnel law, and policy analysis are all areas where an understanding of student growth percentiles is essential. Accredited programs that lead to a Georgia Professional Standards Commission certificate in Educational Leadership should include student growth percentiles as part of their curriculum.

Implications for Future Research

As has been previously discussed in Chapter 2, the body of literature related to research regarding the use of student growth percentiles for leader evaluation is limited and relatively new. There exists a body of work related to teacher evaluation with student growth measures, particularly in the use of value-added measures. This study sought to expand on this research to include school-based leaders and to focus specifically on student growth percentiles. Because of the limited scope of this type of research, there are many areas the researcher has identified for future research.

Alignment to the Georgia Teacher Keys Evaluation System observation scores. The annual teacher evaluation tool currently in use in the state of Georgia is the Teacher Keys Evaluation System (TKES). At this time, it is anticipated that in the school year 2021-2022 that student growth measures will officially be included in the annual teacher evaluation score and will count as 30% of the total score. In this study, the second most commonly reported use of student growth percentiles by school administrators was for informal teacher evaluation. The use in formal teacher evaluation was the least reported use of these scores.

The researcher has noted statements from school-based administrators that suggest that a teacher's growth percentile scores do not always match what the administrator observes in the classroom or experiences with the teacher in some other capacity. Before student growth percentiles officially become a significant part of a teacher's formal annual evaluation, there would be value in research that measures the validity of this measure in contrast to and correlated with the ten performance standards that teachers are rated on by their evaluating administrator. The ten standards evaluated in the classroom observation portion of the TKES are professional knowledge, instructional planning, instructional strategies, differentiated instruction, assessment

strategies, assessment uses, positive learning environment, academically challenging environment, professionalism and communication (Georgia Department of Education, 2018b).

A study of this nature will help identify if there are specific standards that teachers who demonstrate high levels of student growth also accel in. Additionally, the data from this research could measure rater reliability for administrators using the TKES tool for teacher evaluation for consistency in rating for teachers who demonstrate consistent student growth over time. Finally, this data could support professional development for teachers by identifying skills relative to a specific performance standard in which a teacher may require additional training or support.

Administrator use in teacher evaluation. Another area for research regarding the use of student growth percentiles by administrators in annual teacher evaluation would be consideration of how administrators address this component in teacher coaching and conferences. The current study highlights some ways that administrators are currently using student growth percentiles as a conversation element with teachers during annual evaluation conferences. Future research should consider what aspects of these conversations are useful for teacher growth and development including characteristics of a practical evaluation conference and teacher response to these discussions. Additionally, research should consider the instructional outcomes of using this tool as a part of formative teacher evaluation throughout the year versus using it as a summative tool in the annual end of year evaluation conference.

Official use of student growth measures in annual leader evaluation in the state of Georgia. As previously stated, the state of Georgia has not begun to officially use student growth percentiles as a part of teacher or leader annual evaluation. Since student growth percentiles became a part of the LKES process in the 2012-2013 school year, there have been many revisions to when they would officially become a part of the leader's annual evaluation score

through political protest and legislative and state Board of Education rules. Additionally, the weight that they would carry in this process, as well as what subjects they would calculate for and what teachers or leaders they would apply to has been in a continuous state of flux. As such, many participants in this study have expressed skepticism as to whether student growth percentiles will ever officially become a part of the annual evaluation process. Current trends away from standardized testing are confirmed by the State of Georgia's reduction of content areas, and a waiver process recently implemented where the local district would not use the statewide standardized test at all.

Additionally, many participants speculate that student growth percentiles will never actually have a high stakes component attached to their use. Since the current "hold harmless" nature of these scores may have an impact on the results of this study, there would be value in repeating the study if these scores do officially become a high-stakes measure in the state of Georgia. The researcher theorizes that administrator attitudes and actions may be different in response to a metric that is tied not only to annual evaluation but also impacts one's ability to renew an education certificate and thus lead to the loss of employment.

Student growth percentiles reduced to two content areas. When No Child Left Behind began, researchers (Berliner, 2011) discovered a narrowing of the curriculum to focus only on the subjects of English language arts and math that were measured by high-stakes assessments. In the 2015-2016 legislative session, Senate Bill 364 removed science and social studies from the state Milestone End of Grade assessment program in all grades except 3 and 8. Science and social studies remain a part of the high school Milestone End of Course assessments. Mathematically, a student must have at least 2 years of prior assessment data to calculate a

growth percentile. This legislation means that one can no longer calculate a student growth percentile for a student in science and social studies.

While one might think that this would lead to feelings of decreased pressure or relief, one administrator is already expressing some concern at the impact this has had:

> I've previously mentioned that now that we don't have science and social studies, all we have is math and ELA. I do think we've created a problem where we have some academic teachers that don't feel, on the one hand, that they contribute as much. And, on the other hand, they don't feel like they need to contribute as much. I'm a sixth or seventh-grade science or social studies, and that's where some of our best teachers are, don't get me wrong. But, "Eh, I don't get a growth score, so..."

Future research should consider the curricular impact on Georgia students now that science and social studies no longer have as high an impact on a teacher, administrator, or school evaluation because growth data is no longer available for consideration in these subjects. This research should also consider the impact on the field of teaching as highly qualified teachers may be less willing to enter the field or remain in the subject areas of English language arts and math because of the higher stakes attached than science, social studies, fine arts, career tech, and other curriculum areas.

District options for schools with nontested subjects. In Chapter 1, the researcher explained that currently, the student growth percentiles would only evaluate teachers in grades 4 – 8 who teach English language arts or mathematics. Additionally, teachers at the high school level who teach 9th Grade Literature, American Literature, Algebra 1, or Geometry will also be evaluated using student growth measures. For all other teachers, the local district has options available to choose from related to student growth for use instead of student growth percentiles.

The options available to the local school district include using a pretest/posttest measure, applying the school mean growth percentile for nontested teachers, applying the district mean growth percentile for nontested teachers, or developing another measure that assesses student growth. Additionally, the flexibility provided to local districts for nontested teachers allows for different options to be applied to different scenarios instead of the same option for all nontested teachers across the district.

Because districts can apply this flexibility in a way that benefits the teacher, leader, or school the most, a dual system exists meaning there are higher stakes for a tested subject teacher without any flexibility than for a nontested subject teacher with flexibility. The metric used to measure teachers of the tested subject is a much more objective metric than for the teacher of the nontested subject.

Future research should consider the impact of this dual system on the field of teaching. Highly qualified teachers may gravitate into nontested subject and grade areas to avoid the higher stakes subjects connected to student growth percentile data. School leaders may place teachers perceived as weaker teachers into nontested grade or subject teaching assignments to minimize their impact on the schools' overall growth score, limiting the learning opportunities of the students who are not in tested subjects or grades.

Additionally, the subjective nature of growth measures for nontested teachers does not mean that the options will always be applied to benefit the teacher. Quite the opposite could occur, given that an educator's ability to renew teaching credentials requires successful evaluation. Districts can apply this flexibility in a way that it would lower a teacher's overall annual evaluation score to remove teachers perceived as weaker teachers, potentially in an

unethical fashion in some cases. Future research should consider the unanticipated consequences of this dual system and its impact on the teaching field and student outcomes.

The consistency of student growth measures over time. Previous research (American Statistical Association, 2014; Darling-Hammond, 2015; Darling-Hammond et al., 2012; Newton et al., 2010) has pointed to the variability of value-added measures from one year to the next and cited the lack of consistency over time as one reason to be cautious about these measures. None of this research specifically considered student growth percentiles, and many participants in this project indicated that their data did not remain consistent over time, often going up one year, down the second year, and then back up the year after that. This pattern, along with previous research, suggests that research that considers the consistency of student growth percentiles explicitly over time would be valuable. The research should consider if there are issues with the reliability and validity of these constructs if the patterns discovered are similar to those of value-added measure. If the research finds that patterns of consistent growth exist, a more in-depth exploration of what factors contribute to sustained growth over time would also be valuable to the field.

Student growth percentiles and subgroup populations. The current study did not consider student growth percentiles in the context of subgroup populations such as race, economic status, language, disability, or giftedness or regarding school characteristics like transiency rates. The literature review in Chapter 2 described several studies (Ehlert et al., 2014; Goldhaber et al., 2012; Herrmann & Ross, 2016; Marion, 2014; McCaffrey & Castellano, 2014; McCaffrey et al., 2014) that found concerns with student growth percentiles for teachers with this groups of students, indicating that factors other than the teacher could have a substantial impact on student growth percentiles. As large numbers of students in subgroup populations can

impact the overall rates for a school, research that considers this same information in the context of the school leaders is needed.

Researcher Comments and Conclusion

The researcher documented her experience with this research through personal notes and journaling kept through the course of this research. There are areas identified where additional professional development would increase the capacity of school-level leaders in the Mountain Ridge School District. It is evident to the researcher that school administrators want to use student growth percentile data in a way that supports the teaching and learning that takes place in the schools that they serve, even if they are not always comfortable with how to do this. Utilizing this data to make educational decisions is happening, even though these scores are not officially a part of the school-based leader's annual evaluation. Additionally, the administrators utilize these scores in the way they were initially intended most of the time – as one of many pieces of data to help describe student learning. Many administrators are skeptical that the state of Georgia will ever attach the high stakes to these scores legislated to begin during the 2021-2022 school year and suggest that the outcomes of this research may be different if that were to happen. Whether or not that happens, this study has provided valuable insight in the actions of school-based leaders in the Mountain Ridge School District relative to student growth percentile data and adds to a body of research that remains limited in scope. The implications and outcomes of this study should lead to additional studies that will continue to grow the body of literature related to student growth percentile data as a component of school-based leader evaluation.

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Appendix A: Overview of the Georgia Student Growth Model

Overview of the Georgia Student Growth Model

What is the Georgia Student Growth Model?

The Georgia Student Growth Model (GSGM) is an exciting initiative designed to provide students, parents, educators, and the public with important information on student progress. Student growth, in addition to academic achievement, provides a more complete picture about the academic performance of students. Now we not only know where students ended up, but we also know how much progress they made to get there. For example, one student may have struggled to demonstrate proficiency; but the GSGM shows that he is growing at a high level and, if he continues to grow at that level, is on the path to becoming proficient in the future. Another student may have demonstrated proficiency; but the GSGM shows that she is growing at a low level. This student could benefit from enrichment activities to help her keep pace with her academic peers. The Georgia Student Growth Model provides important information on how well all students are progressing – whether or not they currently demonstrate academic proficiency.

What are Student Growth Percentiles?

Georgia is implementing the student growth percentile (SGP) methodology. SGPs describe the amount of growth a student has demonstrated relative to academically-similar students from across the state. Growth percentiles range from 1 to 99, with lower percentiles indicating lower academic growth and higher percentiles indicating higher academic growth. With SGPs, all students – regardless of their prior achievement level – have the opportunity to demonstrate all levels of growth.

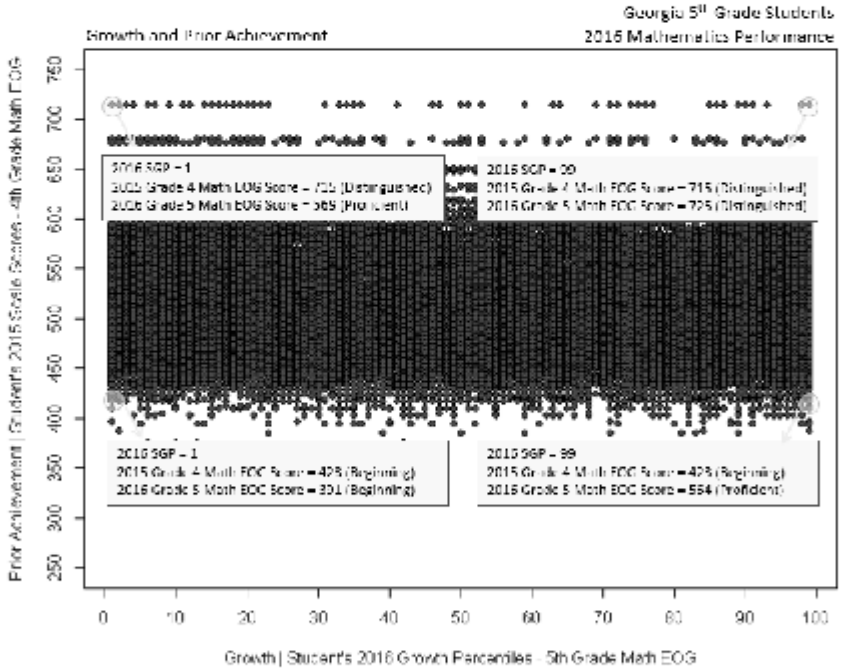
How are SGPs calculated?

SGPs are statistical, regression-based quantities used to characterize the growth of students on state-mandated assessments. SGP calculations utilize quantile regression with b-spline smoothing to create growth norms that model the relationship between students' current and prior achievement scores. Specifically, for each cohort of students taking the assessment in the same content area and grade, quantile regression is used to create 100 conditional percentiles for each student based upon their own scale scores. B-spline smoothing is used in conjunction with the quantile regression analyses to model any non-linearity in the distribution of student scale scores, particularly at the high and low end of the assessment scale. The coefficient matrices derived from the analyses relate prior and current achievement across for students across the entire achievement spectrum. These matrices can be calculated each year so that growth norms are annually updated or can be fixed to a baseline period and used with annual data to allow for growth comparisons across years fixed to the same growth norms.

Can all students demonstrate all levels of growth?

The nature of student growth percentiles ensures that all students – regardless of their prior achievement level – have the opportunity to demonstrate all levels of growth. By measuring growth relative to academically-similar students, SGPs provide an apples-to-apples comparison. A student's growth is relative to that of his or her academic peers – other students from across Georgia with the same prior scores. This means that high-achieving students are being compared to other high-achieving students and low-achieving students are being compared to other low-achieving students.

The figure below displays student-level data for 2016 5th grade mathematics statewide. Student growth is plotted on the x-axis and students' prior achievement (2015 4th grade mathematics scores) is plotted on the y-axis. This figure shows that all students, for all various levels of prior achievement, are demonstrating the full range of 1st through 99th percentile growth.



The student in the upper left-hand corner earned the highest possible scale score (715) in grade 4. In grade 5, this student scored a 569, which represented 1st percentile growth. The student is still a Proficient Learner. However, compared to his or her academic peers (the other students across Georgia who scored a 715 in grade 4), this student demonstrated low growth.

The student in the upper right-hand corner also earned the highest possible scale score in grade 4. In grade 5, this student once again scored the highest possible scale score (725), which represented 99th percentile growth. While there was not an opportunity for this student to show a higher level of *achievement* in either the 4th or 5th grades, it was possible for the student to show a high level of *growth* from the 4th grade to the 5th grade, as the student had to learn new content and grow in order to continue to earn the highest scale score.

The student in the lower left-hand corner is a Beginning Learner in grade 4 and scored a 423 in math. In grade 5, this student earned a 391 and remained as a Beginning Learner. This represented 1st percentile growth.

The student in the lower right-hand corner also earned a 423 in grade 4. In grade 5, the student earned a 564 and became a Proficient Learner, which represented 99th percentile growth.

This figure illustrates the importance of the concepts of "academic peers" and a student's "starting point" when measuring growth. The student in the upper left-hand corner and the student in the lower right-hand corner demonstrated very similar achievement in grade 5, scoring a 569 and a 564, respectively. But their SGPs help illustrate a more complete picture of their performance. The student in the upper left-hand corner's 569 represented a low level of growth given his or her prior achievement and the current achievement of his or her academic peers. The student in the lower right-hand corner's 564 represented a high level of growth given his or her prior achievement and the current achievement of his or her academic peers.

What are student growth levels?

Much like achievement levels are used to describe student performance on state assessments, student growth levels provide context for various values of SGPs. These levels were set using information about the relationship between student growth and status-based achievement. The SGP growth levels are low (1-34), typical (35-65), and high (66-99). A student who demonstrates low growth generally will struggle to maintain his or her current level of achievement. A student who demonstrates typical growth generally will maintain or improve academically. A student who demonstrates high growth generally will make greater improvements academically.

How are SGPs combined?

While SGPs are produced for individual students, there are multiple ways of combining SGPs to summarize the growth of a group of students (such as for a classroom, school, or system). These methods include the median growth percentile, mean growth percentile, and the percentage of students demonstrating typical or high growth. All of these methods are utilized for different purposes.

How is the growth model used?

The core purpose of the GSGM is to provide students, parents, educators, and the public with valuable, actionable information on students' academic progress. The addition of student growth data to existing student achievement data paints a more complete picture of the achievement and progress being made by Georgia's students.

Reporting of growth model results is a critical component of this program. Students and parents receive student growth reports that provide information on students' academic progress and achievement. Students and parents can work with their teachers to better understand student performance and the support or enrichment opportunities that might contribute to them meeting or exceeding academic expectations.

The public can access school- and district-level SGP data through an interactive data tool at http://gastudentgrowth.gadoe.org/. Educators have access to detailed SGP data for their students through the Statewide Longitudinal Data System (SLDS). They can utilize SGPs, in addition to other information about student performance, to improve student learning, instruction, and educational programs.

SGPs also contribute to school and district accountability. SGPs are used as a measure of student progress in the College and Career Ready Performance Index (CCRPI). SGPs are combined with other measures to provide an overall indication of school and district effectiveness.

Finally, SGPs are one of multiple measures used to provide an indication of teacher and leader effectiveness in the Teacher and Leader Keys Effectiveness Systems (TKES and LKES).

How was the GSGM affected by the transition from the CRCT and EOCTs to Georgia Milestones?

One important feature of the methodology used within the Georgia Student Growth Model (GSGM) is that the Student Growth Percentile (SGP) is robust to scale transformations like those associated with changes in assessment systems. SGP calculation was not interrupted during the transition to Georgia Milestones Assessment System.

Where can I learn more?

There are many resources available on the Georgia Student Growth Model website at gsgm.gadoe.org. Resources include an animated introduction to SGP video; documents, such as guides and FAQs; technical information; a technical evaluation, a tutorial series providing in-depth information on the model; and information on student growth reports, including sample reports and interpretation videos.

Appendix B: Georgia Student Growth Model Handout, Georgia Department of Education (n.d.)

Georgia Student Growth Model

Student Growth Percentiles

What is the Georgia Student Growth Model?

The Georgia Student Growth Model (GSGM) is an exciting initiative designed to provide students, parents, educators, and the public with important information on student progress. Academic achievement only tells part of the story. The addition of student growth tells a more complete story about the academic performance of students. The GSGM provides important information on how well all students are progressing – whether or not they are currently meeting or exceeding academic expectations.

What are SGPs?

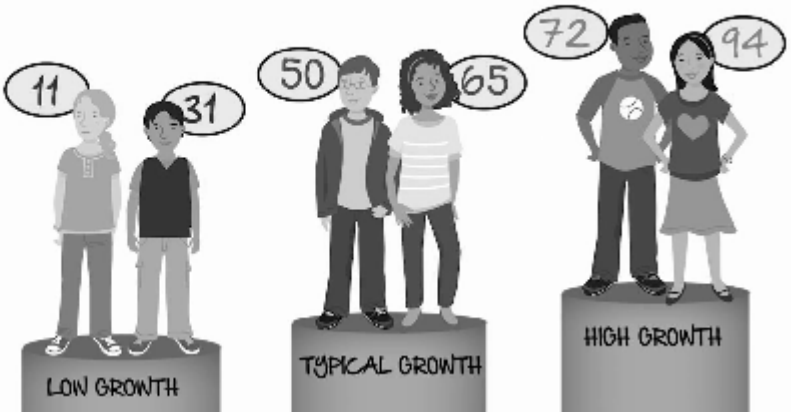
Student growth percentiles (SGPs) describe the amount of growth a student has demonstrated relative to academically-similar students from across the state. Growth percentiles range from 1 to 99, with lower percentiles indicating lower academic growth and higher percentiles indicating higher academic growth. With SGPs, all students – regardless of their prior achievement level – have the opportunity to demonstrate all levels of growth.

What Do I Need to Know?

- Students are compared to other students across Georgia with the same achievement history.
- Growth percentiles range from 1 to 99, with lower percentiles indicating lower academic growth and higher percentiles indicating higher academic growth.
- All students, regardless of their prior achievement level, have the opportunity to demonstrate all levels of growth.
- SGPs are utilized as one of multiple indicators in the College and Career Ready Performance Index (CCRPI) and the Teacher and Leader Keys Effectiveness Systems (TKES and LKES).

Where can I learn more?

Check out our video and other great resources at gsgm.gadoe.org.



Appendix C: Student Growth Percentiles 101 from the RAND Corporation (2012)

RAND EDUCATION

Student Growth Percentiles 101

Using Relative Ranks in Student Test Scores to Help Measure Teaching Effectiveness

One way to assess a teacher's effectiveness is to compare his or her students' improvement with the improvement of other students. How is this improvement calculated and compared? In cases where standardized tests are administered annually to all students, student growth percentiles, or SGPs, provide a simple way of making this comparison because they show how each student's test-score growth ranks among academically similar students.

SGPs show how a student's achievement at the end of the year compares with that of other students who started the year at the same level.

For example, if Adele scored 263 on last year's test, her score at the end of this year would be compared with the scores of all the other students who scored 263 last year. Adele's SGP would be her percentile rank (from 1 to 99) within this group of similar peers. If Adele's SGP is 50, it means that her growth in test scores is right in the middle: Half of the similar students who scored 263 last year scored higher than she did this year, and half of them scored lower.

A teacher's score is the middle SGP for his or her students.

The middle SGP score provides a simple indicator of how well the typical student in a class performed relative to similar students. This score is called the median growth percentile (MGP), and it is useful because, unlike a simple average, it doesn't change much if one or two students do unusually well or unusually poorly relative to their peers.

The MGP does not account for variations among students or classes, nor does it indicate what caused improvement.

Unlike some other methods of estimating teacher effectiveness, such as value-added modeling, MGP calculations do not try to adjust for differences in student characteristics. And neither SGPs nor value-added modeling indicates what might have caused improvements, nor do they reveal whether other students would make similar improvements if taught by that teacher.

SGPs are easier to understand than many other complex statistical models.

Although the calculations behind them are sophisticated, SGPs present information about growth in percentile terms that are familiar to most teachers and parents. They provide a clear indicator of progress for each student.

WANT TO LEARN MORE?

RAND Education is a nonpartisan resource on education policy at the local, state, and federal levels, including on the topic of measuring teacher effectiveness. To access other fact sheets in this series, as well as reports, multimedia products, and more, scan the QR code above with your smartphone, or visit **www.rand.org/education/measuring-teacher-effectiveness**.

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Appendix D: Kennesaw State University IRB Approval

From: irb@kennesaw.edu <irb@kennesaw.edu>
Sent: Monday, May 21, 2018 9:33 AM
To: jturnell@students.kennesaw.edu
Cc: irb@kennesaw.edu; spadget1@kennesaw.edu
Subject: Study 18-516: An Explorational Study of Educational Leaders' Attitudes, Opinions, Understanding and Application of Student Growth Percentile Data

5/21/2018

J Lyn Turnell, Student
Educational Leadership

Re: Your followup submission of 5/17/2018, Study #18-516: An Explorational Study of Educational Leaders' Attitudes, Opinions, Understanding and Application of Student Growth Percentile Data

Hello Ms. Turnell,

Your application has been reviewed by IRB members. Your study is eligible for expedited review under the FDA and DHHS (OHRP) designation of category 7 - Individual or group characteristics or behavior.

This is to confirm that your application has been approved. The protocol approved is Online survey and recorded personal interviews with study of current principals and assistant principals evaluated under the Georgia Department of Education's Leader Keys Effectiveness System (LKES) to understand how the use of student growth measures in the annual evaluation of educational leaders informs leader actions and thus impacts school effectiveness. The consent procedure described is in effect.

NOTE: All surveys, recruitment flyers/emails, and consent forms must include the IRB study number noted above, prominently displayed on the first page of all materials.

You are granted permission to conduct your study as described in your application effective immediately. The IRB calls your attention to the following obligations as Principal Investigator of this study.

1. The study is subject to continuing review on or before 5/21/2019. At least two weeks prior to that time, go to http://research.kennesaw.edu/irb/progress-report-form.php to submit a progress report. Progress reports not received in a timely manner will result in expiration and closure of the study.

2. Any proposed changes to the approved study must be reported and approved prior to implementation. This is accomplished through submission of a progress report along with revised consent forms and survey instruments.

3. All records relating to conducted research, including signed consent documents, must be retained for at least three years following completion of the research. You are responsible for ensuring that all records are accessible for inspection by authorized representatives as needed. Should you leave or end your professional relationship with KSU for any reason, you are responsible for providing the IRB with information regarding the housing of research records and who will maintain control over the records

during this period.

4. Unanticipated problems or adverse events relating to the research must be reported promptly to the IRB. See http://research.kennesaw.edu/irb/reporting-unanticipated-problems.php for definitions and reporting guidance.

5. A final progress report should be provided to the IRB at the closure of the study.

Contact the IRB at irb@kennesaw.edu or at (470) 578-6407 if you have any questions or require further information.

Sincerely,

Christine Ziegler, Ph.D.
KSU Institutional Review Board Director and Chair

cc: spadget1@kennesaw.edu

Appendix E: Mountain Ridge School District Research Approval

1

[redacted] SCHOOL SYSTEM

REQUEST FOR PERMISSION TO CONDUCT DATA COLLECTION ACTIVITIES WITHIN THE SYSTEM

Name J Lyn Turnell

[redacted] Employee: Yes X No ___ If *NO*, list employer: _____

College/University Supervising Activities Kennesaw State University

Degree in Progress(Level/Area) Ed. D.

Locations for Data Collection Online (survey) [redacted] county or school sites (interviews)

Date of Request 3/9/2018 Requested Date(s) for Data Collection 4/1/2018 - 8/31/2018

Professor's Name Dr. Susan Padgett-Harrison Phone #/Email (770) 423-6888/spadget1@kennesaw.edu

Include with this request:

- A letter from your supervising professor on college or university letterhead indicating support for your research and his/her confirmation of data collection validity.
- A brief summary of the issues being researched and the type of data collection you are requesting to conduct. (Page 2 of this form).
- Method of data collection assessment (Page 2 of this form); Number of respondents, etc.
- Copy of interview questions, surveys, etc. that will be used. If student data/videos are used, a notarized "Release of Educational Records for Research Purposes Confidentiality Statement" and a copy of a letter requesting parent permission to use the data will be required.

I, J Lyn Turnell do hereby submit to **not** hold the [redacted] School System liable for any findings, or commentary involved in this research. I understand that without the express written permission of the [redacted] Board of Education, I am not authorized to conduct any data collection involving system employees or students and/or any other information that is protected by Federal or State Law. **Furthermore, a copy of all findings and data collection instruments will be made available to the [redacted] Board of Education. All research is to be sent to the Office of Assessment upon completion of the project.**

Signature J Lyn Turnell Date 3/18/18

Signature of Principal (if applicable) [signature] Date 3-21-18

Send completed form to: Dr. Jennifer Scrivner, Director, Office of Assessment, ESA, Building G

Staff Use Only

Jennifer Scrivner ✓ Permission given _____ Permission denied

Office of Assessment

Conditions of Permission: Denied due to:

Revised 01/2012

Please write a brief summary of the issues being researched and the type of data collection you are requesting to conduct.

The purpose of this study is to understand how the use of student growth measures in the annual evaluation of educational leaders informs leader actions and thus impacts school effectiveness. Through survey data and interviews, the researcher will conduction a qualitative study of current principals and assistant principals evaluated under the Georgia Department of Education's Leader Keys Effectiveness System (LKES) to identify themes in the context of administrator attitudes and opinions regarding growth measures, knowledge and understanding of these growth measures, and the actions administrators take as educational leaders in the context of these measures.

The results of this research should provide data that will identify educational best practices regarding the use of student growth percentiles. Additionally, it can identify areas for professional development at the district level related to the interpretation and use of student growth data. Finally, unintended consequences for the use of these measures in leader and school evaluation can be identified for policy makers and educational stakeholders.

Indicate your method of data collection assessment (surveys, interviews, and/or test data)

Survey and interviews

Check the appropriate box(s) which indicate respondents:

- [x] Administrators
- [ ] Teachers/Certified Personnel
- [ ] Classified Personnel
- [ ] Students

Note the number of data collection instruments being used (i.e., number of expected respondents)

I would like permission to solicit all Principals and Assistant Principals/TSAs to complete the on-line survey. Additionally, I will interview 3 - 6 school based administrators (1 - 2 from each level - ES, MS, HS).

4, 2, 2

Revised 01/2012

Appendix F: Survey Questions

1. How many years have you been a school administrator?
    a. This is my first year as a school administrator.
    b. 1 – 3
    c. 4 – 5
    d. 6 – 10
    e. 11 – 15
    f. 16 – 20
    g. 21+
2. What is your current position?
    a. Principal
    b. Assistant Principal
3. At what level are you currently a school administrator?
    a. Elementary School
    b. Middle School
    c. High School
4. How many years have you been in education total?
    a. 1 – 3
    b. 4 – 5
    c. 6 – 10
    d. 11 – 15
    e. 16 – 20
    f. 21+
5. How would you classify the socioeconomic status of students in your school?
    a. Very high needs
    b. High needs
    c. Average
    d. Low needs
    e. Very low needs
    f. Unsure
6. How would you classify the academic status of the students in your school?
    a. Very high needs
    b. High needs
    c. Average
    d. Low needs
    e. Very low needs
    f. Unsure
7. What is your gender?
    a. Male
    b. Female
8. What is your identified race?
    a. African American/Black

   b. Asian
   c. Hispanic/Latino
   d. Native American/Indian
   e. Caucasian/White
   f. Multi
   g. Other
   h. Prefer not to say
9. How many years have you been the principal or assistant principal of your current school (including this school year)?
10. Reflecting on your most recent CCRPI report, please rate from 1 – 5 how useful you found Student Growth Percentile data (1 is extremely useful – 5 is not useful at all)?
11. Reflecting on your most recent CCRPI report, please rate from 1 – 5 how accurately you think your school's overall growth percentile reflects the quality of teacher and learning at your school (1 is most accurate – 5 is least accurate)
12. How do you rate your school's performance over the past 2 years?
    a. My school performed better than other schools of its kind
    b. My school performed less than other schools of its kind
    c. My school performed about the same as other schools of its kind
13. If you have been at the same school for more than one year, have your student growth scores been consistent over time?
    a. Yes
    b. No, please explain
    c. N/A
14. Is there anything you would like to share regarding your school's student growth scores?
15. Do you consider student growth scores in your educational decision-making?
    a. Yes, I use student growth score data to inform my educational decision-making. Please explain
    b. No, I do not use student growth score data to inform my educational decision-making.
16. What other data do you consider (either in conjunction with student growth data or instead of student growth data) when making educational decisions.
17. How (if at all) have you used your school's Student Growth Percentile data (select all that apply)
    a. As additional information about how well the school is performing.
    b. To identify students who need additional help
    c. To identify students who are making exceptional gains
    d. To evaluate whether or not a particular instructional strategy is working
    e. To evaluate whether or not a particular curriculum is working
    f. Informal use in staff evaluation (comparing a teacher's classroom growth percentile with your general sense of a teacher's effectiveness)
    g. Formal use in staff evaluation (including a teacher's classroom growth percentile as a factor in determining his or her performance rating)
    h. To determine a teacher's teaching assignment in a given school year.

    i. Have not used
    j. Other (please explain)
18. Have you participated in professional learning experiences regarding Student Growth Percentiles in the past year?
    a. Yes
    b. No
19. Do you feel like you have received adequate training to effectively utilize Student Growth Percentile data in your educational-decision making?
    a. Yes, I feel completely competent in using student growth data to inform my educational decision making.
    b. Yes, I am comfortable using student growth data to inform my educational decision making, but could use more training to feel fully competent.
    c. No, I do not understand at all how student growth data can inform my educational decision making.
20. To what extent do you typically reflect on student growth data to inform your educational decision making? Please explain.
21. Is there anything else you would like to add about using student growth data to inform your educational decision making?
22. To what extent do you agree with the following statements:
    a. Strongly agree
    b. Agree
    c. Somewhat agree
    d. Neither agree nor disagree
    e. Somewhat disagree
    f. Disagree
    g. Strongly disagree
    h. Not applicable
        i. Student Growth Percentiles are simple to use.
        ii. Student Growth Percentiles help create professional goals for school administrators.
        iii. Student Growth Percentiles help create school improvement plan goals.
        iv. Student Growth Percentiles help improve instruction.
        v. Student Growth Percentiles help increase student learning.
        vi. Student Growth Percentiles help me become a more effective school leader.
        vii. Student Growth Percentiles help identify and remove ineffective school leaders.
        viii. Student Growth Percentiles provide incentives for good practices.
        ix. Student Growth Percentiles enhance the school environment.
        x. Student Growth Percentiles enhance working conditions.
        xi. Overall, Student Growth Percentiles are beneficial to me as a school leader.
        xii. Overall, Student Growth Percentiles are beneficial to my district.

23. If there is anything else you would like to add regarding the questions above, please do so here.
24. How would help a fellow school administrator interpret a school's 8th grade English Language Arts Student Growth Percentile of 42?
    a. The 8th grade students are less than halfway proficient in English Language Arts
    b. 42% of the 8th grade students are proficient in math
    c. The 8th grade students grew 42% in their English Language Arts achievement this year.
    d. The median 8th grade growth percentile is 42
    e. The 8th grade students grew as much or more than 42% of other 8th grade students in the state.
    f. The 8th grade students performed better than 42% of other students in the state.
    g. Since the previous year, the 8th grade students have improved by 42% in English Language Arts.
    h. Other (explain)
25. If you were the school administrator at the school described above, which of the following actions would you take based on the growth percentile data? (Select all that apply)
    a. I would not make any change to current practices.
    b. I would provide math coaching for the faculty
    c. I would provide English Language Arts coaching for the faculty
    d. I would present the Student Growth Percentile data to the faculty to discussion possible interventions.
    e. I would present CCRPI scores and the Student Growth Percentile data to the faculty for celebrations.
    f. I would take a different course of action from those listed above. (Please explain)
26. Which of the following students would you recommend for addition support (EXP, RTI, supplemental services, etc.) based on their subject area EOG/EOC score and growth percentile? (Select all that apply)
    a. A student with an EOG/EOC Milestone score rated a Distinguished Learner and a SGP of 38
    b. A student with an EOG/EOC Milestone score rated a Developing Learner and a SGP of 80
    c. A student with an EOG/EOC Milestone score rated a Distinguished Learner and a SGP of 80
    d. A student with an EOG/EOC Milestone score rated a Developing Learner and a SGP of 38
    e. A student with an EOG/EOC Milestone score rated a Proficient Learner and a SGP of 50
    f. A student with an EOG/EOC Milestone score rated a Proficient Learner and a SGP of 30
    g. If you would like to provide any explanation to your answers above, please do so here.

27. If there is anything else you would like to add overall, please do so here.

Appendix G: Semistructured Interview Protocol

Interview # _____ Interviewer: _____

Date: _____/_____/_____ Interviewer: _____

Time: _____ School: _____

Introduction

Welcome and thank you for your participation today. My name is Lyn Turnell and I am a graduate student at Kennesaw State University conducting research for my dissertation on Student Growth Percentiles. This interview will take about 45 - 60 minutes and will include 14 questions regarding your experience with Student Growth Percentiles and any key information about them that you wish to focus on.

I would like your permission to audio record this interview so I may accurately document the information you convey. If at any time during the interview you wish to discontinue the use of the recorder or the interview itself, please feel free to let me know and we will stop. All of your responses are confidential. Your responses will remain confidential and will be used only for educational purposes.

At this time I would like to ask for your verbal consent and also inform you that your participation in this interview also implies your consent. Your participation in this interview is completely voluntary. If at any time you need to stop, take a break, or return to a question, please let me know. You may also withdraw your participation at any time without consequence. Do you have any questions or concerns before we begin?

Then with your permission we will begin the interview. (Begin recording)

Demographic Questions:

1. What is your current position?

2. How many years have you been in your current position?

3. How many years have you been in education?

Research Questions:

4. Are you familiar with Student Growth Percentiles? What do you know about them?

5. How would you describe Student Growth Percentiles for a stakeholder (student, teacher, parent, community partner) in your school?

6. What training have you received regarding Student Growth Percentiles? Please provide examples.

7. What is the value of using Student Growth Percentiles for administrator evaluation? Are there any examples coming from your own experience to illustrate your answer?

8. What is the value of using Student Growth Percentiles for instructional planning? Are there any examples coming from your own experience to illustrate your answer?

9. What is the value of using Student Growth Percentiles for school improvement? Are there any examples coming from your own experience to illustrate your answer?

10. Could you provide an example on how you are currently utilizing Student Growth Percentile in your educational decision making?

11. What are the best practices you have observed in other school administrators related to Student Growth Percentiles?

12. How are you currently utilizing Student Growth Percentiles in your school improvement process? Could you provide some examples?

13. What do you feel that you still need to be confident and comfortable with Student Growth Percentiles?

14. Before we conclude this interview, is there anything else you would like to share about Student Growth Percentiles?

    Thank the participant for his/her participation

Appendix H: Solicitation Request for Interview Participants

From: Lyn Turnell
Sent: Saturday, June 16, 2018 1:03 PM
Cc: XXXXXXXX
Subject: Assistance Needed

Dear Colleagues,

I am an Ed.D. candidate at Kennesaw State University currently completing my dissertation using a mixed-methods study regarding school-based leaders evaluated under LKES and their attitudes, opinions & understanding of Student Growth Percentiles (a component of the LKES annual evaluation) as well as the actions that they take in the context of these measures. **I am requesting the opportunity to interview you for inclusion in my study.**

The county has provided me with a list of names of [redacted] administrators who represent a range of annual LKES scores and you were chosen from this list through a random selection. **I do not have access to your LKES scores and your participation is voluntary. All responses will remain confidential and individual responses will not be seen by anyone other than myself. Additionally, the names of the leaders who participate in this study will not be shared and all identifying information will be removed from the final project.**

The results of the study will come from these interviews, as well as an anonymous online survey that will be sent to all [redacted] school based leaders, and the final project will be shared with the district at the conclusion of my research. It is anticipated that this research will identify educational best practices regarding the use of Student Growth Percentiles. Additionally, it will assist in identifying areas for professional development related to the interpretation and use of student growth data. Finally, unintended consequences for the use of these measures in leader and school evaluation will be identified for policy makers and educational stakeholders.

Would you be willing to provide me with 45 – 60 minutes of your time for the purpose of conducting these interviews? I will interview you at a time and location that is convenient to you. This can be at your school site, another [redacted] location, via SKYPE, at a local Starbucks (I'll even buy the coffee), etc. My goal is to have all interviews completed by Aug 1. If you would prefer to speak to me via phone instead of email, please feel free to call my cell at (404) 516-0099.

Thank you in advance for your assistance and support of my research!

Lyn

Lyn Turnell

Appendix I: Solicitation Request for Survey Participants

From: Lyn Turnell
Sent: Sunday, July 22, 2018 6:56 PM
Cc: XXXX
Subject: Request for participation

Dear [redacted] School Leaders,

You are receiving this email to request your brief participation in a study for my doctoral dissertation at Kennesaw State University. As part of my study, I am surveying school-based leaders evaluated annually with the LKES regarding Student Growth Percentiles. Participants should be [redacted] principals or assistant principals at the elementary, middle or high school level. School locations and current position are not recorded as part of the study. The attached consent document will be the first page you see in the survey and explains more about the study which has been approved by Kennesaw State University (IRB Study #18-516).

Would you please take a moment and complete the online survey found at https://kennesaw.co1.qualtrics.com/jfe/form/SV_ctJ8XlZQeGKsVPT. The survey should take no more than 20 minutes to complete. Responses are anonymous, and no names or email addresses will be collected as part of your participation.

Thank you in advance for your support! If you have any questions regarding this research project, please feel to contact me.

Lyn Turnell

Appendix J: Online Consent for Survey Participants

ONLINE SURVEY CONSENT FORM

Title of Research Study: Study #18-516: An Explorational Study of Educational Leaders' Attitudes, Opinions, Understanding and Application of Student Growth Percentile Data

Researcher's Contact Information: J Lyn Turnell, (404) 516-0099, jturnell@students.kennesaw.edu

Introduction

You are being invited to take part in a research study conducted by J Lyn Turnell of Kennesaw State University. Before you decide to participate in this study, you should read this form and ask questions about anything that you do not understand.

Description of Project

The purpose of the study is to understand how the use of student growth measures in the annual evaluation of educational leaders informs leader actions and thus impacts school effectiveness. Through survey data and interviews, the researcher will conduct a mixed method study of current principals and assistant principals evaluated under the Georgia Department of Education's Leader Keys Effectiveness System (LKES) to identify administrator attitudes and opinions regarding growth measures, knowledge and understanding of these growth measures, and the actions administrators take as educational leaders in the context of these measures.

Explanation of Procedures

Each participant is being asked to respond electronically to the survey questions that follow. The participant may skip any question that you do not wish to answer.

Time Required

It should take approximately 20 minutes to complete the survey.

Risks or Discomforts

There are no known risks or anticipated discomforts associated with participation in this study.

Benefits

While there are no direct benefits to you for taking part in the study, the researcher may learn more about how school-based leaders respond to and utilize Student Growth Percentiles. This could identify educational best practices and identify areas for professional development at the district level related to the interpretation and use of student growth data. Additionally, unintended consequences for the use of these measures in leader and school evaluation can be identified for policy makers and educational stakeholders. Additionally, participants may reflect on their own practices or those of others and identify areas for personal growth as well as identify their own best practices related to educational decision-making and school improvement.

Confidentiality

The results of this participation will be anonymous. No identifying information will be collected that could indicate who the respondent is or what school they serve.

Inclusion Criteria for Participation

You must be 18 years of age or older to participate in this study. Additionally, you should be currently serving as a school-based administrator in the [redacted] School District (Principal or Assistant Principal) at the Elementary, Middle or High School Level.

Use of Online Survey

IP Addresses WILL NOT be collected by the survey program. This will help maintain the anonymity of the participant.

Research at Kennesaw State University that involves human participants is carried out under the oversight of an Institutional Review Board. Questions or problems regarding these activities should be addressed to the Institutional Review Board, Kennesaw State University, 585 Cobb Avenue, KH3403, Kennesaw, GA 30144-5591, (470) 578-2268.

PLEASE PRINT A COPY OF THIS CONSENT DOCUMENT FOR YOUR RECORDS, OR IF YOU DO NOT HAVE PRINT CAPABILITIES, YOU MAY CONTACT THE RESEARCHER TO OBTAIN A COPY

By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

☐ I agree and give my consent to participate in this research project. I understand that participation is voluntary and that I may withdraw my consent at any time without penalty. *(Selection of this option will lead to question 1 on the survey)*

☐ I do not agree to participate and will be excluded from the remainder of the questions. *(Selection of this option will terminate the session and survey questions will not be presented)*

Appendix K: Informed Consent for Interview Participants

SIGNED CONSENT FORM

Title of Research Study: Study #18-516: An Explorational Study of Educational Leaders' Attitudes, Opinions, Understanding and Application of Student Growth Percentile Data

Researcher's Contact Information: J Lyn Turnell, (404) 516-0099, jturnell@students.kennesaw.edu

Introduction

You are being invited to take part in a research study conducted by J Lyn Turnell of Kennesaw State University. Before you decide to participate in this study, you should read this form and ask questions about anything that you do not understand.

Description of Project

The purpose of the study is to understand how the use of student growth measures in the annual evaluation of educational leaders informs leader actions and thus impacts school effectiveness. Through survey data and interviews, the researcher will conduct a mixed method study of current principals and assistant principals evaluated under the Georgia Department of Education's Leader Keys Effectiveness System (LKES) to identify administrator attitudes and opinions regarding growth measures, knowledge and understanding of these growth measures, and the actions administrators take as educational leaders in the context of these measures.

Explanation of Procedures

Each participant is being asked to participate in a face-to-face, semi-structured interview that will be audio recorded for transcript purposes.

Time Required

The interview will take 45 – 60 minutes. The participant can terminate the interview at any time.

Risks or Discomforts

There are no known risks or anticipated discomforts associated with participation in this study.

Benefits

While there are no direct benefits to you for taking part in the study, the researcher may learn more about how school-based leaders respond to and utilize Student Growth Percentiles. This could identify educational best practices and identify areas for professional development at the district level related to the interpretation and use of student growth data. Additionally, unintended consequences for the use of these measures in leader and school evaluation can be identified for policy makers and educational stakeholders. Additionally, participants may reflect on their own practices or those of others and identify areas for personal growth as well as identify their own best practices related to educational decision-making and school improvement.

Confidentiality

The results of this participation will be confidential. Any identifying information that may point to the school or identity of the participant will be redacted by the interviewer, and the participant will be able to review the redacted transcript to ensure their anonymity.

Inclusion Criteria for Participation

You must be 18 years of age or older to participate in this study. Additionally, you should be currently serving as a school-based administrator in the [redacted] School District (Principal, Assistant Principal or Teacher on Special Assignment)

Signed Consent

I agree and give my consent to participate in this research project. I understand that participation is voluntary and that I may withdraw my consent at any time without penalty.

_____

Signature of Participant or Authorized Representative, Date

_____

Signature of Investigator, Date

PLEASE SIGN BOTH COPIES OF THIS FORM, KEEP ONE AND RETURN THE OTHER TO THE INVESTIGATOR

Research at Kennesaw State University that involves human participants is carried out under the oversight of an Institutional Review Board. Questions or problems regarding these activities should be addressed to the Institutional Review Board, Kennesaw State University, 585 Cobb Avenue, KH3403, Kennesaw, GA 30144-5591, (470) 578-2268.

Appendix L: Definition of Acronyms & Curriculum Materials Cited by Participants in Item 16

1. Easy CBM: A web-based tool designed by the University of Oregon and available to school districts for use in the Response to Intervention (RTI) program. (See item 9). The curriculum measure assesses student progress in literacy and mathematics.
2. Milestone/Achievement Data: In addition, the Georgia Milestone Assessment, some students may also have achievement data that is reported via the Iowa Assessment from Riverside Publishing or, for students evaluated individually to determine eligibility for special education services, individualized achievement tests such as: the Kaufman Test of Educational Achievement – Third Edition (KTEA-3); Woodcock-Johnson Tests of Achievement (Third or Fourth Edition) – WJIII ACH or WJIV ACH; Wechsler Individual Achievement Test-Third Edition (WIAT-III); or Gray Oral Reading Test – 5th Edition (GORT-5).
3. iReady: An electronic program from Curriculum Associates that provides differentiated math instruction for students and assessment tools that track student growth in math throughout the school year.
4. Common Formative/Summative Results: Assessments designed by a department or a grade-level within the local school to assess the same skills and standards at the same time for all students. These could be used as checks for understanding in the course of a lesson or unit (formative) or could be the end of a lesson or unit assessment used to measure overall student understanding.
5. Grades: The Mountain Ridge School District (MRSD) using an online student information system that contains an electronic grade book permitting school administrators to check a student or classroom grades at any time.

6. Discipline – In addition to housing discipline reports for individual students, the online MRSD student information system allows school administrators to generate reports of student discipline by code infraction, the location of the event, time of day, and teacher making the referral.
7. SRI Reading – The Scholastic Reading Inventory (SRI) is an online assessment that measures student reading ability against The Lexile Framework for Reading® (see item 14).
8. Attendance – The MRSD online student information system allows school administrators to generate reports of attendance by student, class or daily indicators.
9. RTI data – Response to Intervention (RTI) is a tiered level of support and intervention used to support students with academic and behavioral needs.
10. Demographics/Classroom Composition – May include gender, race, ethnicity, free/reduced lunch rates, transiency, students with disabilities, students with English language acquisition, students meeting gifted education eligibility, etc.
11. RCD Unit Assessments – MRSD has been in the process of implementing a district-wide series of Rigorous Curriculum Design (RCD) Units that map the course of the curriculum standards and assess students as set points along the map.
12. TKES – The Teacher Keys Effectiveness System (TKES) is the annual teacher evaluation tool used in public schools in the state of Georgia.
13. Cognitive Assessment Data – All MRSD students are given the Cognitive Abilities Test (CogAT) in grade 2. Additionally, students may be evaluated individually for special education services using Wechsler Intelligence Test for Children – Fifth Edition (WISC-V); Wechsler Adult Intelligence Scales – Fourth Edition (WAIS-IV); Differential Ability

Scales – Second Edition (DAS-2); Kaufman Assessment Battery for Children-Second Edition (KABC-2); or Woodcock-Johnson Tests of Cognitive Ability (Third or Fourth Edition) – WJIII COG or WJIV COG

14. Lexile data – Created by Metametrics, a Lexile quantifies a student's reading level based on text complexity and recommends texts that will stretch the student's reading comprehension ability
15. ACCESS - An online or paper-based English Language Proficiency test from the WIDA consortium that is used to measure the progress of English Language Learners from one year to the next.
16. Wilson Reading – A multisensory reading program available from the Wilson Language Training Corporation for students who are not making progress in reading through the standard reading program.
17. Professional Learning Community Data – The professional learning community (PLC) model is a current professional development practice based on regular (weekly in MRSD) collaboration among a like group of educators with the intent of identifying best-practices for student outcomes. Each school in MRSD has its own set of requirements regarding what type of data the PLC must collect and document.
18. Pre/Post Assessments – A measure given at the beginning of a learning unit and again at the end of a learning unit to measure student gains.
19. Do the Math – An intervention program from Houghton Mifflin Harcourt to build math proficiency for students who struggle.
20. Stakeholder Relationships – A stakeholder is anyone with a vested interest in the local school (students, parents, teachers, community business partners, taxpayers, etc.)

21. IEP data collection – The Individuals with Disabilities Act (IDEA) requires an Individual Education Plan (IEP) for students with disabilities. This plan requires regular monitoring of student progress toward individual learning goals.
22. Graduation Rate – The state of Georgia currently reports the rate of high school students who graduate in 4 years and 5 years for each school and system as well as overall in the state.
23. GKIDS – The Georgia Kindergarten Inventory of Developing Skills (GKIDS) is given to all Kindergarten students and assesses their progress with the acquisition of Kindergarten skills and academic standards.
24. CCRPI – The College and Career Ready Performance Index (CCRPI) is Georgia's accountability platform for public schools that reports an annual grade based on a range of accountability measures.
25. AP Scores – The College Board Advanced Placement (AP) program gives high school students the opportunity to take college-level coursework at the high school level. The annual AP exams provide opportunities for students scoring high enough to earn college credit.
26. Anecdotal Data – Data based on teacher or other professional educator informal reports.

Appendix M: Georgia Department of Education Milestone Achievement Level Descriptors

Primary Assessments

ACCESS for ELLs 2.0

Georgia Alternate Assessment 2.0 (GAA 2.0)

Georgia Kindergarten Inventory of Developing Skills (GKIDS)

GKIDS Readiness Check

Georgia Milestones Assessment System

National Assessment of Educational Progress (NAEP)

Other Assessment Resources

Keenville

Eliciting Evidence of Student Learning

Formative Instructional Practices (FIP)

Georgia Online Formative Assessment Resource (GOFAR)

Georgia Student Growth Model (GSGM)

Lexile Framework for Reading

College Readiness for School Personnel

AP

PSAT

SAT

College Readiness for Students/Parents

ACT

AP

PSAT

SAT

Georgia Milestones Achievement Level Descriptors

With the implementation of the Georgia Milestones Assessment System, Georgia educators have developed four achievement levels to describe student mastery and command of the knowledge and skills outlined in Georgia's content standards. Most students have at least some knowledge of the content described in the content standards; however, achievement levels succinctly describe how much mastery a student has. Achievement levels give meaning and context to scale scores by describing the knowledge and skills students must demonstrate to achieve each level.

The four achievement levels on Georgia Milestones are *Beginning Learner, Developing Learner, Proficient Learner,* and *Distinguished Learner.* The general meaning of each of the four levels is provided below:

Beginning Learners do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students ***need substantial academic support*** to be prepared for the next grade level or course and to be on track for college and career readiness.

Developing Learners demonstrate partial proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students ***need additional academic support*** to ensure success in the next grade level or course and to be on track for college and career readiness.

Proficient Learners demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students ***are prepared*** for the next grade level or course and are on track for college and career readiness.

Distinguished Learners demonstrate advanced proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students ***are well prepared*** for the next grade level or course and are well prepared for college and career readiness.

More detailed and content-specific concepts and skills are provided for each grade, content area, and course in the **Achievement Level Descriptors** (ALDs). ALDs are narrative descriptions of the knowledge and skills expected at each of the four achievement levels and were developed for each grade level, content area, and course by committees of Georgia educators in March 2015 and July 2015. The ALDs are based on the state-adopted content standards.

ALDs show a *progression of knowledge and skills* for which students must demonstrate competency across the achievement levels. It is important to understand that a student should demonstrate mastery of the knowledge and skills within his/her achievement level *as well as all content and skills in any achievement levels that precede his/her own, if any*. For example, a Proficient Learner should also possess the knowledge and skills of a Developing Learner *and* a Beginning Learner.

Appendix N: Likert Item Responses

Likert Item Responses for Administrator Opinion Statements on Student Growth Percentiles

Statement	SA	A	SWA	N	SWD	D	SD
Student Growth Percentiles are simple to use.	5 (10%)	20 (40%)	20 (40%)	2 (4%)	1 (2%)	2 (4 %)	0
Student Growth Percentiles help create professional goals for school administrators.	7 (14%)	25 (50 %)	11 (22%)	5 (10%)	2 (4%)	0	0
Student Growth Percentiles help create school improvement plan goals.	14 (28%)	22 (44%)	10 (20%)	2 (4%)	2 (4%)	0	0
Student Growth Percentiles help improve instruction.	6 (12%)	24 (48%)	14 (28%)	3 (6%)	1 (2%)	2 (4%)	0
Student Growth Percentiles help increase student learning.	6 (12%)	18 (36%)	16 (32%)	7 (14%)	0	3 (6%)	0
Student Growth Percentiles help me become a more effective school leader.	8 (16%)	25 (50%)	10 (20%)	7 (14%)	0	0	0
Student Growth Percentiles help identify and remove ineffective school leaders.	0	11 (22%)	13 (26%)	14 (28%)	6 (12%)	4 (8%)	2 (4%)
Student Growth Percentiles provide incentives for good practices.	9 (18%)	15 (30%)	12 (24%)	9 (18%)	4 (8%)	1 (2%)	0
Student Growth Percentiles enhance the school environment.	8 (16%)	9 (18%)	15 (30%)	9 (18%)	5 (10%)	3 (6%)	1 (2%)
Student Growth Percentiles enhance working conditions.	5 (10%)	6 (12%)	14 (26%)	13 (26%)	5 (10%)	5 (10%)	2 (4%)
Overall, Student Growth Percentiles are beneficial to me as a school leader.	14 (28%)	23 (46%)	7 (14%)	5 (10%)	1 (2%)	0	0
Overall, Student Growth Percentiles are beneficial to my district.	13 (26%)	22 (44%)	7 (14%)	5 (10%)	1 (2%)	0	2 (4%)

Note: $N = 50$ for all statements. Header codes are as follows: SA = Strongly Agree; A = Agree; SWA = Somewhat Agree; N = Neither Agree or Disagree; SWD = Somewhat Disagree; D = Disagree; SD = Strongly Disagree