2014

A study of teacher perceptions of the use of student growth measures in teacher evaluation and its effect on school culture

Jennifer L. Slanger

A Study of Teacher Perceptions of the Use of Student Growth Measures in Teacher Evaluation and its Effect on School Culture

by

Jennifer L. Slanger

Dissertation

Submitted to the Department of Leadership and Counseling

Eastern Michigan University

in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

Dissertation Committee:

Barbara Bleyaert, Ed.D., Committee Chair

David Anderson, Ed.D , Committee Member

Lisabeth Margulus, Ed.D., Committee Member

William Price, Ph.D., Committee Member

October 2014

Ypsilanti, Michigan

Acknowledgments

The writing of this dissertation has been the most significant personal and professional challenge I have endured and would not have been possible without the support of my dissertation chair, Dr. Barb Bleyaert, and my dissertation committee. I would like to thank my dissertation committee for their support, guidance, and expertise as I completed this research. Thank you to Dr. Bleyaert for her unwavering support and constructive feedback throughout this project. Dr. Bleyaert's excitement for my research topic continued to challenge me and motivate me throughout this writing. Dr. Bleyaert understood the responsibilities I held outside of working on a dissertation, and continually supported me, both personally and professionally. Thank you to Dr. David Anderson who helped me to better understand the field of statistics and enhanced my understanding so it could be applied to my study. His knowledge and expertise in the area of statistics and research methodology allowed me to become a deeper thinker about statistics and their application to my study. Thank you to Dr. Price whose contributions at the very early stages of my research helped to refine my research to what it has become. Finally, I would like to thank Dr. Liz Margulus for continually checking on my progress and offering her support along this journey. Additionally, I would like to thank Dr. Tom Granoff for his assistance in helping me to further my understanding of the statistical applications for my study.

I would like to acknowledge the support of my Wyoming Public Schools colleagues who have provided professional support as I started and am now completing my dissertation. You have taken a personal interest in what this personal and professional accomplishment means to me; for that I am grateful.

Dedication

I would like to dedicate this dissertation to the following individuals who have played, and continue to play, an integral part of my life. Without the love, support, and understanding of these people, I would have not accomplished this personal and professional goal. To my parents, as a child you impressed upon me the importance of going to college and furthering my education. Not once did you make me feel like a dream was ever out of my reach or that I couldn't achieve something I set my mind to. Without your unconditional love and support I am confident I would not have developed the love of learning I have. You both have always been my biggest supporters and provided the encouragement I needed to not only embark on this journey, but to complete this journey.

To my sisters, Heidi and Amy, thank you for understanding the time and commitment it has taken me to achieve this professional goal. You always knew when I needed to hear "You got this!" or "We are proud of you!" Those words of encouragement went a long way over the past few years.

To my wonderful David, thank you for recognizing the importance of this personal and professional goal. I appreciate your patience and support while I completed this journey. Thank you for providing me with the motivation to keep going, knowing it would all be worth it in the end.

To my EMU crew: Scott, Forrest, Julie, Kathy, and Brandi. I would not have accomplished this academic feat without each of you. Thank you for your support, professional dialogue, laughs, and tears throughout this journey. I am proud to call you not only my colleagues but life-long friends. I look forward to future adventures together, which do not involve talking statistics or research methodology!

To my close friends who always recognized how important it was to me to continue my education even, if at times, it seemed to be at the expense of time we could have been sharing. Thank you for your encouragement, support, and humor throughout this journey.

Abstract

This study explored teacher perceptions of the inclusion of student growth data into the teacher evaluation process and the relationship(s) these perceptions might have on school culture. A positive correlation ($p < .001$) was found between the inclusion of VAM into the teacher evaluation process and motivation to collaborate. Key findings include participants working in priority designated schools were less likely to collaborate; participants with more knowledge about VAM had more positive perceptions; and participants in nonurban schools or smaller schools had more positive perceptions of VAM. Significant main effects for urban location ($p = .001$), number of teachers ($p = .005$), and level of knowledge ($p = .05$) were found. Participants in priority or urban schools indicated they don't want to collaborate at a higher level than their counterparts in non-priority or nonurban schools. The inclusion of VAM appears to lead participants into isolation, not necessarily competitive relationships.

Table of Contents

List of Tables

Chapter 1: Introduction to the Study

The quality of the educational system throughout the United States has been a growing concern among politicians and educators for several decades. Over time, politicians have proposed legislation to address this issue in the hopes of providing an objective means to increase the quality of our educational system. Embedded within this topic is the issue of teacher evaluation and how that relates to the quality of schools in the country (Darling-Hammond, L., 2013). The implementation of a teacher evaluation process includes the interplay of many factors: policy goals, established rules and procedures, union bargaining, value choices, and the local institutional context (Wise, Darling-Hammond, McLaughlin, & Bernstein, 1984). In fact, teacher evaluation is a reoccurring theme as a way to improve the quality of schools (Barton, 2010; Sand, 2005), yet how to do it right is a highly controversial educational issue. Teacher evaluations per se are not necessarily controversial; the ways in which the teacher evaluation process is implemented in any given school district, however, may be controversial because there are many theories and practices as to what is the best way to evaluate teachers (Darling-Hammond, 2013).

In 2001, No Child Left Behind (NCLB) legislation placed an emphasis on student achievement and teacher quality. A key provision of NCLB correlated the quality of school staff with student achievement. Additionally, NCLB indicated that states must become more involved in the teacher evaluation process (Barton, 2010). Teacher quality has a significant impact on the success of schools (Logue-Beldon, 2008); thus in order to improve the quality of our schools and educational services, reform of the teacher evaluation process needed to be considered. In 2010, the reauthorization of the Elementary and Secondary Education Act discussed the "shared responsibility" of improving student achievement (Barton, 2010, p. 1). As a result, states and

districts were called upon to develop and implement teacher evaluation systems that included student growth data as a means of evaluating teacher effectiveness. A federal program (Race to the Top) implemented by the Obama Administration encouraged competition among states to improve teacher and principal effectiveness based on performance. Many states have re-assessed the way teachers should be evaluated, compensated, promoted and granted tenure or dismissed based on their overall effectiveness in their classroom (National Council on Teacher Quality (NCTQ), 2011). In response to the national discussion of teacher evaluation reform, Michigan is one of those states that has focused legislation on reforming the teacher evaluation process.

Within the state of Michigan, the teacher evaluation system is undergoing a paradigm shift in response to the accountability measures stemming from federal and state legislation. School reform laws that were initially included as part of Michigan's Race to the Top application shaped the current legislation known as Michigan School Law Reform (MCL 380.1249). Effective 2012, MCL 380.1249 mandated that school districts must conduct an annual evaluation of each teacher and student growth must be a significant factor as part of the evaluation (S. Res. 926, 2009). The Michigan Department of Education (MDE) distributed $1.3 billion to school districts through the federal State Fiscal Stabilization Fund (SFSF) to implement and conduct educator evaluations (Olivares, 2011). As a condition for receiving funds, school districts were required to report the level of effectiveness to the state. The levels of effectiveness, in turn, are used to determine the retention and promotion of teachers and administrators as it relates to tenure and certification decisions. Additionally, districts must have adopted a performance-based compensation method tied to student growth. For example, a district may set aside a monetary stipend that is to be divided among teachers who receive an end-of-the-year performance rating of highly effective, which must be based, in part, on student growth data (Darling-Hammond,

2013). These significant changes in the teacher evaluation process may be perceived by some to be a top-down punitive approach that leads to a deficit model of evaluation, rather than a supportive, growth model.

Evaluation practices are evolving to become more rigorous and to include student achievement data. According to Sand (2005), past practices of many teacher evaluation processes were viewed as one out of many perfunctory job duties. However, regular and comprehensive teacher evaluations should foster instructional support, raise students' level of achievement, hold staff accountable, recognize exemplary practices, assist in determining deficits in teacher practices, and initiate remedial support (Sand, 2005). These changes have created anxiety and fear in both teachers and principals as it relates to the inclusion of student achievement data in the process. Additionally, there are significant implications that the teacher evaluation process may have on the culture of the school building.

Teacher evaluation processes in the state of Michigan and across the United States are undergoing significant changes. Teachers have different perceptions on how an effective teacher evaluation process can accurately evaluate instructional delivery. To further complicate matters, administrators may lack the confidence to adequately carry out this portion of their job (Baton, 2010; Nickerson, 2009; Sand, 2005). Teacher evaluations are one of many responsibilities carried out by building principals and this may be thought of as "one more thing to do," rather than a highly important task that has the potential to help support teachers. Eventually, states will have to incorporate student growth data as a way to evaluate the quality of teaching. A review of research has not provided strong support for the inclusion of student growth data (Darling-Hammond, 2013; Baker, Barton, Darling-Hammond, Haertel, Ladd, Linn, & Shepard 2010). There is conflicting information as to the type of achievement data that should be used to

measure student growth (Darling-Hammond, 2013; Haertel, 1986; Zinth, 2010). Finally, the culture of the school building may be impacted by the perceptions of the teacher evaluation process. If the teacher evaluation process is framed in a way that is supportive of teachers, rather than punitive, teachers may be more likely to be invested in the process and view it as supportive to their effectiveness as a teacher. The interplay between the reform of the teacher evaluation process, teacher perceptions of the evaluation process, and the inclusion of student growth data is an important factor to consider when examining the teacher evaluation process.

Literature Review and Conceptual Framework Overview

The increasing rigor of the educational system, kindergarten through twelfth grade, requires school districts to ensure that the best teachers are teaching. Having an objective measure of high quality teaching is of utmost importance if we are to improve the educational outcomes for our students and meet the demands of increased rigor. Each school building has a unique organizational culture that binds the organization together and gives it a distinctive identity that may lend itself to high quality teaching and positive educational outcomes for students. Using the conceptual framework known as organizational culture developed by Schein (1990), teacher perceptions of the newly mandated Michigan teacher evaluation system were examined.

Organizational culture for the purpose of this student is defined as:

> A pattern of basic assumptions, invented, discovered, or developed by a group, as it learns to cope with its problems of external adaptation and internal integration, which are taught to new members as the correct way to perceive, think, and feel in relation to those problems. (Schein, 1990, p. 111)

Each school building has a unique organizational culture comprised of both abstract and concrete levels of analysis. Schein (1990) described three components, or levels of culture, that work together to form the overall organizational culture. Culture manifests itself through (1) observable artifacts, (2) espoused values and beliefs, and (3) basic underlying assumptions (Schein, 1990; Schein, 2010).

The most basic level of cultural analysis is observable artifacts. Artifacts are those things one would see, hear, and feel (Schein, 2010). Artifacts include, but are not limited to, the visible products of an organization, such as the layout of the building, dress code that staff follows, the language used within the organization, and observable behaviors people engage in within the organization (Schein, 1990). At this most basic level of cultural analysis is the climate of the organization. Schein (2010) cautions that although observable artifacts are easy to see, they are difficult to gain meaning from because some people may infer deeper assumptions based on their interpretations and personal feelings.

A more abstract level of cultural analysis is espoused values and beliefs. Espoused values include the organizations' norms, ideologies, and philosophies (Schein, 1990). These values and beliefs are articulated and shared by members of the organization and guide group members as to how to handle situations that arise (Schein, 2010). Eventually the espoused values and beliefs will become a part of the organizations' philosophy (Schein, 2010). When the espoused values and beliefs are analyzed, one must pay close attention to the congruence between the values and beliefs held by members and the values and beliefs of effective performance of the organization.

More abstract than the level of espoused values and beliefs, is underlying assumptions. Underlying assumptions is what the present study examined. Basic underlying assumptions are often described as "unconscious assumptions that determine perceptions, thought processes,

feelings and behavior" (Schein, 2010, p. 112). Once a member comes to understand and internalize the basic underlying assumptions of an organization, they begin to gain a deeper, more thorough understanding of the aforementioned two levels of cultural analysis: artifacts and espoused values and beliefs. Artifacts become less ambiguous and espoused values and beliefs are internalized and guide behavior. Once group members come to understand organizations' basic assumptions, they will have a better understanding of the guiding philosophies of the organization.

Basic assumptions tend to be non-debatable and very difficult to change (Schein, 2010). Culture, at this level, defines what to pay attention to, what things mean, and how to behave in certain situations (Schein, 2010). Schein (2010) suggested cultural change at this level is difficult, time consuming, and anxiety provoking. The cognitive processes involved in learning something new at this level, or as a leader, making a cultural change at this level, may involve experiencing a level of cognitive dissonance in which one may "resurrect, reexamine, and possibly change some of the more stable portions of their cognitive structure" (Schein, 2010, p. 28). An analogy can be made between the inclusion of student growth data or VAM into the teacher evaluation process and the basic assumptions underlying a school's organizational culture. Teachers may begin to experience some form of cognitive dissonance as they try to decipher how the inclusion of such data, which is unprecedented, may or may not impact the culture of their school. This may prove to be anxiety provoking for some teachers, as well as administrators.

With the implementation of using student growth data as a measure of teacher effectiveness within the teacher evaluation process, the espoused values and beliefs, as well as the underlying assumptions within the organizational culture of a school, may shift to become

more competitive in nature as each teacher is becoming solely concerned with the performance of their students, not the collective performance of *all* students within a school building.

The culture of any given school is a powerful factor in student learning. In a review of research regarding culture, Deal and Peterson (as cited in Smith & Piele, 2006) emphasized the following important effects culture may have on a school:

> Culture fosters school effectiveness and productivity; culture improves collegial and collaborative activities that foster better communication and problem-solving practices; culture fosters successful change and improvement efforts; culture builds commitment and identification of staff, students, and administrators; culture amplifies the energy, motivation, and vitality of a school's staff, students, and community; and culture increases the focus of daily behavior and attention on what is important and valued (Smith & Piele, 2006, p. 179).

Culture is the collection of shared beliefs and practices that sets the tone for a school building and determines how instructional practices are carried out and how new mandates are interpreted and viewed. For the purposes of this study, the central focus was how teacher perceptions of the teacher evaluation process with the inclusion of student growth data or value-added measure may impact the organizational culture within a school building.

There are many factors which may impact and shape the organizational culture of a school building. Teacher perceptions about the teacher evaluation process, specifically the inclusion of student growth data to measure teacher effectiveness, is a controversial topic which may impact the school culture and ultimately student achievement. Collegiality, teacher relationships, and collective efficacy are additional factors. Research has provided documented evidence that high levels of collective efficacy are positively correlated with high levels of

student achievement (Goddard, Hoy, & Woolfolk Hoy, 2004). Teachers' perceptions of the teacher evaluation process may impact the level of collective efficacy.

Related to relationship building and collegiality is the idea of collective efficacy. Collective efficacy is defined as "future-oriented judgments about capabilities to organize and execute the courses of action required to produce given attainments in specific situations or contexts" (Goddard, Hoy, & Woolfolk Hoy, 2004, p. 3). The culture of a school may be described as having a high level of perceived collective efficacy when teachers working in such a school possess strong beliefs about the school's capability for success, its ability to tolerate pressure, and rise above challenges that are presented.

The teacher evaluation process may impact the school culture positively or negatively. If teachers have a high standard for teaching practices and student achievement, a culture is created and shared so staff and students work towards, and hopefully, yield positive educational outcomes. Administrators set the tone for the building they serve, which is reflected in the way in which the teacher evaluation process is enacted. Through an effective evaluation process, a shared language for communication is developed with the goal that administrators can focus on the empirically derived data to support and assist in the growth of teachers they supervise. This common language will ultimately help lead teachers toward the shared goals critical to school improvement measures (McLaughlin, 1984). Sand (2005) found that establishing a culture with open dialogue between all stakeholders might precipitate meaningful growth and collaboration.

In his work, Hargreaves (1992) found that the way teachers relate to their colleagues has significant implications for their instructional strategies, how they develop as teachers, and the types of teachers they become. Ultimately, this will impact the collective efficacy of the school culture. A high level of collective efficacy may be experienced if the teachers in a school have

the same internalized beliefs, values, and habits related to the cultures of teaching. It is these "cultures of teaching that give meaning, support and identity to teachers and their work" (Hargreaves, 1992, p. 217). The instructional strategies adopted and implemented by teachers are affected by their colleagues and their respective relationships with those individuals.

The inclusion of student growth data or VAM into the teacher evaluation process may create a culture of teaching, which will eventually lead to a low level of collective efficacy within the school's organizational culture, that is based on evaluative and judgmental characteristics among teachers. The intent is not to help teachers grow in their understanding of instructional strategies, rather the goal becomes more self-serving and individualistic. Hargreaves (1992) described this phenomenon as an individualistic culture of teaching. Within this low-level of collective efficacy, teachers isolate themselves in their classroom and are solely focused on the immediacy of the teaching within their classroom. Hargreaves (1992) notes this level of individualism often results in teachers not experiencing praise, support or adult feedback on their teaching competence. These teachers do not engage in collaboration with other teachers. The inclusion of student growth data or VAM into the teacher evaluation process may push teachers to operate in alignment with an individualistic culture of teaching, which may potentially have negative implications for the organizational school culture.

The controversial topic of including student growth data or a value-added measure of student achievement data into teacher evaluations may decrease the collaborative nature of a school building because teachers may become more focused on individual goals, rather than working collaboratively. The interest becomes self-interest and their instructional strategies may distort and undermine the school's broader goals for achievement (Baker et al., 2010). Thus, taking away from the collective efficacy of the school culture.

Statement of the Problem

The controversial topic of including a value-added measure (VAM) of student achievement data into teacher evaluations may decrease the collegiality and collaborative nature of a school building because teachers will be more focused on individual goals, rather than working collaboratively. The interest becomes self-interest and their instructional strategies may distort and undermine the school's broader goals for achievement (Baker et al., 2010).

Research has focused on and highlighted the following important concepts as they relate to the teacher evaluation process: teacher and administrator perceptions, inclusion of student achievement data, and school climate (Barton, S., 2010; Conley, S., & Glasman, N., 2008; Darling-Hammond, 2013; Hoy & Hoy, 2013; Logue-Beldon, 2008). The underlying theory that teachers will become more devoted to self-interest rather than collaborative growth of a school building is prevalent in research focusing on school culture as it relates to the teacher evaluation process. One way of studying school culture is through the lens of collective efficacy. At many schools, the school improvement team works diligently to set annual achievement goals in each content area with the idea all teachers in a particular grade level will collectively collaborate to ensure students progress. With the inclusion of VAM into the teacher evaluation process, teachers may be more likely to sacrifice the good of the group to ensure *their* students progress because that will indicate a level of effectiveness as it relates to their professional effectiveness as a teacher. In the meantime, the collaborative nature of the school greatly declines because teachers are more worried about their performance, rather than the performance of the school as a whole. Collective efficacy helps to explain the effect that schools, as a whole, contribute to student achievement. A school culture that nurtures a high level of collective efficacy may

correlate to higher levels of student achievement compared to schools with little or no collective efficacy.

Purpose of the Study

The purpose of this study was to explore teacher perceptions of the inclusion of student growth data into the teacher evaluation process and the relationship(s) these perceptions may have on school culture. These perceptions have everything to do with shaping the culture of a school, especially as it may relate to teachers' perceptions and a sense of collective efficacy. Using the lens of collective efficacy within the organizational culture of schools, this study examined to what extent the inclusion of value added measures into the teacher evaluation process contribute to a self-serving, competitive school environment due to the heightened desire to ensure their students are performing at a significantly high level.

Significance of the Study

The significance of this study directly impacts student learning and the relationship to students having access to quality teachers, as well as the school culture. Every child that enters school deserves an outstanding, highly qualified teacher to provide them instruction in all of the content areas. Additionally, every teacher deserves to be supported in a professional environment to become an outstanding, highly qualified teacher. Often principals see the teacher evaluation process as a time-consuming perfunctory duty of their job, yet if done well and consistently, it can be an effective method to support and improve teacher performance. The inclusion of VAM into the teacher evaluation process has the potential to negatively impact students because teachers may not be supported to become highly qualified teachers to provide quality instruction to students.

Related to relationship building and collegiality is the idea of collective efficacy. Collective efficacy has been found to be significantly and positively correlated with student achievement. Collective efficacy had a greater impact on student achievement than did the student's socioeconomic status (Goddard, Hoy, & Woolfolk Hoy, 2004). Students deserve to be educated within a school culture with a high level of collective efficacy.

The controversial topic of including student growth data or a VAM of student achievement data into teacher evaluations may decrease the collaborative nature of a school building because teachers will become more focused on individual goals, rather than working collaboratively. The interest becomes self-interest and their instructional strategies may distort and undermine the school's broader goals for achievement (Baker et al., 2010). The perceptions teachers hold related to the inclusion of a VAM into the teacher evaluation process may shape the organizational culture of their school.

Research Question

This study explored the relationship between teacher perceptions about the newly mandated Michigan teacher evaluation process, which requires the inclusion of student growth data in the summative evaluation of teachers, and the relationship it may have on the culture of a school. The following research question guided this study:

> What is the relationship between teacher perceptions regarding the inclusion of VAM into the teacher evaluation process and teachers' motivation to opt in or opt out of engaging in collaborative, collegial relationships with each other?

Research Method

This researcher utilized a quantitative research methodology through the use of a researcher-developed survey (Nardi, 2014). The rationale for adhering to a quantitative research

design is to determine relationships between the variables being studied. Survey questions will include open-ended and close-ended responses, as well as personal, attitudinal, and behavioral questions (Creswell, 2012).

The teacher participants of this study were certified teachers who are registered members of the their local teacher association working within an intermediate school district (ISD) located in western Michigan. This ISD services twenty-one school districts. There are currently 6,000 registered certified teachers who were emailed a SurveyMonkey® survey. Prospective teacher participants were emailed a pre-notification letter at least ten days before the actual survey was emailed. Approximately two weeks after the survey was emailed to prospective teacher participants, a follow-up email was sent to remind prospective participants to complete the survey.

Delimitations of the proposed study included using teacher participants from a single county in western Michigan. Additionally, this study examined one component of a comprehensive teacher evaluation process: student growth data. Finally, this study only examined one aspect of the culture of a school: the relationship between teachers.

Definition of Terms

The following terms are used in this study:

Collective efficacy: "the perceptions of teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive impact on students" (Stephanou, Gkavras, & Doulkeridou, 2013, p. 269; Hoy & Hoy, 2006).

Collegiality: the collective, cooperative, and collaborative working relationships among teachers working in a school building that supports learning for the teachers and their students (Darling-Hammond, 2013).

Merit pay: a financial reward for meeting established goals and/or standards (Darling-Hammond, 2013).

Organizational culture: "a pattern of basic assumptions, invented, discovered, or developed by a group, as it learns to cope with its problems of external adaptation and internal integration, which are taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein, 1990). Culture implies the need for stability, consistency and meaning within an organization.

Student growth data: "the measurement of students' status on at least two occasions" (Popham, 2013, p. 8). For example, comparing/contrasting of a students' pretest score on a test with their posttest score on the same or similar test.

Teacher evaluation process: a term used to describe the methods and/or processes involved in determining the effectiveness of a teacher.

Teacher self efficacy: "the teacher's belief in his or her capability to organize and execute the course of action required to successfully accomplish a specific teaching task in a particular context" (Stephanou, G., Gkavras, G., & Doulkeridou, M., 2013, p. 268).

Value added measure (VAM): is a term used to describe a class of statistical techniques that attempts to take into account transiency of the student, level of prior achievement, and classroom characteristics (Steele, J., Hamilon, L., & Stecher, B., 2010).

Summary

In the state of Michigan, the teacher evaluation system is undergoing a paradigm shift in response to the accountability measures stemming from federal and state legislation. One of the most controversial aspects of the teacher evaluation system is the inclusion of student growth data, or a value-added measure (VAM), to rate the effectiveness of teachers. The purpose of this

study was to explore teacher perceptions of the inclusion of student growth data into the teacher evaluation process and the relationship(s) these perceptions may have on school culture. Each and every student deserves to be provided with a high quality teacher to instruct them. In turn, each and every teacher deserves to work in an environment that supports their growth as a teacher so that they may become a highly qualified teacher.

Chapter 2: Review of Literature

Conceptual Framework: Organizational Culture

Organizational culture is "a pattern of basic assumptions, invented, discovered, or developed by a group, as it learns to cope with its problems of external adaptation and internal integration, which are taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein, 1990). Culture implies the need for stability, consistency and meaning within an organization. Each school building has a unique organizational culture comprised of both abstract and concrete levels of analysis. Schein (1990) described three components, or levels of culture, that work together to form the organizational culture. Culture manifests itself through (1) observable artifacts, (2) espoused values and beliefs, and (3) basic underlying assumptions (Schein, 1990; Schein, 2010).

The most basic level of cultural analysis is observable artifacts. Artifacts are those things one would see, hear, and feel (Schein, 2010). Artifacts include, but are not limited to, the visible products of an organization, such as the layout of the building, dress code that staff follows, the language used within the organization, and observable behaviors people engage in within the organization (Schein, 1990). At this most basic level of cultural analysis is the climate of the organization. Schein (2010) suggested that climate and culture are not equivalent. Rather, Schein (2010) suggested the climate of an organization is the result of underlying assumptions, which then becomes a manifestation of culture. Schein (2010) cautioned that although observable artifacts are easy to see, they are difficult to gain meaning from because some people may infer deeper assumptions based on their interpretations and personal feelings. Unless the observer has been a part of the organization for a long time, the meanings of artifacts are not always clear.

A more abstract level of cultural analysis is espoused values and beliefs. Espoused values include the organizations' norms, ideologies, and philosophies (Schein, 1990). These values and beliefs are articulated and shared by members of the organization and guide group members as to how to handle situations that arise (Schein, 2010). Additionally, espoused values and beliefs guide the training of new group members. Eventually the espoused values and beliefs will become a part of the organizations' philosophy (Schein, 2010). When the espoused values and beliefs are analyzed, one must pay close attention to the congruence between the values and beliefs held by members and the values and beliefs of effective performance of the organization.

More abstract than the level of espoused values and beliefs are underlying assumptions. Basic underlying assumptions are often described as "unconscious assumptions that determine perceptions, thought processes, feelings and behavior" (Schein, 2010, p. 112). Once a member comes to understand and internalize the basic underlying assumptions of an organization, they begin to gain a deeper, more thorough understanding of the aforementioned two levels of cultural analysis: artifacts and espoused values and beliefs. Artifacts become less ambiguous and espoused values and beliefs are internalized and guide behavior. Once group members come to understand organizations' basic assumptions, they will have a better understanding of the guiding philosophies of the organization.

Basic assumptions tend to be non-debatable and very difficult to change (Schein, 2010). Culture, at this level, defines what to pay attention to, what things mean, and how to behave in certain situations (Schein, 2010). Schein (2010) suggested cultural change at this level is difficult, time consuming, and anxiety provoking. The cognitive processes involved in learning something new at this level or making a cultural change at this level, may involve experiencing a level of cognitive dissonance in which one may "resurrect, reexamine, and possibly change some

of the more stable portions of their cognitive structure" (Schein, 2010, p. 28). An analogy can be made between the inclusion of student growth data or VAM into the teacher evaluation process and the basic assumptions underlying a school's organizational culture. Teachers may begin to experience some form of cognitive dissonance as they try to decipher how the inclusion of such data, which is unprecedented, may or may not impact the culture of their school. This may prove to be anxiety-provoking for some teachers, as well as administrators.

With the implementation of using student growth data as a measure of teacher effectiveness within the teacher evaluation process, the espoused values and beliefs, as well as the underlying assumptions within the organizational culture of a school, may shift to become more competitive in nature as each teacher is becoming solely concerned with the performance of their students, not the collective performance of *all* students within a school building.

School Culture

It is important to distinguish and understand the difference between *culture* and *climate.* The set of internal characteristics that distinguishes one school from another and influences the behavior of the teachers and administrator(s) comprises the organizational climate of the school building (Hoy & Hoy, 2006). The school climate may be viewed as a relatively stable quality of an organization that teachers and administrators working within experience, influence their behavior, and is based on their collective perceptions (Hoy & Hoy, 2006). Culture, on the other hand, is a more complex and multifaceted abstract concept (Hoy & Hoy, 2006). Schein (2010) suggested climate is a manifestation of espoused values and beliefs and underlying assumptions. Both climate and culture provide an understanding of the impact that social influences may have on the organization of a school and both are useful in understanding how social conditions may impact teaching and learning. In his book, *Organizational Culture and Leadership,* Schein

(2010) stated that any given organization faces two problems: survival in and adaptation to the external environment and integration of the internal processes of the organization to ensure continued survival and adaptation. The change in the teacher evaluation process to include student growth data as a measure of teacher effectiveness is an example of an external pressure placed on school buildings. A strong organizational culture within a school has established a consensus of the goals and mission of the school, as well as the means to measure how well the school is doing to meet those goals. When the external pressure of a new teacher evaluation process is mandated, the organizational culture may be impacted as it adjusts to this external pressure.

The organizational culture of a school is the "pattern of shared orientations that binds the organization together and gives it a distinctive identity" (Hoy & Hoy, 2006, p. 301). The culture of any given school is a powerful factor in student learning. In a review of research regarding culture, Deal and Peterson (as cited in Smith & Piele, 2006) worked to emphasize the following important effects culture may have on a school:

> Culture fosters school effectiveness and productivity; improves collegial and collaborative activities that foster better communication and problem-solving practices; fosters successful change and improvement efforts; builds commitment and identification of staff, students, and administrators; amplifies the energy, motivation, and vitality of a school's staff, students, and community; and culture increases the focus of daily behavior and attention on what is important and valued (Smith & Peele, 2006, p. 179).

Culture is the collection of shared beliefs and practices, whereas *climate* is made up of the basic patterns of behavior that are exhibited by those that work in the school building. Culture sets the tone for a school building and determines how instructional practices are carried out and how

new mandates are interpreted and viewed. The purpose of this study was to explore teacher perceptions of the inclusion of student growth data into the teacher evaluation process and the relationship(s) these perceptions may have on school culture.

The teacher evaluation process may impact the school culture positively or negatively. If teachers have a high standard for teaching practices and student achievement, a culture is created and shared so staff and students work towards, and hopefully, yield positive educational outcomes. Administrators set the tone for the building they serve, which is reflected in the way in which the teacher evaluation process is enacted. Through an effective evaluation process, a shared language for communication is developed with the goal administrators can focus on the empirically derived data to support the professional growth of the teachers they supervise. This common language will ultimately help lead teachers toward the shared goals critical to school improvement measures (McLaughlin, 1984). Sand (2005) found that establishing a culture with open dialogue between all stakeholders might precipitate meaningful growth and collaboration.

Administrators can nourish and grow collegial relationships among teachers or they can suffocate them (Sutton, 2008). Sutton (2008) found relationship building is an important component of a teacher evaluation process so that reciprocal, communicative relationships are formed. Sutton (2008) also found teachers and administrators place greater value on the formative role of the evaluation process because it helps teachers grow professionally.

Teacher Relationships and School Culture

School improvement as it relates to improved academic performance of all students has been the central focus of public education supporters and critics. School improvement and student achievement are closely related to the organizational school culture of each school building. Roland Barth (1990) suggests collegiality is the key to a good school setting. One

aspect of collegiality is the interactions between teachers. Barth (1990) described three types of relationships: parallel play, adversarial relationships and competitive relationships. Parallel play provides isolation among teachers so one teacher doesn't steal ideas from another or influence them to do things a different way. Adversarial relationships involve creating opponents among teachers. A teacher in a competitive relationship among other teachers selfishly puts themselves first. The aforementioned relationship qualities may not provide the best learning environment for students, thus not contributing to the collective efficacy of the school culture.

To counteract potential negative relationships among teachers, Barth (1990) suggested introducing collegiality into the organizational school culture. The premise of collegiality is that "teachers who work together can enjoy continuous professional, collegial relationships" (Bath, 1990, p. 34). Collegiality is associated with the following positive outcomes: higher level of moral and trust among adults; adult learning is energized and more likely to be sustained; motivation of students and *their* achievement rises; and when adults share and cooperate, students are more likely to do the same (Barth, 1990). Teacher perceptions of the evaluation process may have a relationship with the level of collegiality among teachers as they may become less motivated to work with colleagues.

Teachers' Perceptions of the Teacher Evaluation Process

It is important to understand teachers' perceptions of the evaluation process so principals can work to use these perceptions as a catalyst to improve the process and/or student achievement data. Teachers' perceptions of the evaluation process are a driving force to improved school improvement. Nickerson (2009) studied the effectiveness of principals as evaluators of teachers based on the teachers' perceptions. He found teachers place a high value on evaluation practices that ensure evaluations are conducted ethically and with regard to the

welfare of those being evaluated. High importance was placed on the relationship between the teacher and principal (Nickerson, 2009), such as being respectful, fair, and the ability to clearly communicate. Teachers perceive the evaluation process positively if the aforementioned conditions are met. Sand (2005) identified several weaknesses in the teacher evaluation process, which may impact teachers' perceptions. These include: evaluations do not always provide meaningful feedback; ratings are subjective, professional growth plans are not linked to the evaluation, and training supports have been inadequate. Teachers may perceive the evaluation process as not being valuable because they do not receive observable, empirical data to help promote positive changes in their instructional delivery, which may ultimately help them to become a more effective teacher.

In her article about teacher evaluation, McLaughlin (1984) discussed the deterministic feel to teacher evaluations and the shortcomings teachers perceive as a result. Of particular importance are the numerous factors, *outside of the classroom,* that may impact student growth. These included socio-economic status of the child, school climate, pupil abilities, and student attendance rate. Thus, teachers perceive their effectiveness (i.e., as measured by student achievement data) as a highly contextual and conditional measure. Conley and Glasman (2008) provided evidence to suggest teachers only feel comfortable being evaluated on variables within their control. This leads to a sense of fear and anxiety as it relates to how teachers perceive the evaluation process.

Some teachers perceive the evaluation process to be less about professional growth and more about a punitive measure from the top-down. Teachers report very little sense of career accomplishment and progress from their evaluation (Conley & Glasman, 2008). They are not viewing the evaluation process as a means to help them perfect the craft of teaching. In order to

help change this perception, Zimmerman and Deckert-Peton (2003) suggested teachers want to be part of the process. Their study found that teachers want a reciprocal, communicative relationship with their administrator (Zimmerman & Deckert-Pelton, 2003). Additionally, the researchers found teachers valued the evaluation process when they thought of their principal as a mentor. In light of this information, teacher evaluation processes should be inclusive to include the teacher throughout the evaluation process. However, this process starts by creating and establishing a collegial relationship between the teacher and principal.

Inclusion of Student Growth Data

The inclusion of a value-added measure (VAM), such as student achievement data, has also received attention and adds another layer of complexity as teacher evaluation processes are designed and implemented. The formal definition of VAM is a class of statistical techniques that attempts to take into account transiency of the student, level of prior achievement, and classroom characteristics (Steele et al., 2010). Teachers are assumed to be a very large determinant in the success of a child in school, yet we don't have objective means to measure the impact a teacher has on a student unless we study high-stakes testing scores and/or progress on district common assessments. Kupermintz (2003) suggested that modeling student data over time provides a quantitative measure of student learning. Principals, as well as district-level administrators, may then use VAM to compare teachers, which will attempt to weed out the less effective teachers.

In *Teacher Evaluation: New approaches for a New Decade,* Zinth (2010) summarized the states that require student growth data as a component of the teacher evaluation process. As of 2010, only sixteen states required objective student data as part of teacher evaluations (Zinth, 2010). Some states, such as Michigan, require local school boards to adopt and implement a fair and transparent performance evaluation system for teachers and administrators who use student

growth as a "significant factor" in evaluation (Zinth, 2010). More than fifty percent of a teachers' evaluation in Colorado, Louisiana, and Tennessee is comprised of student growth data. In Michigan, it has been proposed by the end of the 2015-16 school year, 25% of a teachers' overall summative evaluation should be based on student growth data. By the end of the 2018-19 school year, at least 50% should be based on student growth data. Currently, twenty-three states require teacher evaluation include not just some attention to student learning, but objective evidence of student learning (NCTQ, 2011).

In her book, Darling-Hammond (2013) stated, "Only 7%-10% of the overall variation in student achievement can be attributed to a student's individual teacher; the largest influences typically account for 60% of the variation, which include socioeconomic factors and the collective composition of the classroom and school" (p. 78). The real-world implications for including VAM are vast. Darling-Hammond (2013) stated four such implications: instability of ratings, bias, measurement concerns, and incentives. The instability of teacher ratings is evidenced when a teacher who was ranked within the highest quintile one year, has about a 50% chance of scoring in a much lower quintile the following year (Darling-Hammond, 2013). With regard to bias, a given teacher appears more effective when he/she is teaching more advantaged students than when teaching students who experienced educational difficulties or are considered new English learners. For example, a study of California high school teachers found that a teachers' VAM ratings were significantly correlated to the percentage of students in their classroom who were from different race/ethnicity groups, income, language background and parent education groups (Darling-Hammond, 2013). Essentially, the differences from year to year in teachers' VAM ratings were largely correlated to their classroom composition. This study showed that the more stable scores were from classrooms that had similar classroom

compositions from one year to the next. Teachers' VAM scores may differ significantly when different tests are used, hence a concern with the actual measurement of student achievement. According to Darling-Hammond (2013), large majorities of teachers reported having changed their instruction so as to focus more closely with the content and format of state and local tests. Teachers are beginning to "teach to the test," rather than provide a high quality method of instruction to their students. Finally, test-based merit pay is problematic. It is possible when districts offer merit pay for the most highly effective teachers, their willingness to collaborate with other teachers for the betterment of all students will decline greatly because they will simply be looking to only further their instructional practices for the students in their classroom so they will receive a monetary incentive. The aforementioned real-world implications of including VAM into the teacher evaluation process help to shape the perceptions of teachers and administrators.

There are inherent concerns shared by both district administrators and teachers about including student growth data into the teacher evaluation process. In many states, state sanctioned tests and district assessments are utilized as the sources of growth data. Depending on the state, this may be a potential problem as NCLB indicated high-stakes testing in grades 3-8 and high school. Additionally, only certain subject areas are tested. Reading and math is tested annually, while writing, science, and social studies are tested only in certain specified grades. For example, writing is assessed in fourth grade but not again until seventh grade. In Michigan, students take the state assessment in the fall of their current school year. Therefore, this test is measuring knowledge they acquired in previous years with a different teacher, not their current teacher. School professionals are concerned a single test is not a perfect measure of a students' level of achievement, as the test only captures a narrow measure of what students know. Tests

often do not allow students to share their thinking and go more in depth. Recognizing this concern, Baker et al. (2010) suggested test scores should only be a *part* of a comprehensive teacher evaluation process.

In a study examining the Tennessee Value Added Assessment System (TVAAS), Kupermintz (2003) studied the validity of the statewide teacher evaluation system by analyzing student test score data and estimating the effects of individual teachers on score gains. It was determined there were concerns with regard to the validity of the TVAAS. A clear definition of "teacher effectiveness" was determined to be an important characteristic on the TVAAS when student growth data are included. Attribution of gains was central to this validity study. Teachers and students bring unique variables to the learning environment and it may be difficult to decipher who and what variable(s) can be attributed to student growth.

There are many influences outside of instruction that impact learning, such as access to curriculum materials, SES of the student, student attendance, class size, availability of tutoring support, and previous teachers. Kupermintz (2003) argued that "equally competent teachers will produce different results with groups of students that differ appreciably in cognitive, affective, and motivational aptitude profiles" (p. 291). Haertel (1986) emphasized students vary not only in general cognitive abilities, but also in relevant prior experiences in instruction and motivation. There are also varying levels of out-of-school experiences that may also impact achievement of students. Some parents may indirectly support and provide high expectations for learning, while other parents may provide more direct support for their child by completing homework with their child(ren), volunteering at school and/or reading with them outside of school (Haertel, 1986). Students also present with unique learning profiles that have been influenced by social and cultural norms. Taken together, all of these factors impact the learning of a student. According to

Baker et al. (2010) a teacher's VAM can only be compared when teachers have the same mix of struggling students or when a statistical measure of effectiveness fully adjusts for the differing mix of students.

Linda Darling-Hammond (2013) stated that the strategy of using "value-added methods to calculate student test score gains attached to individual teachers has been found to be far less reliable and accurate that many researchers had hope" (p. 70). Teachers are understandably worried about the increased accountability for student achievement because there are factors outside their control that may impact student achievement, such as a student who moves in half way through the school year and enters academically behind his peers or a teacher who has a significant number of students with special needs in his/her classroom. Another important factor to consider is that some teachers are moved around the district, teaching different grade levels each year. How can a district expect those teachers to become a highly effective teacher at their grade level if they are not provided the opportunity to teach a consistent grade level? Although statistical models of VAM try to control for the aforementioned issues, it is impossible to remove the effects of differences in classroom composition from the value added measure (Darling-Hammond, 2013). Generally speaking, a measure cannot be considered valid if it is heavily influenced by factors outside of the teacher's control.

Given the fact that there are certain variables teachers cannot control, law makers are not suggesting 100% of a teachers' evaluation be based on student growth, but there is a growing trend to increase the percentage that growth data accounts for in evaluations. In Michigan, it has been proposed by the end of the 2015-16 school year, 25% of a teachers' overall summative evaluation should be based on student growth data. By the end of the 2018-19 school year, at least 50% of a teacher's summative evaluation should be based on student growth data.

Additionally, teachers may begin to teach to the middle so instruction is focused on the middle-performing students in their class. Teachers may determine that they cannot provide a high quality level of instruction to all of their students, so they begin to modify curricular goals to stress facts and other easily measurable content as opposed to more difficult concepts that need to be mastered (Conley & Glasman, 2010). Haertel (1986) indicated course objectives that are not being assessed for reward-type measures (i.e., merit pay), will lead to a decreased emphasis on instructional activities for those particular learning objectives. Teachers will devote little, if any, time on those learning objectives they know will not be tested and counted toward a financial reward at the end of the school year. Currently there is no measure that can account for the differences to level the playing field for an entirely equitable evaluation as it relates to the inclusion of student growth data. Home environment plays a crucial part in a student's educational performance. Teachers working in more affluent districts may appear to be more effective teachers because of the home supports that are available to the students in that affluent community. Although the review of the literature provided little support for the VAM of student growth data as an appropriate and reliable piece of information for the teacher evaluation process, a study conducted by Steele et al. (2010) and commissioned by the RAND Corporation, provided several suggestions related to the inclusion of student growth data. Steele et al. (2010, pp. 45-46) suggested school districts consider the following factors: incorporate multiple measures of teacher effectiveness into the teacher evaluation system; attend to how student assessments are being used in high-stakes contexts; promote consistency in the student performance measures teachers are allowed to use; use multiple years of student achievement data; and find ways to hold teachers accountable for students not included in their value-added measure.

Teacher Efficacy and High Quality Teaching

The increasing rigor of the educational system, kindergarten through twelfth grade, requires school districts to ensure that the best teachers are teaching. Having an objective measure of high quality teaching is of utmost importance if we are to improve the educational outcomes for our students and meet the demands of the increased rigor. Sand (2005) suggests effective teacher evaluation helps teachers improve instruction, build trust, openness, and professionalism. Research suggests teacher evaluation has the potential to greatly influence classroom practices and student achievement (Sand, 2005). Milanowski (2004) conducted a study in Cincinnati, Ohio to determine if teacher evaluations could predict levels of achievement. Results indicated the teacher assessment system used in Cincinnati was able to identify which teachers had higher than expected levels of achievement, as measured by test scores. Thus, Milanowski (2004) concluded teacher evaluation scores might be useful representations of teaching practices impacting learning. If administrators use or adopt a comprehensive evaluation system, they should be able to identify teachers who excel at delivering instruction, as well as those that need support. Based on the evaluation system, administrators should be able to develop a professional growth plan for teachers in the hopes to strengthen their instructional delivery, which in turn, will improve student achievement.

Effective teacher evaluation systems, if implemented with fidelity, may be able to positively impact the quality of teaching and a teacher's sense of self-efficacy. A teacher's sense of self-efficacy is based upon a teacher's belief regarding his/her capability to organize and carry out a particular teaching task (Stephanou et al., 2013). Teacher evaluation practices can help teachers grow professionally to improve the craft of teaching if evaluation practices are viewed in a supportive light.

Teacher evaluations will not help teachers grow professionally if evaluation practices are structured around punitive and coercive measures. In their study of thirty-two school districts' teacher evaluation practices, Wise, Darling-Hammond, McLaughlin, & Bernstein (1984) found two consistent results related to professional efficacy: improved teacher-administrator communication and increased teacher awareness of instructional goals and classroom practices. A teachers' level of self-efficacy may be directly related to their evaluation if the feedback is focused on instructional goals. McLaughlin (1984) found the biggest obstacle to a teacher's sense of self-efficacy is the lack of feedback he/she receives about how he/she performs on the job. Efficacy is based not only on an internal construct, but also on an external construct when a teacher receives feedback as to the effectiveness of their teaching. Teacher evaluation processes need to be a part of the structure that builds feedback into the process so teachers receive quality feedback to ensure their instruction can continue to be, or improve to be, high quality. Teachers may view the evaluation process more positively if feedback is given as part of the process.

School Culture and Collective Efficacy

The culture of a school can be impacted either positively or negatively depending on how the teacher evaluation process is perceived. Administrators can nourish and grow collegial relationships among teachers or they can suffocate them (Sutton, 2008). Sutton (2008) found relationship building an important component of a teacher evaluation process so that reciprocal, communicative relationships are formed. Sutton (2008) also found teachers and administrators place greater value on the formative role of the evaluation process because it helps teachers grow professionally.

Related to relationship building and collegiality is the idea of collective efficacy. Collective efficacy is defined as "future-oriented judgments about capabilities to organize and

execute the courses of action required to produce given attainments in specific situations or contexts" (Goddard, Hoy, & Woolfolk Hoy, 2004, p. 3). For schools, perceived collective efficacy refers to the "judgment of teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive effect on students" (Goddard, Hoy, Woolfolk Hoy, 2004, p. 4). The culture of a school may be described as having a high level of perceived collective efficacy. Teachers working in such a school possess strong beliefs about the school's capability for success, its ability to tolerate pressure, and rise above challenges that are presented.

Goddard, Hoy, and Woolfolk (2004) suggested collective efficacy beliefs are an important aspect of a school's culture. These perceptions directly affect the diligence with which teachers pursue professional teaching goals. If teachers begin to disengage in collaborative and collegial relationships with their colleagues because of the self-interest they possess to ensure *their* students achieve, the culture of the school will be characterized as having a low-level of perceived collective efficacy. Whereas the culture of a school characterized as having a high-level of perceived collective efficacy, may be described as having a collaborative staff working together to achieve the school's goal of improved student achievement. All students deserve to be educated in a school characterized by a high-level of perceived collective efficacy.

In his work, Hargreaves (1992) found that the way teachers relate to their colleagues has significant implications for their instructional strategies, how they develop as teachers, and the types of teachers they become. Ultimately, this will impact the collective efficacy of the school culture. A high level of collective efficacy may be experienced if the teachers in a school have the same internalized beliefs, values, and habits of the cultures of teaching. It is these "cultures of teaching that give meaning, support and identity to teachers and their work" (Hargreaves,

1992, p. 217). The instructional strategies adopted and implemented by teachers are affected by their colleagues and their respective relationships with those individuals.

A school with a high level of collective efficacy may be described as having a culture of collaboration (Hargreaves, 1992). A culture of collaboration consists of unified teachers working together and supporting one another while working toward agreed upon educational goals. A culture of collaboration consists of trust, openness, and honest discussions about disagreements in educational beliefs (Hargreaves, 1992). Hargreaves (1992) stated collaborative cultures based on trust and sharing provide the most collegially supportive environments. Unfortunately, one of the biggest constraints in achieving a collaborative school culture are the external demands placed on teachers, such as curriculum demands and lack of time and/or desire to collaborate with colleagues.

The inclusion of student growth data or VAM into the teacher evaluation process may create a culture of teaching, which will eventually lead to a low level of collective efficacy within the school's organizational culture, that is based on evaluative and judgmental characteristics among teachers. The intent is not to help teachers grow in their understanding of instructional strategies, rather the goal becomes more self-serving and individualistic. Hargreaves (1992) described this phenomenon as an individualistic culture of teaching. Within this low-level of collective efficacy, teachers isolate themselves in their classroom and are solely focused on the immediacy of the teaching within their classroom. Hargreaves (1992) noted this level of individualism often results in teachers not experiencing praise, support or adult feedback on their teaching competence. These teachers do not engage in collaboration with other teachers. The inclusion of student growth data or VAM into the teacher evaluation process may push

teachers to operate in alignment with an individualistic culture of teaching, which may potentially have negative implications for the organizational school culture.

Collective efficacy is not only related to the culture of a school building, but collective efficacy has been found to have implications for student achievement. In fact, collective efficacy had a greater impact on student achievement than did the student's socioeconomic status (Goddard, Hoy, & Woolfolk Hoy, 2004). In a separate study, Goddard, Hoy and Woolfolk Hoy (2004) found collective efficacy beliefs had a stronger effect on student achievement than student race or the socioeconomic status of students. Collective efficacy beliefs may foster commitment to a school's goals for gains in student achievement. All students deserve to be educated within a school culture with a high level of collective efficacy.

Summary

The increasing rigor of the educational system, kindergarten through twelfth grade, requires school districts to ensure that the best teachers are teaching. Having an objective measure of high quality teaching is of utmost importance if we are to improve the educational outcomes for our students and meet the demands of the increased rigor. Each school building has a unique organizational culture that binds the organization together and gives it a distinctive identity, which may lend itself to high quality teaching and positive educational outcomes for students.

There are many factors that may impact and shape the organizational culture of a school building. Teacher perceptions about the teacher evaluation process, specifically the inclusion of student growth data or a VAM to measure teacher effectiveness, is a controversial topic which may impact the school culture and ultimately student achievement. Collegiality, teacher relationships, and collective efficacy are additional factors. Collective efficacy are the

perceptions held by teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive impact on students (Stephanou, Gkavras, Doulkeridou, 2013, p. 269; Hoy & Hoy, 2006). Research has provided documented evidence that high levels of collective efficacy are positively correlated with high levels of student achievement (Goddard, Hoy, & Woolfolk Hoy, 2004). Teachers' perceptions of the teacher evaluation process may impact the level of collective efficacy.

The controversial topic of including student growth data or a VAM of student achievement data into teacher evaluations may decrease the collaborative nature of a school building because teachers may become more focused on individual goals, rather than working collaboratively. The interest becomes self-interest and their instructional strategies may distort and undermine the school's broader goals for achievement (Baker et al., 2010), thus taking away from the collective efficacy of the school culture.

Chapter 3: Research Design and Methodology

The inclusion of student growth data or a value-added measure into the teacher evaluation process is a highly controversial topic in education. The way in which teachers perceive this component of the teacher evaluation process may have a relationship with the organizational culture of the school, specifically with regard to a teachers' level of motivation to collaborate with other teachers. This study examined the relationship between teacher perceptions and the inclusion of student growth data or a value-added measure (VAM) into the teacher evaluation process and their perceptions of school culture related to collaborative, collegial relationships among teachers. This design and methodology chapter includes a review of the study design, instrumentation, methods, sampling, data collection, data analysis, limitations/delimitations, procedures, data analysis, and validity and reliability (Creswell, 2012; Nardi, 2014).

Study Design

This researcher utilized quantitative research methodology through the use of a researcher-developed survey (Nardi, 2014). The rationale for adhering to a quantitative research design is to determine relationships between the variables being studied. Survey questions will include open-ended and close-ended responses, as well as personal, attitudinal, and behavioral questions (Creswell, 2012).

Survey research was used to examine the following research question:

> What is the relationship between teacher perceptions regarding the inclusion of VAM into the teacher evaluation process and teachers' motivation to opt in or opt out of engaging in collaborative, collegial relationships with each other?

Sampling

The population examined by this researcher included certified teachers working within a local intermediate school district located in western Michigan. The population included kindergarten through 12th grade teachers. The researcher used a SurveyMonkey® survey to collect data from the teacher participants. Respondents remained anonymous. The intermediate school district (ISD) represents twenty-one public school districts, which include urban, suburban and rural areas. There are approximately 6,000 certified teachers employed within this intermediate school district. An email with a link to the research survey was emailed to prospective teacher participants.

A nonprobability sampling referred to as purposive sampling was used for this study (Nardi, 2014). Utilizing this sampling procedure means the researcher specifically selected a group of people to participate based on their common characteristic of being a certified teacher within the selected western Michigan ISD. According to Nardi (2014), it is not uncommon for only 20-30% of the sample to complete the survey during the first phase. The following three-phase survey administration procedure was followed: (1) initial emailing of the survey to the sample; (2) second emailing of the survey to non-respondents in the sample; and (3) third email reminder to non-respondents reminding them to complete the survey (Creswell, 2012; Nardi, 2014). Following the aforementioned protocol, the researcher's goal was to achieve a sample size consisting of 30% or more of the targeted teacher participants completing the survey. Nardi (2014) suggested following such a protocol might result in 50% or more of the respondents completing the survey. A limitation of using nonprobability sampling is that results will not be generalizable to the entire population (Nardi, 2014). Regardless of the sample size, the results are

able to be used only to draw conclusions about the teacher participants who actually completed the survey.

Research Question

This study examined the relationship between teacher perceptions of the teacher evaluation process as they relate to the inclusion of student growth data and the potential relationship these perceptions may have on the culture of a school. The following research question guided the research study:

> What is the relationship between teacher perceptions regarding the inclusion of VAM into the teacher evaluation process and teachers' motivation to opt in or opt out of engaging in collaborative, collegial relationships with each other?

The independent variable being studied was teacher perceptions of the inclusion of student growth data or a value-added measure into the teacher evaluation process. The dependent variable being studied was school culture.

Instrumentation

The researcher reviewed preexisting surveys and compiled questions from those surveys, as well as creating additional questions taken from the research and literature review to measure the independent and dependent variables. The preexisting surveys that were reviewed included the Organizational Climate Description Questionnaire-Revised developed by Wayne Hoy (Hoy & Hoy, 2006), the Teacher Evaluation Research Survey (Himmelein, 2009), and the Teacher Efficacy Scale (Woolfolk & Hoy, 1990). Using primarily ordinal levels of measurement, a Likert-type scale was used to measure the independent and dependent variables within the study.

The study also examined demographic information of teacher participants. These questions included gender, grade level taught, years of experience as a teacher, school setting

(urban, rural, suburban), number of teachers in their building, number of formal observations completed during their teaching career, and frequency of summative (end-of-the year) evaluations during their teaching career.

There were ten questions teacher participants answered to gather demographic information; respondents answered fifteen questions related to the independent variable; and respondents answered eleven questions related to the dependent variable. An open-ended question was also included within the survey.

Data Collection

Quantitative data were gathered by a researcher-developed survey using the survey tool SurveyMonkey®. Questions included open-ended and close-ended responses, as well as personal, attitudinal, and behavioral questions (Creswell, 2012). A pilot test of the survey was conducted by administering the survey to a sample (n = 7) of elementary, middle and high school teachers. Participants in the pilot study were not allowed to participate in the actual data collection process.

Creswell (2012) outlined a three-phase survey administration procedure that was followed: (1) initial emailing of the survey to the sample; (2) second emailing of the survey to non-respondents in the sample; and (3) third email reminder to non-respondents reminding them to complete the survey. The goal was to achieve at least a 30% response rate (Nardi, 2014). The results of the survey will be provided to those participants who request a copy of the results.

Emails for currently certified teachers working within the selected ISD were gathered from the local education association's uniserv director. All teacher members received an email requesting their participation. The researcher collected data in the early spring of 2014.

A pilot test of the survey was conducted prior to emailing the survey to prospective respondents. Seven teachers participated in the pilot test. They were emailed the SurveyMonkey® survey and asked to complete the survey. Each teacher also received a hard copy of the survey to make notations of items that are unclear. Upon completion of the pilot test, the researcher contacted participants so feedback may be provided for necessary clarifications of the survey directions and/or specific survey items. Participants in the pilot study were not a part of the sample for the research project.

Data Analysis

Data analysis for the quantitative data was achieved by exporting data from the SurveyMonkey® website into the Statistical Package for the Social Sciences (SPSS) software. Within the SPSS program, descriptive statistics, means, correlation, factor analysis and multiple regression were calculated to determine what, if any, relationship(s) exist between the independent variable of teacher perceptions of the inclusion of student growth data or a value-added measure into the evaluation process and the dependent variable of collective efficacy.

Measures of central tendency were calculated to understand the distribution of the variables in the sample (Nardi, 2014). Analysis of variance (ANOVA) and correlational data were analyzed to determine the presence of any potential relationships between the variables. Coefficient measures were used to determine the strength of the relationship (Nardi, 2014).

Data analysis for the open-ended question was achieved by analyzing individual responses to identify similar phrases, patterns, or themes.

Limitations and Delimitations

Inherent in the design of survey research are methodological limitations. These include the possibility of a bias survey being utilized and a low return/response rate (Creswell, 2012;

Nardi, 2014). Response bias may occur if some respondents exaggerate the truth or provide "socially desirable answers" (Nardi, 2014, p. 88). Although steps were taken to ensure the highest response rate as possible, survey research does not always provide a large response rate, which will not allow the researcher to generalize the findings to a larger population (Nardi, 2014). Thus, the data collected is limited to the teacher participants of the survey. Since a nonprobability sampling method was utilized, the results are not generalizable to a larger population. Regardless of the sample size, the results can be used only to draw conclusions about the teacher participants who actually completed the survey.

This study only looked at the teacher evaluation process and excluded the examination of the administrator evaluation process. Although many aspects impact and are impacted by the teacher evaluation process, this study looked at only two variables: school culture and teachers' perceptions of the inclusion of student growth data or a VAM into the teacher evaluation process. Since the data collection was done through the use of an online survey, teacher participants needed to have access to a computer and the Internet to complete the survey. This study only examined public school teachers' perceptions. Parochial schools were not included. Teacher participants remained anonymous, which did not allow for any follow-up measures by this researcher regarding any of the responses, unless the respondent provided their contact information. Finally, this study was considered non-experimental research; therefore, the researcher could not control for the independent variable.

Although there are several components comprising the teacher evaluation process, this study is delimited because it only examined to what extent including student growth data or a VAM into the teacher evaluation process had on the accountability of the teacher evaluation process as teachers engage in the evaluation process. A second delimitation of the present study

is that data were gathered from teachers within a single county in the state of Michigan. A third delimitation is this study only examined one aspect of school culture: the relationship between teachers, as measured by their willingness to opt in or opt out of collaborative relationships.

Validity and Reliability

The researcher took steps to ensure the survey instrument and statistical tests were accurate measures to examine and study the variables. Validity is "about accuracy and whether the operationalization is correctly indicating what it's supposed to" (Nardi, 2014, p. 62). A pilot test was conducted with seven teachers. Then, meetings were held with each pilot study teacher participant to answer questions they had regarding specific survey items. This was done to ensure the items accurately measure the intended variable(s). Use of a pilot test helped to assure content validity. Nardi (2014) defined content validity as a measure of how well specific survey items actually measure the variable(s) being studied. Internal validity was achieved by aligning the framework of the research to the survey questions. With regard to external validity and generalizability, this survey instrument should be able to be used within other local school districts as well as intermediate school districts.

Reliability is the consistency of the measure; "it is the expectation that there won't be different findings each time the measure is used" (Nardi, 2014, p. 64). Reliability coefficients obtained through survey data collection were considered statistically reliable or significant when .70 or higher. To help assure a reliable survey instrument, a pilot test was conducted prior to data collection. The goal was to have at least 30% of participants complete the survey during the data collection phase.

Summary

This chapter described the methodology used to conduct this study. Sections in this chapter addressed the research design, methodology, sampling, instrumentation, limitations/delimitations, data collection, data analysis, and validity and reliability. Research was conducted using a quantitative research design using survey methodology. The researcher-developed survey was pilot tested prior to the actual research being conducted. Following successful completion of the pilot test, the survey instrument was emailed to prospective teacher participants using a SurveyMonkey® survey to certified elementary and secondary teachers currently working within the selected western Michigan ISD. Quantitative data were collected and analyzed using statistical procedures which allowed the researcher to explore the presence of any relationships between teacher perceptions regarding the inclusion of student growth data or VAM into the teacher evaluation process so that teachers are motivated to opt in or opt out of collaborative and collegial relationships with each other and the potential relationships those perceptions may have on the organizational culture of the school. Limitations and delimitations of the proposed research study were presented.

Chapter 4: Results

This study explored teacher perceptions of the inclusion of student growth data or a value-added measure (VAM) into the teacher evaluation process and the relationship(s) those perceptions might have on school culture. The inclusion of student growth data or a value-added measure into the teacher evaluation process is a highly controversial topic in education. The way in which teachers perceive this component of the teacher evaluation process may have a relationship with the organizational culture of the school, specifically with regard to a teachers' level of motivation to collaborate with other teachers. This study examined the relationship between teacher perceptions and the inclusion of student growth data or a value-added measure (VAM) into the teacher evaluation process and their perceptions of school culture related to collaborative, collegial relationships among teachers. 124 teachers working within a west Michigan ISD completed an online survey for this study. Teacher participants in the study were asked questions related to their knowledge level of the inclusion of student growth data or VAM into the teacher evaluation process as it relates to the Michigan mandate, their perceptions of the inclusion of such data, and, finally, teacher participants in the study were asked questions about the level of collaboration they engage in with their teaching colleagues. The survey instrument can be found in Appendix C.

Appendix F provides a summary of responses for each survey question in section two answered by the participants in the study. The table provides the percentage of respondents who responded with either agree or strongly agree and disagree or strongly disagree. A highlight of the descriptive statistics follows:

- A majority (67.65%) of the teacher participants in the study agreed or strongly agreed that examining local student achievement data over time is a better predictor of their

effectiveness as a teacher, rather than examining high stakes test results available once a year.

- A small percentage (8.09%) of the teacher participants in the study agreed or strongly agreed that the inclusion of student growth data (or VAM) in the teacher evaluation process has increased their potential to become a more effective teacher.
- Nearly three-quarters (72.73%) of the teacher participants in the study disagreed or strongly disagreed that student achievement on state required standardized tests (ie, MEAP, or the Smarter Balanced Assessment, ACT) should be used as part of their teacher evaluation to determine their effectiveness as a teacher.
- An even higher percentage (79.55%) of the teacher participants in the study agreed or strongly agreed that their current teacher evaluation process unfairly holds them accountable for factors over which they exert little or no control (i.e., home life of student, socio-economic status of students, inadequate teaching materials).
- More than half (55.31%) of the teacher participants in the study agreed or strongly agreed that their morale as a teacher has declined since the inclusion of student growth data or VAM into the teacher evaluation process.
- Similarly, more than half (56.59%) of the teacher participants in the study disagreed or strongly disagreed when asked if they felt less inclined to consult with other teachers about their instructional practices since the inclusion of student growth data or VAM into their teacher evaluation process was implemented.
- Again, more than half (56.59%) of the teacher participants in the study disagreed or strongly disagreed when asked if they felt less supported by teachers in their building

since the inclusion of student growth data or a VAM into their teacher evaluation process was implemented.

- A very small percentage (6.98%) of the teacher participants in the study felt less inclined to collaborate with their teaching colleagues since the inclusion of student growth data or VAM into the teacher evaluation process was implemented.
- Nearly a third (29.46%) of the teacher participants in the study felt like they are competing with their teaching colleagues since the inclusion of student growth data or VAM into the teacher evaluation process.

Table 1 provides findings of responses for selected demographic variables which will be used in later regression models. Most of the teacher participants in this study were female (80.6%), comparable to the percentage of female teachers (74.88%) currently employed in the ISD being studied and 76.54% in the state. Years of experience ranged from 1-5 years (4.8%) to 25+ years (21.8%) with the median number of years being 18. The most common school level taught was elementary (55.6%). Years at the current school ranged from 1-5 years (35.5%) to 25+ years (8.9%) with the median number of years being 8. The number of ESL students in a teacher's class ranged from none (13.7%) to 15+ (14.5%) with the median number of ESL students being three. The number of special education students in the teacher's class ranged from none (16.9%) to 15+ (22.6%) with the median number being 5.50 special education students. The most common locations for both the specific school and the district were either urban or suburban. When queried about the characteristics of the school, the most common were a Title I school (67.7%) or no designations (16.1%). Twenty-seven percent of the teachers reported being unsure about what were their school's specific designations. The number of teachers in the building ranged from 1-10 (3.2%) to 50+ (7.3%) with the median being 24.50

teachers. The number of years the teacher evaluation process had been in place ranged from 1 year (14.5%) to 5+ years (2.4%) with the median being two years. Sixty-five percent of the teachers had been evaluated based on the new law two times.

The final 19 variables are as follows: gender, years of teaching experience, school level taught (comprises three variables: elementary, middle, or high school), years working at current school, number of ESL students, number of special education students, school location, school characteristics (comprises six variables: Title I, Focus, Priority, Reward, no designation, unsure of designation), number of teachers in the current building, years current teacher evaluation has been in place, and the number of times evaluated based in the new mandate. The final variable is the total knowledge score, which is not represented in Table 1 but can be found in Table 8. The school level taught and school characteristics variables were dummy coded using a yes/no coding system for analysis.

Table 1

Frequency Counts for Selected Variables (N = 124)

Variable	Category	*n*	%
35. Gender			
	Male	24	19.4
	Female	100	80.6
36. Years of Teaching Experience [a]			
	1-5 years	6	4.8
	6-10 years	18	14.5
	11-15 years	26	21.0
	16-20 years	26	21.0
	21-25 years	21	16.9
	25+ years	27	21.8
37. School Level Taught [b, h]			
	Elementary (K-6)	69	55.6
	Middle school (7-8)	30	24.2
	High school (9-12)	31	25.0
38.Years at Current School [c]			
	1-5 years	44	35.5
	6-10 years	21	16.9
	11-15 years	18	14.5
	16-20 years	17	13.7

	21-25 years	13	10.5
	25+ years	11	8.9
39. Number of ESL Students [d]			
	None	17	13.7
	1-5	48	38.7
	6-10	29	23.4
	11-15	12	9.7
	15+	18	14.5
40. Number of Special Education Students [e]			
	None	21	16.9
	1-5	41	33.1
	6-10	21	16.9
	11-15	13	10.5
	15+	28	22.6
41. School Location			
	Urban	64	51.6
	Rural	4	3.2
	Suburban	56	45.2
43. School Characteristics [b, h]			
	Title I school	84	67.7
	Focus School	4	3.2
	Priority School	4	3.2

	Reward School	5	4.0
	No designations	20	16.1
	Unsure of designations	34	27.4
44. Teachers in Building [f]			
	1-10	4	3.2
	11-15	13	10.5
	16-19	26	21.0
	20-29	35	28.2
	30-49	37	29.8
	50+	9	7.3
45. Years Teacher Evaluation in Place [g]			
	1 year	18	14.5
	2 years	64	51.6
	Unsure	7	5.6
	3-5 years	32	25.8
	5+ years	3	2.4
46. Times Evaluated Based on New Law			
	0 times	13	10.5
	1 time	31	25.0
	2 times	80	64.5

[a] Experience: *Mdn* = 18 years.
[b] Multiple responses were given so totals equal more than 100%
[c] Years at Current School: *Mdn* = 8 years.
[d] Number of ESL Students: *Mdn* = 3 students.
[e] Number of Special Education Students: *Mdn* = 5.50 students.

[f] Teachers: *Mdn* = 24.50 teachers.
[g] Years of Evaluation: *Mdn* = 2 years.
[h] Category dummy coded for subsequent regression models.

Table 2 displays the psychometric characteristics for the two summated scale scores. Fourteen items were grouped together to create the scale entitled positive perceptions of VAM, and ten items were grouped together to create the scale entitled motivation to collaborate. Table 2 shows that for both summated scales, the items grouped together to measure the construct accurately measure the construct. For both scales, positive perceptions of VAM (α = .73) and motivation to collaborate (α = .77), had acceptable levels of internal reliability (Nardi, 2014). These two scales were measured using a 6-point metric (1 = *Strongly Disagree* to 6 = *Strongly Agree*) with the mean scores being *M* = 3.13 and *M* = 4.57, respectively.

Table 2

Psychometric Characteristics for the Summated Scale Scores (N = 124)

Scale Score	Number of Items	*M*	*SD*	Low	High	α
Positive Perceptions of VAM	14	3.13	0.61	1.43	4.36	.73
Motivation to Collaborate	10	4.57	0.63	2.90	6.00	.77

Note. Ratings based on a 6-point metric: 1 = *Strongly Disagree* to 6 = *Strongly Agree*.

Table 3 displays the one-sample *t* tests comparing the 14 VAM inclusion items against a standard of neutrality (3.50 on a 6-point metric: 1 = *Strongly Disagree* to 6 = *Strongly Agree*). Inspection of the table found that 11 of 14 items were significantly different from neutrality with four items (items 9, 10, 11, and 20) significantly higher than neutral (“more agreement”) and

seven other items (items 13, 14, 15, 17, 18, 19, and 22) significantly lower than neutral ("less agreement"). Highest levels of agreement was for item 11, "I believe that examining local student achievement data over time is a better predictor of my effectiveness of a teacher, rather than examining high stakes test results available once a year ($M = 4.74$)" while the lowest level of agreement was for item 17, "I believe my current teacher evaluation process unfairly holds me accountable for factors over which I exert little or no control (i.e., home life of student, socio-economic status of students, inadequate teaching materials" ($M = 1.70$; Table 3).

Table 3

One Sample t Tests Comparing Responses to VAM Inclusion Items for Differences from Neutrality (N = 124)

Survey Item	*M*	*SD*	*t*	*p*
9. I believe a formal teacher evaluation process is useful in determining my effectiveness as a teacher.	4.12	1.28	5.41	.001
10. I believe a formal teacher evaluation process provides meaningful feedback that impacts my instructional delivery.	4.03	1.35	4.39	.001
11. I believe that examining local student achievement data over time is a better predictor of my effectiveness of a teacher, rather than examining high stakes test results available once a year.	4.74	1.34	10.30	.001
12. I believe using a value-added measure, which relies on local student achievement data over time, is the most objective way to measure my effectiveness as a teacher.	3.64	1.43	1.07	.29

13. The inclusion of student growth data (or a value-added measure) in the teacher evaluation process has increased my potential to become a more effective teacher.[a]	2.52	1.32	8.26	.001
14. I believe student achievement on state required standardized tests (i.e., MEAP or the Smarter Balanced Assessment, ACT) should be used as part of my teacher evaluation to determine my effectiveness as a teacher.[a]	2.01	1.09	-15.30	.001
15. Using achievement data from state standardized tests as part of my annual evaluation makes me feel less effective as a teacher.	2.81	1.33	5.75	.001
16. Using achievement data from locally developed assessments as part of my annual evaluation makes me feel less effective as a teacher.	3.60	1.26	0.93	.36
17. I believe my current teacher evaluation process unfairly holds me accountable for factors over which I exert little or no control (i.e., home life of student, socio-economic status of students, inadequate teaching materials).	1.70	1.00	19.95	.001

Note. These ratings were based on a 6-point metric: 1 = *Strongly Disagree* to 6 = *Strongly Agree*.
Note. Neutrality was defined as a rating of 3.50.
[a] Item was reverse-scored because a rating of *Strongly Disagree* was most favorable.

Table 3 *Continued*

Survey Item	*M*	*SD*	*t*	*p*
18. I believe my evaluation should only be based on factors that are within my control as a teacher	1.74	0.95	20.54	.001
19. Since the inclusion of student growth data or a value-added measure into my teacher evaluation process, my morale as a teacher has declined.	2.60	1.40	7.11	.001
20. I believe the administrator responsible for my formal evaluation has the expertise necessary to perform an effective evaluation of my teaching.	3.80	1.62	2.05	.04
21. I believe our teacher evaluation process, including the use of achievement data for the students I teach, is designed to help me grow and improve as a teacher.	3.11	1.31	3.30	.001
22. I believe our teacher evaluation process is designed primarily to identify and "weed out" ineffective teachers.	3.37	1.36	1.06	.29

Note. These ratings were based on a 6-point metric: 1 = *Strongly Disagree* to 6 = *Strongly Agree*.
Note. Neutrality was defined as a rating of 3.50.
[a] Item was reverse-scored because a rating of *Strongly Disagree* was most favorable.

Table 4 displays the one-sample *t* tests comparing the ten willingness to collaborate items against a standard of neutrality (3.50 on a 6-point metric: 1 = *Strongly Disagree* to 6 = *Strongly Agree*). Inspection of the table found that eight of ten items (items 23, 24, 25, 26, 27, 28, 29, and 31) were significantly different from neutrality with all eight items significantly higher than neutrality ("more agreement"). Highest levels of agreement were for item 24, "I value the

expertise of the teachers I work with (M = 5.51)" and item 25, "I trust the professional competence of the teachers I work with (M = 5.21)" (Table 4).

Table 4

One Sample t Tests Comparing Responses to Motivation to Collaborate Items for Differences from Neutrality (N = 124)

Survey Item	*M*	*SD*	*t*	*p*
23. In my school building, I regularly collaborate with teachers to achieve the school's goals.	4.90	0.99	15.62	.001
24. I value the expertise of the teachers I work with.	5.51	0.66	34.07	.001
25. I trust the professional competence of the teachers I work with.	5.21	0.79	24.13	.001
26. I regularly consult with other teachers in my building about instructional practices.	5.06	0.93	18.81	.001
27. I feel less inclined to consult with other teachers about my instructional practices since the inclusion of student growth data or a value-added measure into my teacher evaluation process was implemented. [a]	4.43	1.20	8.58	.001
28. I feel less supported by teachers in my building since the inclusion of student growth data or a value-added measure into the teacher evaluation process was implemented. [a]	4.47	1.14	9.48	.001

Note. These ratings were based on a 6-point metric: 1 = *Strongly Disagree* to 6 = *Strongly Agree*.
Note. Neutrality was defined as a rating of 3.50.
[a] Item was reverse-scored because a rating of *Strongly Disagree* was most favorable.

Table 4 *Continued*

Table 4 *Continued*

Survey Item	*M*	*SD*	*t*	*p*
29. I feel less inclined to provide social support for colleagues since the inclusion of student growth data or a value-added measure into the teacher evaluation process was implemented. [a]	4.65	1.13	11.40	.001
30. I feel more inclined to provide professional support to my teaching colleagues since the inclusion of student growth data or a value-added measure into the teacher evaluation process was implemented.	3.48	1.22	0.15	.88
31. I feel less inclined to collaborate with my teaching colleagues since the inclusion of student growth data or a value-added measure into the teacher evaluation process was implemented. [a]	4.47	1.14	9.42	.001
32. Since the inclusion of student growth data or a value-added measure in the teacher evaluation process, I feel like I am competing with my teaching colleagues. [a]	3.52	1.58	0.11	.91

Note. These ratings were based on a 6-point metric: 1 = *Strongly Disagree* to 6 = *Strongly Agree*.
Note. Neutrality was defined as a rating of 3.50.
[a] Item was reverse-scored because a rating of *Strongly Disagree* was most favorable.

Table 5 displays the final varimax rotation for the principal components analysis for the 14 items of the positive perceptions of VAM scale. Some of these items were reverse coded. The total score was determined and then divided by the number of items. The factor analysis divided the positive perceptions of VAM scale into four different components: (1) VAM useful for long-term teacher growth, (2) VAM useful for teaching effectiveness, (3) VAM is demoralizing, and (4) VAM is better used with local data over time. Selecting all components with eigenvalues greater than 1.0, the final 4-component solution accounted for 57.35% of the variance. This means that the four components had an explaining power of 57.35% when it comes to determining teachers' perceptions of the inclusion of VAM into the teacher evaluation process. The resulting factors were named using the language contained in the largest coefficients as guides. Specifically, factor 1 (*VAM Useful for Long-Term Teacher Growth*) had an eigenvalue of 3.48 (24.88% of the variance); factor 2 (*VAM Useful for Teaching Effectiveness*) had an eigenvalue of 1.75 (12.49% of the variance); factor 3 (*VAM is Demoralizing*) had an eigenvalue of 1.51 (10.76% of the variance); and factor 4 (*VAM Better Used with Local Data Over Time*) had an eigenvalue of 1.29 (9.23% of the variance).

Table 5

Final Varimax Rotation for Principal Components Analysis of Inclusion of VAM Items (N = 124)

VAM Items	1	2	3	4
13. The inclusion of student growth data (or a VAM) in the teacher evaluation process has increased my potential to become a more effective teacher.	.728			
21. I believe our teacher evaluation process, including the use of achievement data for the students I teach, is designed to help me grow and improve as a teacher.	.626	.461		
19. Since the inclusion of student growth data or a VAM into my teacher evaluation process, my morale as a teacher has declined.	-.599		.316	
18. I believe my evaluation should only be based on factors that are within my control as a teacher	-.591			
17. I believe my current teacher evaluation process unfairly holds me accountable for factors over which I exert little or no control (i.e., home life of student, socio-economic status of students, inadequate teaching materials).	-.545		.394	
14. I believe student achievement on state required standardized tests (ie, MEAP or the Smarter Balanced Assessment, ACT) should be used as part of my teacher evaluation to determine my effectiveness as a teacher.	.542			
10. I believe a formal teacher evaluation process provides		.861		

meaningful feedback that impacts my instructional delivery.				
9. I believe a formal teacher evaluation process is useful in determining my effectiveness as a teacher.		.857		
20. I believe the administrator responsible for my formal evaluation has the expertise necessary to perform an effective evaluation of my teaching.		.446		
16. Using achievement data from locally developed assessments as part of my annual evaluation makes me feel less effective as a teacher.			.726	
15. Using achievement data from state standardized tests as part of my annual evaluation makes me feel less effective as a teacher.	-.344		.686	.376
22. I believe our teacher evaluation process is designed primarily to identify and "weed out" ineffective teachers.	.311		.666	
11. I believe that examining local student achievement data over time is a better predictor of my effectiveness of a teacher, rather than examining high stakes test results available once a year				.830
12. I believe using a value-added measure, which relies on local student achievement data over time, is the most objective way to measure my effectiveness as a teacher.				.777

Note. Coefficients sorted by highest loading and displayed if the coefficient was | > .30|.
Note. Ratings based on a 6-point metric: 1 = *Strongly Disagree* to 6 = *Strongly Agree*.
Note. Component names: 1 = *VAM Useful for Long-Term Teacher Growth*, 2 = *VAM Useful for Teaching Effectiveness*, 3 = *VAM Demoralizing*, and 4 = *VAM Better Used with Local Data Over Time*.

Table 6 displays the final varimax rotation for the principal components analysis for the ten items of the motivation to collaborate scale. Some of these items were reverse coded. The total score was determined and then divided by the number of items. The factor analysis divided the motivation to collaborate scale into three components: (1) less collaboration since VAM, (2) trust among teachers and (3) more collaboration since VAM. Selecting all components with eigenvalues greater than 1.0, the final 3-component solution accounted for 69.60% of the variance. This means that, taken together, the three components that comprised this scale have 69.60% explaining power in determining the level of motivation for teachers to opt in or opt out of collaborative and collegial relationships as a result of the inclusion of VAM into the teacher evaluation process. The resulting factors were named using the language contained in the largest coefficients as guides. Specifically, Factor 1 (*Less Collaboration since VAM*) had an eigenvalue of 3.68 (36.77% of the variance); Factor 2 (*Trust Among Teachers*) had an eigenvalue of 2.22 (22.23% of the variance); and Factor 3 (*More Collaboration since VAM*) had an eigenvalue of 1.06 (10.60% of the variance).

Table 6

Final Varimax Rotation for Principal Components Analysis of Motivation to Collaborate Items (N = 124)

Motivation to Collaborate Items	1	2	3
29. I feel less inclined to provide social support for colleagues since the inclusion of student growth data or a value-added measure into the teacher evaluation process was implemented.	.879		
27. I feel less inclined to consult with other teachers about my instructional practices since the inclusion of student growth data or a value-added measure into my teacher evaluation process was implemented.	.865		
28. I feel less supported by teachers in my building since the inclusion of student growth data or a value-added measure into the teacher evaluation process was implemented.	.838		
31. I feel less inclined to collaborate with my teaching colleagues since the inclusion of student growth data or a value-added measure into the teacher evaluation process was implemented.	.838		
32. Since the inclusion of student growth data or a value-added measure in the teacher evaluation process, I feel like I am competing with my teaching colleagues.	.663		
25. I trust the professional competence of the teachers I work with.		.861	
24. I value the expertise of the teachers I work with.		.835	

26. I regularly consult with other teachers in my building about instructional practices.	.747	
23. In my school building, I regularly collaborate with teachers to achieve the school's goals.	.528	.424
30. I feel more inclined to provide professional support to my teaching colleagues since the inclusion of student growth data or a value-added measure into the teacher evaluation process was implemented.		.907

Note. Coefficients sorted by highest loading and displayed if the coefficient was | > .30|.
Note. Ratings based on a 6-point metric: 1 = *Strongly Disagree* to 6 = *Strongly Agree*.
Note. Component names: 1 = *Less Collaboration since VAM*, 2 = *Trust Among Teachers*, and 3 = *More Collaboration since VAM.*

The primary research question asked, "What is the relationship between teacher perceptions regarding the inclusion of VAM into the teacher evaluation process and teachers' motivation to opt in or opt out of engaging in collaborative, collegial relationships with each other?" To answer this question, Table 5 displays the relevant Pearson correlation. The relationship between the two variables was significant, $r = .38$, $p < .001$. Table 5 indicates a moderate positive correlation between the two scales: positive perceptions of VAM and the scale score of motivation to collaborate. If teachers held more positive perceptions of the inclusion of VAM into their teacher evaluation, the more likely they are to collaborate with other teachers. Also, Table 5 has 19 additional correlations comparing the five VAM inclusion scores with the four motivations to collaborate scores. Six of the 19 other correlations were significant with the largest three correlations being the positive perceptions of VAM scale with the less engagement since VAM factor ($r = -.44$, $p < .001$) along with the correlations for the VAM useful for

teaching effectiveness factor both with the motivation to collaborate scale score (r = .37, p < .001) and the less collaboration since VAM factor (r = -.38, p < .001).

Table 7

Pearson Correlations for VAM Inclusion and Motivation to Collaborate Factor and Scale Scores (N = 124)

	Motivation to Collaborate Scores [a]							
VAM Inclusion Scores	1		2		3		4	
Positive Perceptions of VAM Scale	.38	****	-.44	****	-.08		.06	
VAM Useful for Long-Term Teacher Growth Factor	.12		-.14		-.05		-.01	
VAM Useful for Teaching Effectiveness Factor	.37	****	-.38	****	.02		.14	
VAM Demoralizing Factor	-.18	*	.22	**	-.01		.09	
VAM Better Used with Local Data Over Time Factor	.05		-.12		-.19	*	.10	

* p < .05. ** p < .01. *** p < .005. **** p < .001.
[a] Collaboration Scores: 1 = *Scale Score*, 2 = *Less Collaboration since VAM Factor*, 3 = *Trust Among Teachers Factor*, and 4 = *More Collaboration since VAM Factor*.

Table 8 displays the multiple regression model predicting the motivation to collaborate score based on the four VAM factor scores. The full model was significant (p = .001) and accounted for 18.7% of the variance in the motivation to collaborate score. Table 8 indicates that the motivation to collaborate is higher when participants in the study indicated higher scores on the VAM is useful to improve teaching effectiveness factor scores (β = .37, p = .001) and lower VAM demoralizing factor scores (β = -.18, p = .04). This table indicates that there are many

reasons that teachers may opt in or opt out of collaborative, collegial relationships with colleagues. Discussion of these reasons will be provided in chapter 5.

Table 8

Prediction of the Motivation to Collaborate Score Based on VAM Factor Scores (N = 124)

VAM Factor	*B*	*SE*	β	*p*
Intercept	4.57	0.05		.001
VAM Useful for Long-Term Teacher Growth Factor	0.07	0.05	.12	.16
VAM Useful to Improve Teaching Effectiveness Factor	0.23	0.05	.37	.001
VAM Demoralizing Factor	-0.11	0.05	-.18	.04
VAM Better Used with Local Data Over Time Factor	0.03	0.05	.05	.57

Full Model: F (4, 119) = 6.82, p = .001. R^2 = .187.

Table 9 examines what demographic variables might help to explain a teachers' motivation to collaborate. Table 9 displays the two-step stepwise multiple regression model predicting the motivation to collaborate score. In the first step of the model, 19 candidate variables (total knowledge score and the 18 independent variables found in Table 1) were tested then the inclusion of VAM is good scale score was added in the second step. The final 2-variable model was significant (p = .001) and accounted for 16.8% of the variance in the motivation to collaborate score. Table 9 indicates that the motivation to collaborate tends to be higher in non-priority schools (β = -.17, p = .05) and with higher inclusion of positive perceptions of VAM scale scores (β = .35, p = .001). Therefore, teachers who held positive

perceptions of the inclusion of VAM into the teacher evaluation process, tended to be more highly motivated to collaborate with one another. Additionally, teachers who worked at a school that received a "priority school" designation by the state (i.e. A priority school is one that falls in the bottom 5% of all Michigan public schools as measured by school achievement data.), tended to be less motivated to collaborate with one another.

Table 9

Two-Step Stepwise Multiple Regression Model Examining the Relationship between Motivation to Collaborate Scale with the Positive Perceptions of VAM Score Controlling for Selected Variables

(N = 124)

Variable	*B*	*SE*	β	*p*
Intercept	3.46	0.28		.001
Priority School [a]	-0.59	0.30	-.17	.05
Positive Perceptions of VAM Scale	0.36	0.09	.35	.001

Final Full Model: F (2, 121) = 12.20, p = .001. R^2 = .168. Candidate Variables for First Step of the Model = 19.
[a] Coding: 0 = No 1 = Yes.
Note. The first step of the model used stepwise multiple regression to identify all significant demographic predictor variables and in step two, the Positive Perceptions of VAM scale was added.

Table 10 displays the results of the stepwise multiple regression model predicting the positive perception of VAM scale score based on the same 19 candidate variables (total knowledge score and the 18 independent variables found in Table 1). The final 3-variable model was significant (p = .001) and accounted for 17.2% of the variance in the inclusion of positive

perceptions of VAM scale score. Table 10 indicates the inclusion of positive perceptions of VAM score to be higher in non-urban schools (β = -.30, p = .001), schools with fewer teachers in the building (β = -.22, p = .009), and for teachers with higher knowledge scores (β = .18, p = .03). Table 10 shows that the teachers who held the most positive perceptions about the inclusion of VAM into the teacher evaluation process were those teaching in non-urban schools, had fewer teachers working in their school building and had more knowledge about the inclusion of VAM into the teacher evaluation process (see Appendix E for the knowledge questions of the survey).

Table 10

Stepwise Multiple Regression Model Predicting Positive Perceptions of VAM Score Based on Selected Variables (N = 124)

Variable	*B*	*SE*	β	*p*
Intercept	3.31	0.25		.001
Urban	-0.36	0.10	-.30	.001
Number of Teachers in Building	-0.11	0.04	-.22	.009
Knowledge Score	0.11	0.05	.18	.03

Final Full Model: F (3, 120) = 8.33, p = .001. R^2 = .172. Candidate variables = 19.

Table 11 displays the prediction model examining the interactions of the three independent variables from Table 10 (urban location, number of teachers and knowledge). The full model accounted for 17.7% of the variance in the VAM inclusion score. Inspection of the table found significant main effects for urban location (p = .001), number of teachers (p = .005) and level of knowledge (p = .05) on the perception of VAM inclusion into the teacher evaluation

process. However, no significant two-way or three-way interactions were noted. Inspection of the table found agreement with VAM inclusion to be greater in non-urban schools ($M = 3.31$), smaller schools ($M = 3.28$) and for teachers with higher levels of knowledge ($M = 3.24$) (Table 11).

Table 11

Prediction of VAM Inclusion Based on Selected Variables (N = 124)

Source	*SS*	*df*	*MS*	*F*	*p*	Partial Eta Squared
Full Model	8.06	7	1.15	3.57	.002	.177
Urban Location [a]	3.58	1	3.58	11.07	.001	.087
Number of Teachers [b]	2.60	1	2.60	8.06	.005	.065
Knowledge [c]	1.27	1	1.27	3.92	.05	.033
Urban X Teachers	0.09	1	0.09	0.29	.59	.002
Urban X Knowledge	0.01	1	0.01	0.03	.86	.000
Teachers X Knowledge	0.06	1	0.06	0.19	.66	.002
Urban X Teachers X Knowledge	0.01	1	0.01	0.04	.84	.000
Error	37.47	116	0.32			
Total	45.53	123				

[a] Urban Location: No ($M = 3.31$, $SE = 0.08$) versus Yes ($M = 2.95$, $SE = 0.07$).
[b] Teachers: Under 30 ($M = 3.28$, $SE = 0.07$) versus 30+ ($M = 2.97$, $SE = 0.08$).
[c] Knowledge: Lower ($M = 3.02$, $SE = 0.07$) versus Higher ($M = 3.24$, $SE = 0.08$).

Table 12 displays the prediction model examining the interactions of the two independent variables from Table 9 (priority school and positive perceptions of VAM). The full model accounted for 11.2% of the variance in the willingness to collaborate. Inspection of the table found a non-significant main effect for priority school (p = .28) but a significant main effect for VAM inclusion (p = .01) on willingness to collaborate. Higher agreement with VAM inclusion was related to more willingness to collaborate Low (M = 3.96, SE = 0.18) versus High (M = 4.85, SE = 0.30) (Table 12). The interaction effect for priority school and VAM inclusion was also significant (p = .05). Inspection of the descriptive statistics (Table 13) found in non-priority schools comparatively similar levels for willingness to collaborate between the low and high VAM inclusion groups (M = 4.49 versus M = 4.70). However, for the priority school teachers, willingness to collaborate was comparatively much lower for the low VAM inclusion group (M = 3.43) as compared to the high VAM inclusion group (M = 5.00; Table 13).

Table 12

Prediction of Willingness to Collaborate Based on Selected Variables (N = 124)

Source	*SS*	*df*	*MS*	*F*	*p*	Partial Eta Squared
Full Model	5.39	3	1.80	5.03	.003	.112
Priority School	0.41	1	0.41	1.16	.28	.010
VAM Inclusion [a]	2.30	1	2.30	6.43	.01	.051
Priority X VAM	1.36	1	1.36	3.79	.05	.031
Error	42.89	120	0.36			
Total	48.28	123				

[a] VAM Inclusion: Low ($M = 3.96$, $SE = 0.18$) versus High ($M = 4.85$, $SE = 0.30$).

Table 13

Descriptive Statistics for Willingness to Collaborate Based on the Interaction of Priority School and Inclusion of VAM (N = 124)

Priority School	VAM Inclusion	*M*	*SE*
No			
	Low	4.49	0.08
	High	4.70	0.08
Yes			
	Low	3.43	0.35
	High	5.00	0.60

Summary

In summary, data from 124 teacher participants was used to explore teacher perceptions of the inclusion of student growth data or a VAM into the teacher evaluation process and the relationship(s) those perceptions might have on school culture. The primary research question found a significant, positive correlation ($p < .001$) between the two variables of the inclusion of VAM into the teacher evaluation process and the motivation to collaborate (Table 9). Additional key findings included: teachers working in schools which received a 'priority school' designation were less likely to collaborate (Table 9); the more knowledge teachers had about the inclusion of student growth data or VAM into the teacher evaluation process, the more positive their perceptions were about VAM (Table 10); teachers in nonurban schools had more positive perceptions of VAM when compared to their urban counterparts (Table 10); and teachers

working in smaller school buildings (as identified by the number of teachers in their building) had more positive perceptions of VAM. Significant main effects were found for urban location (p = 001), number of teachers (p = .005) and level of knowledge (p = .001). In the final chapter, these findings will be compared to the literature, conclusions and implications will be drawn, and a series of recommendations will be suggested.

Chapter 5: Conclusions

Introduction

This study explored teacher perceptions of the inclusion of student growth data or a value added measure (VAM) into the teacher evaluation process and the relationship(s) these perceptions may have on school culture. These perceptions have everything to do with shaping the culture of a school, especially as it may relate to teachers' perceptions and a sense of collaboration and collegiality. Using the lens of collective efficacy within the organizational culture of schools, this study examined to what extent the inclusion of value added measures into the teacher evaluation process contribute to a self-serving, competitive school environment due to the heightened desire to ensure their students are performing at a significantly high level. The significance of this study directly impacts student learning and the relationship to students having access to quality teachers, as well as the school culture. Every child that enters school deserves an outstanding, highly qualified teacher to provide them instruction in all of the content areas. Additionally, every teacher deserves to be supported in a professional environment to become an outstanding, highly qualified teacher.

The controversial topic of including a value-added measure of student achievement data into teacher evaluations may decrease the collaborative nature of a school building because teachers may become more focused on individual goals, rather than working collaboratively. The interest becomes self-interest and their instructional strategies may distort and undermine the school's broader goals for achievement (Baker et al., 2010). The perceptions teachers held related to the inclusion of a VAM into the teacher evaluation process may shape the organizational culture of their school. This study explored the relationship between teacher perceptions about the newly mandated Michigan teacher evaluation process, which requires the

inclusion of student growth data in the summative evaluation of teachers and the potential relationship it may have on the culture of a school. The following research question guided this study:

> What is the relationship between teacher perceptions regarding the inclusion of VAM into the teacher evaluation process and teachers' motivation to opt in or opt out of engaging in collaborative, collegial relationships with each other?

This researcher utilized a quantitative research methodology through the use of a researcher-developed survey (Nardi, 2014). Survey questions were close-ended, with a single open-ended question. Personal, attitudinal, and behavioral questions were also included in the survey. Following successful completion of the pilot test, the survey instrument was emailed to certified elementary and secondary teachers in a western Michigan intermediate school district using SurveyMonkey®. Quantitative data were collected and analyzed using statistical procedures which allowed this researcher to explore the presence of any relationships between teacher perceptions regarding the inclusion of student growth data or VAM into the teacher evaluation process so that teachers are motivated to opt in or opt out of collaborative and collegial relationships with each other and the potential relationships those perceptions may have on the level of collective efficacy of teachers, which ultimately impacts the culture of a school building.

Teacher Participants of This Study

Teaching experience. One hundred and twenty-four teachers working in a western Michigan intermediate school district participated in this study. The vast majority were female (80.65%) participants working in an elementary school setting (55.65%). For the purposes of this study, an elementary school is a school building serving kindergarten through sixth grade

students. Just under a quarter of teacher participants (24.2%) worked in a middle school setting (7th & 8th grades) and exactly a quarter (25.0%) worked in a high school setting (9th through 12th grades). The years of teaching experience of the teacher participants in this study ranged from 1-5 years (4.8%) to 25+ years (21.8%). The median years of teaching experience was 15. Thus, the majority of respondents have had multiple years of teaching and possible exposure to vastly different teacher evaluation processes. Slightly more than one-third (35.48%) of the teacher participants have been teaching at their current building 1-5 years. It is during these years of working in the same school building that a teacher becomes a part of the culture and works to build collegial, collaborative relationships.

Student population. It is important to consider the student population the teacher participants interact with on a daily basis in their classroom. It is not solely general education students, it may be special education students who require specialized academic support and/or students learning English as a second language (ESL). Slightly more than one-third (38.71%) of the teacher participants indicated they teach between 1-5 ESL students. Similarly, slightly more than one-third (33.06%) of the participants teach between 1-5 special education students. Slightly less than one-quarter (22.58%) of the teacher participants, however, taught 15+ special education students. These groups of students present unique learning challenges the teacher must work to overcome, which may impact how the teacher participant views the inclusion of student growth data into their summative teacher evaluation. These students will not learn at the same rate as their general education peers, yet the teacher participant is still held accountable for the same amount of academic progress as their colleagues teaching all general education students.

Building characteristics. The perspectives of urban schoolteachers were much better represented in this study than rural teachers. Very few teachers who participated in this study

(3.23%) worked in a rural school setting. Slightly over half of the participants (51.51%) worked in an urban school setting. On an annual basis all schools in the state of Michigan are provided with one of the following designations: school-wide Title I school, a focus school (i.e., achievement gap exists between the top 30% of students and the bottom 30%), a priority school (i.e., a school identified in the bottom 5% of all schools in Michigan), or a reward school (i.e., a school identified as making adequate yearly progress in addition to being in the top 5% of Michigan schools or in the top 5% of school making the greatest achievement gains). Slightly over two thirds (67.74%) of the teacher participants indicated their school is a school-wide Title I school building (i.e., the school receives state and/or federal funding to support the most at-risk students in the building). Nearly one-third (27.42%) of teacher participants did not know what designation their school had received the prior school year. These data should be noted as teacher participants working in a focus or priority school may be working under a great deal of pressure to improve the achievement level of those students.

Experience with the teacher evaluation process. Just over half (51.61%) of the teacher participants indicated their current teacher evaluation process has been in place for two years. Nearly two thirds (64.52%) of teacher participants have been evaluated under the new Michigan teacher evaluation law, which requires a portion of their summative evaluation to reflect student growth data.

Knowledge of the teacher evaluation process. Teacher participants in the present study answered six questions that assessed their knowledge of the teacher evaluation process in Michigan. The vast majority (95.2%) of teacher participants accurately knew that as a teacher in Michigan they would be assigned one of four end-of-the-year effectiveness ratings (i.e., highly effective, effective, minimally effective, or ineffective). Yet, less than half (44.4%) knew these

ratings are made public. Only 17.7% of the teacher participants knew that by the end of the 2015-16 school year, 50% of their year-end evaluation would be comprised of student growth data or VAM.

Conclusions

Analysis of this study's data indicated a moderate positive correlation ($p < .001$) between teachers' perceptions of the inclusion of VAM and their level of motivation to collaborate with other teachers. The more positively held perceptions of the inclusion of VAM into the teacher evaluation process, the more likely teacher participants were to engage in collaborative and collegial relationships with their teaching colleagues. Teacher participants in this study who had more knowledge of the changing Michigan mandate to include student achievement data or VAM into their summative teacher evaluation also held more positive perceptions of the inclusion of such data. Thus, the more knowledge one has about the mandate, the greater the likelihood that they will perceive the inclusion of VAM into the teacher evaluation process as positive rather than negative (See Table 12).

General perceptions of the teacher evaluation process. A review of research examining how teachers generally perceive the teacher evaluation process indicated factors which may impact teachers' perceptions of how they are evaluated (Conley & Glasman, 2008; Sand, 2005; Sutton, 2008; Marshall, 2005; McLaughlin, 1984; Nickerson, 2009; Zimmerman et al., 2003). Conley and Glasman (2008) found teachers reported very little sense of career accomplishment from their evaluation because it is less about professional growth and more about punitive measures to weed out ineffective teachers. Teachers are not viewing the evaluation process as a tool to perfect the craft of teaching. Only 43.38% of the teacher participants in the present study agreed or strongly agreed their formal evaluation process is

useful in determining their effectiveness as a teacher. Sand (2005) identified weaknesses in the teacher evaluation process, which may impact teachers' perceptions: evaluations do not always provide meaningful feedback; ratings are subjective; and professional growth plans are not linked to the evaluation. For these reasons, teachers may perceive the evaluation process as not being valuable because they do not receive observable empirical data to help promote positive instructional changes in the classroom. Data from the present study supports Sand's (2005) research as fewer than half (40.44%) of the teacher participants believed their formal evaluation process provides them with meaningful feedback that ultimately impacts their instructional delivery. Meaningful feedback could essentially help a teacher become a more effective teacher.

Teachers give little credibility to the teacher evaluation process and with the changing state mandate to include student growth data or VAM, the credibility of the process continues to be the center of debate among teachers and educational leaders. Marshall (2005) proposed several reasons why the teacher evaluation process is not as credible as it could be. Among the reasons are: the actual evaluation rarely focuses on student learning, high-stakes evaluation tends to diminish the capacity for adult learning, and evaluations often fail to give teachers "judgmental" feedback (p. 731). Marshall (2005) contends many evaluation instruments allow principals to provide an overall "satisfactory" rating without clearly articulating how the teacher is actually performing. Additionally, these types of evaluations do not give clear direction on how the teacher may improve their performance. Only 15.15% of teacher participants in the current study felt the teacher evaluation process is designed to help them grow and improve as a teacher. Teacher participants are not feeling the evaluation process is a credible way to measure their effectiveness as a teacher for a variety of factors. Those factors include: teachers are being held accountable for factors out of their control as a teacher; the inclusion of student growth data

or VAM is not an objective measure despite what proponents of VAM argue; and they believe the teacher evaluation process is not designed to support their professional growth as a teacher. Slightly less than one third (30.31%) of the teacher participants agree or strongly agree the sole purpose of the teacher evaluation process is to "weed out" ineffective teachers.

Closely related to the collegial relationship among teachers as it relates to the evaluation process, is the relationship between the principal conducting the evaluation and the teacher. Nickerson (2009) found teachers place a high value on evaluation practices that ensure evaluations are conducted ethically and with regard to the welfare of those being evaluated. A high level of importance was placed on the relationship between the teacher and principal. Nickerson (2009) found when the evaluation was conducted fairly, respectfully and through the use of clear communication, teachers perceived the evaluation more positively. Related to these concepts is the perception held by teachers as to whether or not they believe their principal has the knowledge and expertise to perform an effective evaluation. Just over one-third (39.39%) of teacher participants in the current study felt their principal had the expertise necessary to perform an effective evaluation of their teaching performance.

School culture and the inclusion of VAM: Collegiality, collective efficacy, and morale. Teacher relationships can positively or negatively impact the culture of a school building. The organizational culture sets the tone for a school building and determines how instructional practices are carried out and how new mandates are interpreted and implemented. Roland Barth (1990) suggested collegiality is the key to a good school setting because the premise of collegiality is that "teachers who work together can enjoy continuous professional, collegial relationships" (Barth, 1990, p. 34). Collegiality and motivation to collaborate are integral to establishing a positive culture within a school building. Collegiality is associated with

the following positive outcomes: higher level of morale and trust among adults; adult learning is energized and more likely to be sustained; motivation of students and their achievement rises; and when adults share and cooperate, students are more likely to do the same (Barth, 1990). The open ended responses at the end of the survey suggest why the culture of their school is negatively impacted because the inclusion of VAM has created a more individualistic culture in which teachers do not work together and do not engage in supportive collegial relationships. When asked the open ended question *What, if any, impact has the new teacher evaluation process had on the relationships between you and your teaching colleagues?* some teacher participants described their relationships as the following:

- Others are not collaborating and sharing materials for test items. A climate of mistrust is formed.
- Relationships have been weakened dramatically.
- Relationships are starting to become strained because they know when push comes to shove, data will determine who keeps their job.
- A lot of tension, griping, and blame now occurs.
- Not as much collaboration and excitement.
- Puts a strain on our collaboration.

Additionally, the level of competition among teaching colleagues has increased, which may have a negative impact on the culture of the school building because teachers may opt out of collaborative and collegial relationships with their colleagues. Teacher participants felt more competition among their colleagues since the inclusion of VAM and therefore engage less in collaborative work with their teaching colleagues because the inclusion of VAM into the teacher evaluation process pushes them to align themselves with a more individualistic culture of

teaching, which ultimately could have negative implications for the organizational culture of the school. When asked if they felt more inclined to provide professional support to their teaching colleagues since the inclusion of VAM into the teacher evaluation process, 24.81% of teacher participants indicated they disagreed or strongly disagreed. Although the research would suggest an individualistic culture being created, less than a quarter (24.81%) agreed or strongly disagreed with the aforementioned statement.

Over half (55.31%) of the teacher participants in this study indicated the morale of their school has declined since the inclusion of VAM into the teacher evaluation process. This researcher speculates the decline in morale is related to a level of competiveness teachers are beginning to engage in. Teacher participants in this study were asked what, if any, impact has the new teacher evaluation process had on the relationship between themselves and their teaching colleagues. Nearly one-third (29.46%) of teacher participants answered that they agree or strongly agree with the following statement: "Since the inclusion of a student growth data or a value-added measure in the teacher evaluation process, I feel like I am competing with my colleagues." For these teacher participants, the inclusion of VAM into their teacher evaluation process has fostered a sense of competitiveness to outperform other teachers. The open ended responses at the end of the survey suggest why some teacher participants felt a level of competiveness among their colleagues when they answered the question, "What if any has the new teacher evaluation process had on the relationships between you and your teaching colleagues?" The following open-ended responses at the end of the survey suggest why teachers may have responded as they did to this item:

- I feel like I have to outperform my colleagues.
- There is some competiveness, which is hard.

- Many more teachers are in competition with each other.
- I see teachers comparing their scores with each other in a competitive way.
- It has brought out competition between teachers.
- I feel like I need to be better than the teachers in my discipline. It puts us in competition.
- I am feeling less trusting of my colleagues due to the current atmosphere of competitiveness within the profession.

One of the reasons for the heightened level of competitiveness may be the result of the district's requirement to financially reward highly effective teachers through the use of merit pay. Teachers are beginning to isolate themselves in their classroom and are solely focused on the immediacy of the teaching within their classroom. Hargreaves (1992) noted this level of individualism often results in teachers not experiencing praise, support or adult feedback on their teaching competence, both from colleagues and their building administrator. Hargreaves (1992) described a phenomenon referred to as an individualistic culture of teaching, which is characterized by a low level of collective efficacy based on evaluative and judgmental characteristics among teachers. Collective efficacy beliefs are an important aspect of a school's culture as well. The level of collective efficacy directly affects the diligence with which teachers pursue professional teaching goals. A school characterized as having a low level of collective efficacy is described as one where teachers disengage from collaborative work with colleagues because the level of self-interest to produce a high level of student achievement is greater than the level of collaboration collectively working beside colleagues to work together toward the greater goal of improving the overall student achievement of the school (Goddard, Hoy, and

Woolfolk, 2004). How teacher participants perceive the mandate of the inclusion of VAM has impacted their livelihood and passion for teaching, which ultimately impacts the culture of a school building.

Overall, teacher participants in this study indicated it has created a less collegial working environment because teachers are under a high level of stress to outperform their teaching colleagues in order to keep their job. When provided the opportunity to answer the open-ended questions, teacher participants shared the following comments when asked about what impact the new teacher evaluation process has had within their school. Some of the comments included:

- Teachers are feeling leery of the administration, feeling they are always being compared and judged. This is not the best way to build a community in a school building.
- It (the inclusion of student growth data/VAM) has created a less collegial environment and hurt the morale of many teachers.
- I feel like teachers are in competition with each other to have higher data. I also feel like teachers are changing their scores or data to make themselves look better.
- These VAMs have increased the competition amongst teachers, removing collegiality and creating a winner takes all environment, instead of one where everyone in the building works towards the common goal of all students being successful.
- Teachers are fearful of what a test says about their teaching.
- Teachers just inflate grades.

Although some teachers might be less likely to share instructional resources or collaborate with their teaching partners because they want *their* students to perform the best, results from this study indicated that over half (56.59%) disagreed or strongly disagreed with the statement *I feel less inclined to consult with other teachers about my instructional practices since the inclusion of student growth data or a VAM into my teacher evaluation process was implemented*. This researcher strongly believes more teachers will eventually become more individualistic in their teaching methodologies, rather than collaborating with teachers to ensure success for all students in a given school building. In fact, nearly a third (29.46%) of the teacher participants in this study indicated they felt like they are competing with their colleagues since the inclusion of VAM. Additionally, just over one-third (34.88%) indicated they did not feel a heightened sense of competition. The remaining one-third (35.66%) of teacher participants didn't have strong feelings one way or the other with regard to their level of competiveness since the inclusion of a student growth measure or VAM. In general, participants in this study felt a higher level of motivation to collaborate *only* when they perceived VAM as being useful to improve their teaching effectiveness and that VAM was not viewed as demoralizing. Table 6 indicated the motivation to collaborate is higher when teacher participants in the study indicated higher scores on the VAM is useful to improve teaching effectiveness factor scores ($\beta = .37$, $p = .001$) and lower VAM demoralizing factor scores ($\beta = -.18$, $p = .04$). This is an important key finding because teacher participants were more likely to opt into collaborative partnerships with their teaching colleagues if they felt the VAM was not only a useful measure of their teaching effectiveness but a measure that could actually improve their ability to their level of instruction. Teacher participants who were not made to feel demoralized because of VAM were more likely to continue to engage in collaboration with their colleagues possibly because they continued to

be confident in their instructional capabilities. Given this information this researcher speculates there are several variables, which may impact and help to explain the level of motivation to collaborate among teachers. These variables include, but are not limited to, teachers who view teaching as a "calling" rather than a job; teachers who generally have a higher level of job satisfaction; availability of time to collaborate; administrative support for collaboration among teachers; and the size of the school building. According to the teacher participants in this study, VAM was not necessarily felt to be overwhelmingly demoralizing, yet participants in this study felt it is not yet an acceptable means to evaluate teacher effectiveness objectively. More specifically, teacher participants indicated they are being held accountable for factors outside of their control as a teacher, which takes away from the objectivity of VAM. A large majority of teacher participants (79.55%) felt that the current teacher evaluation process unfairly holds them accountable for factors over which they exert little or no control. These factors include the home life of the student, inadequate teaching materials, level of parental support and the socioeconomic status of the student. Additionally, the vast majority of teacher participants (84.85%) felt their evaluation should *only* be based on factors within their control as a teacher.

Data from teacher participants working in priority schools versus non-priority schools and urban schools versus non-urban schools indicated teacher participants working in priority schools or urban schools do not want to collaborate at a much higher level than their non-priority and non-urban counterparts. For the priority school and urban schoolteacher participants, the inclusion of VAM appears to be driving teachers *back* into their classrooms to work in isolation. These teacher participants are not necessarily feeling a strong sense of competition among their teaching colleagues; rather, they are isolating themselves from their colleagues. Barth (1990) described three types of relationships that impact the level of collegiality in schools: parallel

play, adversarial relationships and competitive relationships. Parallel play provides isolation among teachers so one teacher doesn't steal ideas form another or influence them to do things a different way. Adversarial relationships involve creating opponents among teachers. A teacher in a competitive relationship selfishly puts themselves before their colleagues. Unfortunately, this mandate seems to be doing more harm than good for these teacher participants working in schools where the most help and support is needed. Teachers need to grow professionally and learn together, regardless yet some teacher participants appear to be reverting to more archaic, individualistic ways of teaching. On the other hand, teacher participants in non-priority and non-urban schools do not hold as negative perceptions regarding the inclusion of VAM. These schools are typically characterized as higher performing schools located in more affluent areas. For these teacher participants, their school culture doesn't appear to be as impacted by the mandate to include VAM into the teacher evaluation.

Teacher effectiveness: Accountability and the inclusion of VAM. One of the goals of the inclusion of VAM into the teacher evaluation process was to improve the caliber of our teachers in the state of Michigan so that all students may have the opportunity to be educated by highly effective teachers. Yet, only a small percentage (8.09%) of the teacher participants in this study indicated they believe VAM has increased their ability to become a more effective teacher. McLaughlin (1984) has discussed the deterministic feel to teacher evaluations and the shortcomings teachers perceive as a result. Teacher participants in this study commented on the many factors out of their control, which may impact, either positively or negatively, the academic growth of their students. Haertel (1986) emphasized students not only vary by general cognitive abilities, but also in relevant prior experiences that may also impact achievement of students. Students also present with unique learning profiles that have been influenced by social

and cultural norms. Teachers perceive their level of effectiveness (i.e., as measured in their summative teacher evaluation by the use of student growth data or VAM) as a highly contextual and conditional measure, rather than an objective measure they can use to reflect upon and improve teaching practices because of the many factors out of their control in the classroom. It is evident by the responses provided by the teacher participants in the present study that negative perceptions of the inclusion of VAM stem from the factors outside of the classroom, which are impacting student learning, and are out of the control of the teacher. These include, but are not limited to: school climate, student abilities, socio-economic status of the student, and student attendance rate. Furthermore, Conley and Glasman (2008) provided evidence to suggest teachers only feel comfortable being evaluated on variables within their control within their classroom. The inclusion of VAM is beginning to create fear and anxiety as it relates to how teachers perceive not only their instructional abilities, but also the evaluation process. It is the opinion of this researcher, teachers perceive the evaluation process to be less about professional growth and more about a punitive measure to weed out the lowest performing teachers based on student growth data or VAM.

There continues to be discussion about the most accurate way to measure the effectiveness of teachers. Nearly three-quarters (67.65%) of the teachers who participated in this study indicated that measuring their effectiveness as a teacher using data over a period of time is a better predictor of their effectiveness as a teacher, rather than using once-a-year high stakes testing. Using student growth data gathered from achievement testing conducted over the course of the school year (i.e., use of formative assessments) is a preferred method of evaluating teacher effectiveness. Instead of placing the emphasis of student growth data or VAM on a once-a-year high stakes assessment, the use of ongoing yearlong formative assessments is a more accurate

measure to help to determine the level of teacher effectiveness. According to the State of Michigan, by the year 2018-2019, 50% of a teachers' evaluation must be based upon student growth and assessment, which can be a combination of ongoing yearlong formative assessments and once-a-year high stakes testing. The real-world implications for including VAM are vast. Darling-Hammond (2013) stated four such implications: instability of ratings, bias, measurement concerns, and incentives. This researcher has experienced a shift from the care and concern of student welfare (i.e., social and emotional growth) to ensuring that students perform well on assessments, specifically ones that are included in the summative teacher evaluation. Teachers are more likely to be "teaching to the test" rather than encouraging a more authentic learning environment. Rather than having collegial dialogue about best practices to instruct students and teaching methodologies, teachers engage in conversations on how new initiatives will impact their summative evaluation and student growth data. The dialogue is no longer about how we can best educate students; it is about self-preservation in an increasingly stressful working environment.

Teachers are understandably worried about the increased accountability for student achievement because there are factors outside their control that may impact student achievement. Kupermintz (2003) argued, "Equally competent teachers will produce different results with groups of students that differ appreciably in cognitive, affective, and motivational aptitude profiles" (p. 291). Over 79% of the teacher participants in this study indicated their current evaluation process unfairly holds them accountable for factors over which they exert little or no control (i.e., the home life of the student, parental support, cognitive aptitude, socioeconomic status of students or their families, inadequate teaching materials). In her book, Darling-Hammond (2013) stated that "only 7%-10% of the overall variation in student achievement can

be attributed to a student's individual teacher; the largest influences typically account for 60% of the variation, which include socioeconomic factors and the collective composition of the classroom and school" (p. 78). A study conducted in California high schools further supports the statement that academic growth is impacted by the composition of the classroom. Darling-Hammond (2013) found that high school teachers' VAM ratings were significantly correlated to the percentage of students in their classroom who were from different race/ethnicity groups, income, language background, and parent education groups. Over the course of several years, however, more stable VAM scores were found when the composition of the classroom was similar from year to year. According to Baker et al. (2010), a teacher's VAM can only be compared to another teacher's VAM when the teachers have the same mix of struggling students or when a statistical measure of effectiveness fully adjusts for the differing mix of students. Students present with unique learning profiles, especially if English is not their first language or if they are special education students, which ultimately requires teachers to implement a variety of instructional strategies within a single classroom to ensure the academic growth of all students. Generally speaking, a measure cannot be considered valid if it is heavily influenced by factors outside of the teacher's control. When examining the level of effectiveness of our teachers, educational leaders need to recognize the implications these other factors play in the academic achievement of our students to have a truly accurate picture of the level of effectiveness demonstrated by teachers.

Despite the negative connotations and perceptions some of the teacher participants in the present study expressed about the inclusion of VAM, some teacher participants indicated the inclusion of VAM has had *a positive* effect. Despite the high level of stress and frustration the inclusion of VAM has created, some participants in this study actually felt the inclusion of VAM

has led to a *higher* level of collaboration among their teaching colleagues. This statement is supported by responses provided by teacher participants on the open-ended questions of the survey. When asked *What, if any, impact has the new teacher evaluation process had on the relationships between you and your teaching colleagues*? teacher participants provided the following responses:

- We collaborate more.
- It has made me seek out other teachers that are having successful educational gains with students.
- It has created more collaboration.
- Consult each other frequently, brainstorm ideas.
- We are already a collaborative group. If anything, it has made us more collaborative because we want to make sure data is becoming stronger and not weaker at our school.
- I don't think it has impacted the relationships at our building.
- It has made our unity even stronger.
- In my case, it has caused me to work more closely with my colleagues so we can share expertise and support each together with our efforts to provide quality instruction.
- We have bonded over the unfairness of the process.
- In my grade level, I think we collaborate even more and discuss even more effective strategies.

Only a very small percentage (6.98%) of teacher participants in the present study felt *less* inclined to collaborate with their teaching colleagues since the inclusion of VAM was

implemented. Similarly, just over half (56.59%) of the teacher participants disagreed when asked if they felt less supported by the teachers in their building since the inclusion of VAM. Teacher participants in this study who worked in smaller schools, had more accurate knowledge of the teacher evaluation mandate, and taught in a school located in a nonurban setting tended to have more positive perceptions of VAM. Reportedly, these positive perceptions fostered a more collaborative relationship among the teachers they worked with in their school building. This researcher has concluded teachers who held more positive perceptions of the inclusion of VAM were those teachers who were more likely to engage in some level of collaborative work with their fellow teaching colleagues despite the inclusion of VAM. They did not sense a level of competitiveness within the culture of their school. In fact, some participants in this study indicated that a positive effect of the inclusion of VAM was that it made them want to collaborate more with their colleagues and engage in professional dialogue with colleagues. Sand (2005) suggested effective teacher evaluation helps teachers improve instruction, build trust, openness and professionalism. Teachers who rise above the demands of the new Michigan mandate to include VAM into their summative evaluation recognize the possibility that VAM *may* help them become a more effective teacher.

Recommendations for Educational Leaders

This study provides many implications for educational leaders. Today's educational leaders are working to maintain the morale of their school building while there are constantly new mandates to be mindful of. Evaluating teachers may be one of the most important duties an educational leader performs, especially in light of the challenge to improve the quality of teachers we place in front of our students. Not only must these leaders have knowledge of the

changes related to the teacher evaluation process, leaders must support their teaching staff in their understanding of the process, as well as maintain a collegial working environment.

Participants in this study clearly articulated if student growth data are to be included in their summative teacher evaluation, then the data needs to be gathered over the course of an extended period of time, rather than at one point in time during a students' academic year (i.e., high stakes testing, such as the MEAP or ACT is gathered at one point in the school year). Additionally, district leaders must recognize the factors that are out of a teacher's control which impact the learning profile of students and must be taken into consideration. Over three-quarters (79.55%) of the teacher participants in this study indicated the teacher evaluation process unfairly holds them unaccountable for factors they have little or no control over. These include home environment, parental support, socio-economic status of the student, and inadequate teaching materials. As educational leaders, we support teachers in the process of leveling the playing field to ensure that all students have what they need to learn. How are we as educational leaders leveling the playing field to support teachers in their growth to become a highly effective teacher?

Regardless of whether or not student growth data or VAM is included in the teacher evaluation process, teachers must view the process as a credible way for them to improve their professional competence as a teacher. If the teacher evaluation process is designed in such a way that teachers perceive it to be a supportive measure to help them grow professionally, we will see an increase in our teachers' ability to provide effective to highly effective instruction to their students. Marshall (2005) provided the following suggestions to improve the credibility of the supervision-evaluation cycle so that teachers may improve their level of effectiveness in the classroom continuously analyzing student learning; foster a collaborative culture in which

teachers are working together in teams; facilitating conversations focused on authentic data; use of face-to-face feedback; and having frequent unannounced classroom visits.

Educational leaders are leading in a time of heightened pressure to be a high performing school building. These pressures are exacerbated in buildings that are persistently low achieving. There is such pressure to succeed, yet what supports are we providing for our teachers to improve their teaching effectiveness, which will, in turn, improve achievement outcomes for our students? Educational leaders who recognize this pressure and support their teachers will help to maintain a positive level of collegiality within their school culture. Educational leaders can maintain a collegial and collaborative school culture by recognizing these pressures teachers are facing and having open dialogue about student growth data and VAM.

Recommendations for Further Study

The current study only examined the perceptions held by teachers as they relate to the inclusion of VAM into the summative teacher evaluation process. Future studies may examine administrator perceptions of the inclusion of VAM into teacher evaluations, as well as administrator evaluations. To enhance the methodological approach a future researcher may want to design a similar study using a mixed methods approach and focus on follow-up qualitative interviews with participants to learn more about how the relationships between colleagues are being impacted by the inclusion of a VAM.

A more in depth study might involve a more comprehensive examination of teachers' perceptions of the credibility of the teacher evaluation process. A single evaluation process will not be perfect, but educational leaders can take steps to ensure a comprehensive approach to teacher evaluations is carried out.

Finally, a longitudinal study may help educational leaders to better understand how effective the inclusion of student growth data or VAM is to teacher effectiveness.

References

Baker, E., Barton, P., Darling-Hammond, L., Haertel, E., Ladd, H., Linn, R., & Shepard, L. (2010, August 28). *Problems with the use of student test scores to evaluate teachers* [EPI Briefing Paper Briefing Paper No. 278]. Retrieved from Economic Policy Institute: http://www.epi.org/page/-/pdf/bp278.pdf

Barth, R. S. (1990). *Improving schools from within: Teachers, parents, and principals can make the difference*. San Francisco, CA: Jossey-Bass, Inc.

Barton, S. (2010). *Principals' perceptions of teacher evaluation practices in an urban school district* (Doctoral dissertation). Available from ProQuest Dissertations and Theses.

Conley, S., & Glasman, N. (2008). Fear, the school organization, and teacher evaluation. *Educational Policy*, *22*(1), 63-85. http://dx.doi.org/10.1177/0895904807311297

Creswell, J. W. (2012). Survey designs. In P. A. Smith (Ed.), *Educational research: Planning, conducting, and evaluating quantitative and qualitative resaerch* (4th ed., pp. 375-421). Boston, MA: Pearson Education, Inc.

Darling-Hammond, L. (2013). *Getting teacher evaluation right: What really matters for effectiveness and improvement*. New York, NY: Teachers College Press and Learning Forward.

Goddard, R. D., Hoy, W. K., & Woolfolk Hoy, A. (2004). Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. *Educational Researcher*, *33*(3), 3-13. Retrieved from http://search.proquest.com.ezproxy.emich.edu/docview/216901890/fulltextPDF/140D1482E85C794444/4?accountid=10650

Haertel, E. (1986). The valid use of student performance measures for teacher evaluation. *Educational Evaluation and Policy Analysis*, *8*(1), 45-60. Retrieved from http://www/jstor.org/stable/1163819

Hargreaves, A., & Fullan, M. (1992). Cultures of teaching: A focus for change. In *Understanding teacher development* (pp. 45-68). University of Toronto Press.

Himmelein, M. E. (2009). *An investigation of prinicpals' attitudes toward teacher evaluation process* (Doctoral dissertation). Available from ProQuest Dissertations and Theses. (UMI No. 3399151)

Hoy, A., & Hoy, W. (2006). Assessing and changing school culture and climate. In *Instructional leadership: A learning-centered guide* (2nd ed., pp. 301-345). New York, NY: Pearson

Hoy, A., & Hoy, W. (2013). Motivation. In *Instructional leadership: A research- based guide to learning in schools* (4th ed., pp. 140-158). New York, NY: Pearson.

Kerlinger, F., & Lee, H. (2000). Sampling and randomness. In *Foundations of behavioral research* (4th ed., pp. 163-187). Orlando, FL: Harcourt Inc.

Kupermintz, H. (2003). Teacher effects and teacher effectiveness: A validity investigation of the Tennessee Value Added Assessment Program []. , (), . http://dx.doi.org/Retrieved from

Logue-Beldon, J. (2008). *Teachers' attitudes toward teacher evaluation in high-and low-achieving middle schools as measured by the Pennsylvania state system of assessment* (Doctoral dissertation). Available from ProQuest Dissertations and Theses.

Marshall, K. (2005) It's time to rethink teacher supervision and evaluation. *Phi Delta Kappan*, June 2005, pp. 727 - 735.

McLaughlin, M. W. (1984). Teacher evaluation and school improvement. *Teachers College Record*, *86*(1), 193-207.

Michigan Department of Education (MDE) website. http://www.mi.gov/mde/0,4615,7-140-22709_62255---,00.html. Accessed January 12, 2014.

Milanowski, A. (2004). The relationship between teacher performance evaluation scores and student achievement: Evidence from Cincinnati. *Peabody Journal of Education*, *79*(4), 33-53. Retrieved from http://www.jstor.org/stable/1493307

Nardi, P. M. (2014). *Doing survey research: A guide to quantitative methods.* (3rd edition). Boulder, CO: Paradigm Publishers.

National Council on Teacher Quality. (2011). *State of the States: Trends and early lessons on teacher evaluation and effectiveness policies* [Issue brief]. Retrieved from National Council on Teacher Quality website: http://www.nctq.org

Nickerson, Jr., N. (2009). *Effectiveness of principals as evaluators of teachers* (Doctoral dissertation). Available from ProQuest Dissertations and Theses.

Olivares, C. (2011). Educator Evaluation Overview. Retrieved from http://search.michigan.gov/search?affiliate=mi-mde&query=teacher evaluation legislation

Popham, W. J. (2013). *Evaluating America's teachers: Mission possible?* Thousand Oaks, CA: Corwin.

S. Res. 137, Cong., S (2011) (enacted).

Sand, J. D. (2005). *Elementary administrators and teachers' perceptions of the teacher evaluation process in California's public schools* (Doctoral dissertation). Available from ProQuest Dissertations & Theses. (UMI No. 3180405)

Schein, E. H. (1990). Organizational culture. *American Psychologist (February).* 109-119.

Schein, E. H. (2010). *Organizational culture and leadership.* (4th edition). San Francisco, CA: Jossey-Bass.

Smith, S., & Piele, P. (2006). Cultural leadership. In *School leadership: Handbook for excellence in student learning* (4th ed, pp. 178-195). Thousand Oaks, CA: Corwin.

Steele, J., Hamilton, L., & Stecher, B. (2010). *Incorporating student performance measures into teacher evaluation systems* [Research report]. Retrieved from RAND Corporation website: http://www.rand.org

Stephanou, G., Gkavras, G., & Doulkeridou, M. (2013). The role of teachers' self- and collective-efficacy beliefs on their job satisfaction and experienced emotions in school. *Psychology*, *4*, 268-278. http://dx.doi.org/10.4236/psych.2013.43A040

Sutton, S. R. (2008) *Teachers' and administrators' perceptions of teacher evaluation* (Doctoral dissertation). Available from ProQuest Dissertations and Theses. (UMI No. 3340518)

Wise, A., Darling-Hammond, L., McLaughlin, M., & Bernstein, H. (1984). *Teacher evaluation: A study of effective practices* [Research report]. Retrieved from Rand Corporation website: www.rand.org

Woolfolk, A. E., & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology, 82,* 82-91.

Zimmernan, S., & Deckert-Pelton, M. (2003). Evaluating the evaluators: Teachers' perceptions of the principal's role in professional evaluation. NASSP Bulletin, 87(636), 28-37. Retrieved on November 11, 2012, from http://bul.sagepub.com/content/abstract/87/636/28

Zinth, J. (2010). *Teacher evaluation: New approaches for a new decade* [Issue brief]. Retrieved from Education Commission of the States website: http://www.ecs.org/clearinghouse/86/21/8621.pdf

Appendix A: Survey Pre-Notification Letter

Date:

Dear Participant:

My name is Jennifer Slanger and I am a doctoral candidate at Eastern Michigan University. For my dissertation research, I am examining teachers' perceptions of the inclusion of student growth data or a value-added measure into the teacher evaluation process and it's impact it may have on school culture. You are being asked to participant in this study because you are currently a certified teacher within the intermediate school district being sampled.

Within the next five days you will receive an email requesting your participation in my survey research. Embedded in that email will be a link to the online survey. The survey will take approximately 15 minutes to complete. There is no compensation, nor any known risks for participating. All surveys will remain confidential. If you choose to participate in the survey, please answer each question as honestly as possible and complete the online survey by April 1, 2014. Participation is strictly voluntary.

Thank you for your consideration to participate in my educational research.

Sincerely,

Jennifer Slanger, Doctoral Candidate
jennslanger@gmail.com

Dr. Barb Bleyaert, Ed.D.
Associate Professional Educational Leadership

Appendix B: Survey Cover Letter

Date:

Dear Participant:

My name is Jennifer Slanger and I am a doctoral candidate at Eastern Michigan University. For my dissertation research, I am examining teachers' perceptions of the inclusion of student growth data or a value-added measure into the teacher evaluation process and it's impact it may have on school culture. You are being asked to participant in this study because you are currently a certified teacher within the intermediate school district being sampled.

The following survey will take approximately 15 minutes to complete. There is no compensation, nor any known risks for participating. All surveys will remain confidential. If you choose to participate in the survey, please answer each question as honestly as possible and complete the online survey by April 1, 2014. Participation is strictly voluntary.

Thank you for taking the time to assist me with my educational research. The data collected will provide useful information related to teachers' perceptions related to the teacher evaluation process with regard to the inclusion of student growth data or a value-added measure. If you would like a summary of the survey results, please contact me at jennslanger@gmail.com. Completion of the online survey will indicate your willingness to participate in this study. If you have questions or would like additional information, please contact me at the email address provided below.

Sincerely,

Jennifer Slanger, Doctoral Candidate
jennslanger@gmail.com

Dr. Barbara Bleyaert, Ed.D.
Associate Professional Educational Leadership

Appendix C: Survey Instrument

Teachers Perceptions of the Inclusion of Student Growth Data and the Relationship Those Perceptions May Have on School Culture

Section 1: General Knowledge

The following questions will examine your current knowledge about Michigan's current teacher evaluation legislation and your understanding of student growth data or value added measure (VAM).

1) By the end of the 2013-2014 school year, all Michigan school districts must provide an annual year-end evaluation for all teachers.
__True
__False

2) 25% of the year-end evaluation of teachers in 2013-2014 must be based on student growth and assessment data.
__True
__False

3) 50% of the year-end evaluation of teachers in 2015-2016 must be based on student growth and assessment data.
__True
__False

4) Based upon their year-end rating, teachers must be assigned one of four ratings at the end of the year (highly effective, effective, minimally effective or ineffective), which is made public.
__True
__False

5) Student growth and assessment data or a value-added measure consists of individual student achievement data collected at the local level (i.e., district assessments) and state level (i.e., MEAP).
__True
__False

6) My district's current teacher evaluation process includes student growth data or a value-added measure (VAM) as a measure of teacher effectiveness.
__Yes
__No *(If no, please proceed to section 2 of the survey.)*

7) My district uses:
__only local achievement data
__only state achievement data
__a combination of both local and state achievement data

Section Two: Teacher perceptions and feelings about and understandings of the teacher evaluation process, especially student growth measures or VAM. [measure of the independent variable]

The following items examine teacher perceptions about the inclusion of student growth data into the teacher evaluation process. Please respond to the following questions as candidly as possible based on your current experience as a teacher.

SA=Strongly Agree **A**=Agree **SWA**=Somewhat Agree **SWD**=Somewhat Disagree **D**=Disagree **SD**=Strongly Disagree

8) I believe a formal teacher evaluation process is useful in determining my effectiveness as a teacher.

SA **A** **SWA** **SWD** **D** **SD**

9) I believe a formal teacher evaluation process provides meaningful feedback that impacts my instructional delivery. (Sand, 2005)[1]

SA **A** **SWA** **SWD** **D** **SD**

10) I believe examining student achievement data over time is a better predictor of a teachers' effectiveness than examining high stakes test results available once a year (Kupermintz, 2003).

SA **A** **SWA** **SWD** **D** **SD**

11) I believe using a value-added measure evidenced by student achievement data over time is the most objective way to measure my effectiveness as a teacher.

SA **A** **SWA** **SWD** **D** **SD**

12) Based on the inclusion student growth data into the teacher evaluation process, I have the potential to become a more effective teacher.

SA **A** **SWA** **SWD** **D** **SD**

13) The inclusion of student growth data or VAM into the teacher evaluation process has had a positive impact on my professional growth as a teacher.

SA **A** **SWA** **SWD** **D** **SD**

14) The inclusion of student growth data or VAM into my teacher evaluation makes me feel less effective as a teacher.

SA **A** **SWA** **SWD** **D** **SD**

[1] Citations will be removed prior to distributing the survey to respondents.

15) I believe student achievement on state required standardized tests (ie, MEAP or the Smarter Balanced Assessment, ACT) should be used as part of my teacher evaluation to determine my effectiveness as a teacher.

SA A SWA SWD D SD

16) Using achievement data from state standardized tests as part of my annual evaluation makes me feel less effective as a teacher.

SA A SWA SWD D SD

17) I believe student achievement on locally developed assessments should be used as part of my teacher evaluation process to determine my effectiveness as a teacher.

SA A SWA SWD D SD

18) Using achievement data from locally developed assessments as part of my annual evaluation makes me feel less effective as a teacher.

SA A SWA SWD D SD

19) I believe my current teacher evaluation process unfairly holds me accountable for factors over which I exert little or no control (i.e., home life of student, socio-economic status of students, inadequate teaching materials).

SA A SWA SWD D SD

20) I believe my evaluation should only be based on factors that are within my control as the teacher (Conley & Glasman, 2008).

SA A SWA SWD D SD

21) Since the inclusion of student growth data into my teacher evaluation process, my morale as a teacher has declined.

SA A SWA SWD D SD

22) I believe the administrator responsible for my formal evaluation has the expertise necessary to perform an effective evaluation of my teaching.

SA A SWA SWD D SD

23) I believe our teacher evaluation process, including the use of achievement data for the students I teach, is designed to help me grow and improve as a teacher.

SA A SWA SWD D SD

24) I believe our teacher evaluation process is designed primarily to identify and "weed out" ineffective teachers.

SA A SWA SWD D SD

<u>Section Three: Teacher Relationships</u> [measure of the dependent variable]
The following items examine relationships between teachers, as measured by collegiality and collaboration within your school building. Please respond to the following questions as candidly as possible based on your current experience as a teacher. As you respond to each item below, please think about the teachers you currently work with in your school building.

25) In my school building, I regularly collaborate with teachers to achieve the school's goals (Schein, 2010).

SA A SWA SWD D SD

26) I value the expertise of the teachers I work with (Hargreaves, 1992).

SA A SWA SWD D SD

27) I trust the professional competence of the teachers I work with.

SA A SWA SWD D SD

28) I regularly consult with each other teachers in my building about instructional practices.

SA A SWA SWD D SD

29) I feel less inclined to consult with other teachers about my instructional practices since the inclusion of student growth data into my teacher evaluation process.

SA A SWA SWD D SD

30) I feel less supported by teachers in my building since the inclusion of student growth data into the teacher evaluation process.

SA A SWA SWD D SD

31) I feel less inclined to provide social support for colleagues since the inclusion of student growth data into the teacher evaluation process.

SA A SWA SWD D SD

32) I feel more inclined to provide professional support to my teaching colleagues since the inclusion of student growth data into the teacher evaluation process.

SA A SWA SWD D SD

33) I feel less inclined to collaborate with my teaching colleagues since the inclusion of student growth data into the teacher evaluation process.

SA A SWA SWD D SD

34) I feel more supported by the teachers in my building since the inclusion of student growth data into my teacher evaluation process.

SA A SWA SWD D SD

35) I feel more competitive with my teaching colleagues since the inclusion of student growth data into the teacher evaluation process..

SA A SWA SWD D SD

36) I feel more inclined to provide social support for colleagues since the inclusion of student growth data into the teacher evaluation process.

SA A SWA SWD D SD

Section Four

37) How have the new teacher evaluation requirements, especially the inclusion and use of student growth data, made a positive or negative difference within your school? What, if any, impact has the teacher evaluation process had on the relationships between you and your teaching colleagues?

Section Five: Demographic Questions

38) Gender:

___ Male
___ Female

39) Years of experience as a teacher:

__1-5 years
__6-10 years
__11-15 years
__16-20 years
__20-25 years
__25+ years

40) I teach the following grade level:

__elementary (K-6)
__middle school (7-8)
__high school (9-12)

__other

41) I have been teaching at my current school for:
__1-5 years
__6-10 years
__11-15 years
__16-20 years
__20-25 years
__25+ years

42) I currently teach the following number of identified ESL students:
__0
__1-5
__6-10
__11-15
__15+

43) I currently teach the following number of identified special education students:
__0
__1-5
__6-10
__11-15
__15+

44) I would describe my school as:
__urban
__rural
__suburban

45) The district I currently teach in would best be described as:
__high socio-economic status (SES)/affluent
__some poverty
__low SES/high poverty

46) My school has been identified as:
__A school-wide Title I school
__A Focus School *Focus Schools consist of the ten percent of schools on the Top-to-Bottom list with the largest achievement gaps between its top 30 percent of students and its bottom 30 percent (MDE, 2014).*
__A Priority School *Priority Schools (formerly known as Persistently Lowest Achieving Schools) are Michigan public schools identified in the bottom 5% (MDE, 2014).*
__A Reward School *Reward Schools consist of schools that made AYP and were also identified in one of three ways: (1) top 5% of schools on the Top-to-Bottom list ; (2) top 5% of schools making the greatest gains in achievement (improvement metric) or (3) "Beating the Odds" (MDE, 2014).*

__My school has not received any of the aforementioned designations.
__I am unsure if my school has received any of the aforementioned designations.

47) The number of teachers in my school building is:
__1-10
__11-15
__16-20
__20 – 30
__30 – 50
__50+

48) How long has your current teacher evaluation process been in place?
__1 year
__2 years
__3-5 years
__5+ years
__unsure

49) How many times have you been evaluated under the new Michigan teacher evaluation law?
__0 times
__1 time
__2 times

Appendix D: Human Subjects Review Board Approval Letter

EASTERN MICHIGAN UNIVERSITY *Education First*

March 4, 2014 **UHSRC INITIAL APPROVAL: EXEMPT**

To: **Jennifer Slanger**
Eastern Michigan University

Re: **UHSRC: #140209**
Category: Exempt #2
Approval Date: February 26, 2014

Title: A Study of Teacher Perceptions of the use of Student Growth Measures in Teacher Evaluation and its Effect on School Culture

The Eastern Michigan University Human Subjects Review Committee (UHSRC) has completed their review of your project. I am pleased to advise you that **your research has been deemed as exempt** in accordance with federal regulations.

The UHSRC has found that your research project meets the criteria for exempt status and the criteria for the protection of human subjects in exempt research. **Under our exempt policy the Principal Investigator assumes the responsibility for the protection of human subjects** in this project as outlined in the assurance letter and exempt educational material.

Renewals: Exempt protocols do not need to be renewed. If the project is completed, please submit the **Human Subjects Study Completion Form** (found on the UHSRC website).

Revisions: Exempt protocols do not require revisions. However, if changes are made to a protocol that may no longer meet the exempt criteria, a **Human Subjects Minor Modification Form** or new **Human Subjects Approval Request Form** (if major changes) will be required (see UHSRC website for forms).

Problems: If issues should arise during the conduct of the research, such as unanticipated problems, adverse events, or any problem that may increase the risk to human subjects and change the category of review, notify the UHSRC office within 24 hours. Any complaints from participants regarding the risk and benefits of the project must be reported to the UHSRC.

Follow-up: If your exempt project is not completed and closed after three years, the UHSRC office will contact you regarding the status of the project and to verify that no changes have occurred that may affect exempt status.

Please use the UHSRC number listed above on any forms submitted that relate to this project, or on any correspondence with the UHSRC office.

Good luck in your research. If we can be of further assistance, please contact us at 734-487-0042 or via e-mail at gs_human_subjects@emich.edu. Thank you for your cooperation.

Sincerely,

Jennifer K. Fritz

Dr. Jennifer Kellman Fritz
Faculty Co-Chair
University Human Subjects Review Committee

University Human Subjects Review Committee · Eastern Michigan University · 200 Boone Hall
Ypsilanti, Michigan 48197
Phone: 734.487.0042 Fax: 734.487.0050
E-mail: human.subjects@emich.edu
www.ord.emich.edu (see Federal Compliance)

Appendix E: Knowledge Questions

Knowledge Questions Sorted by the Highest Percentage Correct (N = 124)

Knowledge Question	*n*	%
4. Based upon their year-end evaluation, teachers must be assigned one of four ratings at the end of the year (highly effective, effective, minimally effective or ineffective).	118	95.2
1. By the end of the 2013-2014 school year, all Michigan school districts must provide an annual year-end evaluation for all teachers.	114	91.9
6. Student growth and assessment data or a value-added measure consists of individual student achievement data collected at the local level (i.e., district assessments) and state level (i.e., MEAP).	100	80.6
2. 25% of the year-end evaluation of teachers in 2013-2014 must be based on student growth and assessment data.	96	77.4
5. A teachers' year-end rating is made public.	55	44.4
3. 50% of the year-end evaluation of teachers in 2015-2016 must be based on student growth and assessment data.	22	17.7

Note. Total 6-item knowledge score: $M = 4.07$, $SD = 1.04$.

Appendix F: Survey Question Responses

Survey Question Responses

Survey Question	*n*	%[a]	%[b]
9. I believe a formal teacher evaluation process is useful in determining my effectiveness as a teacher.	136	43.38	11.77
10. I believe a formal teacher evaluation process provides meaningful feedback that impacts my instructional delivery.	136	40.44	14.71
11. I believe that examining local student achievement data over time is a better predictor of my effectiveness as a teacher, rather than examining high stakes test results available once a year.	136	67.65	8.09
12. I believe using a value added measure, which relies on local student achievement data over time, is the most objective way to measure my effectiveness as a teacher.	136	30.88	23.52
13. The inclusion of student growth data (or a VAM) in the teacher evaluation process has increased my potential to become a more effective teacher.	136	8.09	52.94
14. I believe student achievement on state required standardized tests (ie, MEAP, or the Smarter Balanced Assessement, ACT) should be used as part of my teacher evaluation to determine my effectiveness as a teacher.	136	3.79	72.73
15. Using student achievement data from state standardized tests as part of my annual evaluation makes me feel less effective as a teacher.	136	46.97	15.15
16. Using achievement data from locally developed assessments as part of my annual evaluation makes me feel less effective as a teacher.	132	21.97	26.52
17. I believe my current teacher evaluation process unfairly holds me accountable for factors over which I exert little or no control (i.e., home life of student, socio-economic status of students, inadequate teaching materials).	132	79.55	3.03
18. I believe my evaluation should only be based on factors that are within my control as a teacher.	132	84.85	2.28
19. Since the inclusion of student growth data or VAM into my teacher evaluation process, my morale as a teacher has declined.	132	55.31	14.09
20. I believe the administrator responsible for my formal evaluation has the expertise necessary to perform an			

effective evaluation of my teaching.	132	39.39	21.22
21. I believe our teacher evaluation process, including the use of achievement data for the students I teach, is designed to help me grow and improve as a teacher.	132	15.15	32.58
22. I believe our teacher evaluation process is designed primarily to identify and "weed out" ineffective teachers.	132	30.31	24.24
23. In my school building, I regularly collaborate with teachers to achieve school's goals.	129	73.64	3.88
24. I value the expertise of the teachers I work with.	129	92.25	0.00
25. I trust the professional competence of the teachers I work with.	129	83.73	0.00
26. I regularly consult with other teachers in my building about instructional practices.	129	81.4	1.55
27. I feel less inclined to consult with other teachers about my instructional practices since the inclusion of student growth data or VAM into my teacher evaluation process was implemented.	129	7.76	56.59
28. I feel less supported by teachers in my building since the inclusion of student growth data or a VAM into the teacher evaluation process was implemented.	129	5.43	58.14
29. I feel less inclined to provide social support for colleagues since the inclusion of student growth data or a VAM into the teacher evaluation process was implemented.	129	6.21	64.35
30. I feel more inclined to provide professional support to my teaching colleagues since the inclusion of student growth data or a VAM into the teacher evaluation process was implemented.	129	24.81	24.81
31. I feel less inclined to collaborate with my teaching colleagues since the inclusion of student growth data or a VAM into the teacher evaluation process was implemented.	129	6.98	58.14
32. Since the inclusion of student growth data or a VAM in the teacher evaluation process, I feel like I am competing with my teaching colleagues.	129	29.46	34.88

[a] Percentage of respondents who indicated they *agree* or *strongly agree.*
[b] Percentage of respondents who indicated they *disagree* or *strongly disagree.*