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THE IMPACT OF A VALUE-ADDED MODEL ON EDUCATIONAL LEADERSHIP PRACTICES IN NORTHWEST LOUISIANA

by

Candice D. Webert, B.S., M.Ed.

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

COLLEGE OF EDUCATION

LOUISIANA TECH UNIVERSITY

May 2017

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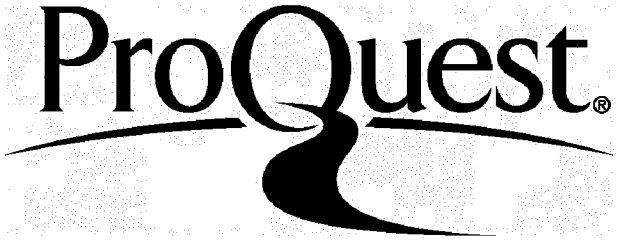

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We hereby recommend that the dissertation prepared under our supervision by Candice D. Webert

entitled The Impact of a Value-Added Model on Educational Leadership Practices in Northwest Louisiana

be accepted in partial fulfillment of the requirements for the Degree of Ed.D. in Educational Leadership

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ABSTRACT

This study addressed the impact of VAM, concerns with VAM data, uses and interventions educational leaders provided teachers, and components perceived as necessary for VAM effectiveness as an evaluation tool. The demographics used for this study were position, school size, and experience. Due to the documented need for educational accountability from the 1960s to present, the knowledge gained in this study was valuable. While the initiative was implemented as a response to increased accountability, the perceptions and understanding of such new initiatives can impact their effectiveness; in turn, impacting educational leadership. This study focused on the effectiveness of VAM.

In this quantitative study, data were gathered through a survey. The study participants were educational leaders, including principals, assistant principals, coordinators, and district-level personnel. The data collection and analysis were guided by the following research questions:

1) Did the impact of VAM on leadership practices differ based on position, school size, and years of experience in northwest Louisiana?

2) Did concerns of educational leaders about VAM effectiveness differ based on position, school size, and years of experience in northwest Louisiana?

3) Did the uses and interventions (student placement, teacher placement, professional development, giving teachers feedback, more observations, and

termination) educational leaders provided to teachers differ based on position, school size, and years of experience?

4) Did educational leaders' perceptions of components necessary for VAM effectiveness differ based on position, school size, years of experience in northwest Louisiana?

This study revealed that educational leaders experienced problems with the impact of VAM, the components of VAM effectiveness, and how they used the information generated by VAM in their leadership practices based on position, school size and years of experience.

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Author Claudia Ruf

Date 5-2-17

DEDICATION

This dissertation is dedicated to several people who inspired, influenced, and encouraged my aspirations as an educator. Without their unwavering support, I would not have completed this process. First, I have to thank and acknowledge God, for through Him, I can attest that all things are possible. Second, I thank my parents, Martha Ashton Webert and the late Charles L. Webert, who taught me the value and importance of education, and always believed that I could accomplish any and everything I set to mind to achieve. I thank them for their love, sacrifice, and support. To my sister, Crystal Webert Mays, and brother-in-law, Brandon Mays, Sr., thank you for always looking out for me as I travelled the interstate in all elements of weather, day and night.

Last, but not least, I dedicate this dissertation to a special group of people who have been the most influential individuals in my life, my late grandparents and great-grandparents. To the late Rosa Lee and Eugene Jones, Elver Ree Webert Williams, and Mandy and Charlie Ashton, Sr., I will always love and remember each of you in a special way. I hope that I have made each of you proud.

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CHAPTER 1

INTRODUCTION

A value-added model (VAM) is a teacher evaluation method that measures teacher contributions to student achievement based on standardized test scores. Predicted test scores are calculated for each student based on external factors, such as attendance, discipline, socioeconomic status, and exceptionalities. After students complete the state standardized tests, their actual scores are compared with their predicted scores to generate a value-added score. This value-added score is used to evaluate teacher effectiveness (Louisiana Department of Education [LDOE], 2014).

A value-added model was implemented in Louisiana in 2010 (LDOE, 2014). Educational leaders, including principals, assistant principals, coordinators, and district personnel, were directed to use VAM generated data along with teacher observations to complete teacher evaluations. While such a model was intended to give educational leaders feedback to identify strengths and areas of growth to support teachers, the data were not perceived as reliable because several components were missing that could have improved its effectiveness (LDOE, 2014). Nine components are considered necessary for VAM effectiveness: a) assessment, b) student growth, c) reliable student data, d) multiple years of data, e) consideration of outliers, f) consideration of student demographics, g) student placement, h) student grouping, and i) calculation. However, only five (i.e., assessment, student growth, reliable data, calculation, and student demographics) were in

place in the state of Louisiana during the initial implementation (Hadfield, Hutchinson-Lupardus, & Snyder, 2012). Researchers found that VAM data negatively affected educational leaders in Louisiana in several ways. They faced higher teacher turnover rates and grievances from teachers who believed the model was not fair (Lipscomb, Teh, Gill, Chiang, & Owens, 2010). They were forced to become more strategic in organizational management by attempting to place teachers with certain students to appear more effective under the model (Bradley, 2013). Jacob and Lefgren (2008) argued that the lack of a direct link to instructional practices which result in higher VAM scores left educational leaders with no clear direction in efforts to provide quality professional development and support to teachers.

After the 2012–2013 school year, VAM data were no longer used to evaluate teachers because Louisiana adopted new curriculum standards and state assessment which would have compromised the reliability of VAM scores. VAM data continued to be generated during the 2013–2014 school year as the state transitioned to new academic standards and assessments. During this time, VAM data were made available to administrators for informational purposes only and not used for teacher evaluations. Louisiana replaced the Louisiana Educational Assessment Program (LEAP), which was the assessment tool used to generate VAM scores, with the Partnership for Assessment of Readiness of College and Career (PARCC) test. PARCC was scored on a scale that differed from LEAP, so measures of student growth were not reliable. Continued research of the model took place in the state between 2013 and 2016 to gather transitional VAM data based on PARCC scores (LDOE, 2014). These data were not used to evaluate teachers. Instead, teachers were evaluated with Student Learning Targets (SLTs) and

formal observations on the Compass rubric. The Louisiana state legislature passed Senate Bill 477 in May of 2016, which stated that VAM would be reinstated in Louisiana to evaluate teachers in the future (Boudreaux, 2016).

Purpose of the Study

This study addressed the impact of VAM, concerns with VAM data, uses and interventions educational leaders provided teachers, and components perceived as necessary for VAM effectiveness as an evaluation tool. The demographics used for this study were position, school size, and experience. The educational leaders in each district varied based on position, school size, and experience. Educational leaders were school- and district-level administrators such as coordinators, assistant principals, principals, and school board personnel. This study aimed to investigate if educational leadership practices, concerns, and perceptions of VAM effectiveness differed based on the demographics of position, school size, and experience. Data from this study of educational leaders could be used for revising VAM in Louisiana.

Educational leaders expressed concerns over the effectiveness of VAM throughout this research, and the data collected in this study illustrated those concerns with the intention of making the model a more effective means of teacher evaluation in Louisiana.

Significance of the Study

Limited research has examined how educational leaders use and perceive VAM data. Young (1996) classified leaders into three groups to compare perceptions of VAM based on position, school size, and years of experience. Most research has been limited exclusively to principals. While previous research compared how different groups perceived VAM, it did not compare how different groups used the data in their practices.

This study gathered information from the perspective of educational leaders of different positions, school sizes, and years of experience regarding the effectiveness of an evaluation system, VAM, on student learning. This study is significant to educational leadership in Louisiana because VAM will be reinstated in the state to evaluate the effectiveness of teachers (Boudreaux, 2016). The Young study (1996) concluded that educational leaders' perceptions of the impact of VAM differed based on position and years of experience, but not school size. However, research from Gagnon (2015) suggested that all three demographics impact how VAM is perceived and used by leaders. If demographics impact leader perceptions of effectiveness, then demographics would likely impact how these leaders use VAM. If educational leaders were using VAM as it was designed, such differences would not exist. Information from the perspective of educational leaders who have used VAM to evaluate teachers may assist policymakers to revise the system to be a more effective tool for evaluation. The information will also contribute to the continuing research on components that affect VAM effectiveness.

The use of VAM data was initiated in Louisiana to support educational leaders in providing meaningful feedback to teachers to improve their effectiveness and produce

higher student performance scores (LDOE, 2014). Dr. George Noell conducted research on the difference between demographics and effective VAM scores among teachers. He used a single demographic, years of experience, in his study. His research compared VAM scores of newer teachers with 0–3 years of experience who had recently completed teacher preparation programs with VAM scores of teachers who had more teaching experience. His research showed years of experience could impact a VAM score (LDOE, 2014).

School size and location may also impact VAM scores. Gagnon (2015) conducted a study comparing VAM scores of teachers in urban, suburban, and rural school districts to determine if a relationship existed between VAM scores and geographical location. The results of the study concluded that teachers in suburban school districts could achieve higher VAM scores than teachers in urban school districts. Rural school districts were among the lowest VAM scores achieved. A relationship also existed between school size and location. Urban, inner-city districts were more populated than suburban and rural districts. Urban districts had more diverse populations and financial resources to support instruction and attract teachers, and therefore produced higher VAM scores than rural districts.

As previously mentioned, Young (1996) suggested that VAM scores are impacted by years of position, school size, and experience. The significance of this study was to investigate if these same demographics affect how educational leaders in Louisiana use the data produced from VAM scores. Educational leaders may perceive and use the information derived from VAM scores differently based on their position, school size, and years of experience.

Educational Leadership Practices in Northwest Louisiana

According to Alvoid and Black (2014), the job of a modern-day principal has transformed into something that would be almost unrecognizable to the principals of the 1960s, 1970s, and 1980s. Principals as building managers became principals as aspirational leaders, team builders, and agents of visionary change. The role of support coach was added to the responsibilities of an educational leader after federal mandates increased accountability in the 1990s and 2000s (Alvoid & Black, 2014). An educational leader, such as a principal or an assistant principal, observes teachers, gives feedback, and provides support in an effort to make them more effective (Alvarez & Anderson-Ketchmark, 2011; Danielson, 2001). In addition to the changes in their role, educational leaders in Louisiana are now also responsible for new teacher and principal appraisal systems that place student performance at the forefront. Educational leaders have had to develop new competencies that include analyzing data from a variety of sources, developing curriculum, learning new pedagogy, and managing human capital to meet the new expectations, all while performing as a task manager and disciplinarian and

maintaining a positive community image. They are also challenged to evaluate and retain quality teachers despite increasing accountability and reforms, such as VAM (Alvoid & Black, 2014).

Statement of the Problem

Prior to 2010, efforts began to revise the Louisiana teacher evaluation system to improve teacher quality and accountability (LDOE, 2014). Although VAM data were generated to solve the problem with teacher evaluations, it created additional concerns and responsibilities for educational leaders. Though educational leaders were supposed to benefit from VAM data to support their practices and improve instruction and student achievement, they had practical and technical concerns about the initial effectiveness (Lipscomb et al., 2010). VAM data were not perceived as valid because several components (i.e., consideration of outliers, student placement, student grouping, and multiple years of data) that could have made it more effective in Louisiana were missing (Hadfield et al., 2012). Nine components are essential for effective implementation of VAM. However, a review indicated that Louisiana had only five of the nine essential components in place (Lipscomb et al., 2010).

When VAM was implemented in 2010, educators protested on the school, district, and state levels for it to be removed as part of the teacher evaluation system (Lipscomb et al., 2010). While educational leaders were aware that VAM data could support their efforts to improve teachers and remove ineffective teachers, they found it difficult to use

VAM to identify specific practices for improvement. These factors discredited the data from VAM as being viable means of evaluation for use among educational leaders (Jacob & Lefgren, 2008).

The Young (1996) study suggested that educational leaders perceived VAM differently based on position, school size, and experience. However, limited research has investigated whether these same demographics affect how leaders use VAM data. If leaders perceive VAM differently, their usage of VAM data in their leadership practices should differ based on position, school size, and experience. Knowledge of how different groups used VAM data can guide improvements for future use in teacher evaluation and support educational leadership practices. The research questions below were designed to investigate this problem by addressing the impact of VAM on practices, its effectiveness as an evaluation tool, how educational leaders perceived it, and the components leaders perceived as necessary for effectiveness.

Research Questions

1. Did the impact of VAM on leadership practices differ based on position, school size, and years of experience in northwest Louisiana?
2. Did concerns of educational leaders about VAM effectiveness differ based on position, school size, and years of experience in northwest Louisiana?
3. Did the uses and interventions (student placement, teacher placement, professional development, giving teachers feedback, more observations, and termination) educational leaders provided to teachers differ based on position, school size, and years of experience?

4. Did educational leaders' perceptions of components necessary for VAM effectiveness differ based on position, school size, or years of experience in northwest Louisiana?

Hypotheses

There were 12 hypotheses for this study based on three variables: position, school size, and years of experience.

Addressing Research Question 1 regarding VAM's impact on leadership practices:

H1: There will be no statistical difference in the impact of VAM when the variable of position is considered.

H2: There will be no statistical difference in the impact of VAM when the variable of school size is considered.

H3: There will be no statistical difference in the impact of VAM when the variable of years of experience is considered.

Addressing Research Question 2 regarding concerns with VAM:

H4: There will be no statistical difference in the concerns educational leaders encounter in VAM effectiveness when the variable of position is considered.

H5: There will be no statistical difference in the concerns educational leaders encounter in VAM effectiveness when the variable of school size is considered.

H6: There will be no statistical difference in the concerns educational leaders encounter in VAM effectiveness when the variable years of experience is considered.

Addressing Research Question 3 regarding the uses and interventions educational leaders provided teachers:

H7: There will be no statistical difference in the uses and interventions educational leaders provided to teachers when the variable of position is considered.

H8: There will be no statistical difference in the uses and interventions educational leaders provided to teachers when the variable of school size is considered.

H9: There will be no statistical difference in the uses and interventions educational leaders provided to teachers when the variable of years of experience is considered.

Addressing Research Question 4 regarding the perception of components necessary for VAM effectiveness:

H10: There will be no statistical difference in the components perceived as necessary for VAM effectiveness when the variable of position is considered.

H11: There will be no statistical difference in the components perceived as necessary for VAM effectiveness when the variable of school size is considered.

H12: There will be no statistical difference in the components perceived as necessary for VAM effectiveness when the variable of years of experience is considered.

Theoretical/Conceptual Framework and Significance

This study was viewed from the educational change theory perspective. According to Fullan (2001), educational leaders can expect problems and resistance with transition, similar to those experienced in Louisiana with VAM data. He identified the need to study schools and educational leaders as they implemented new initiatives, such as VAM, and stated that most studies did not show the process of what schools and educational leaders needed in order to implement effective change. He identified four characteristics of change: need, clarity, complexity, and quality/practicality. He explained that need should be defined and precise from the beginning, not during implementation. Fullan also argued that clarity is essential to the change process because a lack of clarity results in vague goals and a misinterpretation of what the change was supposed to accomplish. Complexity is defined as the level of responsibility each stakeholder has in the change process. The last characteristic, quality/practicality, described whether the change addressed important needs, responded to educator needs, and was concrete (Fullan, 2001).

It was evident that Louisiana needed accountability reform to remain in compliance with the No Child Left Behind Act of 2001, which mandated schools increase their achievement. When VAM was implemented to address this mandate, educators began to challenge the necessity of such an instrument because of a lack of information to clarify what VAM meant for educators (Hadfield et al., 2012). The complexity, or level of accountability, increased for not only teachers, but also for educational leaders, who

were responsible for using the data to provide feedback and strengthen the effectiveness of weak teachers (LDOE, 2014).

Implementation of change could take place once the characteristics were identified. Fullan (2001) identified six steps to the change implementation process: (a) vision-building, (b) evolutionary planning, (c) initiative-taking and empowerment, (d) staff development and resource assistance, (e) monitoring/problem coping, and (f) restructuring. He defined vision-building as all stakeholders in the organization sharing in a goal and participating in efforts to achieve it. The second step of implementing change was evolutionary planning. He defined this stage as the process of adapting implementation because of unexpected situations. Initiative-taking and empowerment enabled stakeholders to develop a collaborative culture and increase morale. Fullan also stated that stakeholders misunderstood and misused staff development. The most successful staff development opportunities had concrete goals and continued training opportunities. Monitoring implementation provided the opportunity to gather data on the change process. Monitoring and gathering data on implementation is crucial to effective transition. Unfortunately, many organizations do not complete this task and continue processes without feedback that could improve the implemented change. Feedback determines how well a change was implemented in an organization and the steps needed to continue improvements. The last step of implementation, restructuring, was how the organization was arranged. The roles of educational leaders, governance, work conditions, and policies were part of the restructuring step. According to Fullan (2001), an effective implementation process must go through all six steps.

VAM was initiated in Louisiana to be an effective change agent to the teacher evaluation system. The purpose of the system was to improve the effectiveness of teachers (LDOE, 2014). However, the change brought about numerous complaints and concerns from teachers and educational leaders. This study investigated the effect that position, school size, and years of experience had on the concerns educational leaders had with the effectiveness of VAM.

Assumptions

There were two assumptions present in this study: the first was that participants would provide honest responses, and the second was that the participants would respond within the timeframe of the research.

Limitations

The study had several limitations. First, the number of participants in the study was limited. Second, the response rate among the participants was lower than anticipated. Finally, the participants included only educational leaders from northwest Louisiana.

Delimitations

Several delimitations guided this study. The first was the choice to study VAM effectiveness. Other problems related to teacher evaluation could have been selected for this study, but were rejected because lack of relevance to the state of Louisiana. The second delimitation was the criterion that participants were required to be educational leaders at some point between the years 2010–2014. A third delimitation was

the geographic location chosen for this study. The results of this study could be generalizable to educators who are (a) educational leaders (b) in the state of Louisiana.

Definitions

For the purposes of this study, the following terms are defined.

Assessment: standardized tests administered to students on an annual basis. These differ by state (Lipscomb et al., 2010).

Compass: the system of evaluation for educators in the state of Louisiana (LDOE, 2014).

Curriculum verification results (CVR): a part of Compass in the state of Louisiana. It was an electronic portal that allowed teachers to verify student rosters. CVR generated the VAM score for a teacher based on the verified rosters (LDOE, 2014).

Educational leader: a principal, a coordinator, an assistant principal, or a district supervisor. Educational leaders were responsible for teacher evaluations (Lipscomb et al., 2010).

End of course (EOC): the type of assessment used in Louisiana for high school credit and graduation (LDOE, 2014).

Iowa Test of Basic Skills (ITBS): the name of the state standardized test administered to students in Louisiana in grade 2 (LDOE, 2014).

Louisiana Educational Assessment Program (LEAP): the state standardized test in Louisiana administered to students in grades 4 and 8 (LDOE, 2014).

Integrated Louisiana Educational Assessment Program (iLEAP): the state standardized test in Louisiana administered to students in grades 3, 5, 6, and 7 (LDOE, 2014).

Partnership for Assessment for College and Career Readiness (PARCC): the assessment administered in 2015 to students in Louisiana. Students that took the PARCC were tested on English and Math skills (LDOE, 2014).

Path: synonym for 'group'. Paths were used in the pilot study of VAM in Louisiana. Students were placed in paths according to their retention status (LDOE, 2014).

Student Learning Target (SLT): goals for student learning set by teachers. Teachers were evaluated on the percentage of students that met the goal (LDOE, 2014).

Value-added model (VAM): a model adopted by states to evaluate teachers by compiling information from several years of statistical data to estimate the effectiveness of a teacher (McCaffery, Lockwood, Koertz, & Hamilton, 2003).

VAM Impact Opinionnaire (VIO): the instrument in this study. The researcher created the VIO after a review of three previous studies on VAMs.

Outline of Study

Chapter 1 outlined this study and provided a history of VAM. Chapter 2 summarizes how educational leaders perceived and used VAM data. Chapter 3 includes information about the pilot study, sample size and selection, the criteria for the sample selection, a description of the data collection procedures, and an explanation of the data analysis. Chapter 4 analyzes the findings and details the results of the survey. The study

was completed within a six-month timeline. During that timeframe, additional supporting research was compiled, the VIO was developed and distributed, and the results were tabulated. Chapter 5 contains a summary of the findings of the research, conclusions, discussion, implication for policy and practice, and recommendations for future research.

CHAPTER 2

REVIEW OF LITERATURE

This literature review on the development of VAM and its impact on educational leadership examines (a) a historical perspective of VAM, (b) the components of VAM effectiveness, and (c) the ability of educational leaders to use value-added data in their leadership practices.

Historical Perspective of VAM

Dr. William Sanders, a professor of statistics at the University of Tennessee, created the first value-added model. In the 1980s, William Sanders began research on VAM with a mixed-model selection based on the research of Charles Henderson (Sanders & Horn, 1994). Henderson applied statistical theories to livestock breeding, in which he treated samples as random subjects with unknown variables. The sample group received specific treatment, while the control group received no treatment. The livestock experiment developed the concept that the treatment livestock received had a greater impact on their breeding than the environment. An input–output relationship existed, and the gains could be measured using statistics.

Sanders applied this mixed-model methodology to the field of education. In theory, a teacher could have greater impact on student achievement than the environment.

As in Henderson's approach, the teacher's impact could be measured using statistics. The Sanders model was developed from an economic theory that an input–output relationship existed in production, as he saw the same types of relationships in various arenas and applied it to education. An input–output relationship existed between teachers and students. His model, the Sanders Model, was adopted in districts across Tennessee during the 1990s, and has since been used in several states, including Louisiana (Sanders & Horn, 1994).

Using longitudinal test data from school districts, Sanders implemented his model in Knox County, Tennessee, and concluded that a correlation existed between teacher influence and student achievement. Other districts in Tennessee then implemented the model. By the mid-1990s, the entire state had implemented the Sanders Model in grades 3–8. The longitudinal data used to comprise VAM scores were taken from the Tennessee Comprehensive Assessment Program (TCAP), a norm-referenced test (Sanders & Horn, 1994). External factors, such as transient student populations, students for whom no data was available, and socioeconomic status, were not considered in the model and raised concerns about its validity in Tennessee. In response, the method of calculation was revised to consider external factors. The first few years VAM was used in Tennessee witnessed a decline in student achievement. Even so, VAM is now a standard component in evaluations in Tennessee, and the data is used to acquire federal and state funding as well as to determine compensation, promotion, retention, and tenures (Lipscomb et al., 2010). Administrators use the data to create school improvement plans and plan professional development each year (Sanders & Horn, 1994).

The initial implementation of VAM posed similar challenges in Louisiana in 2010. The reliability of VAM data was a concern because, like Tennessee, there were groups of students for whom no prior assessment data were available (Lipscomb et al., 2010). Louisiana had an additional challenge with VAM data because the state assessment also changed. The new assessment, PARCC, was not scored on the same scale as the previous assessment, LEAP (LDOE, 2014).

In Louisiana, VAM began as a means of evaluating the effectiveness of college and university teacher preparation programs (LDOE, 2014). In 2001, teacher preparation programs attempted to improve the quality of preservice teachers. Colleges and universities already had three areas of concentration in developing the teacher preparation programs: a) planning, b) implementation, and c) effectiveness. In 2004, the Louisiana Board of Regents supported Dr. George Noell, professor of psychology at Louisiana State University at Baton Rouge, and his research on the growth and achievement of students as based on the quality of teacher preparation programs. His research team piloted the study with new teachers of grades 4–9 in 10 districts. The results of the research indicated that new teachers who trained at certain institutions increased student achievement as much as experienced teachers. The study was replicated in 2006 across the state, and the results were similar to those of the 2004 pilot study. The 2006 study also indicated that teachers impacted student growth the most in their first few years of teaching, but that student growth became stagnant during years 3–8 (LDOE, 2014). While the research on teacher preparation continued, the board of education reviewed its methods of teacher evaluation with plans to include VAM. During the 2009-2010 school year, the

researchers conducted a field test to determine the feasibility of using VAM to evaluate teacher effectiveness in the state of Louisiana. The researchers conducting the VAM field test gathered state standardized test data from 2007–2010. The field test included 328 schools in 20 school districts. The state accountability data system linked students' test scores by subject to teachers (LDOE, 2014). The information provided in the state database included (a) attendance, (b) enrollment, (c) special needs/504 status, (d) proficiency in English, (e) socioeconomic status, (f) number of discipline infractions, (g) race, and (h) gender. With this information, the LDOE predicted a student performance score based on prior test data and enrollment status during 2008–2009, as required by the researchers that conducted the field test (LDOE, 2014).

The state used standard deviations to compare the amount of student growth reported by teachers to other teachers in the state who taught the same grade and subject. Ineffective teachers scored below 11, while effective teachers scored between 11 and 70, and highly effective teachers scored 80 and above. The results of the field test indicated that the model produced stable results and indicators about teacher quality and student achievement (LDOE, 2014). In 2010, Louisiana's Governor, Bobby Jindal, signed a bill into law that mandated the use of the model to evaluate teachers (Lipscomb et al., 2010).

During the 2010–2011 school year, Louisiana implemented VAM in grades 4–8. The VAM score became a weighted percentage of a teacher's evaluation (50%). Teachers received a VAM score based on student assessment scores (LDOE, 2014). Concerns from educators and teacher unions surfaced. VAM calculation became a concern because

teachers received an ineffective rating if their students did not meet predetermined targets. School administrators placed ineffective teachers on intensive assistance. Other ratings included a) effective emerging, b) proficient, and c) highly effective. Standard deviations determined the rankings. Like the pilot study done by Noell, ineffective teachers were ranked 1–10, effective emerging teachers were ranked 11–49, proficient teachers were ranked 50-79, and highly effective teachers were ranked 80–100 (Lipscomb et al., 2010).

VAM data were used alongside an observation tool, Compass. Compass was a rubric used to observe teachers that was based on the Charlotte Danielson Framework of Teaching (LDOE, 2014). While VAM was the measure of student performance, Compass was the professional practice evaluation tool. The new evaluation method resulted in an increase in teacher resignations and retirements. Teacher organizations filed lawsuits against the state for implementing VAM. In fall of 2013, the state legislature voted not to use VAM for the 2013–2014 school year. However, Compass remained a part of teacher evaluation. Louisiana developed and adopted the PARCC assessment for the 2014–2015 school year (LDOE, 2014). Teachers of grades and subjects for which there was no standardized assessment created Student Learning Targets (SLTs). SLTs provided teachers and educational leaders with more autonomy to select the instruments used to measure student growth (LDOE, 2014). In addition to the concerns teachers had with VAM, educational leaders in several states that had used a VAM expressed concerns about the effectiveness of the model and how the data derived from the model were used (Finke, 2012; Lipscomb et al., 2010).

Another problem educational leaders faced in Louisiana was concern with the components of VAM needed for effective implementation. For VAM to be an effective model for teacher evaluation, nine components needed to be in place (Hadfield et al., 2012).

Components of VAM

Nine components of VAM were identified as essential. The first component, assessment, is important because the results of state assessments form the basis of teacher VAM scores. An effective assessment component aligned valid tests from year to year. When VAM was first implemented in Louisiana, LEAP scores were used to generate scores. LEAP scores were compared to the previous year to measure how much growth had taken place. Different interpretations of student scores each year impacted the predetermined achievement score that served as the baseline data for VAM. Aspects of student demographic information, such as socioeconomic status, primary language, and special needs, were not considered additional control variables that determined student performance and VAM scores (Hadfield et al., 2012). In Louisiana, teachers verified their student enrollment prior to the release of final scores. VAM was used in grades 3–8 in core elementary subjects, and in algebra I, biology, and English II at the secondary level. The rationale for using VAM was that (a) teachers were essential and influential to student performance, and (b) the impact of each testing grade used a reliable assessment. A consistent and reliable means of measurement determined student progress. VAM included measuring student growth as a cohort from year to year (Hanushek & Raymond, 2004). Available assessments in all subject areas held all educators equally accountable.

The scoring method was transferable between grades and subjects (Hadfield et al., 2012). However, Louisiana changed its assessment system from the LEAP to the PARCC assessment during the 2013–2014 school year (LDOE, 2014). The test data from that school year was not used to evaluate teacher effectiveness because the scoring of the LEAP did not transfer to the PARCC test. The LEAP score is on a scale of 0–500, while the PARCC test is on a scale of 0–800. It is difficult for educational leaders to effectively use VAM data as part of a teacher's evaluation without consistent and reliable assessment data. It was also challenging to measure student growth when assessments changed each year (Hadfield et al., 2012).

The second essential component of VAM is student growth. Core teachers in lower grades used a state standardized assessment, while core high school teachers used end of course (EOC) test data. As previously mentioned, VAM needed a baseline score to predict student performance from year to year. Teachers of lower primary grades did not receive VAM scores because they used an assessment other than LEAP and PARCC. Baseline data for those grades were not available. Student growth was determined by numerous factors such as special needs, primary language, attendance, mobility, and previous learning. The average performance of a certain student demographic determined achievement. The state compared student performance to the average performance of students in that category. How well the students performed, as compared to similar students, determined the teacher's VAM score (Hadfield et al., 2012).

The third and fourth key components of VAM are reliable student data and multiple years of data. For data to be considered reliable, multiple years of data from a test assessment must be available to calculate VAM scores (Hadfield et al., 2012). Reliable student data were data collected from three years of an assessment. Louisiana used the Iowa Test of Basic Skills (ITBS) for second grade, the iLEAP in the third grade, and the LEAP in the fourth grade. These three tests were scored differently, as the ITBS and the iLEAP were norm-referenced tests, and the LEAP was criterion-referenced. Multiple years of data, in addition to student achievement, gave evaluators a better perspective on how effective or ineffective a teacher was. The use of multiple years of data ruled out external factors that impacted the performance of a student, such as poor testing conditions. The LDOE calculated baseline scores in a database during the 2010–2011 school year with previous years of test data. Administrators used the scores to guide their decisions in completing evaluations (LDOE, 2014). Educational leaders placed some teachers on intensive assistance based on these data. While Louisiana gave an account for having test data, the state department of department did not make adjustments in how a VAM score was calculated based on these data (Hadfield et al., 2012).

The fifth component of an effective VAM score is the consideration of outliers such as missing scores, student attendance, and mobility rate (Hadfield et al., 2012). Educators in Louisiana verified their enrollment roster determined by their VAM score (LDOE, 2014). The purpose of teachers verifying their rosters was to consider the attendance factor. This process allowed teachers and educational leaders an opportunity to verify and certify that the students included in their VAM score were students they

instructed for a period of time as determined by the LDOE. For example, in Louisiana, a student enrolled in a class who maintained regular attendance from October 1 through February 1 of the school term was included in a VAM score (Hadfield et al., 2012).

The sixth component of VAM is consideration of student demographics, such as race and poverty. Louisiana accounted for special education status, minority status, poverty status, and English as a second language status when determining baseline scores (Hadfield et al., 2012; McCaffery et al., 2003). Louisiana made such considerations by using a statistical formula to adjust the expected performance score of a student. The average performance of different demographics was calculated to determine performance targets. How much higher or lower a student performed as compared to the average score of similar students determined the VAM rating of a teacher. While educational leaders could use these considerations to adjust their professional observations, there was no means for leaders to adjust VAM scores (Hadfield et al., 2012).

The next key component of VAM is student placement. Teachers of certain student groups may be at an advantage for achieving a higher VAM score. Educational leaders were expected to use random placement to create classes to rule out bias and provide a fair and equal opportunity for all teachers to achieve a higher VAM score. Louisiana did not use random placement to create classes, and this caused organizational management challenges for educational leaders. Teachers developed preferences for certain students and tended to compete with other teachers to ensure their own personal success instead of collaborating with each other for the success of all students (Hadfield et al., 2012).

The eighth component of VAM is student grouping. Educational leaders were supposed to assign classes through random means (Bradley, 2013). Many schools grouped students in classes by ability, and special schools, such as magnet schools, had selective admission processes. This compromised random placement and selection. Schools in which some teachers taught only advanced students while others taught lower-performing students made it challenging for some teachers to achieve a successful VAM score. Demographics also limited the diversity of schools because school populations reflected the neighborhoods they served. This factor resulted in socioeconomic disparities among schools. Some schools had more affluent students than others (Hadfield et al., 2012). Educational leaders had the challenge of finding the balance to place students not only based on what was best for student instruction, but best for teacher VAM scores (Bradley, 2013).

The ninth and final component of VAM is calculation. In Louisiana, the method of calculation did not gauge the overall quality of a teacher. VAM could measure neither the academic and verbal ability of students nor the content knowledge, professional development, pedagogy, experience, and certification of teachers (Darling-Hammond, 2002). Factors, such as the mood of a student on test day, impacted VAM scores (Hanushek & Rivkin, 2010). The model did not distinguish or differentiate data for teachers who taught multiple subjects or grade levels. VAM linked student test performance to the quality of instruction a teacher provided over the course of the year. It did not consider whether there were factors beyond the control of the teacher that affected student test performance (Hadfield et al., 2012). This component generated the need for

educational leaders to use other observations in conjunction with VAM scores to account for the professional practices of teachers (Danielson, 2001). However, even when professional practices were considered, it was still challenging for educational leaders to identify which effective practices influenced student achievement (Jacob & Lefgren, 2008).

Value-Added Model and Educational Leadership

Researchers have conducted several studies of educational leaders' perceptions of VAM and how it impacted their practices. Young (1996) conducted a study in Tennessee that compared government officials' perceptions of VAM to those held by school district employees. Eight questions guided his research and addressed topics such as whether the system was effective in improving teacher quality, student performance, teacher morale, instruction, the curriculum, test scores, and the cause of stress, as well as being a fair means of evaluation. Young also developed three hypotheses. He predicted a significant difference in perception between school district employees and the government officials participating in the study, among different groups of district employees, and from participant demographics.

Young's (1996) instrument was a questionnaire administered to a sample population that included teachers, principals, superintendents, state legislators, and representatives from the state department of education in Tennessee. The school- and district-level personnel served grades 3–8 in Tennessee. The study included 85 school superintendents, 115 principals, 257 teachers, and 57 state department personnel. The

questionnaire had 13 questions: three demographic questions and 10 about VAM. Participants had to give Likert-scale responses stating their level of agreement to the statements in the survey. The responses were analyzed by descriptive statistics, and the hypotheses were analyzed by an analysis of variance (ANOVA) (Young, 1996). The ANOVA is an analysis tool used to measure the degree of difference between distinct groups

As in Louisiana, principals and teachers in the Young study disagreed over whether VAM improved test scores, whereas the superintendents and district personnel agreed that the model had a positive impact on test scores. The principals, teachers, and superintendents disagreed over whether the model measured teacher performance, whereas the state officials agreed that VAM was an effective measure of teacher performance. The principals, superintendents, teachers, and state officials in Tennessee agreed that the system was not fair and did not improve instruction. However, state officials believed that it improved curriculum, whereas principals, superintendents, and teachers disagreed on this issue. The same three groups concluded that the system did not have a positive effect on teacher morale and that it did not offer students equal opportunities to make gains, whereas the state officials held the opposite beliefs in those situations. Only the state officials agreed that VAM use improved student achievement. Conversely, most participants agreed that VAM contributed to teacher stress. The study concluded that there was a significant difference in perception among the teachers, principals, and superintendents concerning VAM. There were also differences between the perceptions of the district employees and the state department officials. The

demographics of the participants did affect their perceptions of VAM based on position. The district-level stakeholders did not support VAM implementation during the period addressed by the study; only the state department officials supported it. Educational leaders had different perceptions not only about the impact of VAM data, but about its effectiveness in evaluating teachers (Young, 1996).

Geithman (2009) conducted a study of principals' perceptions and their effectiveness at using VAM data to identify effective teachers. The purpose of the study was to determine whether the principals' perceptions of effective teachers on campus corresponded with VAM's determinations of teacher effectiveness. Geithman's research questions considered whether there was a correlation between principals' observations and test-score growth as determined by VAM. The participants were six elementary school principals in California. Geithman asked the principals to rank teachers of particular grades during a school term according to their English/language arts and math test scores on the California Standards Test. The teachers remained anonymous. Geithman accessed the test scores for the students of the teachers who had been ranked. Geithman generated data for a three-year period to determine a VAM score for each teacher and then measured VAM scores against the principals' rankings. Geithman computed VAM scores by calculating the mean of the years of data used for the study for each teacher before comparing the mean to the district-level mean for the same years. If the teacher ranked above the district mean, he ranked the teacher as more effective than those that ranked below the district mean. Geithman used the Statistical Package for Social Sciences (SPSS) to identify correlations between the principals' rankings and the

district rankings. He also asked the principals to complete the Principal Accountability Survey, which consisted of 13 Likert-scale items. The responses ranged from "strongly disagree" to "strongly agree". He coded the survey responses using SPSS to determine whether a correlation between the principals' responses and their VAM rankings existed. Geithman found no correlation between the principals' perceptions and VAM scores.

Bradley (2013) conducted a study on the practices of principals who used a VAM to plan for organizational improvement. The purpose of the study was to determine how principals used VAM in their leadership practices to plan for improvements in their schools, including improvements in teacher instruction. Bradley based his theoretical framework on the path–goal theory, which holds that effective leaders set reasonable goals and enhance the work environment. The study investigated whether principals interpreted VAM data to set goals for school improvement and the organization of teachers. Bradley collected data through interviews and by gathering documents to support the information derived from the interviews. Bradley conducted two sets of interviews. The sample consisted of 11 principals in the state of New York. Bradley based the first set of interviews on how the principals used VAM to set goals based on the path–goal theory, and he based the second set of interviews on the responses from the first set. Minutes from meetings, agendas, school report cards, and district reports supported the research and clarified how the principals used VAM in the school vision and goals. Bradley concluded that the principals were skeptical of the data generated by VAM and used it only because of state department mandates. The participants understood that there was value in using the data; however, they still preferred their own

observation-based evaluation data. The research concluded that teacher experience and teacher observations were the best criteria for determining the effectiveness of a teacher. VAM influenced principals' personnel decisions regarding hiring, recommending teachers for a transfer, and placing teachers on probation. The principals did not use VAM data for short-term planning. When the data were considered for such decisions, other sources of information from district and state reports were also considered. The principals in the study wanted to use VAM to support their attempts to improve the performance of teachers they deemed ineffective; however, this use of VAM was problematic because the principals did not know exactly which strategies could help teachers improve their VAM scores.

Finke (2012) conducted a study of how 87 principals used VAM in high-performing schools in Ohio. The purpose of the study was to determine whether school principals used a process to place students with teachers based on the teacher's VAM score. The study used a mixed-methods approach. A student-placement survey was administered to principals, and the data collection continued with a set of interviews about the protocol used for student placement. The survey responses included Likert ratings and responses to open-ended questions. Finke coded the responses to the surveys and interviews to identify trends and themes in the principals' use of VAM in student placement. Of the 87 principals who participated in the survey, 33 indicated that they would participate in additional interviews for more information. Finke selected six participants for the interviews based on demographics and background. The initial survey asked questions about the backgrounds of the participants and the demographics of their

schools. It also provided a definition of VAM as applied in the state of Ohio. The second section of the survey consisted of Likert-response questions about the placement of students in reading and math classes, how often the data were reviewed, district influences, student behavior, parent information, how the data were shared in the building, and collaborations with teachers. The themes discovered from the data were a) collaboration, b) balance, and c) placement. The principals and teachers worked together in the student placement process. The principals believed it was important to match students and teachers with complementary personalities. Teachers made student recommendations based on data, and the principals made the final decisions. Principals considered the second theme, balance, in the student placement process. Principals achieved balance by reviewing student behavior and distributing problematic students equally among the staff. In terms of placement, the principals reviewed VAM scores at the beginning of the school year; however, could not use the scores for student placement because the scores were not delivered to them prior to the beginning of the school year. Although VAM data were not used for the initial placement of students, the data were used to identify students in need of intervention and as feedback to help teachers improve instructional practices.

Lloyd (2008) conducted a study of the perspectives and practices of district-level specialists implementing VAM in Ohio. The research questions asked about the efficacy of the specialists upon being trained to implement the model, the organizational impact of the system on the district as perceived by the specialists, and what factors impacted the success of the model in Ohio. The sample population was drawn from eight districts in

Ohio. A 38-question survey was given to 431 specialists across the eight districts. The participants responded to questions using a 5-point Likert scale, which ranged from "strongly agree" (5) to "strongly disagree" (1). Four additional questions were open-ended. The survey consisted of four parts: (a) efficacy, (b) impact on organization, (c) impact on success, and (d) professional development. Lloyd analyzed results with SPSS to generate descriptive statistics. He conducted an ANOVA to determine whether there were differences among the cluster groups. He analyzed the open-ended questions by coding to identify themes. The results indicated that the specialists needed more training in how to implement VAM in their districts. The results also showed that the specialists wanted more information about how to use VAM data as opposed to more information about the statistical process of data calculation.

Jacob and Lefgren (2008) conducted a study of principals' ability to identify effective teachers. The purpose of the research was to determine whether subjective evaluations from principals produced results like those generated by VAM. The sample consisted of 201 teachers from grades 2–6 in a district in the western United States. The sample was 84% female and 16% male. On average, the teachers in the sample had 12 years of experience and were over the age of 40. The principals of the teachers responded to a survey in which they rated the teacher on overall effectiveness on a scale of 1 ("adequate") to 10 ("exceptional"). The principals rated several teacher characteristics that influenced teacher effectiveness. These characteristics included work ethic, dedication, classroom management, parental support, relationships, and test scores. The researchers compared the overall teacher effectiveness score given by the principal to a VAM score generated by the state. The results indicated that the principals' ratings were

similar to VAM ratings of effectiveness. The top 10% of teachers that the principal ranked as effective were also considered effective with VAM scores. The bottom 10% of teachers considered ineffective by principals were also considered ineffective by VAM. Their ratings of characteristics also indicated the factors that contributed to teacher effectiveness in these categories. However, the ratings for the 80% of teachers that ranked between the two measures were not as distinct. The principals identified average-performing teachers, whose VAM scores ranked between 11% and 79%. However, when compared to the ratings of characteristics, there was no indication of which characteristic could help them improve their performance. Therefore, although VAM scores produced data that were helpful in supporting the principals' evaluations, the data did not provide information about the areas of instruction in which teachers could improve their effectiveness. The principals' evaluations, however, provided feedback that could be used to help teachers improve student achievement.

Summary

This literature review summarized the research on how educational leaders have perceived and used VAM data in their leadership practices. Because VAM was used in Louisiana between 2010 and 2014 and may be used again in the future, it is beneficial to conduct similar research that can support its future implementation in the state of Louisiana. Educational leaders are important to its implementation, so this study will provide information needed to ensure VAM is a supportive resource for educational leaders in their roles to improve the quality of teachers in Louisiana. Chapter 3 includes

information about the pilot study, sample size and selection, the criteria for the sample selection, a description of the data collection procedures, and an explanation of the data analysis.

CHAPTER 3

METHODOLOGY

This chapter presents information about the research design, the process of approval for the study, the development of the survey instrument, the distribution of the survey through a pilot study, the revision of the survey instrument, the final distribution of the survey, and methods of data analysis. Based on the literature review, it was determined that further research on VAM was necessary. The purpose of this study was to investigate if differences in leadership practices, concerns, and perceptions of VAM effectiveness existed among educational leaders in Louisiana based on the demographics of position, school size, and experience. The design of this study was quantitative. Permission to conduct this study was granted from Louisiana Tech University and districts in the state of Louisiana (Appendices A–D).

A survey instrument was developed, the Value-Added Instrumentation Opinionnaire (VIO) because no suitable instrument existed that addressed the research questions. The VIO was based on three surveys used in previous research on VAM. This chapter describes the procedure by which the VIO was created. Each of this study's research questions was addressed by items in the VIO. This study developed 12 hypotheses. This chapter concludes with a discussion of how the VIO results were compiled and the methods used to analyze the results (Appendix E).

Research Design

The design of this quantitative study was descriptive and comparative. The data on educational leaders' perceptions and uses of VAM were collected by means of a survey. The survey research was appropriate for this study because it was a quantitative study (Gall, Gall, & Borg, 2007). The study's research questions were as follows:

1. Did the impact of VAM on leadership practices differ based on position, school size, and years of experience in northwest Louisiana?
2. Did concerns of educational leaders about VAM effectiveness differ based on position, school size, and years of experience in northwest Louisiana?
3. Did the uses and interventions (student placement, teacher placement, professional development, giving teachers feedback, more observations, and termination) educational leaders provided to teachers differ based on position, school size, and years of experience?
4. Did educational leaders' perception of components necessary for VAM effectiveness differ based on position, school size, and years of experience in northwest Louisiana?

Hypotheses

There were 12 hypotheses for this study based on three variables: position, school size, and years of experience.

Addressing Research Question 1 regarding VAM's impact on leadership practices:

H1: There will be no statistical difference in the impact of VAM on leadership practices when the variable of position is considered.

H2: There will be no statistical difference in the impact of VAM when the variable of school size is considered.

H3: There will be no statistical difference in the impact of VAM when the variable of years of experience is considered.

Addressing Research Question 2 regarding concerns with VAM:

H4: There will be no statistical difference in the concerns educational leaders encounter in VAM effectiveness when the variable of position is considered.

H5: There will be no statistical difference in the concerns educational leaders encounter in VAM effectiveness when the variable of school size is considered.

H6: There will be no statistical difference in the concerns educational leaders encounter in VAM effectiveness when the variable years of experience is considered.

Addressing Research Question 3 regarding the uses interventions educational leaders provided to teachers:

H7: There will be no statistical difference in uses and interventions educational leaders provided to teachers when the variable of position is considered.

H8: There will be no statistical difference in the uses and interventions educational leaders provided to teachers when the variable of school size is considered.

H9: There will be no statistical difference in the uses and interventions educational leaders provided to teachers when the variable of years of experience is considered.

Addressing Research Question 4 regarding the perception of components necessary for VAM effectiveness:

H10: There will be no statistical difference in the components perceived as necessary for VAM effectiveness when the variable of position is considered.

H11: There will be no statistical difference in the components perceived as necessary for VAM effectiveness when the variable of school size is considered.

H12: There will be no statistical difference in the components perceived as necessary for VAM effectiveness when the variable of years of experience is considered.

Population and Sample

The sample population consisted of educational leaders in six districts in northwest Louisiana. Letters were written to the superintendents of nine districts that stated the purpose of the study, the researchers' university affiliation, and how the results would be used in the research. Six districts agreed to participate in the study, and the remaining three did not respond to the letter. Approval to use human subjects was granted from Louisiana Tech University (Appendix A). For this study, educational leaders were defined as school administrators responsible for conducting teacher evaluations. These leaders included principals, assistant principals, coordinators, and district personnel in public K–12 settings. The sample consisted of 328 educational leaders in the state of Louisiana. E-mail addresses were collected by school board clerical staff and contact lists on websites and compiled into a master contact list. An email with a link to the survey was sent to each participant. The survey included an introductory statement that indicated

who the researcher was, the nature of the study, and how the results would be used. The statement also indicated that participants' responses would remain confidential. Before participants could complete the online survey, they were asked to verify that they used a VAM between 2010 and 2014. Those who did progressed to the survey.

Instrumentation

After a thorough review of the literature on VAM, the VIO was created to determine the impact of VAM on educational leaders. No suitable instrument existed to address this issue. The VIO was developed after a review of three studies on VAMs. Portions of three instruments developed by Young (1996), Finke (2012), and Hadfield et al. (2012) were the basis of the VIO. Taken together, these three instruments addressed this study's research questions.

Young Instrument: Value-Added Questionnaire. The first part of the VIO was based on Young's instrument (1996), which analyzed educational leaders' perceptions of VAM in Tennessee. The study was quantitative, and the instrument used for data collection was a survey titled the Value-Added Questionnaire. The first three items of the Young questionnaire were demographic questions about the participant. The remaining 10 questions addressed the participants' perceptions of the impact of VAM on instruction, the assessment system, and curriculum. The Young instrument was reviewed by a panel of educators with advanced degrees. Young used Cronbach's alpha to test the reliability of the instrument. During the pilot study, Cronbach's alpha (α=.84) established reliability, and the final questionnaire was (α=.95). Young used multiple statistical

techniques to analyze the data, beginning with descriptive statistics. Percentages and frequency of responses were tabulated. The results of the data were categorized by position, and an ANOVA was run to determine whether there were differences in the responses of participants based on their positions. Items 1–7 of the VIO were based on Young's instrument (1996). Dr. Young granted the author written permission to use the study (Appendix F).

Finke Instrument: Student Placement Survey. The second part of the VIO was based on Finke's instrument (2012). The demographic questions in the Young and Finke studies were nearly identical. Finke (2012) conducted a mixed-methods study that included a survey and interviews. Finke used the triangulation method to analyze the data from the Likert responses to the survey, responses to open-ended questions, and interview data. Finke developed his survey based on data from student placement surveys. His study aimed to identify themes among principals' responses about how they used the data generated from VAM. He began with a pilot study to determine how school principals had used VAM data in their schools. The pilot study consisted of interviewing four principals in Ohio. He coded the transcripts and identified themes. The survey contained a demographic section and sections based on general usage of VAM, placement, student behavior, parental involvement, and teacher information. Like Young, he used a Likert scale. Eight principals reviewed the survey instrument for validity and usability (the survey was administered electronically). His sample of 87 educational leaders consisted of males and females with a range of administrative experience and education levels.

Finke analyzed his data with descriptive statistics and coding. He graphed the data on a scatter plot against regression lines to determine whether a linear relationship was present. Finke tested regressions with the economically disadvantaged students, students with disabilities, minority students, and multiracial students. Items 8, 9, 10, and 12 of the VIO were based on Finke's instrument (2012). Dr. Finke granted permission to use his study via email (Appendix G).

Hadfield et al. Instrument: Value-added essential components. Item 11 of the VIO was based on the survey results of Finke (2012) and Hadfield et al. (2012). Hadfield et al. (2012) used a comparative study that identified nine common components used for VAM implementation. A research team conducted the study, which sought to determine (a) whether VAM was a reliable teacher evaluation method, (b) the essential components of VAM, and (c) how states implemented teacher evaluation instruments that incorporated VAM component. The team conducted a comparison study using nine years of research literature on VAMs. From the literature review, they identified key themes of the research. After consulting with the researchers, the team used a comparison matrix. Nine essential components were derived from the research: (a) utilizes student test scores, (b) measures student growth, (c) contains several years of evidence, (d) uses reliable data, (e) addresses missing scores and data, (f) considers factors of student background, (g) randomly groups students, (h) performs complex calculations, and (i) focuses on math and reading scores. The research team removed the ninth component because many of the states involved in the study used value-added scores to evaluate teachers of all core subjects. The comparison matrix, which included the remaining eight essential

components, collected and analyzed data from all 50 states. Data were divided into four categories: states that used VAM, states prepared to use VAM, states in the piloting stage of implementing a model, and states that did not use a model at all. From that data, seven states emerged for use in the remainder of the study: Florida, Louisiana, New York, Ohio, Oklahoma, Pennsylvania, and Tennessee. The team also collected models instruments from each state as well as information from each of their state department websites. The team compared the states' use of the components and compiled the results in a chart. The chart indicated that the states implemented VAMs inconsistently. These nine components were selected for use in the present study because Louisiana used five of the nine components (Hadfield et al., 2012). Information regarding educational leaders' perceptions of the effectiveness of these nine components was needed, hence this research study. Through e-mail, Dr. Hadfield granted permission to use his research about the components to develop the VIO (Appendix H).

The VIO. The first item on the survey (Appendix E) was a disclaimer statement to the participant that explained the confidentiality of the responses and the consent agreement to the terms of the survey. The subsequent items (2–5) were demographic questions about which district the participant worked in, whether the participant was an administrator between 2010 and 2014, the participant's amount of experience as an administrator, the size of the school in which the participant worked, and the participant's position. The next items (5–6) consisted of statements the participants had to rate on a Likert scale, regarding their perceptions of VAM (Young, 1996). The responses to these items included the following options: "strongly disagree," "disagree," "undecided,"

"agree," and "strongly agree." The next four questions asked the participant to select "yes," "no," or "not applicable" (Hadfield et al., 2012).

Item 7 of the VIO addressed Research Question 1, which asked educational leaders to identify the components they perceived as necessary for the implementation of VAM. This item was based on a question from Hadfield et al. (2012) and was presented in a checklist format that required participants to provide a "yes" or "no" response to each component. Item 8 of the VIO addressed Research Question 2, regarding the concerns educational leaders encountered. The question was based on Finke's (2012) literature review. Item 9 of the VIO addressed Research Question 3, which inquired about how VAM data affected educational leaders. Items 10 and 11 of the VIO addressed Research Question 4. Item 10 was based on Finke (2012), and Item 11 was based on Hadfield et al. (2012).

Procedure

Louisiana Tech University granted permission to use human subjects (Appendix A). A proposal that described the study and the participants was submitted to the university. A copy of a letter requesting permission from each superintendent to conduct the study in each district was submitted to the university (Appendix C). Permission letters were mailed to nine districts, and the name of each district that approved administration of the survey was submitted to the university (Appendix B). Two weeks was the timeframe for the approval.

Six districts granted permission to conduct the research via e-mail. The remaining three districts did not respond. Once the university granted human use/Institutional

Review Board (IRB) approval, a list of e-mail addresses of educational leaders was compiled in the six districts that agreed to participate in the study. The names and e-mail addresses of the educational leaders were available on the websites of four school districts. The secretary to the superintendent of one district compiled a contact list of the educational leader information and e-mailed me the list to distribute the survey. A telephone call to the school board office of the sixth district resulted in e-mail information being provided over the phone. An e-mail contact list of educational leaders in the districts for participation in the survey was compiled. The e-mail list was then exported into Survey Monkey for distribution.

Pilot Study

A peer panel established the validity of the VIO before the pilot distribution (Gall et al., 2007). Finke (2012) and Young (1996) used the same method to establish the validity of their instruments. The panel consisted of four educational leaders: a principal with 0–5 years of administrative experience, a principal with 6–10 years of administrative experience, a district-level administrator with 0–5 years of administrative experience, and a doctoral student with 6–10 years of administrative experience. They also completed the web-based survey to determine its usability. The panel reviewed the instrument for trustworthiness, ambiguity, and honesty.

Once the panel determined the validity of the questionnaire, a pilot study was conducted to determine the usability and reliability of the survey instrument. The VIO was revised by modifying the survey instruments from three previous studies; therefore, a pilot study was needed. The beginning of the questionnaire included a disclaimer that

stated that responses from the participants would not impact their employment. Responses and participation remained confidential. Survey Monkey distributed e-mail messages containing a link that directed participants to the VIO. Participants who did not complete the survey within one week received a reminder e-mail. A second reminder was sent the following week, and the final reminder was sent to participants two weeks after the initial e-mail. In the pilot study, 328 participants received the VIO pilot survey by e-mail. The number of respondents was 135, which resulted in a 40.8% response rate. Like Young (1996), Cronbach's alpha ($\alpha = .70$) established the reliability of the VIO.

Based on the pilot study, the VIO was revised to prevent participants from skipping or not responding to questions. Item 7 became a Likert-scale question that determined the degree to which participants agreed or disagreed with the statement. Item 8 required a response to each part of the question and clarified the direction of the concerns. Item 9 became a Likert-scale question that determined the degree of VAM use among educational leaders. A third category, "non-applicable," was added to Item 10, based on the responses from the pilot study. The category "non-applicable" provided clarification as to why participants did not select or use that component. The Item 11 revision required participants to respond to each component listed in the question. The Item 12 revision required a response to each component, and it included a "non-applicable" category to determine whether interventions were not used or were not applicable to the participant's situation.

After the pilot VIO revision, a new version was e-mailed to 329 participants through Survey Monkey. The e-mail message contained a link to the survey.

Participants who did not respond received a reminder e-mail two days after the initial distribution. A second e-mail reminder was sent to participants five days after the initial distribution. Participants received a final e-mail reminder seven days after the initial distribution.

Data Analysis

Survey Monkey was used to summarize the data. The results of the VIO from the 105 completed surveys were converted into SPSS for additional analysis. The results of the survey questions were expressed as percentages and frequencies. Cronbach's alpha (α = .699) determined the relationship value and reliability of the final version of the VIO. Like the Young study, the p-value used was .05. An ANOVA was used to determine if differences existed among the responses based on position, school size, and years of experience for Item 7 of the VIO. Item 7 was a Likert-style question. A chi-square analysis was used to determine significant differences between the groups based on the same variables for Items 8–12, in which there were two available responses: "yes" and "no."

Conclusion

Chapter 3 provided information about the development of the pilot VIO and the final VIO instrument. It also provided information about how the participants were selected and administered the VIO instrument. A description of data analysis procedures was also presented Chapter 4 analyzes the findings and details the results of the survey.

CHAPTER 4

RESULTS AND ANALYSIS

The purpose of this study was to investigate the impact of a Value Added Model (VAM). Specifically, this study investigated concerns educational leaders had with the model, use of data for interventions they provided to teachers, and the components they perceived as necessary for VAM effectiveness as an evaluation tool. The demographics used for this study were educational leaders' position, school size, and experience. This chapter presents the results of the VAM Impact Opinionnaire (VIO) survey and an analysis of the data as they relate to the research questions. The results are presented in five parts: (a) total results with descriptive statistics, (b) results based on school position, (c) results based on school size, (d) results based on years of experience, and (e) results of the hypotheses and research questions. The hypotheses were tested, and the four research questions were answered. Throughout the chapter, the results of the VIO are presented with descriptive and inferential statistics, and organized into tables to illustrate the responses to each item in the VIO. ANOVA and chi-square tests were conducted for items in which there were groups that responded to items differently based on three variables: position, school size, and years of experience. The means and standard deviations for responses to items in the VIO were calculated and reported by the total group and the subgroups of position, school size, and experience.

Descriptive Analysis Results

The first distribution of the final VIO received a total of 35 responses. The second request yielded an additional 53 responses, and the third request yielded an additional 36 responses, for a total of 134 responses, which represented a 40.7% response rate. A review of the responses showed that 29 responses were either incomplete or disqualified from the survey, thus yielding a total of 105 complete and usable responses for this study, or a 31.9% response rate. Those disqualified responded "no" to Item 2 of the VIO or exited the survey prior to completing all items.

Table 1 provides the return rate of the VIO by district.

Table 1

Return Rate by District

District	#Sent	#Returned	%Returned
A	199	68	34.17
B	74	25	33.78
C	22	0	0
D	6	5	83.33
E	21	5	23.81
F	7	2	28.57
Total	329	105	31.91

Note. $N = 105$. principal = 45; assistant principal = 38; other = 22.

The result of the Cronbach's alpha after the pilot study administration was (α=.699). The Cronbach's alpha based on the standardized items was (α= .71). Items 3–6 were analyzed by descriptive statistics. As shown in Table 1, a total of 329 participants in six districts received the VIO, of which 105 responded to be used for data analysis.

The number distributed by district ranged from a high of 199 in District A to a low of 6 in District F. Table 1 compares the percentage of return in each district, which addressed Item 3 in the survey.

The results of the survey were classified by urban and rural districts for the sake of comparison. The response rate by district type is presented in Table 2.

Table 2

Return Rate by District Type

District Combination	#Sent	#Returned	%Returned
Urban (A)	199	68	34.17
Urban (B)	74	25	33.78
Rural (C-F)	56	12	21.42
Total	329	105	31.91

Note. $N = 105$. principal = 45; assistant principal = 38; other = 22.

The urban districts that participated in the study were Districts A and B. The remaining four districts were rural. These participants were combined to form group C

due to low response rates. The district with the highest percentage of participation was A (34.17%), followed by B (33.78%). District A, however, had a higher number of surveys distributed to participants (199) compared to B (74). Among the rural districts (C-F), there were 56 surveys distributed, and 12 returned.

Table 3 illustrates the rate of participation by position, which addressed Item 6 in the survey.

Table 3

Return Rate by Position

Position	#Sent	#Returned	%Returned
Principal	132	45	34.09
Assistant principal	139	38	27.34
Other administrators	58	22	37.93
Total	329	105	31.91

Note. $N = 105$. principal = 45; assistant principal = 38; other = 22.

Of the participants, 132 were principals, 139 were assistant principals, and 58 were educational leaders in positions other than principal or assistant principal. Although more assistant principals received the VIO, they had the lowest return rate. The return rate was highest among administrators other than principals and assistant principals,

namely coordinators and district-level personnel. The assistant principals had the lowest return rate. Of the 132 surveys sent to principals, 43 were returned (34.09%). Of the 139 surveys sent to assistant principals, 38 were returned (27.34%). Of the 58 surveys sent to educational leaders other than principal or assistant principal, 22 were returned (37.93%).

Table 4 illustrates the rate of participation by school size, which addressed Item 5 in the survey.

Table 4

Return Rate by School Size

School size	#Sent	#Returned	%Returned
Small (0–299)	20	9	45.00
Medium (300–599)	159	36	22.64
Large (600 or more)	150	60	40.00
Total	329	105	31.91

Note. $N = 105$. principal = 45; assistant principal = 38; other = 22.

Of the 329 surveys sent to participants, 20 went to administrators in small school settings, 159 went to administrators in medium school settings, and 150 went to administrators in large school settings. The administrators in small school settings had the highest response rate (9 out of 20 responses, 45%). Administrators in large school settings had the second-highest return rate (60 out of 150 responses, 40%). The administrators in medium school settings had the lowest response rate, with only 36 out of 159 responses returned (22.64%).

Table 5 illustrates the rate of participation by years of administrative experience, which addressed Item 4 in the survey.

Table 5

Return Rate by Years of Experience

Years of Experience	#Returned	%Returned
0–5	9	8.57
6–10	36	34.29
11 or more	60	57.14
Total	105	

Note. $N = 105$. principal = 45; assistant principal = 38; other = 22.

Of the 105 usable responses, 9 were completed by administrators with 0–5 years of administrative experience, for a response rate of 8.57%. Administrators with 6–10 years of experience had a response rate of 34.29%, or 36 out of 105 surveys returned. Most participants who responded to the survey had 11 or more years of experience, for a return rate of 57.14%, or 60 out of 105 surveys returned.

Table 6 presents data from Item 7 of the VIO instrument. It was a Likert-scale question analyzed with descriptive stats. Tables 6–11 illustrate the frequency results for each item in the question.

Table 6

Descriptive Statistics: Impact of VAM

Item	#SD	%SD	#D	%D	#U	%U	#A	%A	#SA	%SA
Improves Achievement Scores	18	17.14	31	29.52	15	14.29	33	31.43	8	7.62
Measures Teacher Performance	20	19.05	25	23.81	11	10.48	42	40	7	6.67
Is Fair to All Teachers	41	39.05	40	38.10	11	10.48	11	10.48	2	1.90
Improves Instruction	14	13.33	25	23.81	19	18.10	38	36.19	9	8.57
Improves Curriculum	24	22.86	37	35.24	15	14.29	27	25.71	2	1.90
Has a Positive Effect on Teacher Morale	45	42.86	45	42.86	11	10.48	4	3.81	0	0
Equal Opportunity for Gain	18	17.14	32	30.48	20	19.05	30	28.57	5	4.76
Did not Contribute to Teacher Stress	67	63.81	34	32.38	2	1.90	2	1.90	0	0
Shows Effect of Teacher on Student Learning	28	26.67	36	34.29	15	14.29	24	22.86	2	1.90

Note. $N = 105$. principal = 45; assistant principal = 38; other = 22.

Table 6 reveals that almost half of the educational leaders (46.66%) responded that they disagreed or strongly disagreed that VAM improved student achievement scores. Fifteen educational leaders (14.29%) were undecided about the statement. Most educational leaders (77.15%) disagreed or strongly disagreed that VAM was fair to all teachers. When asked whether VAM improved instruction 47 of the educational leaders (45.06%) agreed or strongly agreed. Most educational leaders (58.10%) disagreed or strongly disagreed that VAM improved the curriculum. Likewise, 90 educational leaders (85.72%) either disagreed or strongly disagreed that VAM had a positive impact on teacher morale.

Almost all the educational leaders felt that VAM contributed to teacher stress; specifically, 101 respondents (96.19%) either disagreed or strongly disagreed with the statement that VAM did not contribute to teacher stress. Most educational leaders disagreed that VAM was effective in showing teacher effect on student learning. In fact, 64 educational leaders (60.96%) either disagreed or strongly disagreed with the statement that VAM was an effective means of showing teacher effect on student learning.

In conclusion, the educational leaders disagreed that VAM was effective in showing the effects on student learning. While they felt that VAM could improve instruction, they also argued that it (a) did not improve student achievement scores, (b) was not fair to teachers, (c) did not improve the curriculum, (d) did not have a positive impact on teacher morale, (e) did not offer equal opportunity for gain, (f) did not show the effect of the teacher on student learning, and (g) contributed to teacher stress.

Table 7 addresses Item 8 of the VIO, which asked educational leaders to identify concerns they encountered with VAM.

Table 7

Descriptive Statistics: Concerns over the Use of VAM

Concern	#Yes	%Yes	#No	%No
Time Management	63	60	42	40
Stress	73	69.52	32	30.48
Changes in Faculty	59	56.19	46	43.81
Teacher Grievances	43	40.95	62	59.05
Scheduling Difficulties	43	40.95	62	59.05

Note. $N = 105$. principal = 45; assistant principal = 38; other = 22.

Of the educational leaders, 63 (60%) experienced time management concerns, and 73 (69.52%) experienced personal stress using VAM. Additionally, 59 (56.19%) responded that they encountered changes in faculty while using VAM, though 62 (59.05%) did not encounter teacher grievances. Overall, the educational leaders experienced concerns in their (a) time management, (b) stress, and (c) changes in faculty as a result of VAM implementation in Louisiana.

Item 9 of the VIO asked educational leaders if they believed VAM data were useful between 2010 and 2014. It was mandatory that VAM be used to evaluate teachers during this period. Table 8 shows the results from Item 9 of the VIO.

Table 8

Descriptive Statistics: Use of VAM Data

	#	%
Very Useful	14	13.33
Somewhat Useful	50	47.62
Undecided	13	12.38
Not Very Useful	28	26.67

Note. N=105. principal = 45; assistant principal = 38; other = 22.

Table 8 addresses Item 9 of the VIO, which asked if leaders found VAM data useful. The educational leaders found the data to be very useful (13.33%) or somewhat useful (47.62%). While 13 (12.38%) of leaders were undecided about the usefulness of VAM data, 28 (26.67%) of leaders did not find the data very useful.

VIO Item 10 asked educational leaders how they used VAM data and gave four possible uses (student placement, teacher placement, professional development, and giving teacher feedback) based on prior research (Finke, 2012). Table 9 shows the results of Item 10 of the VIO.

Table 9

Descriptive Statistics: Uses of VAM Data

Use of Data	#Yes	%Yes	#No	%No	#N/A	%N/A
Student Placement	45	43.69	52	49.52	8	7.77
Teacher Placement	63	60.58	37	35.58	5	4.76
Professional Development	79	75.96	25	23.81	1	0.95
Giving Teacher Feedback	94	89.52	9	8.57	2	1.90

Note. $N = 105$. principal = 45; assistant principal = 38; other = 22.

According to the responses, 63 (60.58%) of the educational leaders used VAM data for student placement. Additionally, 79 (75.96%) used VAM data to plan professional development, and 94 (89.52%) used VAM data for giving teachers feedback. It should be noted that 45 (43.69%) of the educational leaders reported using VAM data for student placement. In conclusion, a majority of the educational leaders reported using VAM data for (a) teacher placement, (b) professional development, and (c) giving teachers feedback.

Table 10 shows the response rate of Item 11 of the VIO. Item 11 asked educational leaders to identify components they perceived as necessary for the effectiveness of VAM in Louisiana. The item was a checklist of the nine components needed for VAM effectiveness. Educational leaders responded "yes" or "no" to the items in the checklist.

Table 10

Descriptive Statistics: Components of VAM Effectiveness

Component	#Yes	%Yes	#No	%No
Statewide Assessment	92	87.62	13	12.38
Student Growth	93	88.57	12	11.43
Reliable Student Data	103	98.10	2	1.90
Multiple Years of Student Data	102	97.14	3	2.86
Consideration of Outlier Data	103	98.10	2	1.90
Makes Provisions for Demographics	93	88.57	12	11.43
The Ability to Place Students	49	46.67	56	53.33
Random Student Grouping	64	60.95	41	39.05
Effective Means of Calculating	100	95.24	5	4.76

Note. $N = 105$. principal = 45; assistant principal = 38; other = 22.

Of the educational leaders, 92 (87.62%) agreed that statewide assessment was necessary for VAM effectiveness, and 93 (88.57%) agreed that showing student growth was a necessary component of VAM effectiveness. Further, 103 of the educational leaders (98.10%) agreed that reliable student data were needed, while 102 of the educational leaders (97.14%) agreed that multiple years of student data were needed for VAM effectiveness. Of the respondents, 103 (98.10%) agreed that consideration of outlier data, such as scores, attendance, and mobility rate, were needed for VAM effectiveness, while 93 (88.57%) agreed that VAM needed to make provisions for demographics. Nearly all of the educational leaders (95.24%) perceived that effective means of calculating was a necessary component of VAM effectiveness. In conclusion, educational leaders agreed that eight of the nine components needed to be in place in order for VAM effectiveness of VAM in Louisiana. However, Louisiana used only five of the nine components upon its initial implementation in 2010 (LDOE, 2014).

Table 11 shows the response rate of the educational leaders to Item 12 of the VIO. The question asked participants which interventions educational leaders used in their practices as a result of VAM data.

Table 11

Descriptive Statistics: Interventions Used from VAM Data

Intervention	#Yes	%Yes	#No	%No	#N/A	%N/A
More Observations	57	54.29	45	42.86	3	2.86

More Feedback	77	73.33	25	23.81	3	2.86
Professional Development	89	84.76	14	13.33	2	1.90
Changes in Teacher Assignment	57	54.29	43	40.95	5	4.76
Teacher Termination	11	10.58	84	80.77	10	9.52

Note. $N = 105$. principal = 45; assistant principal = 38; other = 22.

According to the survey, 89 educational leaders (84.76%) used VAM data to provide professional development to teachers. Additionally, 77 leaders (73.33%) gave teachers feedback. However, 84 educational leaders (80.77%) stated they did not use VAM data to terminate teachers.

Results by Position Type

Tables 12–20 address Items 7–12 of the VIO according to position type. Table 12 shows the total mean and standard deviation for each statement in Item 7. Respondents were divided into three categories: principal, assistant principal, and other. "Other" included all coordinators, district personnel, and other educational leaders other than principal or assistant principal.

Table 12

Descriptive Statistics: Means and SD: Impact of VAM According to Position Type

Item	Total Mean	Total SD	M Principal	SD Principal	M Asst. Principal	SD Asst. Principal	M Other	SD Other
All Items	2.39	1.14	2.34	0.91	2.28	0.91	2.34	0.79
Improves Achievement Scores	2.83	1.26	3.07	1.29	2.66	1.26	2.67	1.16
Measures Teacher Performance	2.91	1.29	2.95	1.34	2.95	1.31	2.79	1.21
Is Fair to All Teachers	1.98	1.04	1.84	0.92	2.11	1.16	2.04	1.08
Improves Instruction	3.01	1.22	3.05	1.27	3.05	1.23	2.88	1.15
Improves Curriculum	2.47	1.15	2.48	1.24	2.42	1.13	2.50	1.06
Has a Positive Effect on Teacher Morale	1.76	0.79	1.81	0.91	1.62	0.64	1.86	0.78
Equal Opportunity for Gain	2.73	1.19	2.65	1.21	2.68	1.21	2.95	1.12
Did not Contribute to Teacher Stress	1.43	0.63	1.33	0.57	1.53	0.76	1.45	0.50
Shows Effect of Teacher on Student Learning	2.39	1.16	2.41	1.31	2.26	1.03	2.54	0.23

Note. $N = 105$. principal = 45; assistant principal = 38; other = 22.

Table 12 presents the responses to each statement for each of the 105 participants. Scores were placed into the three categories. Each category was averaged to tabulate the total mean and standard deviation for that category. The items were ranked using a Likert scale from 1 to 5, with 1 indicating strongly disagree, 2 indicating disagree, 3 indicating undecided, 4 indicating agree, and 5 indicating strongly agree. For all items, the mean was 2.39. Participants disagreed with all statements in Item 7 of the VIO. As can be seen in Table 12, the means of four items rated higher than 2.5: a) improves achievement scores (2.83), b) measures teacher performance (2.91), c) improves instruction (3.01), and d) offers equal opportunity for gain (2.73). The total standard deviation was 1.14. There were three items that rated below 2.0, which indicated that leaders disagreed for those items. These items were fair to all teachers (1.98), and had a positive effect on teacher morale (1.76), and did not contribute to teacher stress (1.43).

Table 13 addresses Item 7 of the VIO. An ANOVA based on position type was used to determine whether a significant difference existed between the groups in their responses to Item 7.

Table 13

ANOVA: Impact of VAM According to Position Type

Source		SS	df	MS	F	*p*
Improves	Between groups	4.24	2	2.12	1.35	2.65
Achievement	Within groups	160.68	102	1.58		
Scores	Total	164.91	104			

Measures Teacher Performance	Between groups	2.26	2	1.13	.70	.52
	Within groups	171.97	102	1.69		
	Total	174.23	104			
Is Fair to All Teachers	Between groups	1.56	2	.78	.71	.49
	Within groups	112.40	102	1.11		
	Total	113.96	104			
Improves Instruction	Between groups	0.56	2	.28	.19	.83
	Within groups	153.97	102	1.51		
	Total	155.00	104			
Improves Curriculum	Between groups	0.13	2	.06	.05	.96
	Within groups	136.35	102	1.35		
	Total	138.13	104			
Has a Positive Effect on Teacher Morale	Between groups	1.15	2	.57	.91	.41
	Within groups	63.84	101	.63		
	Total	65.00	103			
Equal Opportunity for Gain	Between groups	1.60	2	0.80	.56	.57
	Within groups	144.84	102	1.42		
	Total	146.53	104			
Does not Contribute to Teacher Stress	Between groups	0.84	2	0.42	1.05	.35
	Within groups	40.87	102	0.40		
	Total	41.71	104			
Shows Effect of Teacher on Student Learning	Between groups	1.20	2	0.60	0.44	.65
	Within groups	139.79	102	1.37		
	Total	140.99	104			

Note. $N = 105$; principal = 45; assistant principal = 38; other = 22.

*$p<.05$.

Table 13 lists the results of the ANOVA test. Item results below .05 indicated a significant difference between the responses of the three groups. No significant difference existed in the responses between the three groups for Item 7 based on position type.

Table 14 presents information about VAM concerns by position. The results of the chi-square analysis are listed below.

Table 14

Chi-Square: Concerns over the Use of VAM by Position Type

Component	Chi-square	df	*p*
Time Management	3.44	2	.06
Stress	14.49	2	.00*
Changes in Faculty	1.15	2	.28
Teacher Grievances	4.20	2	.04*
Scheduling Difficulties	3.44	2	.06

Note. $N = 105$; principal = 45; assistant principal = 38; other = 22.
$p<.05$

Table 14 addresses Item 8 of the VIO. A chi-square test was used to determine whether a difference existed among groups in their responses. A significant difference existed among groups with respect to stress and teacher grievances. Although not statistically significant, but it should be acknowledged that two components (time management and scheduling difficulties) had an alpha level of .06.

Table 15 presents the responses of Item 8 by position. A chi-square test was used to further analyze the data by position.

Table 15

Descriptive Statistics: Concerns over the Use of VAM by Position Type

	Principal		Assistant Principal		Other	
	Yes	No	Yes	No	Yes	No
Time Management	26 (57.78%)	19 (42.22%)	28 (73.68%)	10 (26.32%)	9 (40.91%)	13 (59.09%)
Stress	32 (71.11%)	13 (28.89%)	25 (65.79%)	13 (34.21%)	15 (68.18%)	7 (31.81%)
Changes in Faculty	25 (55.56%)	20 (44.44%)	22 (57.89%)	16 (42.11%)	12 (54.55%)	10 (50.00%)
Teacher Grievances	15 (33.33%)	30 (66.67%)	19 (50.00%)	19 (50.00%)	8 (36.36%)	14 (66.67%)
Scheduling Difficulties	23 (51.11%)	22 (48.89%)	12 (31.58%)	26 (68.42%)	9 (40.91%)	13 (59.10%)

Note. $N = 105$; principal = 45; assistant principal = 38; other = 22.

Principals (57.78%) had concerns with time management less than assistant principals (73.68%). Principals (71.11%) had more concerns with stress than educational leaders other than principal or assistant principal (68.18%). Principals (55.56%)

experienced changes in faculty almost the same as assistant principals (57.89%). Principals (51.11%) experienced scheduling difficulties more than assistant principals (31.58%) and educational leaders in positions other than principal and assistant principal (59.10%).

Table 16 addresses Item 10 of the VIO. A chi-square was conducted to determine whether a significant difference existed among the response rate of the groups.

Table 16

Chi-Square: Uses of VAM Data According to Position Type

Use of Data	Chi-square	df	*p*
Student Placement	38.12	2	.00*
Teacher Placement	50.44	2	.00*
Professional Development	92.67	2	.00*
Giving Teachers Feedback	149.89	2	.00*

Note. $N = 105$; principal = 45; assistant principal = 38; other = 22.
$p<.05$

The chi-square analysis indicated that a significant difference existed between groups for each of the uses identified in VIO Item 10.

Table 17 provides information about the response rate for each item according to position type, which was Item #10 of the VIO. Participants responded "yes," "no," or "non-applicable" to items provided in the survey. The "non-applicable" items are not reported in Table 17 as they did generate significant results.

Table 17 shows the differences among the groups as mentioned in Table 16. Principals (46.67%) used VAM data for student placement more than assistant principals (42.11%) and educational leaders in positions other than principal or assistant principal (36.36%). However, principals (62.22%) and assistant principals (50.00%) used VAM data for teacher placement more than leaders in educational leaders in positions other than principal or assistant principal (27.27%).

Table 17

Descriptive Statistics: Uses of VAM Data According to Position Type

	Principal		Assistant Principal		Other	
	Yes	No	Yes	No	Yes	No
Student Placement	21 (46.67%)	20 (44.44%)	16 (42.11%)	18 (47.37%)	8 (36.36%)	12 (54.55%)
Teacher Placement	28 (62.22%)	17 (37.78%)	19 (50.00%)	15 (39.47%)	6 (27.27%)	14 (63.64%)
Professional Development	30 (66.67%)	15 (33.33%)	29 (76.31%)	17 (18.42%)	20 (90.91%)	2 (9.09%)
Giving Teachers Feedback	39 (86.67%)	6 (13.33%)	36 (94.74%)	1 (2.63%)	19 (86.36%)	2 (9.09%)

Note. $N = 105$; principal = 45; assistant principal = 38; other = 22.

Principals (66.67%) and assistant principals (76.31%) did not use VAM data for professional development as much as educational leaders in positions other than principal or assistant principal (90.01%). Principals (86.67%), assistant principals (94.74%) and educational leaders in positions other than principal or assistant principal (86.36%) all used VAM data to give teachers feedback. Several leaders responded "non-applicable" to items because those tasks may not have been part of their assigned duties.

Table 18 illustrates the results of the chi-square analysis used to determine if there was a significant difference between the responses of educational leaders based on position type. It addresses Item 11 of the VIO, which asked leaders, which of the nine components made VAM data effective.

Table 18

Chi-Square: Components of VAM Effectiveness According to Position Type

Component	Chi-Square	df	*p*
Statewide Assessment	59.48	2	.00*
Student Growth	59.44	2	.00*
Reliable Student Data	97.15	2	.00*
Multiple Years of Student Data	93.34	2	.00*
Consideration of Outlier Data	97.15	2	.00*

Makes Provisions for Student Demographics	62.49	2	.00*
The Ability to Place Students	.24	2	.00*
Random Student Grouping	5.04	2	.00*
Effective Means of Calculating	85.95	2	.00*

Note. N =105; principal = 45; assistant principal = 38; other = 22.
p<.05

A chi-square was conducted to determine whether a significant difference existed among responses to Item 11 of the VIO. The results of the chi-square analysis used for Table 18 indicated that a difference existed between groups for all items except the ability to place students based on teacher VAM data.

Table 19 addresses Item 11 of the VIO based on position. It is the response rate to VIO Item 11 based on position. The data in Table 19 supports the findings of Table 18.

Table 19

Descriptive Statistics: Components of VAM Effectiveness According to Position Type

	Principal		Assistant Principal		Other	
Statewide Assessment	43 (95.56%)	2 (4.44%)	31 (81.58%)	7 (18.42%)	20 (90.90%)	2 (9.10%)
Student Growth	43 (95.56%)	2 (4.44%)	32 (84.21%)	6 (15.79%)	20 (90.90%)	2 (9.10%)

Reliable Student Data	45 (100.00%)	0 (0.00%)	36 (94.74%)	2 (5.26%)	22 (100.00%)	0 (0.00%)
Multiple Years of Student Data	44 (97.77%)	1 (2.23%)	36 (94.74%)	2 (5.26%)	22 (100.00%)	0 (0.00%)
Consideration of Outlier Data	45 (100.00%)	0 (0.00%)	37 (97.37%)	1 (2.63%)	22 (100.00%)	0 (0.00%)
Makes Provisions for Student Demographics	43 (95.56%)	2 (4.44%)	33 (86.84%)	5 (13.16%)	18 (81.82%)	4 (18.18%)
The Ability to Place Students	23 (51.11%)	22 (48.89%)	16 (42.11%)	22 (57.89%)	12 (54.55%)	10 (45.45%)
Random Student Grouping	23 (51.11%)	22 (48.89%)	25 (65.79%)	13 (34.21%)	17 (77.27%)	5 (23.73%)
Effective Means of Calculating	44 (97.77%)	1 (2.23%)	36 (94.74%)	2 (5.26%)	20 (90.90%)	2 (9.10%)

Note. N =105; principal = 45; assistant principal = 38; other = 22.

Table 19 supported the findings of the Table 18 chi-square analysis. Table 19 shows the response data from Item 11 of the VIO, which was on the components of VAM effectiveness. Principals (95.56%) and assistant principals (81.58%) agreed that statewide assessment was necessary for VAM effectiveness. Principals (95.56%) also agreed that VAM data needed to use student growth for implementation. Principals (100.00%) and educational leaders in positions other than principal or assistant principal (100.00%) all agreed that VAM reliable student data were needed for effectiveness. Leaders in positions other than principal or assistant principal (100.00%) all agreed that multiple

years of growth were needed for VAM effectiveness. Principals (100.00%) and educational leaders in positions other than principal or assistant principal also agreed that VAM data needed consideration of outlier data. Principals (95.56%) also agreed that VAM needed to make provisions for student demographics. Principals (51.11%) agreed less than assistant principals (65.79%) and educational leaders in positions other than principal or assistant principal agreed that random student grouping was needed for VAM effectiveness. Principals (97.77%) agreed that effective means of calculation was necessary for VAM effectiveness more than of assistant principals (94.74%) and educational leaders in positions other than principal or assistant principal (90.90%).

Table 20 addresses Item 12 of the VIO, which asked educational leaders about interventions they used as a result of VAM data.

Table 20

Chi-Square: Interventions as a Result of VAM According to Position Type

Intervention	Chi-square	df	*p*
More Observations	38.12	2	.00*
More Feedback	46.69	2	.00*
Professional Development	127.03	2	.00*
Changes in Teacher Assignment	41.37	2	.00*
Teacher Termination	101.10	2	.00*

Note. $N = 105$; principal = 45; assistant principal = 38; other = 22.
$p<.05$

Table 20 shows the results of the chi-square analysis used to determine if there was a significant difference among the responses according to position. A chi-square test measured whether a significant difference existed among groups. The results of the test indicated that there was a significant difference among groups for all interventions listed in Item 12. Table 21 shows the response rate for Item #12 of the VIO. It supports the findings of Table 20.

Table 21

Descriptive Statistics: Interventions as a Result of VAM According to Position Type

	Principal		Assistant Principal		Other	
	Yes	No	Yes	No	Yes	No
More Observations	23 (51.11%)	22 (48.89%)	24 (63.16%)	12 (31.58%)	10 (45.45%)	11 (50.00%)
More Feedback	33 (77.33%)	12 (26.67%)	25 (65.79%)	11 (29.95%)	19 (86.35%)	2 (9.10%)
Professional Development	35 (77.78%)	10 (22.22%)	34 (89.47%)	2 (5.26%)	19 (86.35%)	2 (9.10%)
Changes in Teacher Assignment	26 (57.78%)	19 (42.22%)	19 (50.00%)	16 (42.10%)	12 (54.55%)	8 (36.36%)
Teacher Termination	3 (6.67%)	40 (88.89%)	7 (18.42%)	26 (68.42%)	0 (0.00%)	20 (90.91%)

Note. N =105; principal = 45; assistant principal = 38; other = 22.

Participants responded "yes," "no," or "non-applicable" to items provided in the survey about what interventions they used with teachers based on VAM data. The "non-applicable" responses did not yield significant results, therefore, are not included in Table 21. Principals (51.11%) and assistant principals (48.89%) used the data for observations more than educational leaders in positions other than principal or assistant principal. Principals (73.33%) and leaders in positions other than principal or assistant principal (86.35%) used the data for feedback more than assistant principals (65.79%). Principals (77.78%) used the data for professional development less than assistant principals (89.47%) and educational leaders in positions other than principal or assistant principal (90.90%). Principals (6.67%) and assistant principals (18.42%) used the data less than leaders in positions other than principal or assistant principal (90.91%).

Results by School Size

Tables 22-31 addresses the responses to Items 7-12 of the VIO based on school size. Table 22 addresses item 7 of the VIO according to school size. A mean score was tabulated for each response to item 7 for each educational leader.

Table 22

Descriptive Statistics: Means and SD: Impact of VAM According to School Size

	Total Mean	Total SD	Small Mean	Small SD	Med. Mean	Med. SD	Large Mean	Large SD
All items	2.12	1.00	2.40	0.95	2.30	1.07	2.31	0.89

Improves Achievement Scores	2.83	1.26	2.89	1.27	2.81	1.28	2.78	1.26
Measures Teacher Performance	2.91	1.29	2.89	1.23	2.81	1.31	2.93	1.35
Is Fair to All Teachers	1.98	1.05	1.89	0.90	1.88	0.93	2.05	1.15
Improves Instruction	3.01	1.22	2.94	1.27	2.86	1.26	3.06	1.19
Improves Curriculum	2.46	1.15	2.47	1.19	2.33	1.17	2.45	1.13
Has a Positive Effect on Teacher Morale	1.75	0.79	1.80	0.88	1.75	0.93	1.71	0.72
Equal Opportunity for Gain	2.73	1.19	2.85	1.19	2.69	1.19	2.64	1.19
Does not Contribute to Teacher Stress	1.42	0.64	1.46	0.69	1.31	0.53	1.41	0.59
Shows Effect of Teacher on Student Learning	2.39	1.16	2.39	1.15	2.22	1.07	2.39	1.19

Note. N = 105. Small school = 9 Medium school=37. Large school = 59.

The scores were then divided into three categories: small, medium, and large schools. Small schools had populations of 0–299 students, medium schools had populations of 300–599, and large schools had student populations of 600 and above. The total mean for all items was 2.12. The total standard deviation for all items was 1.00. As can be seen in Table 22, four items averaged 2.5 or higher: a) improves achievement scores (2.83), b) measures teacher performance (2.91), c) improves instruction (3.01), and d) equal opportunity for gain (2.73). Three items averaged below 2.0: a) is fair to all teachers, b) has a positive effect on teacher morale, and c) did not contribute to teacher stress.

Table 23 addresses Item 7 in the VIO by school size with an ANOVA analysis. The analysis was to determine if a significant difference existed between groups.

Table 23

ANOVA: Impact of VAM According to School Size

Source		SS	df	SS	F	*p*	
Improves Achievement Scores	Between groups	5.34	2		1.13	.34	
	Within groups	135.61	102	1.78			
	Total	140.99	104	1.58			
Measures Teacher Performance	Between groups	1.26	2		.37	.69	
	Within groups	172.97	102	.63			
	Total	174.23	104	1.70			
Is Fair to All Teachers	Between groups	1.38	2		.62	.54	
	Within groups	112.59	102	.69			
	Total	113.96	104	1.10			
Improves Instruction	Between groups	2.31	2		.77	.47	
	Within groups	152.69	102	1.15			
	Total	154.99	104	1.49			
Improves Curriculum	Between groups	1.91	2		.72	.49	
	Within groups	136.69	102	.96			
	Total	138.13	104	1.34			
Has a Positive Effect on Teacher Morale	Between groups	4.70	2		3.93	.02*	
	Within groups	60.87	102	2.35			
	Total	65.56	104	0.60			
Equal Opportunity for Gain	Between groups	3.78	2		1.35	.26	
	Within groups	142.76	102	1.89			
	Total	146.53	104	1.40			
Did not Contribute to Teacher Stress	Between groups	2.68	2		3.50	.03*	
	Within groups	39.04	102	1.34			
	Total	41.71	104	.38			
Shows Effect of Teacher on Student Learning	Between groups	5.39	2		2.03	.14	
	Within groups	135.61	102	2.69			
	Total	140.99	104	1.33			

Note. $N = 105$; small school = 9; medium school = 37; large school = 59
$p<.05$.

The ANOVA test determined whether a significant difference existed between groups. The results of the test showed that there was a significant difference for the item "has a positive effect on teacher morale" and "does not contribute to teacher stress."

A Scheffe test was conducted to identify the difference. Table 24 presents the results of the Scheffe test. Table 24 presents the differences between groups for Item 7 of the VIO according to school size.

Table 24

Scheffe: Impact of VAM According to School Size

School Size		Mean Difference	Std Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Small	Medium	0.19	.144	.008	1.19	1.67
	Large	0.25	.151	.000*	1.30	1.65
Medium	Small	0.19	.144	.008	1.25	1.61
	Large	0.04	.114	.008	1.30	1.65
Large	Small	0.25	.151	.000*	1.25	1.61
	Medium	0.04	.114	.008	1.19	1.65

Note. N=105; small school=9; medium school=37; large school=59
$p<.05$

In Table 23, a significant difference was shown for "has a positive effect on teacher morale." A Scheffe test was used to determine which groups had the difference. According to the results, the significant difference existed between the small and large groups, with small having the higher mean of 1.80, as compared to large, with a mean of 1.71.

Table 25 presents the differences between groups for Item 7 of the VIO according to school size.

Table 25

Scheffe: Impact of VAM According to School Size

School Size		Mean Difference	Std Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Small	Medium	0.64	.48	.01	1.43	2.06
	Large	0.26	.43	.01	1.52	1.89
Medium	Small	0.64	.48	.01	1.52	2.47
	Large	0.76	.43	.00*	1.52	1.89
Large	Small	0.26	.49	.01	1.52	2.47
	Medium	0.76	.48	.00*	1.43	2.06

Note. N=105; small school=9; medium school=37; large school=59.
$p<.05$

In Table 23, a significant difference was shown for "did not contribute to teacher stress." A Scheffe test was used to determine which groups had the difference. According to the results as shown in Table 25, the significant difference existed between the small and medium groups, with small having a higher mean of 1.46 as compared to medium, with a mean of 1.31.

Table 26 presents the results of the chi-square test used to analyze differences in the response rate among educational leaders according to school size. The educational leaders were divided into three groups: small, medium, and large. Positions were not used for this grouping. Table 26 addresses Item 8 of the VIO. A chi-square analysis determined whether a significant difference existed between groups based on school size.

Table 26

Chi-Square: Concerns over the Use of VAM According to School Size

Component	Chi-square	df	*p*
Time Management	3.44	2	.06
Stress	14.49	2	.00*
Changes in Faculty	1.15	2	.28
Teacher Grievances	4.20	2	.04*
Scheduling Difficulties	3.43	2	.06

Note. N =105; small school = 9; medium school = 37; large school = 59.
$p<.05$

The results of the test indicated that a significant difference existed between groups for "stress" and "teacher grievances." Although not statistically significant, it should be acknowledged that two items (time management and scheduling difficulties) both had an alpha level of .06.

Table 27 provides additional information about which group had a significant difference with stress from using VAM data.

Table 27

Descriptive Statistics: Concerns over the Use of VAM According to School Size

	Small		Medium		Large	
Time Management	Yes	No	Yes	No	Yes	No
	5 (55.56%)	4 (44.44%)	22 (59.46%)	15 (40.54%)	36 (61.02%)	23 (38.98%)
Stress	4 (44.44%)	5 (55.56%)	28 (75.68%)	9 (24.32%)	41 (69.49%)	18 (30.51%)
Changes in Faculty	5 (55.56%)	4 (44.44%)	18 (48.65%)	19 (51.35%)	35 (59.32%)	24 (40.68%)
Teacher Grievances	4 (44.44%)	5 (55.56%)	13 (35.14%)	24 (64.86%)	25 (42.37%)	34 (57.63%)
Scheduling Difficulties	4 (44.44%)	5 (55.56%)	16 (43.24%)	21 (56.76%)	25 (42.37%)	34 (57.63%)

Note. N =105; small school = 9; medium school = 37; large school = 59.

The school sizes were similar in their responses to the concerns of a) time management, b) changes in faculty, c) teacher grievances, and d) scheduling. Educational leaders of small (55.56%) and medium (59.54%) schools experienced stress at a higher

frequency than leaders in larger schools. Leaders of small (44.44%) schools experienced scheduling difficulties more than those at medium (43.24%) and large schools (42.37%).

Table 28 addresses Item 10 of the VIO and provides chi-square data to show how VAM data were used according to school size.

Table 28

Chi-Square: Uses of Data According to School Size

Use of Data	Chi-square	df	*p*
Student Placement	30.43	2	.00*
Teacher Placement	50.44	2	.00*
Professional Development	92.67	2	.00*
Giving Teachers Feedback	149.89	2	.00*

Note. $N = 105$; small school = 9; medium school = 37; large school = 59.
$p<.05$

The results of the test indicated that a significant difference existed between the groups for all items in the question according to school size. Groups differed in their uses of VAM data (student placement, teacher placement, professional development, and giving teachers feedback) based on school size.

Table 29 provides information on the responses for Item 10 of the VIO according to school size.

Table 29

Descriptive Statistics: Uses of VAM Data According to School Size

	Small		Medium		Large	
	Yes	No	Yes	No	Yes	No
Student Placement	5 (55.56%)	4 (44.44%)	24 (64.86%)	12 (32.43%)	23 (38.98%)	27 (45.76%)
Teacher Placement	7 (77.78%)	2 (22.22%)	22 (59.46%)	14 (37.84%)	33 (55.93%)	22 (37.28%)
Professional Development	7 (77.78%)	2 (22.22%)	29 (78.38%)	7 (18.92%)	44 (74.58%)	11 (18.64%)
Giving Teachers Feedback	9 (100.00%)	0 (0.00%)	33 (89.19%)	3 (8.11%)	50 (84.75%)	5 (8.47%)

Note. N =105; small school = 9; medium school = 37; large school = 59.

Table 30 addresses Item 11 of the VIO, which asked educational leaders to identify components necessary for VAM effectiveness.

Table 30

Chi-Square: Components of VAM Effectiveness According to School Size

Component	Chi-square	df	*p*
Statewide Assessment	59.44	2	.00*
Student Growth	59.44	2	.00*
Reliable Student Data	97.15	2	.00*
Multiple Years of Student Data	93.34	2	.00*
Consideration of Outlier Data	97.15	2	.00*
Makes Provisions for Student Demographics	62.49	2	.00*
The Ability to Place Students	30.43	2	.00*
Random Student Grouping	5.04	2	.03*
Effective Means of Calculating	85.95	2	.00*

Note. $N = 105$; small school = 9; medium school = 37; large school = 59.
$p<.05$

A chi-square test determined that significant differences existed among the groups tested for all components. Groups differed on the components based on school size. These results are supported with the following table.

Table 31 shows the response data for Item 7 of the VIO, which asked educational leaders about components of VAM effectiveness according to school size. Participants responded "yes," "no," or "non-applicable" to items provided in the survey. The responses for "non-applicable" are not listed in Table 31, as they did not yield significant findings.

Table 31

Descriptive Statistics: Components of VAM Effectiveness According to School Size

	Small		Medium		Large	
	Yes	No	Yes	No	Yes	No
Statewide Assessment	8 (88.89%)	1 (11.11%)	31 (83.78%)	6 (16.22%)	53 (89.93%))	6 (10.17%)
Student Growth	8 (88.89%)	1 (11.11%)	34 (91.89%)	3 (8.11%)	51 (86.44%)	8 (13.56%)
Reliable Student Data	9 (100.00%)	0 (0.00%)	35 (94.59%)	2 (5.41%)	59 (100.00%)	0 (0.00%)
Multiple Years of Student Data	9 (100.00%)	0 (0.00%)	34 (91.89%)	3 (8.11%)	59 (100.00%)	0 (0.00%)

Consideration of Outlier Data	9 (100.00%)	0 (0.00%)	36 (97.29%)	1 (2.71%)	59 (100.00%)	0 (0.00%)
Makes Provisions for Demographics	9 (100.00%)	0 (0.00%)	31 (83.78%)	6 (16.22%)	53 (89.83%)	6 (10.17%)
The Ability to Place Students	5 (55.56%)	4 (44.44%)	16 (43.24%)	21 (56.76%)	27 (45.76%)	32 (54.24%)
Random Student Grouping	4 (44.44%)	5 (55.56%)	22 (59.46%)	15 (40.54%)	36 (61.02%)	23 (38.98%)
Effective Means of Calculating	9 (100.00%)	0 (0.00)	34 (91.89%)	3 (8.11%)	56 (94.92%)	3 (5.08%)

Note. N =105; small school = 9; medium school = 37; large school = 59.

Leaders at small schools (88.89%) and large schools (89.93%) agreed that statewide assessment was needed more than those at medium schools (83.78%). Leaders at medium schools (91.89%) agreed that student growth was needed. Leaders at small schools (100.00%) and large schools (100.00%) schools agreed that reliable student data were needed, as compared to medium schools (94.59%). Similarly, leaders at small schools (100.00%) and large schools (100.00%) agreed that multiple years of student data were needed. Leaders at small schools (100.00%) and large schools (100.00%) agreed that VAM needed consideration of outliers, which was also more than medium schools (97.29%). The outliers used for this study were missing scores, student attendance, and mobility rate. Leaders at small schools (100.00%) agreed that VAM data needed to make provisions for demographics more than medium schools (83.78%) and large schools

(89.83%). Leaders at small schools (44.44%) agreed with student placement less than leaders at medium schools (59.46%) and large schools (61.02%). Leaders at small schools (100.00%) agreed that an effective means of calculating was needed more than leaders at medium (91.89%) and large schools (94.52%).

Table 32 addresses Item 12 of the VIO, which asked educational leaders about interventions they used based on VAM data. The variable of school size was used to conduct the test analysis.

Table 32

Chi-Square: Interventions as a Result of VAM According to School Size

Intervention	Chi-square	df	*p*
More Observations	46.70	2	.00*
More Feedback	85.54	2	.00*
Professional Development	127.03	2	.00*
Change in Teacher Assignment	41.37	2	.00*
Teacher Termination	101.10	2	.00*

Note. $N = 105$; small school = 9; medium school = 37; large school = 59.
$p<.05$

The results of the test indicated that a significant difference existed between the groups for each of the items. Table 33 provides the response data that support the

findings in Table 32. It also presents the significant differences for Item 12 of the VIO on interventions used by educational leaders based on school size. Participants responded "yes," "no," or "non-applicable" to items provided in the survey about what interventions they used with teachers based on VAM data. The results for "non-applicable" are not listed in Table 33 as they did not yield significant findings.

Table 33

Descriptive Statistics: Interventions as a Result of VAM Data

	Small		Medium		Large	
	Yes	No	Yes	No	Yes	No
More Observations	7 (77.78%)	2 (22.22%)	16 (43.24%)	21 (56.76%)	33 (55.93%)	23 (38.98%)
More Feedback	9 (100.00%)	0 (0.00%)	27 (72.97%)	10 (27.02%)	40 (67.80%)	16 (27.11%)
Professional Development	9 (100.00%)	0 (0.00%)	29 (78.38%)	8 (21.62%)	50 (84.75%)	7 (11.86%)
Changes in Teacher Assignment	8 (88.89%)	1 (11.11%)	17 (45.95%)	19 (51.35%)	32 (54.24%)	24 (40.68%)
Teacher Termination	4 (44.44%)	1 (11.11%)	5 (13.51%)	28 (75.68%)	25 (42.37%)	28 (47.46%)

Note. N=105; small school=9; medium school=37; large school=59.

Leaders in small schools (77.78%) agreed that they used VAM data for observations more than medium schools (56.76%) and large schools (55.93%). Leaders in small schools (100.00%) used VAM data for feedback more than leaders in medium schools (72.97%) and large schools (67.80%). Leaders in small schools used VAM data for professional development (100.00%) more than leaders in medium (78.38%) and large schools (84.75%). Leaders in small schools (88.89%) used VAM data to make changes in teacher assignments more than leaders in medium (45.95%) and large schools (54.24%). Leaders in small schools (44.44%) used VAM data for teacher termination more than medium schools (13.51%) and large schools (42.37%).

Results by Experience

Tables 34–43 show the responses to Items 7-12 of the educational leaders based on years of experience. The VIO survey had three categories of responses (0-5, 6-10, and 11 years or more) but the categories were adjusted into two (0-10 and 11 or more) because of low response rates. The mean was 2.35, and the standard deviation was 0.84 for leaders with 0–10 years of experience. The mean for educational leaders with 11 or more years of experience was 2.34, and the standard deviation was 0.99.

Table 34 shows the mean and standard deviation for Item 7 of the VIO according to experience.

Table 34

Descriptive Statistics: Means and SD: Impact of VAM According to Experience

Item	Total Mean	Total SD	0-10 Mean	0-10 SD	11+ Mean	11 + SD
All Items	2.39	0.94	2.35	0.84	2.34	0.99
Improves Achievement Scores	2.82	1.26	2.78	1.13	2.91	1.51
Measures Teacher Performance	2.91	1.29	2.92	1.24	2.91	1.42
Is Fair to All Teachers	1.98	1.05	1.96	0.99	2.03	1.17
Improves Instruction	3.01	1.22	3.03	1.16	2.97	1.36
Improves Curriculum	2.47	1.15	2.41	1.02	2.56	1.40
Has a Positive Impact on Teacher Morale	1.75	0.79	1.73	0.76	1.79	0.88
Equal Opportunity for Gain	2.73	1.19	2.75	1.14	2.71	1.29
Did not Contribute to Teacher Stress	1.43	0.63	1.44	0.60	1.41	0.70
Shows Effect of Teacher on Student Learning	2.39	1.16	2.44	1.17	2.29	1.17

Note. $N = 105$; 0–10 years = 74; 11 or more years = 31.

The responses for all items in Item 7 were averaged. Then the averages were divided into two groups: 0–10 years of experience and 11 or more years of experience. The total mean and standard deviation were calculated for all items and the two

subgroups. The total mean for all items was 2.39. The total standard deviation was 0.94. There were four items that averaged above 2.5: a) improves achievement scores, b) measures teacher performance, c) improves instruction, and d) equal opportunity for gain. There were three items that averaged below a 2.0: a) is fair to all teachers, b) has a positive impact on teacher morale, and c) did not contribute to teacher stress.

Table 35 shows the results of the ANOVA analysis used for VIO Item 7 based on experience. The test was used to determine if a difference existed between groups based on experience. Table 35 addresses Item 7 of the VIO.

Table 35

ANOVA: Impact of VAM According to Experience

Source		SS	df	SS	F	*p*
Improves	Between groups	.35	1		.35	.64
Achievement	Within groups	164.57	103	.35		
Scores	Total	164.91	104	1.60		
Measures	Between groups	3.61	1		.53	.72
Teacher	Within groups	170.62	103	.63		
Performance	Total	174.23	104	1.70		
Is Fair to All	Between groups	.12	1		.11	.74
Teachers	Within groups	133.84	103	.69		
	Total	113.96	104	1.10		
Improves	Between groups	.08	1		.05	.82
Instruction	Within groups	154.91	103	1.15		
	Total	154.99	104	1.49		
Improves	Between groups	.74	1		.56	.46
Curriculum	Within groups	137.39	103	.96		
	Total	138.13	104	1.34		
Has a Positive	Between groups	.09	1		.14	.71
Effect on	Within groups	65.47	103	2.35		
Teacher	Total	65.56	104	0.60		
Morale						

Equal Opportunity for Gain	Between groups	.04	1		.03	.87
	Within groups	146.59	103	1.89		
	Total	146.53	104	1.40		
Did not Contribute to Teacher Stress	Between groups	.01	1		.04	.85
	Within groups	41.70	103	1.34		
	Total	41.71	104	.38		
Shows Effect of Teacher on Student Learning	Between groups	.47	1		.34	.56
	Within groups	140.52	103	2.69		
	Total	140.99	104	1.33		

Note. $N = 105$; 0–10 years = 74; 11 or more years = 31.
$p<.05$

The results indicated that no significant difference existed. An ANOVA based on years of experience was conducted to determine whether a significant difference existed between the two groups.

Table 36 addressed Item 8 of the VIO, which asked educational leaders to identify concerns with VAM to determine if a difference existed based on experience.

Table 36

Chi-Square: Concerns over the Use of VAM According to Experience

Component	Chi-square	df	*p*
Time Management	3.43	1	.06
Stress	14.49	1	.00*
Changes in Faculty	1.15	1	.28
Teacher Grievances	4.20	1	.04*
Scheduling Difficulties	3.44	1	.06

Note. $N = 105$; 0–10 years = 74; 11 or more years = 31.
$p<.05$

A chi-square analysis determined that a significant difference existed between groups for stress and teacher grievances. It should be noted that time management and scheduling difficulties both had an alpha level of .06.

Table 37 provides the response rate for VIO Item 8 according to experience. The information provided in this table supports the findings of the chi-square analysis used for Table 36.

Table 37

Descriptive Statistics. Concerns over the Use of VAM According to Experience

	0–10 Years		11+ Years	
	Yes	No	Yes	No
Time Management	43 (58.11%)	31 (41.89%)	29 (93.55%)	2 (6.45%)
Stress	46 (62.16%)	28 (37.84%)	18 (58.06%)	13 (41.94%)
Changes in Faculty	38 (51.35%)	36 (48.65%)	21 (67.74%)	10 (32.26%)
Teacher Grievances	49 (66.22%)	25 (33.78%)	9 (29.03%)	22 (71.97%)
Scheduling Difficulties	32 (43.24%)	47 (56.76%)	19 (61.29%)	12 (38.71%)

Note. N =105; 0–10 years = 74; 11 or more years = 31.

Leaders with 11 or more years of experience (93.55%) had concerns with time management more than those with 0-10 years of experience. Educational leaders with 0–10 years of experience agreed that they encountered more stress because of VAM at a higher rate (62.16%) than educational leaders with 11 or more years of experience (58.06%).

Educational leaders with 0–10 years of experience also agreed that they encountered more teacher grievances than those with 11 or more years of experience.

Table 38 addresses Item 10 of the VIO, which asked educational leaders about how they used VAM data. A chi-square test was used to determine whether a significant difference existed between the groups based on years of experience.

Table 38

Chi-Square: Uses of VAM Data According to Experience

Use of data	Chi-square	df	*p*
Student Placement	30.43	1	.00*
Teacher Placement	50.44	1	.00*
Professional Development	92.67	1	.00*
Giving Teachers Feedback	149.89	1	.00*

Note. $N = 105$; 0–10 years = 74; 11 or more years = 31.
$p<.05$

The results of the chi-square indicated that a significant difference existed between the experience groups for all items. The results of this table are supported in the Table 39.

Table 39 provides the responses to VIO Item 10 according to experience. Differences existed between groups for each of the practices listed in VIO Item 10 as shown in Table 38. The results for "non-applicable" are not listed as they did not yield significant findings.

Table 39

Descriptive Statistics: Uses of VAM Data According to Experience

	0-10 years		11 or more years	
	Yes	No	Yes	No
Student Placement	35 (47.30%)	34 (45.95%)	13 (41.94%)	13 (41.94%)
Teacher Placement	33 (44.59%)	38 (51.35%)	15 (48.39%)	11 (35.48%)
Professional Development	57 (77.03%)	17 (22.97%)	22 (70.97%)	8 (25.81%)
Giving Teachers Feedback	49 (66.22%)	24 (32.43%)	25 (80.65%)	5 (16.13%)

Note. N =105; 0–10 years of experience = 74; 11 or more years of experience = 31.

Educational leaders with 0–10 years of experience used VAM data for student placement (47.30%) more than those with 11 or more years (41.94%). Educational leaders with 0–10 years of experience used VAM data for teacher placement (44.59%) less than those with 11 or more experience (48.39%). Educational leaders with 0–10 years of experience (77.03%) used VAM data more for professional development than those with 11 or more years of experience (70.97%). However, educational leaders with 11 or more years of experience (80.65%) used VAM data for giving teacher feedback more than those with fewer years of experience (66.22%).

Table 40 addresses Item 11 of the VIO according to experience. A chi-square analysis was conducted to determine whether a significant difference existed between the groups based on years of experience.

Table 40

Chi-Square: Components of VAM Effectiveness According to Experience

Component	Chi-square	df	*p*
Statewide Assessment	59.44	1	.00*
Student Growth	59.44	1	.00*
Reliable Student Data	97.15	1	.00*
Multiple Years of Student Data	93.34	1	.00*
Consideration of Outlier Data	97.15	1	.00*
Makes Provisions for Demographics	62.49	1	.00*
The Ability to Place Students	0.24	1	.63
Random Student Grouping	5.04	1	.03*
Effective Means of Calculating	85.95	1	.00*

Note. $N = 105$; 0–10 years = 74; 11 or more years = 31.
$p<.05$

The results of the test indicated that a significant difference existed for all items except the ability to place students. The results of this table are supported with the following table.

Table 41 presents a comparison of responses grouped by experience. It was addressed with Item 11 of the VIO.

Table 41

Descriptive Statistics: Components of VAM Effectiveness According to Experience

	0–10 years		11+ years	
Statewide Assessment	Yes	No	Yes	No
	58 (78.38%)	16 (21.62%)	30 (96.78%)	1 (3.22%)
Student Growth	59 (79.73%)	15 (20.27%)	31 (100.00)	0 (0.00%)
Reliable Student Data	73 (98.65%)	1 (1.35%)	31 (100%)	0 (0.00%)
Multiple Years of Student Data	74 (100.00%)	0 (0.00%)	31 (100.00%)	0 (0.00%)
Consideration of Outlier Data	73 (98.65%)	1 (1.35%)	30 (96.77%)	1 (3.23%)
Makes Provisions for Demographics	64 (86.49%)	10 (13.51%)	29 (93.55%)	2 (6.45%)
The Ability to Place Students	45 (60.81%)	29 (39.19%)	21 (67.74%)	10 (32.26%)
Random Student Grouping	73 (98.65%)	1 (1.35%)	30 (96.77%)	1 (3.23%)
Effective Means of Calculating	58 (78.38%)	16 (21.62%)	21 (67.74%)	10 (32.26%)

Note. N =105; 0–10 years = 74; 11 or more years = 31.

Table 41 presents the differences as mentioned in Table 40. There was a significant difference between the rates of educational leaders with 11 or more years of experience than those with 0–10 years of experience on all components except for ability to place students based on VAM data. Educational leaders with 0-10 years of experience (78.38%) agreed that statewide assessment was needed for VAM effectiveness more than leaders with 11 years of experience or more (96.78%). Leaders with 0-10 years of experience (79.73%) agreed that student growth was needed less than those with 10 or more years of experience (100.00%). Leaders with 0-10 years of experience agreed that reliable student data were needed (98.65%) less than those with those with 11 or more years of experience (100.00%). All leaders in both groups (100.00%) agreed that multiple years of data were needed for VAM effectiveness. Leaders with 0-10 years of experience (98.65%) agreed that consideration of outliers was needed for VAM effectiveness, whereas (96.77%) of leaders with 11 or more years of experience agreed with the component. Leaders with 0-10 years of experience (86.49%) agreed that 'makes provisions for demographics' was needed less than leaders with 11 or more years of experience (93.55%). Leaders with 0-10 years of experience (98.65%) agreed that random student grouping was needed more than leaders with 11 or more years of experience (96.77%). Leaders with 0-10 years of experience (78.38%) agreed that an effective means of calculating was needed more than leaders with 11 or more years of experience (67.74%).

Table 42 addresses Item 12 of the VIO, which asked educational leaders about interventions they used based on VAM data. A chi-square test was used to analyze the results of the data.

Table 42

Chi-Square: Interventions as a Result of VAM According to Experience

Intervention	Chi-square	df	p
More Observations	46.70	1	.00*
More Feedback	85.54	1	.00*
Professional Development	127.03	1	.00*
Changes in Teacher Assignment	41.37	1	.00*
Teacher Termination	101.10	1	.00*

Note. $N = 105$; 0–10 years = 74; 11 or more years = 31.
$p<.05$

The results of the test indicated that a significant difference existed between the groups based on experience and supports the results of the chi-square analysis shown in Table 42, indicating that there was a significant difference between groups for all five items.

Table 43 shows the differences between groups based on experience for VIO Item #12.

Table 43

Descriptive Statistics: Interventions as a Result of VAM According to Years of Experience

	0–10 Years			11 + Years		
	Yes	No	N/A	Yes	No	N/A
More Observations	38 (51.35%)	35 (47.30%)	1 (1.35%)	18 (58.06%)	12 (38.71%)	1 (3.23%)
More Feedback	49 (66.22%)	24 (32.43%)	1 (1.35%)	25 (80.65%)	5 (16.12%)	1 (3.23%)
Professional Development	60 (81.08%)	13 (17.57%)	1 (1.35%)	28 (90.32%)	2 (6.45%)	1 (3.22%)
Changes in Teacher Assignment	38 (51.35%)	35 (47.29%)	1 (1.35%)	18 (58.06%)	12 (38.71%)	1 (3.23%)
Teacher Termination	10 (13.51%)	58 (78.38%)	6 (8.11%)	5 (16.13%)	22 (70.97%)	4 (12.09%)

Note. N =105; 0–10 years = 74; 11 or more years = 31.

Educational leaders with 0–10 years of experience (51.35%) used more observation as an intervention less than those with 11 or more years of experience (58.06%). Leaders with 0-10 years of experience (66.22%) used feedback less than those

with 11 or more years of experience (80.65%). Professional development was used less by educational leaders with 0–10 years of experience (81.08%) than those with 11 or more years of experience (90.32%). Educational leaders with 0-10 years (51.35%) of experience made changes in teacher assignment less often than those with 11 or more years of experience (58.06%). Leaders with 0–10 years of experience (13.51%) also terminated teachers less often than those with more years of experience (16.13%).

Results of the Research Questions and Hypotheses

Hypothesis 1. The hypothesis stated in the null was: "There will be no statistical difference in the impact of VAM on leadership practices when the variable of position is considered." Results of the ANOVA indicated that no significant difference existed between the groups in their responses (see Table 13). The significance level used for the null hypothesis was .05. The null hypothesis was accepted.

Hypothesis 2. The hypothesis stated in the null was: "There will be no statistical difference in the impact of VAM on leadership practices when the variable of school size is considered." Results of the ANOVA showed a significant difference existed between the groups on "has a positive impact on teacher morale" and "did not contribute to teacher stress" (See Table 23). The significance level for the hypothesis was .05. The difference for morale existed between large and small schools as shown in the Scheffe analysis (See Table 24). The Scheffe analysis also shows that the difference of the means of the two groups was .25, which was the greatest of the three groups: small, medium, and large. The small schools had the higher mean of 1.80 for "has a positive effect on teacher morale" as compared to the large schools with a mean of 1.71 (see Table 22). For

the item "did not contribute to teacher stress," the Scheffe analysis shows that the difference existed between the small and medium schools, which had a mean difference of .64 (see Table 25). Small schools had the higher mean of 1.46 for "did not contribute to teacher stress" as compared to medium schools with a mean of 1.31 (see Table 22). The null hypothesis was rejected.

Hypothesis 3. The hypothesis stated in the null was: "There will be no statistical difference in the impact of VAM on leadership practices when the variable of years of experience is considered." According to the ANOVA, no significant difference existed between groups (see Table 35). The null hypothesis was accepted.

Hypothesis 4. The hypothesis stated in the null was: "There will be no statistical difference in the concerns educational leaders encounter in VAM effectiveness when the variable of position is considered." The chi-square analysis was used to determine if certain positions experienced these concerns more than other positions. According to the chi-square analysis, a significant difference existed between groups for "stress" and "teacher grievances" (see Table 14). Principals experienced more stress (71.11%) than assistant principals (65.79%) and educational leaders in positions other than principal or assistant principal (68.18%). Assistant principals (50.00%) experienced teacher grievances more than educational leaders in positions other than principal or assistant principal (36.36%) and principal (33.33%) (see Table 15). Therefore, the null hypothesis was rejected.

Hypothesis 5. The hypothesis stated in the null was: "There will be no statistical difference in the concerns educational leaders encounter with VAM effectiveness when

the variable of school size is considered." A chi-square test was used to determine whether educational leaders in different school sizes experienced these concerns more than others A significant difference also existed between groups for "stress" and "teacher grievances" (see Table 26). Leaders at medium schools (75.68%) experienced more "stress" than large schools (69.69%) and small schools (44.44%). Leaders at small schools (44.44%) experienced more "teacher grievances" than leaders at medium schools (35.14%) and large schools (42.37%) (see Table 27). Therefore, the null hypothesis was rejected.

Hypothesis 6. The hypothesis stated in the null was: "There will be no statistical difference in the concerns educational leaders encounter in VAM effectiveness when the variable of years of experience is considered." A chi-square test was used to analyze if educational leaders experienced concerns differently based on years of experience. The chi-square test indicated that a significant difference existed between groups for "stress" and "teacher grievances" (see Table 36). Educational leaders with 0–10 years of experience reported more "stress" (62.16%) than leaders with 11 or more years of experience (58.06%). Educational leaders with 11 or more years of experience reported more "teacher grievances" (66.22%) than leaders with 0-10 years of experience (29.03%)(see Table 37). The null hypothesis was rejected.

Hypothesis 7. The hypothesis stated in the null was: "There will be no statistical difference in the interventions educational leaders provided to teachers when the variable of position is considered." A chi-square test was used to further analyze the data. The test indicated that a significant difference existed between groups based on position for all

items listed in VIO Item#10 (see Table 16). Principals (46.67%) used VAM data for "student placement" more than assistant principals (42.11%) and educational leaders other than principal and assistant principal (36.36%). Principals (62.22%) used VAM data for "teacher placement" more than assistant principals (50.00%) and educational leaders other than principals and assistant principals (27.27%). Leaders in positions other than principal and assistant principal (90.91%) used VAM data for "professional development" more than assistant principals (76.31%) and principals (66.67%). Assistant principals (94.74%) used "giving teachers feedback" more than principals (86.67%) and leaders in positions other than principal and assistant principals (86.36%)(see Table 17).

This hypothesis was further addressed by VIO Item #12, which asked educational leaders what interventions (more observations, more feedback, professional development, changes in teacher assignment, teacher termination) were used as a result of VAM data. Assistant principals (63.16%) used "more observation" more than principals (51.11%) and leaders other than principal and assistant principal (45.45%). Leaders other than principals and assistant principals (86.35%) used "more feedback" more than principals (73.33%) and assistant principals (65.79%). Leaders in positions other than principal and assistant principal (90.90%) used "professional development" more than assistant principals (89.47%) and principals (77.78%). Assistant principals (18.42%) used "teacher termination" more than principals (6.67%) and leaders in positions other than principal (0.0%)(see Table 21). The null hypothesis was rejected.

Hypothesis 8. The hypothesis stated in the null was: "There will be no statistical difference in the perceived effectiveness of VAM as an evaluation tool when the variable of school size is considered." A chi-square analysis was used to indicate whether educational leaders used VAM data differently based on school size. Results of the chi-square test indicated that a difference existed between groups for "stress" and "teacher grievances" (see Table 26). Medium schools (75.68%) experienced "stress" more than small schools (44.44%) and large schools (69.49%). Small schools (44.44%) experienced "teacher grievances" more than large schools (42.37%) and medium schools (35.14%)(see Table 27).

This hypothesis was further addressed with VIO Item #12, which asked educational leaders what interventions (more observations, more feedback, professional development, changes in teacher assignment, and teacher termination) were used as a result of VAM data. A chi-square analysis was conducted to determine if a significant difference existed for each intervention in VIO Item #12. Results of the chi-square indicated that a difference existed for all groups (see Table 32). Small schools (77.78%) used "more observations" more than large schools (55.93%) and medium schools (43.24%). Small schools (100%) used "more feedback" more than medium schools (72.97%) and large schools (67.80%). Small schools (100%) used "professional development" more than large schools (84.75%) and medium schools (78.38%). Small schools (88.89%) used "changes in teacher assignment" more than large schools (54.24%) and medium schools (45.95%). Small schools (44.44%) used

"teacher termination" more than large schools (42.37%) and medium schools (13.51%)(see Table 33). The null hypothesis was rejected.

Hypothesis 9. The hypothesis stated in the null was: "There will be no statistical difference in the perceived effectiveness of VAM as an evaluation tool when the variable of years of experience is considered." A chi-square analysis was used to indicate if educational leaders used VAM data differently based on years of experience for "student placement," "teacher placement," "professional development," and "giving teachers feedback." The chi-square analysis indicated that a significant difference occurred between groups for all items (see Table 38). Educational leaders with 0-10 years of experience (47.30%) used VAM data for "student placement" more than those with 11 or more years of experience (41.94%). Educational leaders with 11 or more years of experience (48.39%) used VAM data for "teacher placement" more than those with 0-10 years of experience (44.59%). Educational leaders with 0-10 years of experience (77.03%) used VAM data for "professional development" more than those with 11 or more years of experience (70.97%). Educational leaders with 11 or more years of experience (80.65%) used "giving teachers feedback" more than those with 0-10 years of experience (66.22%)(see Table 39).

This hypothesis was further addressed with VIO Item #12, which asked educational leaders what interventions (more observations, more feedback, professional development, changes in teacher assignment, and teacher termination) were used as a result of VAM data. A chi-square analysis was used to determine if a significant difference existed between groups based on experience. The results of the chi-square

indicated that a difference existed for all interventions listed in VIO Item #12 (see Table 42). Educational leaders with 11 or more years of experience (58.06%) used "more observations" more than leaders with 0-10 years of experience (51.35%). Educational leaders with 11 or more years of experience (80.65%) used "more feedback" more than educational leaders with 0-10 years of experience (66.22%). Educational leaders with 11 or more years of experience (90.32%) used "professional development" more than educational leaders with 0-10 years of experience (81.08%). Educational leaders with 11 or more years of experience (58.06%) used "changes in teacher assignment" more than educational leaders with 0-10 years of experience (51.35%). Educational leaders with 11 or more years of experience (16.13%) used "teacher termination" more than educational leaders with 0-10 years of experience (13.51%)(see Table 43). The null hypothesis was rejected.

Hypothesis 10. The hypothesis stated in the null was: "There will be no statistical difference in the components necessary for VAM effectiveness when the variable of position is considered." A chi-square analysis was used to indicate whether educational leaders used VAM data differently based on school size. Results of the chi-square test indicated that a difference existed between groups for "statewide assessment," "student growth," "reliable student data," "multiple years of data," "consideration of outlier data," "makes provisions for demographics," "random student grouping," and "effective means of calculating." "The ability to place students" was not used differently between groups (see Table 18). Principals (95.56%) used VAM data for "statewide assessment" more than educational leaders in positions other than principal or assistant principal (90.90%)

and assistant principals (81.58%). Principals (95.56%) used "student growth" more than leaders in positions other than principal and assistant principal (90.90%) and assistant principals (84.21%). Principals (100%) and leaders in positions other than assistant principal (100%) used "reliable student data" more than assistant principals (94.74%). Leaders in positions other than principal and assistant principal (100%) used "multiple years of student data" more than principals (97.77%) and assistant principals (94.74%). Leaders in positions other than principal and assistant principal (100%) and principals (100%) used "consideration of outlier data" more than assistant principals (97.37%). Principals (95.56%) used "makes provisions for student demographics" more than assistant principals (86.64%) and leaders in positions other than principal and assistant principal (81.82%). Leaders in positions other than principal and assistant principal (77.27%) used "random student grouping" more than assistant principals (65.79%) and principals (51.11%). Principals (97.77%) used "effective means of calculation" more than assistant principals (94.74%) and leaders other than principal and assistant principal (90.90%)(see Table 19). The null hypothesis was rejected.

Hypothesis 11. The hypothesis stated in the null was: "There will be no statistical difference in the components necessary for VAM effectiveness when the variable of school size is considered." A chi-square analysis indicated a significant difference existed among groups for all items (statewide assessment, student growth, reliable student data, multiple years of student data, consideration of outlier data, makes provisions for student demographics, the ability to place students, random student grouping, and effective means of calculating) (see Table 30). Educational leaders in large schools (89.93%) used

"statewide assessment" more than small schools (88.89%) and medium schools (83.78%). Educational leaders in medium schools (91.89%) used "student growth" more than small schools (88.89%) and large schools (86.44%) Educational leaders in small schools (100%) and large schools (100%) used "reliable student data" more than medium schools (94.59%). Small schools (100%) and large schools (100%) used "multiple years of student data" more than medium schools (91.89%). Educational leaders in small schools (100%) and large schools (100%) used "consideration of outlier data" more than medium schools (97.29%). Educational leaders in small schools (100%) used "makes provisions for demographics" more than large schools (89.83%) and medium schools (83.78%). Educational leaders in small schools (55.56%) used "the ability to place students" more than educational leaders in medium schools (43.24%) and large schools (45.76%). Educational leaders in large schools (61.02%) used "random student groupings" more than medium schools (59.46%) and large schools (44.44%). Small schools (100%) used "effective means of calculating" more than large schools (94.92%) and medium schools (91.89%) (see Table 31). Therefore, the null hypothesis was rejected.

Hypothesis 12. The hypothesis stated in the null was: "There will be no statistical difference in the components perceived as necessary for VAM effectiveness when the variable of years of experience is considered." A chi-square was used to analyze the data. The test indicated that a significant difference existed between the groups for "statewide assessment," "student growth," "reliable student data," "multiple years of data," "consideration of outlier data," "makes provisions for demographics,"

"random student grouping," and "effective means of calculating." "The ability to place students" was not used differently between groups (see Table 40). Educational leaders with 11 or more years of experience (96.78%) used "statewide assessment" more than educational leaders with 0-10 years of experience (78.38%). Educational leaders with 11 or more years of experience (100%) used "student growth" more than educational leaders with 0-10 years of experience (79.73%). Educational leaders with 11 or more years of experience (100%) used "reliable student data" more than educational leaders with 0-10 years of experience (98.65%). Educational leaders with 0-10 years of experience (100%) and educational leaders with 11 or more years of experience (100%) both used "multiple years of student data." Educational leaders with 0-10 years of experience (98.65%) used "consideration of outlier data" more than educational leaders with 11 or more years of experience (96.77%). Educational leaders with 11 or more years of experience (93.55%) used "makes provisions for demographics" more than leaders with 0-10 years of experience (86.49%). Educational leaders with 0-10 years of experience (98.65%) used "random student grouping" more than educational leaders with 11 or more years of experience (96.77%). Therefore, the null hypothesis was rejected.

Research Questions. Four research questions guided this study. Research Question 1 was "Did the impact of VAM on leadership practices differ based on position, school size, or years of experience in Northwest Louisiana?" The answer is "no" regarding position (see Table 13), "yes" regarding school size (see Table 23), and "no" regarding experience (see Table 35). "Item 7 of the VIO addressed this question. The results of the ANOVA indicated that no significant difference existed between groups

based on position (see Table 13). There was a significant difference in the impact of VAM data according to school size with regard to "has a positive impact on teacher morale" and "did not contribute to teacher stress" (see Table 22). The results of the ANOVA indicated that no significant difference existed between groups based on experience (see Table 35).

Research Question 2 was "Did concerns of educational leaders about VAM effectiveness differ based on position, school size, or years of experience in Northwest Louisiana?" The answer is "yes" regarding the concern "stress" and "teacher grievances." Item 8 of the VIO addressed this question. The results of the chi-square analysis indicated that a significant difference existed between groups based on position with regard to "stress" and "teacher grievances" (see Table 14). The results of the chi-square analysis indicated that a significant difference existed between groups based on school size with regard to "stress" and teacher grievances" (see Table 26). The results of the chi-square analysis indicated that a difference existed between groups based on experience with regard to "stress" and "teacher grievances" (see Table 36).

Research Question 3 was "Did the uses and interventions educational leaders provided to teachers differ based on position, school size, and years of experience in Northwest Louisiana?" The answer is yes. This question was addressed by Items 10 and 12 of the VIO. The results of the chi-square analyses indicated that the uses (see Table 16) and interventions (see Table 20) were all significant based on position. The results of the chi-square analyses indicated that the uses (see Table 28) and interventions (see Table 32) were all significant based on school size. The results of the chi-square analyses

indicated that the uses (see Table 38) and interventions (see Table 42) were all significant based on experience. The uses of VAM data differed based on position (see Table 17), school size (see Table 28), and years of experience (see Table 39). The interventions as a results of VAM differed based on position (see Table 20), school size (see Table 32), and years of experience (see Table 43).

Research Question 4 was "Did educational leaders' perception of components necessary for VAM effectiveness differ based on position, school size, or years of experience in northwest Louisiana?" Item 11 of the VIO addressed this question. This item listed 9 components needed for VAM effectiveness. The answer is yes. The chi-square analysis indicated that a significant difference existed between the groups for "statewide assessment," "student growth," "reliable student data," "multiple years of data," "consideration of outlier data," "makes provisions for demographics," "random student grouping," and "effective means of calculating," but not for "the ability to place students" (see Table 18). Further support for these findings are reported in Table 19. The chi-square analysis indicated that a significant difference existed between groups for all items based on school size (see Table 30). Further support for these findings are reported in Table 31. The chi-square analysis indicated that a significant difference existed between groups for "statewide assessment," "student growth," "reliable student data," "multiple years of data," "consideration of outlier data," "makes provisions for demographics," "random student grouping," and "effective means of calculating, but not for "the ability to place students" (see Table 40). Further support for these findings are reported in Table 41.

CHAPTER 5

SUMMARY OF STUDY, FINDINGS, DISCUSSION, CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS

The information presented in this chapter provides a summary of the study, findings for the research questions, conclusions, implications for policy and practice, recommendations for future research, and limitations.

Summary of the Study

This study addressed the impact of VAM, concerns with VAM data, uses and interventions educational leaders provided teachers, and components perceived as necessary for VAM effectiveness as an evaluation tool. The results of this research indicated that differences existed between groups based on position, school size, and experience.

Findings

1. Hypothesis 1 was accepted. There was no significant difference between educational leaders on the impact of VAM based on position.

2. Hypothesis 2 was rejected. There was a significant difference between educational leaders on the impact of VAM based on school size.
3. Hypothesis 3 was accepted. There was no significant difference between educational leaders on the impact of VAM based on years of experience.
4. Hypothesis 4 was rejected. There was a significant difference in the concerns educational leaders encountered in VAM effectiveness when the variable of position was considered.
5. Hypothesis 5 was rejected. There was a significant difference in the concerns educational leaders encountered in VAM effectiveness when the variable of school size was considered.
6. Hypothesis 6 was rejected. There was a significant difference in the concerns educational leaders encountered in VAM effectiveness when the variable of years of experience was considered.
7. Hypothesis 7 was rejected. There was a significant difference in the uses and interventions educational leaders provided teachers when the variable of position was considered.
8. Hypothesis 8 was rejected. There was a significant difference in the uses and interventions educational leaders provided teachers when the variable of school size was considered.

9. Hypothesis 9 was rejected. There was a significant difference in the uses and interventions educational leaders provided teachers when the variable of years of experience was considered.
10. Hypothesis 10 was rejected. There was a significant difference in the components necessary for VAM effectiveness when the variable of position was considered.
11. Hypothesis 11 was rejected. There was a significant difference in the components necessary for VAM effectiveness when the variable of school size was considered.
12. Hypothesis 12 was rejected. There was a significant difference in the components perceived necessary for VAM effectiveness when the variable of years of experience was considered.

There were four research questions used for this study:

Research Question 1. Did the impact of VAM on leadership practices differ based on position, school size, and years of experience in northwest Louisiana?

The findings for Research Question 1 indicated that a significant difference existed among educational leaders based on school size, but not position and years of experience. VIO Item # 7 addressed this research question. Educational leaders were asked if VAM: (a) improves achievement scores (b) measures teacher performance (c) is fair to teachers, (d) improves instruction, (e) improves curriculum (f) has a positive effect on teacher morale (g) equal opportunity to show gain, (h) did not contribute to teacher stress, and (i) shows effect of teacher on student learning (see Tables 13, 23, and 35). The

results of the ANOVA indicated there was no significant difference between groups based on position (see Table 13). The results of the ANOVA indicated that a significant difference existed between groups based on school size (see Table 23). Responses to the two items "has a positive effect on teacher morale" and "does not contribute to teacher stress" were different based on school size. Small schools experienced more concerns with "has a positive effect on teacher morale" than medium and large schools. Small schools experienced more concerns with "did not contribute to teacher stress" than medium and large schools. (see Table 22). The results of the ANOVA indicated there was no significant difference between groups based on years of experience (see Table 35).

Research Question 2. Did concerns of educational leaders about VAM effectiveness differ based on position, school size, and years of experience in northwest Louisiana? The findings for Research Question 2 were that significant differences existed among educational leaders based on position, school size, and experience. The answer is yes (see page 112). VIO Item 8 addressed this research question. Educational leaders were asked if they experienced concerns with "time management, "stress," "changes in faculty," " teacher grievances," and "scheduling." The chi-square analysis indicated that significant differences existed for "stress" and "teacher grievances" based on position (see Table 14), school size (see Table 26), and years of experience (see Table 36).

Research Question 3. Did the uses and interventions (student placement, teacher placement, professional development, giving teachers feedback, more observations, and

termination) educational leaders provided to teachers differ based on position, school size, and years of experience? The answer is yes.

The findings for Research Question 3 were that differences existed among educational leaders based on position, school size, and experience. This question was addressed by VIO Items 10 and 12. Educational leaders were asked about their use of VAM data in several of their practices. The chi-square analyses in Tables 16 and 20 indicated that the uses and interventions were all significant based on position. The chi-square analyses in Tables 28 and 32 indicated that the uses and interventions were all significant based on school size. The chi-square analyses in tables 38 and 42 indicated that the uses and interventions were all significant based on years of experience. The uses and interventions educational leaders provided to teachers differed based on position (see Tables 17 and 21), school size (see Tables 29 and 33) and years of experience (see Tables 39 and 43).

Research Question 4. Did educational leaders' perception of components necessary for VAM effectiveness differ based on position, school size, and years of experience in northwest Louisiana? The answer is yes. The findings for Research Question 4 were that differences existed among educational leaders based on position, school size, and experience. This question was addressed by VIO Item 11. The chi-square analysis indicated that a significant difference existed between groups based on position for all items except "the ability to place students" (see Tables 18 and 19). The chi-square analysis indicated that a significant difference existed between groups for all items based on school size (see Tables 30 and 31). The chi-square analysis indicated that a

significant difference existed between groups for all items except "the ability to place students" based on years of experience (see Tables 40 and 41).

Discussion

Unlike the Young (1996) study, there were no differences based on position and years of experience regarding the impact of VAM on leadership practices. However, this study did show that differences existed among educational leaders regarding the impact of VAM based on school size. The Young (1996) study concluded that educational leaders differed in how VAM data impacted their practices based on school size.

The variable school size from the Young (1996) study was further supported by the Gagnon (2015) research about school size impacting VAM data. Like the Gagnon (2015) and Young (1996) studies, this study showed that differences occurred between leaders based on school size. This study also concluded that educational leaders differed in how they perceived and used VAM data based on school size. Leaders in smaller schools the data more for observations, feedback, professional development, changes in teacher assignments, and teacher termination than leaders in larger schools. This finding differed from the conclusions in the Gagnon (2015), which indicated that larger schools were more likely to have the support and resources needed to effectively implement and use VAM data to evaluate teachers. Therefore, just as the previous research indicated that school size impacted VAM data, this research concludes that it also impacts how leaders perceived VAM data and how they used it in their practices. The differences in the demographics showed that certain groups of leaders agreed more with the model than

others. Overall, in neither the Young (1996) study nor in this study did educational leaders perceive VAM as an effective means of evaluation.

This study differed from the Young (1996) study for the variable years of experience. While the Young (1996) study concluded that educational leaders with more than 10 years of experience did not use VAM data as much as those with less than 10 years of experience, the results of this study showed that leaders with 11 or more years of experience used the data more for teacher placement, observations, professional development, and changes in teacher assignment than those with fewer years of experience. This finding was interesting as newer administrators in Louisiana are now trained to use data to guide their leadership practices (LDOE, 2014). The Young study was done 20 years prior to this study. Time could have impacted the difference in the results between the two studies as the role of the educational leader has changed in the 20 years that has lapsed between the two studies (Alvoid & Black, 2014).

Educational leaders in each group (position, school size, and years of experience) differed in which of the nine components they perceived necessary for VAM effectiveness. While statistical differences existed among their level of agreement, the leaders disagreed on one of the nine components as being necessary for VAM effectiveness, the ability to place students. Louisiana had only five of those nine components in place (Hadfield et al., 2012). When asked which components would make VAM effective, the educational leaders agreed that all five of the components Louisiana had in place were necessary for an effective VAM model; however, they also agreed that three additional components would make VAM more effective in Louisiana. As VAM

will be used in Louisiana to evaluate teachers, this information may provide the state department of education insight into how VAM data are generated. VAM was already considered reliable with a correlation coefficient of .5, which means the data are stable, but could be stronger (LDOE, 2014). Educational leaders may not understand how the components in place are used to generate VAM data, which could have caused the negative perceptions of the model, as well as the differences in how the data were used among different demographics.

The educational leaders in this study also agreed that they used VAM data to provide professional development to their teachers. This finding aligned with the finding of Jacob and Lefgren (2008). Jacob and Lefgren (2008) concluded that leaders could identify their least and most effective teachers with VAM data and provide professional development support to these groups of teachers, but the leaders were still unclear about how to support teachers in the middle range of effectiveness. Future research about instructional practices that help teachers improve their effectiveness could further aid educational leaders in providing meaningful support to teachers (Jacob & Lefgren, 2008).

Conclusions

Based on the findings of this study, the following conclusions were reached:

1. Educational leaders in northwest Louisiana perceived that VAM was not fair to all teachers (see Table 6).
2. Educational leaders in northwest Louisiana perceived that VAM did not have a positive impact on teacher morale (see Table 6).

3. Educational leaders in northwest Louisiana perceived that VAM did not offer high- and low-achievers equal opportunity for gain. Educational leaders in northwest Louisiana perceived that VAM was not an effective means of showing teacher effect on student learning (see Table 6).
4. Educational leaders in northwest Louisiana encountered concerns with time management and stress while using VAM (see Table 7).
5. Educational leaders in northwest Louisiana indicated that VAM impacted their practices as leaders in terms of giving more feedback, providing professional development, and determining how they assigned teachers (see Table 9).
6. Educational leaders in northwest Louisiana indicated that eight of the nine components reviewed in this study were necessary for successful VAM implementation (see Table 10).

Implications for Policy and Practice

The state of Louisiana did not use VAM to evaluate teachers in 2014 or 2015. However, it will be used to evaluate teachers in the future. The state department of education should review VAM components and make updates to include the eight components recommended by educational leaders in this study.

Educational leaders should participate in professional development to understand the purpose of VAM and how to use it as an effective and supportive evaluation tool. Alternative uses of VAM may alleviate the concerns educational leaders encountered.

VAM data may be useful, but educational leaders might be more receptive if it is used as something other than a means to assign teachers labels to indicate their effectiveness. The state department of education should review its evaluation processes based on the change theory. The four characteristics of change (i.e., need, clarity, complexity, and quality/practicality) were evident for VAM implementation in Louisiana (Fullan, 2001).

The purpose of VAM must be made clear to educational leaders if it is to be used effectively as a support system for their roles as human resource managers. All stakeholders need to be provided professional development training in how to use the information provided by VAM for its intended uses: feedback and support. Professional development trainings are crucial to provide key information to all stakeholders to alleviate the concerns of stress and teacher turnover rate. The opportunity for stakeholders to share concerns and feedback must also be available so that the model can continue to improve in its intended purpose. This would address monitoring and coping, which is an element of effective change implementation (Fullan, 2001). The calculations and components of VAM must be restructured to ensure the quality and practicality of its use. The perception of VAM must change if it is to become part of the accountability system in Louisiana.

Recommendations for Future Research

The following recommendations for further research were developed as a result of this study. Additional research on VAM implementation needs to be conducted. Continued research will help Louisiana validate the effectiveness of VAM to evaluate

teachers. Researchers could investigate whether a correlation exists between a school's performance score and the percentage of its teachers with highly effective VAM scores. Additional research on instructional practices used by educators with highly effective VAM scores may provide insight and support to educators with respect to how they can achieve success with VAM. Research that can link strategies and practices to effective VAM scores can also support educational leaders in providing feedback to teachers to strengthen their performance, thereby improving and increasing student achievement.

Limitations

This study had several limitations related to return and response rates. Although 136 educational leaders responded to the VIO survey, only 105 completed the survey. The response rate by subgroup was lower than anticipated. The low response rate based on position, years of experience, and school size affected the ability to compare the groups.

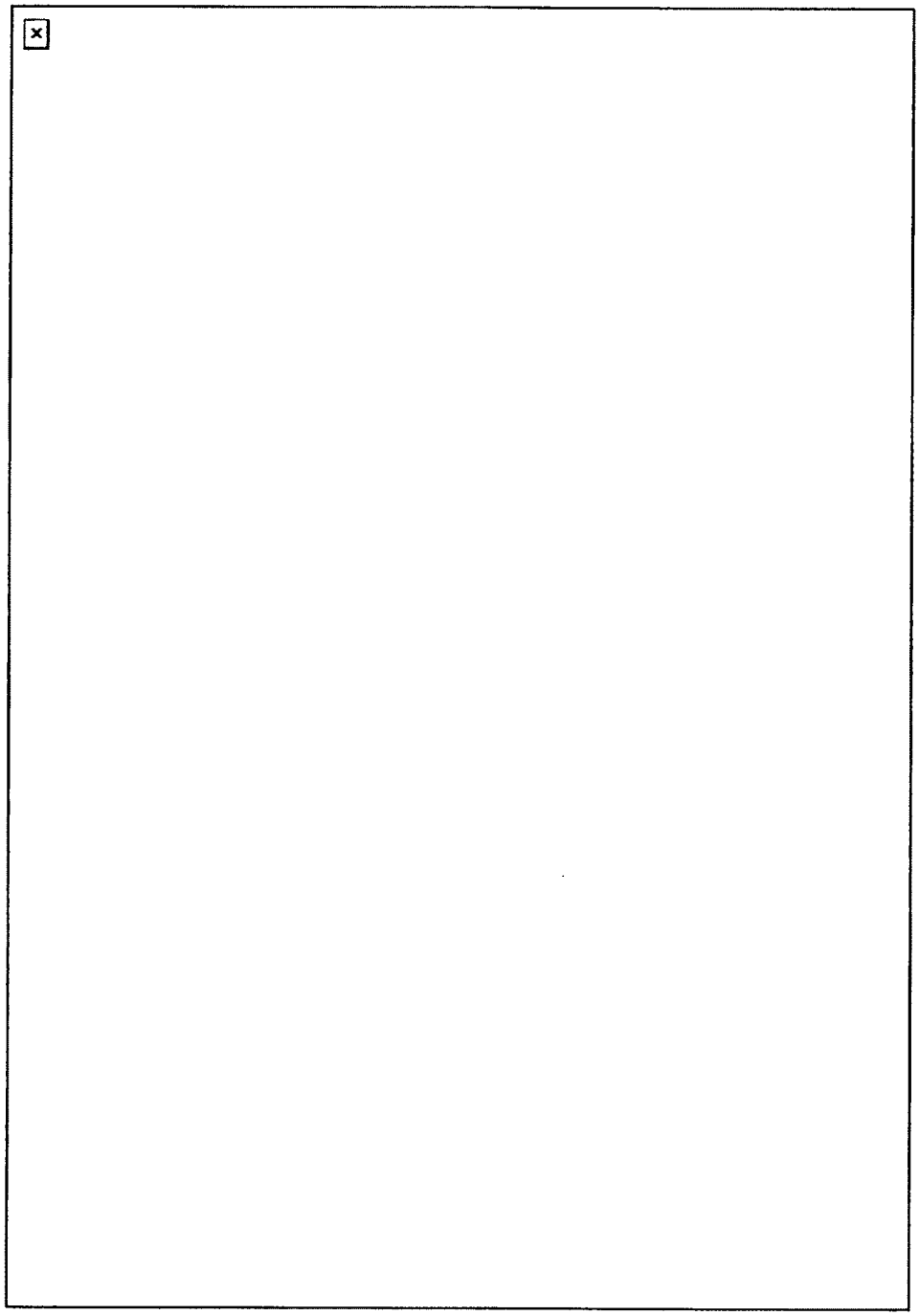
Summary

This study addressed the impact of VAM, concerns with VAM data, uses and interventions educational leaders provided teachers, and components perceived as necessary for VAM effectiveness as an evaluation tool. Six districts in northwest Louisiana participated in the research. The study compared responses based on position, school size, and years of experience. The study concluded that educational leaders differed according to position, experience, or school size regarding the impact of VAM, concerns with VAM, uses and interventions, and components they perceived as

necessary for VAM effectiveness. Overall, the study concluded that educational leaders did not perceive VAM as an effective tool for evaluation. Leaders agreed that additional components to the model could make it more effective. The educational leaders believed VAM could be useful in supporting their roles and practices as educational leaders, but believed certain components needed to be implemented to achieve its potential.

APPENDIX A

INSTITUTIONAL REVIEW BOARD FORM



APPENDIX B

HUMAN SUBJECTS COMMITTEE FORM

STUDY/PROJECT INFORMATION FOR HUMAN SUBJECTS COMMITTEE

Describe your study/project in detail for the Human Subjects Committee. Please include the following information.

TITLE: The Impact of A Value-Added Model on Educational Leadership Practices in Northwest Louisiana

PROJECT DIRECTOR(S): Candice Webert, Doctoral Candidate

EMAIL: candyweb2002@yahoo.com

PHONE: 318-347-1724

DEPARTMENT(S): Curriculum, Instruction, and Leadership

PURPOSE OF STUDY/PROJECT: The purpose of the study is to identify how educational leaders used the data generated from the Value-Added Model.

SUBJECTS: The subjects for the study are to include approximately 200 educational leaders (principals, assistant principals, coordinators, and supervisors) from Caddo, Bossier, Desoto, Natchitoches, Bienville, and Claiborne Parish

PROCEDURE: Permission to conduct a survey and interview in the district(s) will be obtained from the superintendent of each district. Permission from the developer of the survey will be obtained by letter. The surveys will be distributed from Survey Monkey to the educational leaders. The survey instrument consists of 3 multiple-choice demographic questions, 10 Likert-response questions, and 4 open-ended questions. Responses from the data will be coded and analyzed to identify themes.

INSTRUMENTS AND MEASURES TO INSURE PROTECTION OF CONFIDENTIALITY, ANONYMITY: All information will be confidential and viewed by only the researcher. A disclaimer will be included as a preface to the survey for all participants. They may be asked to participate in follow-up interviews.

RISKS/ALTERNATIVE TREATMENTS: The participant understands that Louisiana Tech University and the participating districts will not offer financial compensation for participating in this research. Participation is voluntary.

BENEFITS/COMPENSATION: None

Do you plan to publish this study? **YES** □NO	□X
Will this study be published by a national organization? X□NO	□ **YES**
Are copyrighted materials involved? □NO	X□ **YES**
Do you have written permission to use copyrighted materials? □NO	□X **YES**
COMMENTS:	

SAFEGUARDS OF PHYSICAL AND EMOTIONAL WELL-BEING: Responses to the survey and interviews will remain confidential between the researcher and participant. No treatment will be administered to the participants. Neither the employment status nor the evaluation of the participants will be affected by their participation in this study.

Note: Use the Human Subjects Consent form to briefly summarize information about the study/project to participants and obtain their permission to participate.

HUMAN SUBJECTS CONSENT FORM

The following is a brief summary of the project in which you are asked to participate. Please read this information before signing the statement below.

TITLE OF PROJECT: The Impact of the Value-Added Model on Educational Leadership Practices in Northwest Louisiana

PURPOSE OF STUDY/PROJECT: The purpose of the study is to identify how educational leaders used the data generated from the value-added model and the concern they faced from the implementation of the value-added model in evaluating teachers.

PROCEDURE: Permission to conduct a survey and interview in the districts(s) will be obtained from the superintendent of each district. Permission from the developer of the survey will be obtained by letter. The surveys will be distributed by Survey Monkey to the educational leaders. The survey instrument consists of 3 multiple-choice demographic questions, 10 Likert-response questions, and 4 open-ended questions. Responses from the data will be coded and analyzed to identify themes.

INSTRUMENTS: Survey developed from research surveys of Finke,Young, and Hadfield.

RISKS/ALTERNATIVE TREATMENTS: The participant understands that Louisiana Tech is not able to offer financial compensation nor to absorb the costs of medical treatment should you be injured as a result of participating in this research.

The following disclosure applies to all participants using online survey tools: This server may collect information and your IP address indirectly and automatically via "cookies".

EXTRA CREDIT: If extra credit is offered to students participating in research, an alternative extra credit that requires a similar investment of time and energy will also be offered to those students who do not choose to volunteer as research subjects.

BENEFITS/COMPENSATION: None.

I, Candice Webert, attest with my signature that I have read and understood the following description of the study, "The Impact of the Value-Added Model on Educational Leadership Practices in Northwest Louisiana," and its purposes and methods. I understand that my participation in this research is strictly voluntary and my participation or refusal to participate in this study will not affect my relationship with Louisiana Tech University or my grades in any way. Further, I understand that I may withdraw at any time or refuse to answer any questions without penalty.

Upon completion of the study, I understand that the results will be freely available to me upon request. I understand that the results of my survey will be confidential, accessible only to the principal investigators, myself, or a legally appointed representative. I have not been requested to waive nor do I waive any of my rights related to participating in this study.

_____ _____

Signature of Participant or Guardian Date

CONTACT INFORMATION: The principal experimenters listed below may be reached to answer questions about the research, subjects' rights, or related matters.

Candice Webert, (318) 347-1724

Dr. Dawn Basinger, Doctoral Committee Chair, (318) 257-2382

Members of the Human Use Committee of Louisiana Tech University may also be contacted if a problem cannot be discussed with the experimenters:

Dr. Stan Napper (257-3056)

Dr. Mary M. Livingston (257-2292 or 257-5066)

APPENDIX C

PERMISSION LETTER TO SUPERINTENDENTS

September 7, 2014

Candice Webert
6205 Bocage Drive
Shreveport, LA 71119

(INSERT NAME), Superintendent
(INSERT SCHOOL DISTRICT) Parish School Board
(INSERT ADDRESS), (INSERT CITY), LA (INSERT ZIP CODE)

Dear Dr. (INSERT NAME):

My name is Candice Webert and I am a doctoral candidate from Louisiana Tech University. I am in the process of conducting research on the Impact of the Value-Added Model on Educational Leadership Practices in Northwest Louisiana. The purpose of this study is to identify the methods educational leaders have used to improve the effectiveness of teachers from the value-added model. The study will examine the issues educational leaders faced with the implementation of the model. The study will also examine what educational leaders perceive as components needed by districts in order to have a successful implementation of the Value-Added Model among school districts. I am requesting permission to conduct a survey in (INSERT DISTRICT). The survey will be administered electronically. The participants will include principals, assistant principals, and coordinators who have had experience using the Value-Added Model to evaluate teachers. The survey will take place in the fall upon approval. A follow-up focus group will be created to further analyze the results from the initial study. The results of the final product will be shared with participating districts. Thank you for your support and cooperation.

Sincerely,

Candice D. Webert

APPENDIX D

RESPONSES FROM DISTRICT SUPERINTENDENTS

From: Superintendent [superintendent@desotopsb.com]

Sent: Tuesday, September 23, 2014 12:44 PM
To: WEBERT, CANDICE
Subject: RE: permission to conduct survey

Thanks; You may e-mail the survey to leaders within our system. I will not require their participation so your feedback will be voluntarily based. I hope this helps and best of luck. Please share results upon conclusion.

You're almost home free!

cb

Dr. Cade Brumley
DeSoto Parish Schools
Superintendent
P - 318.872.2836
F - 318.872.1324

From: DC Machen [DC.Machen@BossierSchools.Org]
Sent: Tuesday, September 09, 2014 1:10 PM
To: WEBERT, CANDICE
Subject: Doctoral research survey

Ms. Webert – I have received your letter requesting permission to survey Educational Leaders (principals and assistant principals) in Bossier Parish related to the implementation of the Value-added Model. I grant you permission to contact the individual school principals and assistant principals related to their voluntary participation in your survey. Please understand that the participation in this survey is strictly left up to the discretion of the principals and assistant principals. I will notify the Principals and Assistant Principals that I have given you permission to contact them related to this request. You can find the contact information for each of the Principals and Assistant Principals at our website, www.bossierschools.org . Best of luck with continued success as your pursue your doctoral degree.

Sincerely,

D.C. Machen, Jr.

Superintendent

Dear Ms. Webert,

As Superintendent of Natchitoches Parish Schools, you have my approval to conduct your research on the Impact of the Value-Added Model on Education Leaders in Louisiana.

Dale Skinner
Superintendent
Natchitoches Parish School Board
310 Royal Street
P.O. Box 16
Natchitoches, LA 71458

From: William Kennedy [wkennedy@claibornepsb.org]
Sent: Tuesday, September 23, 2014 1:03 PM
To: WEBERT, CANDICE
Subject: RE: permission to conduct survey

I will pass this email along to principals. Look forward to the survey.

William Kennedy
Superintendent
Claiborne Parish Schools
P.O. Box 600
Homer, LA 71040
318.927.3502 (phone)
318.927.3650 or 318.927.9184 (fax)

Board Members

Richard Walker - District 7
President

Elmer Sullivan - District 2
Vice President

Dan Lee - District 1
Freddie Stow - District 3
Bonita Reifield - District 4
Martha Grigg - District 5
Tony Knotts - District 6

William Britt
Superintendent

Bienville Parish School Board
1956 First Street
P.O. Box 418
Arcadia, Louisiana 71001

TELEPHONE
(318) 263-9416

FAX
(318) 263-3100

WEB PAGE
www.bpsb.us

September 12, 2014

Candice D. Webert
6008 Youree Drive
Shreveport, LA 71105

Dear Ms. Webert:

As Superintendent of Bienville Parish Schools, I grant permission for you to contact principals in Bienville Parish regarding your education research study relative to the Impact of the Value-Added Model on Educational Leaders in Louisiana. No individually identifiable information for students or Bienville Parish personnel may be provided.

Participation will be on a voluntary basis by each principal.

Sincerely,

William Britt

William Britt
Superintendent

The Bienville Parish School System does not discriminate on the basis of race, color, national origin, sex, age or qualified disability.

Good Morning, Ms. Webert.

Your request to survey principals, assistant principals and coordinators experienced using Value-Added Model to evaluate teachers is acknowledged and **approved.** School directors will expect to hear from you in the fall regarding details.

Best wishes as you pursue the doctoral degree.

Mary Nash Robinson, Ph.D.
Chief of Staff

1961 Midway Street
P.O. Box 32000
Shreveport, LA 71130-2000
318-603-7105/Office
318-603-6324/Fax

APPENDIX E

VALUE-ADDED MODEL INSTRUMENTATION OPINIONNAIRE

The Impact of the Value Added Model on Educational Leadership in Northwest Louisiana

*** 1. Participation in this survey is optional. Responses to the survey and interviews will remain confidential between the researcher and the participant. Neither the employment status nor evaluation of the participants will be affected from their participation in this study. Do you agree to the terms of this survey?**

- ○ Yes
- ○ No

Next

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The Impact of the Value Added Model on Educational Leadership in Northwest Louisiana

*** 2. Were you an administrator with access to Value Added Data about teachers during any of the years spanning from 2010-2014?**

- ○ Yes
- ○ No

Prev Next

The Impact of the Value Added Model on Educational Leadership in Northwest Louisiana

*** 3. In which district do you work?**

- Caddo
- Bossier
- Desoto
- Claiborne
- Bienville
- Natchitoches

Prev Next

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The Impact of the Value Added Model on Educational Leadership in Northwest Louisiana

*** 4. How many years of administrative experience do you have (including this one)?**

- ○ 0-5 years
- ○ 6-10 years
- ○ over 10 years

Prev Next

The Impact of the Value Added Model on Educational Leadership in Northwest Louisiana

*** 5. What is the size of the school you currently serve?**

- ○ 0-299
- ○ 300-599
- ○ 600 or greater

Prev Next

The Impact of the Value Added Model on Educational Leadership in Northwest Louisiana

*** 6. What is your current position?**

Principal
Assistant Principal
Distnct Personnel
Coordinator
Other (please specify)

Prev Next

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The Impact of the Value Added Model on Educational Leadership in Northwest Louisiana

*** 7. Please indicate your perception of the impact the Value Added System has had on the each of the following items:**

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Improves Achievement Scores	○	○	○	○	○
Measures Teacher Performance	○	○	○	○	○
Is Fair to All Teachers	○	○	○	○	○
Improves Instruction	○	○	○	○	○
Improves Curriculum	○	○	○	○	○
Has a positive effect on teacher morale	○	○	○	○	○
Offers high and low achievers equal opportunity to show gain.	○	○	○	○	○
Did not contribute to teacher stress.	○	○	○	○	○
Is an effective means of showing the effect of the teacher on student learning.	○	○	○	○	○

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The Impact of the Value Added Model on Educational Leadership in Northwest Louisiana

*** 8. Which of the following concerns did you encounter when evaluating teachers using value-added data?**

	Yes	No
Time Management (of self/evaluator)	○	○
Stress (self)	○	○
Changes in faculty	○	○
Teacher Grievances	○	○
Scheduling Difficulties	○	○

Prev Next

The Impact of the Value Added Model on Educational Leadership in Northwest Louisiana

*** 9. To what degree were the data generated from value-added useful for your leadership position?**

- ○ Very Useful
- ○ Somewhat Useful
- ○ Undecided
- ○ Not Very Useful

Prev Next

The Impact of the Value Added Model on Educational Leadership in Northwest Louisiana

*** 10. How did you use the data?**

	Yes	No	N/A
Student placement/scheduling	○	○	○
Teacher placement/assignment	○	○	○
Professional Development	○	○	○
Giving Teachers Feedback	○	○	○

Prev Next

The Impact of the Value Added Model on Educational Leadership in Northwest Louisiana

*** 11. Which of the following from the list below needed to have been in place in order for the Value-Added Model to have been implemented in Louisiana?**

	Yes	No
Statewide Assessment	○	○
Student Growth	○	○
Reliable Student Data	○	○
Multiple Years of Available Student Data	○	○
Consideration of Outlier Data (scores, attendance, mobility)	○	○
Makes provisions for student demographics	○	○
The ability to place students in classes based on teacher VAM data	○	○
Random student groupings	○	○
Effective means of calculating a teacher evaluation score	○	○

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The Impact of the Value Added Model on Educational Leadership in Northwest Louisiana

*** 12. What interventions did you use with teachers as a result of the Value Added Model?**

	Yes	No	N/A
More Observations	○	○	○
More/Frequent Feedback	○	○	○
Professional Development	○	○	○
Changes in Teacher Assignments	○	○	○
Teacher Termination	○	○	○

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The Impact of the Value Added Model on Educational Leadership in Northwest Louisiana

13. If you would like to participate in a brief follow-up interview, please fill out the following contact information. Your contact information will not be linked to your responses.

Name

School

Email Address

Phone Number

Prev Done

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APPENDIX F

PERMISSION TO CONDUCT SURVEY (YOUNG)

Dear Ms. Weber,

Tom is undergoing rehab from a stroke and a fractured hip. I read your letter to him and he said you are welcome to use the survey or anything in his book that you might need.

I am so sorry I am so late getting back to you. Good luck and best wishes on your book.

Sincerely,
Patricia Young

APPENDIX G

PERMISSION TO CONDUCT SURVEY (FINKE)

Candice,

You are more than welcome to use the information and questions from my dissertation. Good luck on your study!!

Greg

Dr. Greg Finke

Principal

Independence Elementary School

513.755.8300 ext. 18129

513.617.0366 (cell)513.755.6941 (fax)

-----Original Message-----
From: Candice Webert [mailto:candyweb2002@yahoo.com]
Sent: Friday, July 25, 2014 12:22 PM
To: Greg Finke
Subject: Permission to Use Survey Instrument

Good morning Dr. Finke,

My name is Candice Webert and I am a doctoral student at Louisiana Tech University. I am in the process of developing my research instrument for my dissertation. My topic is the Impact of the Value-Added Model on Educational Leaders in Northwest Louisiana. The purpose of the research is to gather data on how educational leaders used the data produced by VAM in their practice. I would like to use the open-ended questions from your 2012 dissertation study as part of my instrument. I can be reached via email at candyweb2002@yahoo.com or cdw031@latech.edu. I look forward to hearing from you soon.

Sincerely,

Candice Webert
Doctor of Education Candidate
Louisiana Tech University

APPENDIX H

PERMISSION TO CONDUCT SURVEY (HADFIELD)

Hi Candice,

It was good to talk with you on the telephone last week. You most certainly have my permission to utilize the study.

Best of luck with your research,

Tim

Dr. Tim Hadfield
Superintendent of Schools
Camdenton R-III School District

REFERENCES

Alvarez, M. E., &Anderson- Ketchmark, C. A. (2011). Danielson's framework for teaching. *Children & Schools*, *33*, 61–63.

Alvoid, L., & Black, W. L. (2014). *The changing role of the principal: How high achieving districts are recalibrating school leadership.* Retrieved from the Center for American Progress website: www.americanprogress.org/issues/education /report/2014/07/01/93015

Boudreaux, G. J. (2016, May 31). *SB 477.* Retrieved from the Louisiana State Legislature website: www.legis/la.gov

Bradley, B. M. (2013). *Principals' perspectives on using value-added data to strategically plan for organizational management* (Doctoral dissertation). Retrieved from ProQuest. (UMI No. 3561927)

Danielson, C. (2001). New trends in teacher evaluation. *Educational Leadership*, *58*, 12–15.

Darling-Hammond, L. (2002). Highly qualified teachers: What does scientifically-based research actually tell us? *Educational Researcher*, *31*(9), 13–25.

Finke, G. E. (2012). *The student placement process: How principals of high performing schools in Ohio employ value-added data in the decision making process* (Doctoral Dissertation). Retrieved from ProQuest. (UMI No. 3539903)

Fullan, M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey-Bass.

Gagnon (2015). School location and teacher supply: Understanding the distribution of teacher effects. *Current Issues in Education, 18*(3), 1–15.

Gall, M., Gall, J., & Borg, W. (2007). *Educational research: An introduction* (8th ed.). Boston, MA: Allyn & Bacon.

Geithman, B. W. (2009). *Examining principal perceptions and teacher and school effectiveness through a value-added accountability model* (Doctoral dissertation). Retrieved from ProQuest. (UMI No. 3355255)

Hadfield, T. E., Hutchinson-Lupardus, T. R, & Snyder, J. E. (2012). *Assessing state models of value-added teacher evaluations* (Doctoral dissertation). Retrieved from ProQuest. (UMI No. 3516221)

Hanushek, E. A., & Raymond, M. E. (2004). The effect of school accountability systems on the level and distribution of student achievement. *Journal of the European Economic Association, 2*(2-3), 406–415.

Hanushek, E. A., & Rivkin, S. G. (2010). Generalizations about using value-added measures of teacher quality. *American Economic Review, 100*(2), 1–11.

Jacob, B. A., & Lefgren, L. (2008). Can principals identify effective teachers? *Journal of Labor Economics, 26*, 101–136.

Lipscomb, S., Teh, B., Gill, B., Chiang, H., & Owens, A. (2010, September 14). *Teacher and principal value research findings and implementation practices* Retrieved from http://files.eric.ed.gov/fulltext/ED531785.pdf

Lloyd, J. L. (2008). *Instituting a value-added assessment system in Ohio: The professional development implications from the perspective of the district value-added specialists* (Doctoral dissertation). Retrieved from ProQuest. (UMI No. 3335877)

Louisiana Department of Education. (2014). *Measuring teacher impact on student growth in grades and subjects (value-added)*. Retrieved April 4, 2014, from http://www.louisianaschools.net/topics/value_added.html

McCaffery, D. F., Lockwood, J. R., Koretz, D. M., & Hamilton, L. S. (2003). *Evaluating value-added models for teacher accountability.* New York, NY: Rand.

Sanders, W. L., & Horn, S. P. (1994). The Tennessee value-added assessment system (TVAAS). *Mixed-Model Methodology in Educational Assessment*, *8*, 299–311.

Young, T. A. (1996). *A study of the perceptions of Tennessee teachers, principals, superintendents, legislators, and department of education representatives regarding the impact of the Tennessee value-added assessment system* (Doctoral dissertation). Retrieved from ProQuest. (UMI No. 9633964)