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SUPERINTENDENT EVALUATION AND OTHER INFLUENCES ON THE
SCHOOL BOARD AND SUPERINTENDENT RELATIONSHIP:
MEASURING STRENGTH OF RELATIONSHIP

by

Sara A. Duvall

Dissertation

Submitted to the Department of Leadership and Counseling

Eastern Michigan University

in partial fulfillment of the requirements of the degree of

DOCTOR OF EDUCATION

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January 10, 2005

Ypsilanti, Michigan

Dedication

To the faculty of the
Department of Educational Leadership
Eastern Michigan University.

In these times of change and opportunity,
reach to the future.

Memoria in Aeterna

Brett Milley
1962-2003

2002 Doctoral Cohort
Department of Leadership & Counseling
Eastern Michigan University

Friend to us all, humble, wry, and brilliant.
You are missed.

Acknowledgements

Thanks to the superintendents and school board presidents of the State of Michigan, whose concern for these issues of educational leadership and dedication to the education and welfare of our children is evident in their impressive response to this survey.

Thanks to my consistent pathfinder, Jackie Tracy. Thanks to Bill Price for perceptive advice throughout. Thanks to Bob Maxfield, who sets the standard for leadership. Thanks to Patrick Melia for demystifying the process. Thanks to Ron Williamson for maintaining the momentum.

Thanks to Mike Flannagan at MASA and Carl Hartman at MASB, exemplary educational professionals.

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Abstract

As schools in the United States resegregate and federal antipoverty programs lapse, the achievement gap widens once again. What can educational leaders *do* on their own to reverse this trend in the face of increased state and federal mandates, decreasing school funding, and community resistance to change? The purpose of this study was to determine the relative effects of factors (evaluation, conflict, political climate, superintendent influence, teaching & learning style, board training, and overall Strength of Relationship) that influence the board and superintendent relationship and to use these data to suggest strategies to support substantive change.

A unique survey questionnaire was developed, tested, and deployed online statewide to all superintendents and board presidents in public school districts in the State of Michigan. Total population was $N = 526$ school districts, $N = 1052$ potential respondents. A self-selected sample ($n = 1047$, 99.5%) responded to the survey. Complete data provided an evenly distributed and representative self-selected sample of the entire state by region and district size from which the

researcher could generalize with confidence. A Strength of Relationship (SOR) Scale was developed by rating responses to questions in each factor, which were statistically tested against district level indicators (Size of District, socioeconomic status, per pupil expenditure, student achievement, political type, evaluation type). Conflict, disagreement, and student achievement were also statistically tested against district-level indicators.

The significant findings of the study were (a) When pluralistic political type board interaction paired with data-driven superintendent evaluation type (as opposed to global or judgment), Strength of Relationship increased approximately two-fold in most cases, levels of conflict were lower and, more important, levels of student achievement were higher; (b) boards that work in a pluralistic manner are 87–93% less likely to report conflict than were other political types (dominated, factional, inert). Conflict centered first on role definition and fulfillment, and second on financial issues; (c) the lower the levels of disagreement between the board and the superintendent were, the higher the student achievement was. This remained the case regardless of district size, per-pupil expenditure, or socioeconomic status; (d) student achievement was shown to be as

much as 3-4 times higher in the Pluralistic and Data-driven combination of political type and evaluation method.

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Chapter 1: Introduction

These are difficult and demanding times for public education in the United States and educational leadership is more important than ever before. There has never been a time in American history when educators have been asked to do more, to fulfill more roles in society and family life than now (Houston, 2004b). The explicit demand that educators provide a platform for the success of all children without exception is imbedded in these roles.

Educational professionals know what work needs to be done, and because it is the right thing to do, they will endeavor to make the necessary but controversial changes (C. R. Maxfield, personal communication, December 22, 2004). In order to achieve this goal, educational leaders will rethink how they organize, how they lead, how they teach, how they support learning, and how they govern public education. The school board and the superintendent are pivotal to this process because they lead change among teachers, students, families, and the community. Partial measures will no longer suffice. Educational leaders are in need of specific outcome data to support the breadth of necessary change. This dissertation will report a

statewide study of superintendents and school board presidents in an effort to supply data on the strength of the relationship between them and what differences that might make for student success.

Context

In the last decade, those who doubt the value of public education have confronted educational leaders with a variety of structural challenges. State regulation and intervention in schools has increased, accountability statutes have been enacted, and forms of quasi-public education have been legitimized. Petersen and Fusarelli detailed this state of education.

The external threat to public education has increased, with the emergence of charter schools, vouchers, [school of choice], contracting out educational services to private contractors, and a re-invigorated home schooling movement...state and federal courts have remained active in educational policy making, and a deepened economic recession has forced districts to do more with less. (Petersen & Fusarelli, 2001, p. 8)

School governance and leadership is no longer simple, obvious, and united; it has become fragmented and confrontational under the

pressure of external challenges and internal shifts of complex organizational needs.

In this light, a more meaningful and empirical look at school governance relationships through a quantitative study was timely. This study collected and analyzed data on the superintendent evaluation process and other influences on the board and superintendent relationship. The effects of these influences and the ability of the school board and superintendent to affect student performance became a focus of the study. The intention was to provide data to support needed structural change. Scholars have recognized the tension between educational leaders and public perception.

During the past several decades, the perception that [public] education had failed the nation's children and jeopardized America's well-being has heightened public concern and launched what is arguably the most comprehensive, intensive, and sustained effort to improve public education in America's history. National commission and task force reports released throughout the reform era (1983-2002) increased expectations for student performance and called for fundamentally changing

classroom instruction, how schools are structured and led, as well as the composition and characteristics of school and district governance. (Bjork, Bell, & Gurley, 2002, p. 294)

The changing times have resulted in stresses upon the board and superintendent relationship often mirrored in the superintendent evaluation process (Lashway, 2002a; National School Board Association [NSBA], 2000). Therefore, superintendent evaluation became one aspect of this study.

Purpose of the Study

This research was an opportunity to get beyond identification of superintendent evaluation methods, frequency, and criteria that have characterized the last twenty years of research (Candoli, Cullen, & Stufflebeam, 1997). The rapidly changing climate of school leadership suggested that researchers begin to gather quantifiable data on the dynamics of the relationship between the board and the superintendent in order to determine the relative effects of those factors and use these data to suggest strategies to support and motivate substantive improvement in district governance. That is the purpose of this study.

This introductory chapter will briefly examine the historical context of the shifting priorities in public education that have resulted in high levels of stress between the superintendent and the board of education. The purpose of the study will be expanded upon and a model of factors that surround and influence the board and superintendent relationship will be introduced. The elements of the model will be discussed. The researcher will briefly describe the research methodology and strategies and will follow these with a discussion of the relevance of the research reported in this dissertation.

Shifting Priorities

Over the course of the last 20 years, there has been a significant shift in the goal of free and public education (Houston, 2004a). The shift was stimulated by the 1983 report of the United States National Commission on Excellence in Education, *A Nation at Risk* (NAR), which heralded the *failure* of American public education. Since the early 19th century, the structure of American schooling has been based on an agrarian calendar. Access to schooling was the goal, and schools accommodated the need for children to work on family farms in agrarian cycles. The goal of access led to the legal requirement that all

children attend public school. American schools have a long history of unequal funding and continued racial isolation in schools, in large part due to their structure (W. J. Price, personal communication, December 15, 2004). In 1954, the Supreme Court decision *Brown v. Board of Education* ushered in the goal of equal opportunity. That meant that separate was not equal and that all public schools must offer quality educational opportunity to all students irrespective of race. Thus, for over 100 years, public education has struggled with the goals of access and equal opportunity while structured in the style of 18th-century European elitist educational institutions and timed to accommodate the needs of rural families.

At the end of the 20th century, the focus shifted from access and opportunity to proficiency. The expectation became not only that all children attend schools with equal opportunity but also that all children achieve to a certain standard set by the state and/or federal governments. The American Association of School Administrators (AASA) described this phenomenon.

When No Child Left Behind (NCLB) was enacted on January 8, 2002, public education got a new mission: universal high achievement. That mission was added to the existing missions of

universal access and equal educational opportunity for all students Absent universal access and equal educational opportunity, universal high achievement is unachievable. (AASA , 2004, p. 2).

The *36th Annual Phi Delta Kappa/Gallup Poll of the Public's Attitudes Toward the Public Schools* highlighted the relative importance of the two forgotten missions, getting kids ready to learn and preparing the next generation of Americans to maintain our democracy (Rose & Gallup, 2004). The study undertaken here focused on the current mandates and expectations with the understanding that learning readiness and preparation for citizenship were worthy of further examination at another time.

Public schools are under pressure to produce proficiency, access, and opportunity within schools that are still structured to achieve convenience for the community. There is a distinct “incompatibility between the structure of [school] organizations and efforts to improve student learning” (Lunenburg, 2002, p. 5). Paul Houston, the Executive Director of the AASA, in his remarks to a joint meeting of the Michigan Association of School Boards (MASB) and the Michigan Association of School Administrators (MASA) in August 2004, took this concern a

step further and proposed that school leadership now faces an atmosphere “where poverty and the lack of public will make proficiency impossible, and where unchanging school structure has made life outside the school richer and more relevant than school” (Houston, 2004a). These dichotomies (Structure of Schooling: Student Achievement and Public Will: Relevance) have exacerbated conflict between school boards and superintendents.

Nonetheless, the political and educational communities have grasped proficiency as the new grail. Therefore, public school structure should be redesigned with proficiency in mind (Houston, 2004a). Therein lies a conundrum. Communities find the structural change needed to accomplish proficiency unpalatable and contradictory to their accepted concept of *schooling*. William Spady (2001) explained this phenomenon with Henry Ford’s famous idea that anyone can have a car in any color, as long as the color is black.

[The public perception is that] there is only one way to do *school*: If it doesn’t look like familiar Model T education, sound like familiar Model T education, operate like familiar Model T education, and give you familiar Model T results, it can’t be

school, and it can't be called *school reform*. School only comes one way: Model T. (Spady, 2001, p. 4)

At the same time, communities appear to accept the proposition that *proficiency* as measured by high-stakes standardized tests is and should be the new goal. The AASA has taken a proactive role is assessing public opinion.

During the week of September 23, 2004 the American Association of School Administrators' pollsters, IPSOS Public Affairs, asked a random sample of 1,000 adults and an additional over-sample of 200 parents of public school children, "There are two important tasks in public schools today, developing better citizens and improving achievement. If you had to prioritize, which would you say is more critical to the future of this country?" The surprising answer to the question was that 57 percent said developing better citizens, 36 percent said improving achievement and 6 percent said both equally (1 percent did not respond or refused). The public school parents in the study gave similar answers, 58 percent said developing citizens and 38 percent said improving achievement. (Houston, 2004a, p. 1)

These politically fraught contradictions make structural change extremely difficult at best (Spady, 1997). “The governance structure [of schooling] is designed to support the logic of confidence between the public and the schools, not to provide direction to improvement of student achievement” (Lunenburg, 2002, p. 9). In the new millennium, this elementary conflict has precipitated, among educational leaders, an emphasis on the search for change strategies that satisfy both issues.

In the presence of this conundrum, school leaders have focused on what conditions should be present in schools for optimum learning to occur and to what extent those conditions relate to governance and leadership over which they have some control. “This complicated matter involves controversial values; it has not received extensive scholarly study; and it beckons for interdisciplinary analysis of the relationship between formal attempts to educate and the ways that human competence is expressed in non-educational settings” (Newman, Secada, & Wehlage, 1995, p. 8). One relationship central to school improvement is between the superintendent and the school board, which often struggles to overcome the dichotomies of modern public education, resulting in escalated strains and conflict.

Board and Superintendent Relationship

Recent relevant research suggests that the relationship between the school board and the superintendent is pivotal (AASA, 1992; AASA, 1993; Candoli et al., 1997; Dolan, 1994; NSBA, 1996; NSBA, 2000). The importance of the relationship is magnified by district-level control of “conditions for student success:

- 1) Beliefs and priorities,
- 2) Operating principles and processes,
- 3) Organizational structures, and
- 4) Support conditions” (Spady, 1997, pp. 37-39).

Therefore, it is critical to understand the nature of the fundamental interaction between elected representatives and the primary appointed administrator in public education so that proficiency can be more effectively realized in an atmosphere of conflicting demands and political maneuvering.

The relationship between the school board and the superintendent is at the center of school district climate. Dolan (1994), for example, saw it as primary. “How boards and superintendents work together can mean the difference between exhilaration and frustration for both parties and, more important,

between success and failure for the students in our nation's schools" (NSBA, 1996, p. 3). The American Association of School Administrators (AASA) concurred and described the importance of the relationship as key to the "very future of our free and democratic society" (AASA, 1993, p. 1).

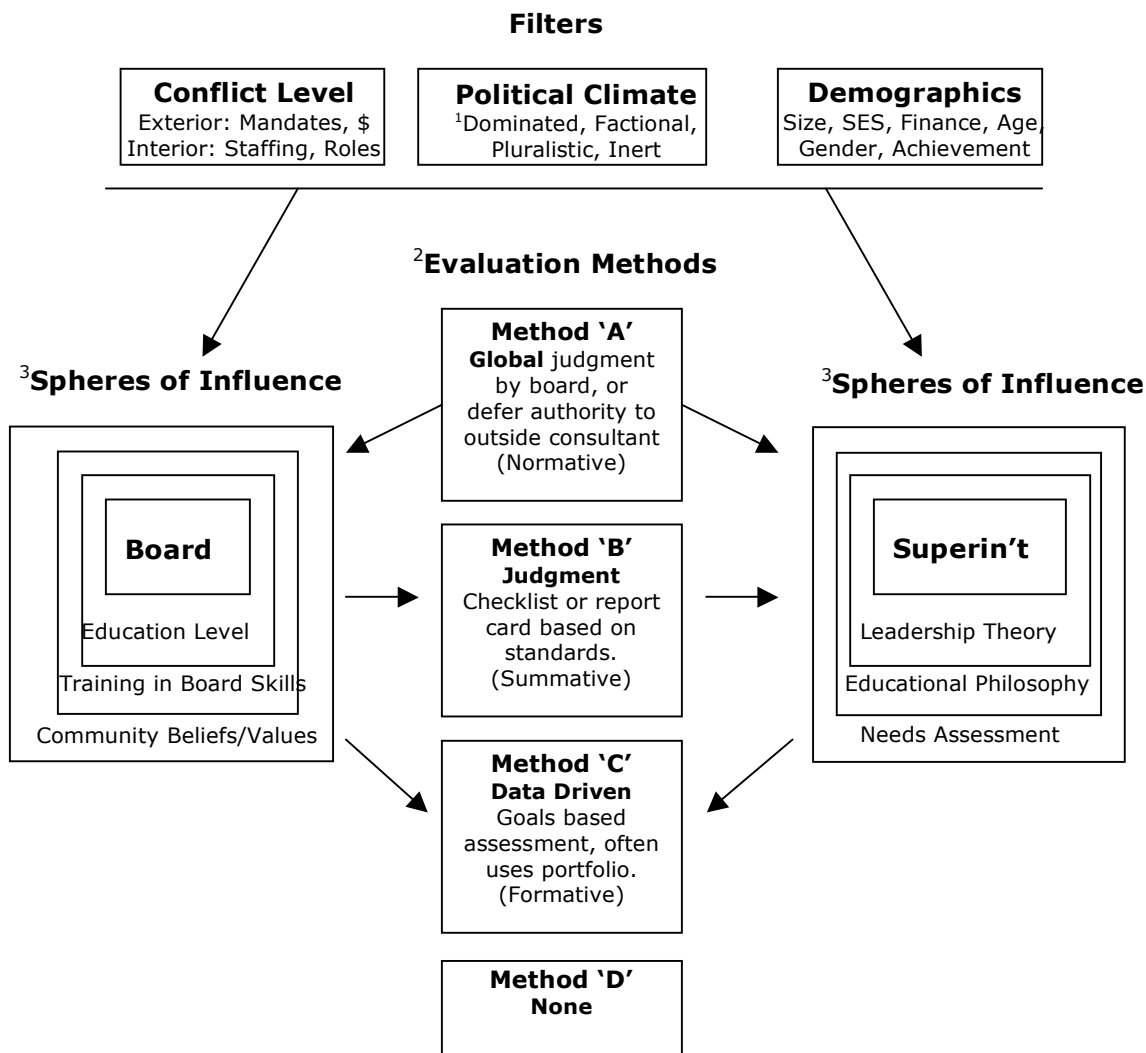
Thematic analysis of the literature concerning board and superintendent relationships suggested that the *method* used by a board to evaluate its superintendent might be indicative of other elements of the relationship. This concept was implied by Candoli et al. (1997) in *Superintendent Performance Evaluation: Current Practice and Directions for Improvement* but never made explicit. It was suggested by the literature of the professional organizations representing superintendents and school boards that both placed deep importance on evaluation as central to the positive relationship between a board and its superintendent.

Concomitant Questions and Conceptual Model

This context of high demand for change within reluctant communities led to a specific posit of questions about the governance relationship in public schools. What elements influence the way a board works with and evaluates the superintendent? How strongly do

those elements influence the relationship? What other factors influence the relationship? Can the evaluation process strengthen the relationship?

On the basis of prior research, offered here is a new conceptual model of the elements of the board and superintendent relationship. This model is depicted in Figure 1.



¹McCarty and Ramsey, 1971

²Candoli, Cullen, and Stufflebeam, 1997

³Price, 1994

Figure 1. The association of evaluation method to the relationship between the board and superintendent: Filters and influences.

Figure 1 organizes the critical thinking of other educational researchers into one conceptual model that includes superintendent evaluation method, political climate of the district, conflict levels, spheres of influence on the school board and superintendent, and influence of demographic characteristics of the district. Next, these factors are examined in more detail.

Superintendent's evaluation method. After considerable synthesis and study, Candoli et al. (1997) precisely defined the categories or types of evaluation, on the basis of the literature through 1997. The three categories were used throughout this study and form the core of the model in Figure 1.

- *Evaluation Type A (Global).* The board makes broad subjective judgments based on *gut* feeling or defers authority to an evaluator brought in from outside the district. This process is normative. Type A (Global) evaluation is *done to* the superintendent from inside or outside the organization.
- *Evaluation Type B (Judgment).* A checklist or report card is used, often based on the AASA superintendent list of competencies or other lists of standardized duties. It is summative in nature.

Type B (Judgment) evaluation method is the *board doing it to* the superintendent.

- *Evaluation Type C (Data-driven)*. This process is goals-based and often uses a portfolio reporting method. It is a formative process. Type C (Data-driven) evaluation process is *both* the board and the superintendent contributing to *a process* of goal setting and improvement.

Although generally accepted as defining the parameters of superintendent evaluation, these categories are limited in that they are static, whereas school boards and superintendents remain in a state of continuous fluctuation.

Political climate of the district. Another significant influence on the school board and superintendent is politics. McCarty and Ramsey's 1971 study of the political dynamics within public school districts suggested four categories of political climate, which were used throughout this study.

- *Dominated*. A school board dominated by prominent citizens or businessmen in the community characterizes this political structure. The superintendent's role is functionary, and the policies of the board provide *basic* education and keep taxes low.

- *Factional.* A school board with continual conflict between agenda-driven factions characterizes this political structure. The superintendent is a political strategist among disputing groups. The policies of the school board change continually as new factions come and go through board elections.
- *Pluralistic.* The status congruent board that characterizes this political structure is quite capable of performing effectively. Its members understand their roles; they do not meddle with or overrule the administration. The superintendent is the professional advisor to the effective board, and board policies are often based on research and community input.
- *Inert.* In inert communities, the school board rubber-stamps the superintendent's actions and sanctions his decisions without much involvement in policymaking. The superintendent is the decision maker.

A detailed discussion of the McCarty and Ramsey (1971) categories is provided in chapter 2.

Conflict levels. Conflict arises between boards and superintendents from sources both internal to the relationship and from outside. External influences include state and federal mandates

for education, such as curriculum standards, national standards of achievement, federal requirements of No Child Left Behind and, in Michigan, Education YES. Compounding the external influences are the funding issues that arise from unfunded mandates and legally limited per-pupil revenue. Internal conflicts arise from financial constraints as reflected in conflict over staff negotiations and hiring decisions. The respective roles of the board and the superintendent can cause considerable conflict. The “lack of congruity between superintendents’ roles and board power structure may, in part, explain why conflict is an enduring problem in the superintendency” (Bjork, Bell, & Gurley, 2002, p. 301). Educational leaders clearly make the connection between board political structure and conflict with the superintendent.

Influences on the school board. The board of education is an elected governing body. The composition of a school board can change with every election. Members of the school board come and go from one success in election to the decision to run for re-election. How the members execute the roles and responsibilities of a school board depends on a variety of factors, including (a) the educational level of the members, (b) extent of training in, and practice of, boardmanship

skills, (c) the beliefs and values of the community they serve, and (d) their individual political agendas (Price, 1994; Lunenburg, 2002).

Influences on the superintendent. The superintendent, on the other hand, occupies a role that is redefined continually. Issues arise and are resolved. The composition and politics of the school board fluctuate. State and federal mandates dictate changes in focus. District and community goals evolve. How the duties of the shifting role are executed depends on a number of influences, including the superintendent's (a) style and practice of leadership, (b) personal educational philosophy, (c) professional assessment of district needs, and (d) public perception (AASA & NSBA, 1980; Price, 1994; Lunenburg, 2002).

Demographic characteristics of the community. To complete the picture of the community, demographic characteristics were included in the model depicted by Figure 1. The core demographics used in this study were district size represented by headcount, socioeconomic status as measured by the level of free and reduced-priced lunches, per-pupil expenditure, and student achievement as represented by Michigan Educational Assessment Program (MEAP) test scores

(Standard & Poor's, 2003). Age and gender of board members and superintendents were included for consideration.

The relationship between the school board and the superintendent is a kaleidoscope of multilayered interactions and motives. The model developed in Figure 1 reflects the complex realities of modern school leadership. This study attempted to measure the relative influences and strength of relationship with the intention of correlation of those factors with district-level descriptive indicators, evaluation type, and political climate type.

Research Questions

Governance and leadership style and the relationship between the school board and its superintendent control the conditions for student success (Spady, 2001). Superintendent evaluation appears to be a key factor in setting the tone of that ever-changing relationship (AASA, 1992; NSBA, 2000; Price, 1994; Lunenberg, 2002).

Because of the importance of this pivotal relationship to student success, this study examined specific research questions derived from the model in Figure 1. What factors influence and to what relative degree do they influence

- The relationship between the school board and the superintendent?
- The choice of superintendent evaluation method?
- The level and type of conflict between the board and superintendent?
- The leadership style of the superintendent?
- The local, state, and national political climates?
- The training level of board members?
- The predominate style of teaching and learning?
- The demographic characteristics of the community?

What is the degree to which these elements influence the relationship?

The research hypotheses presented in chapter 3 derive from an exploration of the above factors as suggested by the review of relevant literature in the following chapter.

Research Methodology

In order to find answers, the researcher gathered data from school board presidents and superintendents in Michigan's public school districts. A comprehensive survey (153 variables, 55 questions) was developed and administered online for a period of 6 weeks in the spring of 2004. A robust response rate (99.5%) was achieved with the

support of the Michigan Associations of School Administrators and School Boards. Through analysis of the responses, the researcher created the “Strength of Relationship Scale” to quantify the relationship areas centered on the research questions, thus creating a mechanism for in-depth descriptive statistical analysis of conditions and influences on the board and superintendent relationship. In brief, the scale rated responses to each variable on a scale from -3 to 3 and then compared mean scores with independent variables to establish correlational relationships between variables.

A self-selected sample ($n_{\text{respondents}} = 1047$, 99.5%) responded to the survey. Only “complete” data were used in analyses, which, when tested, provided a representative sample by region and district size that was statistically no different than the expected population.

Delimitations and Limitations

The study was not intended to replicate the research conducted in the 1980s and 1990s, which focused on defining methods, purpose, frequency, and criteria of superintendent evaluation. This study was designed to build on prior research and to establish empirical data about the influences on the board and superintendent relationship relative to student learning, as suggested by earlier research.

Relevance of the Study

Scarcity of current research. The existing research on superintendent evaluation was sparse and the scope of the research extremely narrow. From 1943 to 2002 (a 59-year period), 53 studies dealt directly with superintendent evaluation, 41 of which were written after *A Nation at Risk* was published in 1983. No research went beyond identification of evaluation method, purpose, frequency, or criteria during this time period. Subsequently, four published and one unpublished major research studies formed the basis of the most recent literature on superintendent evaluation: Robinson and Bickers (1990) examined the purposes of superintendent performance evaluation; Candoli et al. (1997) conducted a meta-study of all studies on superintendent evaluation up to 1997; Glass, Bjork, and Brunner (2000) reported the results of the AASA periodic nationwide survey of the conditions of superintendency; DiPaola and Stronge (2003) explored evaluation methods nation-wide; and Marcus, Mayo, and McCartney (2003) surveyed superintendent preferences for evaluation and perceived fairness of the process. Only a handful of dissertations broached superintendent evaluation; most focused on pre-1997 questions of identification of evaluation method, purpose, frequency,

or criteria. These studies will be discussed in great detail in the review of relevant literature. The scarcity of empirical data in large part motivated the detail of this study.

Standardized competencies. In the midst of the school reform and accountability debate, which is directly connected to the paradigm shift to proficiency, AASA and NSBA (1990) took a proactive role and defined the terms of superintendent evaluation with the issuance of *Professional Standards for the Superintendent* (AASA, 1993) and *Roles and Relationships: School Boards and Superintendents* (AASA, 1990; NSBA, 1990). These documents legitimized the three evaluation methods defined by Candoli et al. (1997) and focused superintendent evaluation on lists of duties and on specified competencies. The definition of national standards diverted superintendent evaluation from whether the superintendent led in a way that achieved the needs and goals of the district to whether the superintendent met national standards and competencies (Duvall, 2002). This diversion may be at the core of conflict between superintendents and their boards.

Self-assessment scale. The lack of research that probed beneath the surface of board and superintendent relations became evident in

the course of this study, which led this researcher to adopt a more comprehensive approach. This current study represented an attempt to move beyond the effort to define criteria, purpose, frequency, and method of evaluation. This study gathered data on methods of evaluation used in Michigan's public school districts and identified the relative strength of influences that affect the school board and superintendent relationship. The study devised a "Strength of Relationship Scale" that might be used by school boards and superintendents to self-assess their relationships and guide intentional structural choices in order to achieve higher student performance.

Replication nationally. The study may be replicated on a national level and might develop a deep and meaningful data set on superintendent and school board relationships. Structural reform was the missing element from the previous two decades of reform efforts (Spady, 1997). This study led to the creation of an instrument and assessment scale with the potential to motivate deep and prolonged conversation between boards and superintendents and might lead to lasting structural reform efforts. This study has quantifiably clarified a process of superintendent evaluation that can model authentic learning and assessment district-wide, create lower levels of conflict,

and overcome disadvantages of the political climate. In turn, it is proposed that the process can be adapted up through the buildings and classrooms and stimulate higher levels of student success.

Summary of Chapter 1

This chapter introduced the research study in terms of the wider context of public education that affects the everyday relationship of the board and superintendent. It reiterated the role of superintendent evaluation in creating a positive relationship at the level of governance and leadership. This chapter briefly described the methods used to gather data from Michigan's school board presidents and superintendents and outlined the relevance of such research in the current climate of education reform. Subsequent chapters will review the relevant literature, describe the research design and methodology in detail, report specific results of the data analyses, and discuss conclusions and inferences from the findings.

Chapter 2: Review of Relevant Literature

Introduction

The first chapter introduced the study and described the context of the superintendent and board relationship, beginning with the significant paradigm shift in public education from universal access (1893) and equal opportunity (1954) as its primary goals to universal proficiency (1983, 2002). Structural change of public education has been fundamentally ignored. Federal, state, and local communities demand the fit of proficiency goals (along with access and opportunity) into familiar schools structured on elitist models using agrarian timetables and having little relation to schools structured for proficiency (Spady, 2001). Leaders of change have been prejudiced by the conflict between community perceptions of what traditional schooling *ought* to look like and the structural change needed to accomplish proficiency (Lunenberg, 2002). Reform efforts have therefore fallen far short of accomplishing change for proficiency and have increased the levels of stress between the school board and superintendent (American

Association of School Administrators [AASA], 1992; Lunenberg, 2002; National Association of School Boards [NASB], 1996).

The governance and leadership of a school district controls the conditions for student success, yet there is inadequate understanding of the influences on the relationship between school boards and superintendents (Spady, 2001; Houston, 2004a). This has inhibited conceptualization and assumption of new models for change (Lunenberg, 2002). A basic component of any new model appears to be school board adoption of a superintendent evaluation method (NSBA, 2000) that promotes communication, goal setting, and total team involvement (Petersen & Fursarelli, 2001).

One repercussion of *A Nation at Risk* (National Commission on Excellence in Education, 1983) was a trend toward articulation of specific national standards for educational personnel (National Council for Accreditation of Teacher Education [NCATE], 2004; Council of Chief State School Officers [CCSSO], 2004).

Superintendent competencies were established by the American Association of School Administrators (AASA, 1993), which drew focus from accomplishment of unique district needs to the satisfaction of national standards. How a school board chooses to

evaluate its superintendent appears to be pivotal in the development of a positive relationship between them (NSBA, 2000).

This chapter will present the relevant literature and primary research that informed this study in three sections: (a) contextual literature, (b) literature surrounding the variables, and (c) literature and logic supporting the relevance of this study.

First will be the literature surrounding the context as discussed in chapter 1. The first section will examine (a) the elitist model school structure in terms of a proficiency goal and public resistance to structural change, (b) the relationship between the board and superintendent as *key* to student success, and (c) the role of superintendent evaluation in the development of the relationship between the board and the superintendent. This section will conclude with a brief contextual explanation of state-level governance of public education in Michigan.

Second, the literature that underlies the creation of the variables in the survey instrument and the Strength of Relationship Scale will be examined. Current thinking on the elements of the relationship between the board and superintendent include

(a) the district political climate, (b) topics of conflict such as the finance of public education, (c) the influence that superintendents wield in their school districts, (d) the training of board members, (e) methods of teaching and learning in the district, and (f) demographic influences. Research to date on (g) superintendent evaluation will conclude the section that supports the variables of the study.

Finally, the researcher will discuss (a) the broader relevance of this study of superintendent evaluation and (b) school leadership's ability to make intentional and informed choices in governance in order to create higher levels of student success in the current climate of proficiency demands.

Contextual Literature

Model T Schools and Demands for Proficiency

William Spady (2001, p. 9) described the "outmoded" elitist-model American school structure only partially in humor:

Specific students must learn specific content on a specific schedule in a specific classroom with a specific teacher out of a specific textbook to pass a specific exam on a specific date with a specific score that qualifies them to get on to the next

specific grade, classroom, teacher, and book the next year to repeat the pattern over and over for a specific number of years in order to collect a specific credential that allows them to attend 'higher' education. (Spady, 2001, p. 10)

This description is familiar to most American-schooled adults and forms the basis of the expectations our communities hold for the educational process. This model of schooling was developed in 1893 by a group of university presidents called the Committee of Ten. Four years of English, three years of math, four years of social studies, and three years of science was the formula for secondary education (Spady, 2001). The *what* of teaching was more important than the *how* of teaching. The fact that all students must attend was more important than whether students learned.

School organization was conceived as an industrial production line (Lunenburg, 2002) in what Cubberly (1920) called the struggle of educators to become *true* professionals. Students were the *product* of school *education factories*, and they were either successful or not. Just as line-inspectors culled flawed output, so it was expected and accepted that some students never learned (Spady, 2001).

Beginning with the 1983 report *A Nation at Risk* (National Commission on Excellence in Education, 1983), school *reform* became the nation's obsession. The resulting spate of educentric standards-based reform initiatives essentially reinforced the old industrial-age structure of boxes in boxes. William Spady described recent reform efforts as

- Primitively narrow in the conception of learning, standards, performance and assessment,
- Rigid in curriculum and organizational structures,
- Insensitive to the characteristics or needs of individual students,
- Hierarchical in the control structures,
- Punitive in orientation,
- Archaic in the endorsed instructional methods,
- Intimidating and de-professionalizing to educators,
- Committed to sorting and selecting students, and
- Severely constrained in opportunities for learning and success.

(Spady, 2001, p. 10)

The failed attempts at school reform have taken their toll on public perception of American public education.

Along with the myriad of stagnant reform efforts came the push for standardization and measurement of student achievement but few efforts to restructure schooling to achieve universal proficiency. The state of school reform today appears to be that the body politic demands proficiency from schools where the goals are access and opportunity in a community climate that resists structural change (Lunenburg, 2002). Teachers in particular have come under attack for failing to produce proficient students as measured by flawed state standardized tests, the outcome of which can be accurately predicted by socioeconomic status of the districts (Malone, 2002).

Policymakers appear to be operating under the assumption that student scores on standardized tests provide valid and reliable information regarding the quality of schools and school districts. If socioeconomic factors act as reliable predictors of school or district test scores, the legitimacy of that assumption is called into question, in that factors beyond the schools' control (socioeconomic status) are associated with test scores. (Malone, 2002, p. iv)

A cogent example of this less-than-successful process is the State of Massachusetts's 1994 effort known as *Education Reform*. In 1994 the state established the Common Core Learning Commission to model a statewide conversation on the future of public education. The assignment was ambitious but inclusive of potential for structural change:

1. Sort through the Information Age glut of facts and data to determine skills critical for graduating students,
2. establish lean and suggestive set of curriculum content to be learned and assessed through a variety of means and modalities, and, above all,
3. align daily business of schools, students, and teachers with abundant research from the last quarter century on human intelligence and organizational theory. (Myatt & Kemp, 2004, pp. 139-140)

Ten years later, educational leaders of Massachusetts lamented that most of the dialog and many of the structures and resources intended to support...school renewal have been co-opted, have been neutralized, or have vanished...The No Child Left Behind Act...has ushered in an unprecedented level of federal

intervention into the workings of local schools, [and] mandates a high-stakes testing regimen that, wittingly or unwittingly, has locked in outdated educational practice.

(Myatt & Kemp, 2004, p. 140)

Many states have undertaken such educational *reform* efforts and surfaced with equally empty results, which has further frustrated educators, politicians, and the public, for example, Education YES in Michigan and Edison, Inc. in Pennsylvania.

More important, this dichotomy has disenfranchised both students and teachers. Across the nation, both high-achieving and low-achieving students report that school is boring, stressful, and unrelated to more important issues in their lives and to what they will need in the future (Pope, 2001; Myatt & Kemp, 2004).

Furthermore, “the *test*, whether an AP exam or a state achievement measure, exerts an extreme influence on what and how teachers teach” (Myatt & Kemp, 2004, p. 141). Massachusetts, reflected by the experience of most state school reform efforts, floundered with complex issues that have not been surmountable.

These realizations and disappointments brought school leaders to seek change strategies that might overcome the old

structural paradigm, overcome the numbing mandated assessments, overcome the political climate issues, and overcome the resulting conflict from inside and outside the board and superintendent relationship. Educational leaders seek these strategies in order to achieve meaningful and successful education for the future of today's students. Given the atmosphere of demand for change and frustrated reform efforts, what do educational leaders and prior research say about the effect of the board and superintendent relationship on student success?

Board and Superintendent Relationship and Student Achievement

“Strong school board [and] superintendent leadership, governance, and teamwork are the foundation for raising the achievement of every child in America” (Goodman & Zimmerman, 2000, p. iii). Goodman and Zimmerman's (2000) report for the New England School Development Council (NESDC), *Thinking Differently: Recommendations for 21st Century School Board/Superintendent Leadership, Governance, and Teamwork for High Student Achievement*, reiterated the link between board and superintendent relations and student achievement. Their report was a

seven-case-study follow-up to the 1997 national study of school board and superintendent collaboration for high student achievement, published by NESDC and the Educational Research Service (ERS). *Thinking Differently* stated a belief in the exigency of teamwork and leadership in effective school governance. The National Advisory Committee for the report included 36 nationally recognized educational leaders who discussed and debated findings to compile the *Thinking Differently* document.

The recommendations ...in this report are all based on one idea, that school districts cannot effectively raise student achievement without strong leadership and teamwork from school board and superintendent . . . that effective school board/superintendent leadership, based on teamwork, communication, and trust, is key to quality education for America's students. (Goodman & Zimmerman, 2000, p. iv)

Little scientific data supported that assumption although within the report, most educators seemed to accept that central administration and school boards can and do affect student achievement. Richard Elmore's review of research (Elmore, 1993) reported that

district-level administration and governance did not typically coordinate policies to influence what happens in the classroom. When superintendent evaluation was considered, the evidence was even less significant. Candoli, et al., (1997) reported that on the basis of research evidence as of 1997, “it cannot be said that a majority of board members or superintendents perceive performance evaluations as contributing to the overall effectiveness of the superintendency and the school system” (Candoli et al., 1997, p. 63).

The exception was the *Lighthouse Study* undertaken by the Iowa Association of School Boards (IASB) in 2000. The IASB study compiled extensive interviews in six Iowa school districts (three high-achieving, three low-achieving). The districts were demographically balanced so that the only apparent difference was level of achievement as measured by Iowa Test of Basic Skills (ITBS) in third-, fifth-, and eighth-grade students. The study found that the differences between high student achievement and low student achievement were (a) the attitude and beliefs of the school board and superintendent team, (b) communication between the central office team and the staff, and (c) action taken on a consistent basis.

Ann Bryant, the Executive Director of the NSBA, reflected on the IASB *Lighthouse Study*:

The study demonstrates the two very different philosophies and practices [of school boards and superintendents] between high and low achieving districts. High-achieving school districts do not accept limitations, but view them as challenges. These districts are moving in the right direction and can be models for other districts across our country.

(IASB, 2000, p. 7)

The IASB study (2000) connected board and superintendent relationships with higher student achievement. The study was based on a small sample of six schools and did *not* conclude that board and superintendent action *caused* improved performance. Rather, it suggested that board and superintendent actions were a key part of the *culture of improvement*. There were no studies that attempted to statistically connect board and superintendent relationships with higher student achievement on the basis of data.

Prior research has shown repeatedly that a weak relationship between the superintendent and board discourages school improvement (Danzberger, Kirst, & Usdan, 1992); affects the quality

of the curriculum and programs (Nygren, 1992); weakens the morale and stability of the district (Renchler, 1992); negatively influences the superintendent's credibility with the board members (Petersen & Short, 2001); impedes reform efforts, such as district restructuring (Konnert & Augenstein, 1995); collaborative long-range planning, and visioning (Kowalski, 1999); and results in the shortened tenure of district leaders (Carter & Cunningham, 1997; Petersen & Fusarelli, 2001).

Superintendent Evaluation as Central to the Board and Superintendent Relationship

At its best, superintendent evaluation carries the power to promote and improve performance, facilitate planning, generate collaboration, use specific objectives, focus on results, and increase motivation (AASA, 1980; NSBA, 1980). Strong superintendents want clear goals and good evaluation, yet school boards often put off performance evaluation (AASA, 1992). "Some boards perceive evaluation as an invitation to spoil their relationships with . . . negative or critical review . . . Many boards are surprised when superintendents want to be evaluated" (AASA, 1992, p. 83). Ruth Paige, former executive secretary of the New Jersey School Boards

Association, reminded us that “the board must recognize that the school system can be no better than the board...that the best superintendent can go no further than the limitations of the board” (AASA, 1992, p. 87).

The AASA (1992) report *Building Better Board-Administrator Relationships* made it clear that the secret of successful board and superintendent relationships begins with strong hiring practices and effective ongoing superintendent evaluation and board self-evaluation. These practices have developed trust, communication, and a bond of shared learning and decision making focused on educational accomplishment:

The importance of local school leadership in creating successful schools cannot be overstated. As long ago as 1958, political scientist Neal Gross called for more research into the roles of boards and superintendents because their relationship ‘is at the heart of any educational problem and its solution.

(AASA, 1992, p. 4)

Governance of Public Education in Michigan

To achieve some clarity of the underpinnings of the influence of conflict and political climate in school district relationships, the

researcher added here a brief overview of the governance of public education in Michigan for the benefit of the reader.

The state constitution. The governance of public education in Michigan is described in the *Constitution of Michigan of 1963, Article VIII*. The “Encouragement of Education” general statement derived from the original state constitution (1835, Article X) and read, “Religion, morality and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged” (State of Michigan, 1963, Article VIII). Article VIII provided for free and public education and prohibited aid to nonpublic schools (Section 2). The responsibility to support a free public elementary and secondary education system was specifically assigned to the state legislature. Article VIII provided for a State Board of Education and a State Superintendent of Public Instruction.

Local school governance. State law has established local school districts. Voters in each district elect 5-9 members of a local school board that appoints a superintendent of schools to administer the district. School boards have been made responsible for all legal actions of the district and the formation of district policy. The

school board trustees and the superintendent are considered to be *public* officials.

This first section of this chapter discussed the structure of schooling as being in conflict with the demand for proficiency. The literature surrounding the board and superintendent relationship in relation to student achievement was explored. Superintendent evaluation was argued as central to the board and superintendent relationship. Finally, the governance of public education in the State of Michigan was outlined. Next, the literature surrounding the variables used in this study was examined.

Literature in Support of Variables

The researcher examined prior research as a basis for inclusion of variables in the survey instrument. These areas of study include

1. Destabilizing factors
2. Influences on the board and superintendent
3. Factors that incite conflict
4. Political climate indicators
5. Influence of the superintendent on the district
6. Training of board members

7. Teaching and learning styles in the district
8. Demographic influences
9. Superintendent evaluation method

Factors That Destabilize The Relationship

The NSBA report *Urban Dynamics* (1992) surveyed superintendents and board members in urban districts and identified the factors that destabilize the relationship between board and superintendent. In rank order, they are “members not understanding role differences, poor communications, personal agendas of board members, distrust, and lack of clearly defined goals” (NSBA, 1992, p. 26). Questions regarding these destabilizing factors were included in the survey instrument.

Influences on School Boards

Today, school boards are “quasi-corporate bodies established by legislative action” (Norton, Webb, Dlugosh, & Sybouts, 1996, p. 114). “As agents of the state, they must carry out state law, while generating ‘laws’ of their own by establishing local district policies” (Schaffer, 1999, p. 26). The representative nature of local school boards results in regular change in membership; new members are elected and veteran members retire or are voted out in a continuing

cycle. The educational level of these members varies, experience with boardsmanship varies, and opinion on community needs, personal agendas, and beliefs vary (Price, 1994). Very small numbers of voters participate in school board elections; rarely is there a clear mandate from the community at large. This is evidenced by the perception of *large* voter turnout in local news reports when 3-5% of registered voters participate in school board elections (Shimke, 2000). This compares to national elections, where near 50% turnout is considered *low* (Keith, 2004). In other words, the general expectation of school board elections is for low voter participation. In addition, there is no continuing commitment of elected members to their original constituencies, as most board members are elected at large. Therefore, coalitions are fragile and personal idiosyncrasies abound. These factors, and others, ensure that the school board and superintendent relationship remains in a state of flux. Questions regarding these influencing factors were included in the survey instrument.

Influences on Superintendents

The influences on the modern superintendent included

(a) the ever-changing nature of the role, (b) leadership style, (c) educational philosophy, and (d) district needs (Price, 1994). All of these influences, or pressures, directly affect the function of the superintendent as creator of culture, and, thus, creator of change and improvement.

Usdan, McCloud, Podmostko, and Cuban (2001) articulated this complex state of the changing role of the superintendent clearly and concisely.

District leaders are in an arena that is perpetually besieged by a *potpourri* of often conflicting forces: state laws and regulations, federal mandates, decentralized school management, demands for greater accountability, changing demographics, the school choice movement, competing community needs, limited resources, partisan politics, legal challenges, shortages of qualified teachers and principals, and a general lack of respect for the education profession. (Usdan et al., 2001, p. 26)

Larry Cuban (1998) claimed that superintendents struggle to create coherence out of the numerous and sometimes-incompatible goals that the public sets for schools (Cuban, 1998). Indicative of

unsettled roles for superintendents is that 93 % of AASA surveyed superintendents reported a collaborative relationship with the board, while 70% believed that the current governance structure should be restructured or replaced (Glass, Bjork, & Brunner, 2000). The above factors were incorporated into the survey instrument.

Conflict Between School Boards and Superintendents

It is evident that board and superintendent conflict is a characteristic of the superintendency in this era of accountability (Lashway, 2002b). Scores of anecdotal observances in professional journals delineated several types of conflict that ranged from role definition and fulfillment to money-related issues to political judgments and responsibility for student achievement. Although this arena reflects a broad and universal palette of conflict, superintendent and board conflict is no trivial issue. Responses to conflict or negative momentum between boards and superintendents range from superintendent resignation or firing to superintendent suicide (Purdy, 2001).

In years past, board members considered their role as community service, and the line between administration and policy-makers was clear. Board members accepted the

professional opinions of the administrative staff without question. The issues facing schools are [now] more complex, creating at times a public agenda that can be hostile. Today the line between roles is blurred, making governance more complex and combative. (Ondrovich, 1997, p. 12)

Larry Cuban (1998) claimed that conflict is the “DNA of the superintendency” (p. 1).

The literature makes clear that conflict must be a factor in any research surrounding the board and superintendent relationship, specifically conflict focused on roles and finance.

Funding of public schools in Michigan. In order to better explain the results of this study pertaining to conflict between the board and superintendent in the realm of finance, a brief explanation of Michigan’s school funding scheme will be given here.

Prior to 1994, the state legislature provided that each school district should tax itself for educational purposes to the level deemed locally appropriate. This universally took the form of tax on the value of property. Section 11 of Article IX as amended in March 1994 (commonly referred to as Proposal A) dramatically changed that principle and provided a guarantee of school funding, a

state-regulated source, and distribution by the state rather than by individual communities. The existing school-aid fund took on unprecedented importance in funding local education at all levels. Property tax for homeowners (*homestead*) was universally set at 6 mills (6 dollars per 1,000 in value as assessed by the state, which equals approximately 50% of cash value). Business property tax (*non-homestead*) was universally set at 18 mills. The other sources of revenue for school aid included

- 60% of all sales taxes imposed at a rate of 4% on retailers and
- 100% of proceeds of sales and use taxes imposed at an additional rate of 2%.

More important, the amendment guaranteed that the amount of per-pupil funding should never be less than the level provided in 1994-1995 (State Foundation Grant), including a caveat that any operating funds provided locally through local assessment on homestead and non-homestead property would be deducted from the State Foundation Grant per-pupil amount. Thus, an increase in tax revenue from growth of non-homestead assessments did not result in greater operating revenue for local schools. (State of Michigan, 1994)

The net result of this system of finance was that operating funds became static or decreased as the Michigan economy declined, which prevented districts from hiring and keeping highly qualified teachers and reducing class sizes (K-16 Coalition for Michigan's Future, 2004). This method of financing the per-pupil State Foundation Grant (flat property tax and sales tax) has resulted in decreased per-pupil funding for public schools over the last four years as the Michigan economy has suffered setbacks. School boards and superintendents have been forced to make cuts in operating budgets at the same time that external state and federal mandates demand higher student achievement. The reported issues of conflict that related directly to finance were hiring of staff, school of choice, achievement, mandates, and staff negotiations (see chapter 4 for analysis of reported conflict).

Political Climate Variables

Donald McCarty and Charles Ramsey's 1971 study of power and conflict in American public education was the definitive work on the political climate in school districts. The weight of this seminal study was clearly delineated by Roald F. Campbell in his forward to the McCarty and Ramsey book, *The School Managers* (1971):

This [work] contributes significantly to the literature of educational administration and to our knowledge of local government....Board members and superintendents are viewed in this study in terms of the community context in which they work. Building upon studies of community decision making, the authors posit four community types: dominated, factional, pluralistic, and inert; each one of which tends to be reflected in its school board and in the role the superintendent can play with the board and the community. (McCarty & Ramsey, 1971, p. xi)

The current study used the political context as defined by McCarty and Ramsey (Dominated, Factional, Pluralistic, Inert) as one tool to assess the strength of the relationship between the board and superintendent. Table 1 summarizes nomination of board members, the perceived function of the board, the function of the superintendent, and the dominant direction of policy by political climate type.

Table 1

*McCarty and Ramsey Political Climate Model Summary **

Power structure	Board nominations	Board function	Superinten't function	Policy
Dominated	Board control of nominations	Dominate Board	Functionary	Education serves local needs, taxes kept low
Factional	Factionalized	Factionalized	Political Strategist	High conflict, policy changes with factional change
Pluralistic	Nominating Caucus	Status-Congruent	Professional Advisor	Based on research and community input
Inert	Superintendent controlled	Sanctioning	Decision maker	Basic education, avoid conflict, controlled by Superintendent

* (McCarty & Ramsey, 1971)

Dominated. The criteria for domination of a school district by its board are based on *behind-the-scenes* manipulation to prevent certain issues from arising:

Board members in dominated communities represent whatever powers are in control; their policies tend to express the values associated with those in charge. The men who exercise control over community affairs are particularly sensitive to the dangers of prolonged controversy and seek to maintain the status quo. Change is slow and incremental.

Domination...is a highly sophisticated, perhaps unconscious, mechanism for enhancing one set of values against those preferred by someone else. Because of the skill and essential public posture of those who dominate, the resultant effect may be much stronger and more pervasive than the exercise of overt pressure. (McCarty & Ramsey, 1971, p. 56)

Further, McCarty and Ramsey recognized that rarely do local school boards recognize their own identities as dominating. Therefore, small numbers of districts reported a dominated political climate. The superintendent became a functionary in the dominated district.

Factional. A factional board was a split board where all major decisions were destined to be decided by the group that mustered a majority vote. The role of the board chairman became central as the agenda and the meetings were highly orchestrated and manipulated with parliamentary procedure.

The distinguishing characteristic of the factional board is a state of high friction. To be elected in a factional community it is usually necessary to campaign hard and to accuse your opponents of impure motives. It is no wonder that a typical board meeting is filled with hostile rhetoric; both factions try to outdo the other in dispensing invective. While the press may report the choicest retorts, the average citizen cannot help but have a distorted image of the actual proceedings. (McCarty & Ramsey, 1971, pp. 100-101)

The superintendent in a factional district was, of necessity, a political strategist aligned with the current board president.

Pluralistic. Board members in pluralistic districts paid consistent attention to community sentiment. Their debate often changed votes, and a board member's status was congruent with his ability to articulate a position. Awareness of the positive function of

conflict was a characteristic of a pluralistic community; confrontations that emerged did not destroy the community. The superintendent became the professional advisor to the board. Frequently these districts were found in suburban areas, where people's values and lifestyles were similar.

Inert. The dominant characteristic of an inert school district was the board's abnegation of its formal responsibility for policy. This condition appeared most often in districts lacking any apparent power structure. An inert district exhibited a flow of power opposite to that of the other three district political types. The superintendent was the decision maker and quietly set policy and saw that it was implemented. He was viewed as the expert by a weak and uncertain board that consistently sanctioned his actions. The survey instrument for this study attempted to define district political climate on the basis of the McCarty and Ramsey terms.

How Superintendents Exert Influence

In 1992, Crowson and Morris explored a small group of suburban superintendents near Chicago. They sought to define the ways in which superintendents influence school districts. The four main dimensions defined by that study were "relationships with the

community, dynamics of governing board/superintendent relationships, risk-taking, and relationships with building principals” (Crowson & Morris, 1992, pp. 69-88). These four dimensions were incorporated into survey questions in the General category of the strength of relationship.

Teaching and Learning

Two works influenced questions of teaching and learning in this study. Newman, Secada, and Wehlage’s (1995) work on authentic instruction and assessment was used in formulating questions for this study. Of interest was that their book, *A Guide to Authentic Instruction and Assessment: Vision, Standards, and Scoring* (1995), and its principles were used to formulate the State of Michigan K-12 Curriculum Standards, which are considered among the most rigorous in the nation. This team positioned the issue succinctly.

Why should we be concerned about *authenticity* in education?...The problem is that the kind of mastery required for students to earn school credits, grades, and high test scores is often considered trivial, contrived, and meaningless by both students and adults. This absence of meaning breeds

low engagement in schoolwork and inhibits transfer of school learning to issues and problems faced outside of school.

(Newman et al., 1995, p. 7)

The principles embodied in their work focused on disciplined inquiry. “Disciplined inquiry consists of three main features: 1) use of a prior knowledge base, 2) striving for in-depth understanding rather than superficial awareness, and 3) expressing conclusions through elaborated communication” (Newman et al., 1995, p. 9).

The second book of interest is *Learning in Overdrive* (Mitchell, Crawford, & The Chicago Teacher’s Union Quest Center, 1995), which describes the application of standards within the framework of authentic teaching and learning proposed by Newman et al. (1995). The authors provide a rationale for the teaching structure they suggest, including assessment rubrics, printable forms, and plenty of examples from teachers themselves.

The current study inquired whether authentic learning in the classroom correlates with the school board and superintendent relationship. The two works discussed here shaped the formulation of the questions used to investigate teaching and learning in the survey for this study. Interestingly, the only model of

superintendent evaluation that in itself encompassed elements of authentic teaching and learning as proposed by Newman et al. (1995) was the Data-driven model identified by Candoli et al. (1997).

Changing Demographics of School Districts

Definitions. The term *demographics* is a colloquialism that derives from demography, the study of the characteristics of human populations (Rothembuhler, 2004). Demographics can be used to sort data about people for the purpose of descriptive analysis. The demographic mix of a community has a strong effect on the options available to educational leaders. Districts of different size (urban, suburban, rural) often demonstrate different political climates, that is, different types of conflict and pressure on the district leadership:

The most obvious [benefit associated with demographic analysis] is that the data permit analysts to calculate marginal, rather than average effects; it acts as an important scientific safeguard, because it permits others to replicate important findings; it...reveals data quality and processing anomalies; and...data permit policy makers to pose and answer complex questions...of their own choosing. (Lane, 2003, pp. 1-2)

Socioeconomic status affects funding levels in education, such as those of the federal Title I and other state-funded programs.

Source of data. In 1993 the State of Michigan, under the leadership of then-governor John Engler, contracted with the accounting firm Standard and Poor's, Inc. to create, maintain, and analyze a database of demographic and performance data on each and every school district in Michigan. (Standard and Poor's, 2003) In 1995 the database came on line. Certain demographic data from this database were used in this study:

- District size, as indicated by the student head count
- Socioeconomic status, as indicated by the free and reduced-priced lunch percentage
- Student achievement as reported by the Michigan Educational Assessment Program (MEAP) scores
- State Foundation Grant status, as the amount per pupil granted to each district by the state

These data were used to estimate a correlation effect when paired with other influences on the board and superintendent relationship.

The Research on Superintendent Evaluation

In light of the strong and varied influences on school boards and superintendents, as previously discussed, the researcher reviewed research studies on evaluation of superintendents. Research on superintendent evaluation has universally focused on identification of frequency, purposes, criteria, and methods of evaluation. Here, the researcher summarized the findings of the major studies and related them to the focused objective of this paper.

The Candoli, Cullen, and Stufflebeam meta-study (1997). The scope of the analysis placed the book *Superintendent Performance Evaluation: Current Practices and Directions for Improvement (1997)* at the center of the discussion of superintendent evaluation. Stufflebeam directs research in educational evaluation at the Center for Research on Educational Accountability and Teacher Evaluation (CREATE) at Western Michigan University. He and his colleagues presented a comprehensive overview and analysis of the research on superintendent evaluation up to 1997. The CREATE archive and the data from studies by Glass (1992) and Robinson and Bickers (1990) were incorporated into the report.

A comprehensive review of the archive by the researchers at CREATE identified seven categories of research on superintendent evaluation:

- 1) Extent and frequency of performance evaluation;
- 2) Purposes of performance evaluation;
- 3) Criteria are used in evaluation;
- 4) Methods used in superintendent evaluation;
- 5) Qualifications of those who conduct evaluations;
- 6) Stakeholder groups provide into the evaluation process; and
- 7) Importance of evaluation to the effectiveness of the system.

(Candoli et al., 1997, pp. 45-64).

According to the meta-analysis of prior studies by Candoli et al., (1997), researchers have a good comprehension of the nuts and bolts of superintendent evaluation.

The main models currently used to evaluate the performance of school superintendents fall into three categories: Global judgment, Judgment driven by specific criteria, and Judgment driven by data (Candoli et al., 1997). Global judgment includes the board *gut feeling*, descriptive narrative reports often by outside consultants, oral exchanges about performance, and stakeholder

evaluation. Judgment driven by specific criteria consists of printed rating forms, report cards, Management by Objective, performance contracting, and duties-based evaluation. Finally, judgment driven by data includes goal setting and superintendent portfolio, student outcome measures, and district accreditation (Candoli et al., 1997). These basic categories of evaluation were applied in this research study, and the evaluation types were labeled *Global*, *Judgment*, and *Data-driven*.

The Glass, Bjork, and Brunner study (2000). The researcher examined *The Study of the American School Superintendency: A Look at the Superintendent of Education in the New Millennium* (Glass et al., 2000). The majority of superintendents continued to be evaluated with formal procedures (53.7%), while 32.3% reported a combination of formal and informal methods. The report card or checklist remained the most common instrument for evaluation. Board members continued to be the main evaluators, and evaluations were done in closed executive session as mandated by law in most states. The researcher concluded that very little change had occurred in the eight years prior to the study.

The DiPaola and Stronge study (2003). Michael DiPaola and James Stronge, both professors of education at the College of William and Mary, conducted a study of the 50 states to assess current policies and practices in superintendent evaluation. The method was to inquire through telephone interviews with each state education department and each affiliate of the AASA and the NSBA as to state legal requirements and affiliate guidelines and recommendations. The researchers then performed a content analysis. They sought first to identify whether policies and recommendations conformed to the AASA's *Superintendent Competencies* and second to attempt to match recommendations and guidelines to the three evaluation categories of evaluation proposed by Candoli et al., (1997). Eight states reported having no guidelines and providing no recommendations to their constituents. All of the other 42 states provided recommendations and materials.

The methodological difficulties became apparent when the results of the analysis were reported out as characteristics of *current use and practice* rather than as characteristics of the *guidelines and recommendations* that were collected (DiPaola & Stronge, 2003). It appeared that the authors interchanged the terms

norms and practices. Despite this difficulty, assessing the results as *guidelines and recommendations* produced interesting results. Eighty-nine percent of the 42 states recommended use of some variation of printed rating forms. Sixty-eight percent embedded Management by Objective (MBO) in recommended forms. The authors observed that the vast majority of recommended evaluation processes were rooted in scientific management.

The Marcus, Mayo, and McCartney (2003) research. The Marcus et al., (2003) research was a study of preferences and was the first research that began to quantify *conflict* between the board and the superintendent. The superintendent and the board president from the Parkland School District in Pennsylvania joined with R. M. Marcus, a professor at Lehigh University, to examine superintendent preferences for performance evaluation on a national level. Two questions of inquiry motivated the study. First, were superintendent evaluation procedures fair, effective, and consistent with superintendent preferences? Second, were superintendent evaluation procedures performance based? These data may not be as statistically robust as the authors might have hoped (N = 12,604 superintendents nationally, n = 1,125 selected

randomly, n = 492 responses), yet the findings were nevertheless intriguing, as presented in Table 2.

Table 2

Superintendents' Preferences for Performance Evaluation

Do you prefer:	Preferred %	Actual %
1. To have at least half the board members trained in evaluation	91.0	28.7
2. To have the board evaluation by objective	92.2	56.9
3. To have very helpful board suggestions for improvement	77.3	16.9
4. To have the board and the superintendent set evaluation criteria together	90.1	61.2
5. To have some expectations expressed at hiring	62.7	62.5

Note. These data are from the work of Marcus, Mayo, and McCartney, 2003

Accountability remained as superintendents' perceived reason for evaluation. Checklist-type evaluation accounted for 82% of evaluation methods. Superintendents perceived that the first criterion for performance was board/superintendent relations. They would have preferred it to be the last criterion. Overall, current evaluation procedures employed by most school districts raised questions about fairness and effectiveness. The procedures were not performance based although most superintendents' preferred performance based evaluation. Most board members were perceived to be inadequately prepared to evaluate the superintendent.

This second section focused on the literature that supported the inclusion of certain variables in the survey instrument for this research study. Factors that destabilize the board and superintendent were discussed. Influences on both the board and the superintendent were examined. Conflict, in terms of money and roles, was delineated along with district-level political climate. The ability of superintendents to exert influence in their districts was explored. The literature surrounding methods of teaching and learning was presented. The necessity for the use of demographic

data as dependent variables was explained. Finally, the relevant and current research surrounding superintendent evaluation was explored in detail.

The final section of the review of literature will discuss the relevance of this study and its potential impact on the field of knowledge.

Relevance and Meaning

Changing Roles and Superintendent Evaluation

The role of the superintendent is continually changing (Price, 2001), and the pace of that change is accelerating as time passes and political agendas fluctuate (Dolan, 1994; Wheatley, 1999). Empirical evidence bearing on the importance of superintendent performance evaluation is minimal and conflicting. “But at present it cannot be said that a majority of board members and superintendents perceive performance evaluation as contributing to the overall effectiveness of the superintendent and the school district” (Candoli et al., 1997, p. 66). None of the prior research showed that methods of superintendent evaluation adapt and evolve to reflect or even keep pace with change. One might ask how

superintendent evaluation can be purposive and meaningful if it is disconnected from district relevance.

Conflict Arising from Financial Constraints

The state of school finance in the State of Michigan is critical to levels of conflict between board and superintendent (see chapter 4). Operating budgets are steadily decreasing with no local recourse for taxation to recover the difference. Class sizes have increased, as districts have had no choice but to reduce operating expenses. This has translated to fewer teachers, less support staff, and narrowed administrative leadership (K-16 Coalition for Michigan's Future, 2004). In the survey, which is the center of this study, the effect of financial crisis, in terms of per-pupil funding and conflict, is measured against the superintendent and board relationship.

Disconnect Between Board and Superintendent Expectations

Prior research makes it abundantly clear that the expectations of superintendents for how they should be evaluated do not match the apparent historic norms of evaluation as practiced by school boards (Glass et al., 2000; Marcus et al., 2003). Most superintendents desire a job that allows them to transform the district culture and to focus all energies on teaching and learning

(Marcus et al., 2003). Before the superintendent can begin to incubate the change, the superintendent is faced with a critical conflict with the board. The superintendent's view of the best method and relevant purposes of evaluation are diametrically opposed to those practiced by the board (Marcus et al., 2003). The common belief held by educators is that the school board and superintendent relationship is key to district climate (AASA, 1990; NSBA, 1990). The critical importance of issues of superintendent evaluation supports the timeliness of this study.

Structural Change

It is striking that none of the prior research suggested how superintendent evaluation might become part of or motivate wider structural change. There is no conclusion that current leadership practice leads anywhere or fulfills any significant purpose relating to teaching and learning. Researchers repeatedly concluded that reform efforts were ephemeral without structural change (Oakes, 1990). Yet, change cannot occur without strong collaborative relationships between school boards and superintendents, successful communication with staff, and community involvement (IASB, 2000).

Terms of Debate

The search for an effective means to foster collaborative school board and superintendent relationships is decisive in the current climate. Ian Jukes, educator and futurist, stated, “We must prepare our students for their future, not our past” (Jukes & McCain, 2001, online). What is at stake is nothing less than a generation ill-prepared to meet the challenge of their own future and ill-prepared for citizenship in a democracy. Furthermore, a flood of classroom reforms cannot be maintained when we ignore our schools’ outmoded structure. It is time to move the debate beyond frequency, purposes, criteria, and methods of superintendent evaluation and to seek the practice that furthers authentic learning through intentional means of superintendent evaluation.

Summary of Chapter 2

In this chapter, the researcher examined access model schools in terms of proficiency and public resistance to structural change. Current thinking and influences on the elements of the relationship of the board and superintendent were explored. Research to date on superintendent evaluation was reviewed. In an effort to

contextualize the influences, the researcher discussed the governance and finance of public education in Michigan, the political context of the board's functions, and demographic influences.

In chapter 3, the researcher will report the methodology and procedures used in collecting survey data from Michigan's superintendents and board presidents. The method of creating constructed variables for analysis will be presented.

Chapter 3: Research Design and Methodology

Introduction

Chapter 2 examined the prior research on the context of the modern superintendency and the literature that supports the variables used in the survey, focusing on superintendent evaluation.

Changing times have resulted in stresses upon the board and superintendent relationship often mirrored in the superintendent evaluation process (National School Board Association [NSBA], 2000; Lashway, 2002b). This research was an opportunity to get beyond identification of superintendent evaluation methods, frequency, and criteria that characterized the last 20 years of research. The literature on the rapidly changing climate of school leadership suggested that gathering data on the dynamics of the relationship between the board and the superintendent was long overdue. The goal was to analyze the relative effects of those factors on the relationship, using the data to suggest strategies for substantive and manageable improvement.

The researcher gathered data from school board presidents and superintendents in Michigan's public school districts. A comprehensive survey (153 variables, 55 questions) was developed

and administered online for a period of six weeks in the spring of 2004. This chapter discusses the methodology used to collect these data and the methodology used to create the *Strength of Relationship Scale*. First, research hypotheses and research questions will be stated, followed by an explanation of the research design for the study's online survey. Construction of the survey instrument and tests for internal validity will be outlined. The variables in the study and procedures used for the collection of data will be reported. A detailed report on the construction of certain new variables from the raw data will be presented. Finally, analysis objectives and measures in relation to the hypotheses will be explained.

Research Hypotheses and Questions

Hypotheses

Prior research suggested three hypotheses that guided this research.

Hypothesis 1: Evaluation Method. Method of evaluation of the superintendent is a significant indicator (either positive or negative depending on the type of evaluation) of the strength of relationship between the school board and the superintendent.

Hypothesis 2: Conflict Levels. Low levels of conflict between the board and the superintendent correlate with Data-driven evaluation type and Pluralistic political climate type.

Hypothesis 3: Agreement, Overall Strength of Relationship (OSOR), and MEAP. High levels of agreement and higher Overall Strength of Relationship between the board and the superintendent correlate with higher district student achievement (MEAP passing rate).

Research Questions

The researcher employed the following research questions, gleaned from prior research, to pursue the hypotheses:

1. What methods of superintendent evaluation are used in the 526 public school districts in Michigan?
2. What are the political characteristics of the school district communities?
3. What are the demographic characteristics of the districts?
4. What influences the choice of method of superintendent evaluation?
5. What characteristics of board/superintendent relationship do the public school districts in Michigan exhibit?

6. To what degree do the variables in the survey influence the school board and superintendent relationship?

Research Design

This study was designed as quantitative research employing descriptive correlational analyses. “The major purpose of correlational research is to clarify our understanding of important phenomena through the identification of relationships between variables” (Fraenkel & Wallen, 2000, p. 360). The goal of this research was to explain the relationship between the school board and the superintendent in terms of their behaviors and the likely outcomes of those behaviors.

Prior research, as discussed in the review of relevant literature, as well as numerous anecdotal reports were examined in order to accomplish three goals:

1. To design a relevant research questionnaire
2. To rank responses in a *Strength of Relationship Scale*
3. To construct meaningful analyses

This study employed a self-administered Internet survey designed to gather detailed data about influences on the strength of the relationship between school boards and superintendents in public

school districts in Michigan and to determine to what degree those influences affect the board and superintendent relationship. The emphasis was on superintendent evaluation. The design employed quantitative data-gathering methods and used descriptive and explanatory analysis of the data to suggest correlational relationships.

One hundred fifty-three variables were probed in seven areas of influence on the board and superintendent relationship: evaluation type, conflict level, political climate, board training, teaching and learning, and general influence of the superintendent. In addition, demographic factors were considered. The areas of inquiry included

1. Evaluation of the superintendent

- a. What superintendent evaluation method is currently in use in each of Michigan's 526 public school districts? (Candoli et al., 1997).
- b. Are district goals written? By whom? How frequently?
- c. What is the level of satisfaction with the evaluation method, and what is the preference if not satisfied?

2. Conflict between board and superintendent

- a. What are the perceived results of the evaluation process?

- b. Are board members prepared to evaluate the superintendent, and is there a level of discomfort with that responsibility?
- c. Does evaluation promote communication? How strong is the communication between the board and the superintendent?
- d. Do board members recognize the distinct roles of a board trustee and a superintendent?
- e. Is the business of the district moving ahead and accomplishing its goals?
- f. What is the leadership style of the superintendent?
- g. What is the educational philosophy of the district?
- h. What is the perceived level of conflict between the board and the superintendent? What are the topics of conflict? Is this disruptive to the district?

3. Political climate of the district

- a. What is the political power structure of the community? (McCarty & Ramsey, 1971)?
- b. Who sets the board agenda? Are items not on the agenda introduced during public meetings?

- c. How large is the board? Is that too large?
 - d. How are the integrity of the superintendent and board members perceived?
 - e. How are government mandates handled in the district?
Are financial issues a strong pressure?
 - f. What are tenures of the board members and the superintendent?
4. Training level of board members and the superintendent
- a. What is the level of education of the board members and the superintendent?
 - b. Do they belong to their professional organizations? What is the pattern of their participation?
 - c. Do board members receive training? In what formats?
 - d. What is the most important job of the board? What is the most important job of the superintendent?
5. Teaching and learning in the district's classrooms
- a. Are board members aware of predominating teaching styles in the district?
 - b. What teaching style dominates?

- c. Do board members believe that all students can learn? If so, in what teaching/learning format?
 - d. Do government mandates effect teaching/learning in the district?
6. General relationship of the board and superintendent
- a. What is the perceived relationship between the board and the superintendent? (Marcus et al., 2003)
 - b. How does the superintendent influence the district? (Robinson & Bickers, 1990)
7. Demographic data of the district
- a. What are the demographic characteristics of the community? (Standard & Poor's, 2003)
 - i. Age, gender, ethnicity of respondents
 - ii. Socioeconomic status of the district as characterized by free and reduced-priced lunch status
 - iii. Student achievement as indicated by MEAP scores
 - iv. Size of the district by headcount and rural, suburban, or urban designation (Glass et al., 2000)
 - v. Per-pupil expenditure

The Survey Instrument and Validity Tests

Instrumentation

A search of the *ERIC Clearinghouse on Assessment and Evaluation* (<http://www.ericae.net>) revealed no existing instrument that addressed the area of inquiry of this study. Consequently, the researcher developed a survey instrument designed specifically for public school board presidents and superintendents. See Appendix A: Superintendent and School Board Strength of Relationship Survey and Scale: K-12 Public Schools in the U.S. (Duvall, 2004) for the survey document. The design was completed with professional assistance from an instructor at the University of Michigan Institute for Social Research who specialized in Internet surveys.

Reliability

Reliability was established by offline completion of the survey instrument, with written commentary, by six former Michigan public school district superintendents and six former school board members representing rural, suburban, and urban experiences (two in each category). Inter-item reliability was established by the comparison of responses to similar items within the questionnaire. Each group of questions consisted of at least two corroborating questions for each

area of inquiry. Each group of questions maintained criterion validity, as questions were directly based on criteria set by previous research and publications of standards by national professional organizations. Necessary adjustments to the questionnaire were made accordingly, and the questionnaire was finalized.

Threats to Internal Validity

There are four main threats to internal validity in survey research: mortality, location, instrumentation, and instrument decay (Fraenkel & Wallen 2000, p. 448). A mortality threat arises in longitudinal studies. This study took place over a 6-week period, not many years, and thus was not susceptible to significant threat of mortality. A location threat can occur if the collection of data is carried out in a place that might affect responses. This study was administered online from the home or office of each individual respondent, thus minimizing any location threat. Instrumentation threat is discussed in detail earlier in this section and was minimized by pre testing of the instrument. Validity of the instrument was tested and the questionnaire was adjusted until the instrument was found to be valid. Instrument decay can occur in interview surveys when the interviewer gets tired or rushed. As this study was not based on face-

to-face interviews, this threat was not applicable. Thus, one can conclude that the survey was an internally valid measure.

Online Survey

The survey was made available to all Michigan public school district superintendents and school board presidents in an online format through the services of zTelligence, a service for online data gathering used extensively by University of Michigan researchers and compatible with SPSS 11.0 software for the Macintosh OSX platform.

The advantages of self-administered survey methods are (a) there is the ability to administer the survey to large groups of participants in a short period of time; (b) the anonymity permits respondents to be more candid than in face-to-face interviews; (c) the outcome is less likely to be affected by the researcher; and (d) survey research with a high response rate is more suitable to probability sampling and generalization to larger populations (Fraenkel & Wallen 2000, pp. 431-466). In addition, the research of Sax, Gilmartin, Lee, and Hagedorn (2003) reported that use of an online data collection method, as opposed to paper-copy mailing, increased survey participation from between 16% and 22%.

Participants

No attempt was made to preselect a sample. All public school district superintendents and board presidents were invited to respond (N = 526 school districts, N = 1052 potential respondents). The Michigan Association of School Administrators (MASA) and the Michigan Association of School Boards (MASB) supported the study. Both organizations provided access to member lists, demographic data, and regional meetings. They each advertised and publicized the survey in regular communications with members and provided links to the survey on their home web page sites in order to motivate maximum participation.

Michigan state law designates all superintendents and school board members as *public* officials. All Michigan superintendents and school board presidents in the state's 526 public school districts were purposively surveyed, regardless of membership in the supporting professional organizations. Specific attention was given to encouraging participation by nonmembers of the professional organizations (10 districts for MASA, 1 district for MASB). Although this was essentially a self-selected respondent group, the goal was to achieve maximum

participation through persistent and methodical communication via mail, email, and follow-up phone calls.

zTelligence software provided the means for the researcher to track responses daily, which allowed focused energy on those individuals who had not yet responded. Further, the software allowed identification of which districts had only one respondent, giving the opportunity for pinpointed communication with the nonresponding member of the pair.

Variables in the Study

There were seven groups of variables that formed this study:

1. Method of superintendent evaluation
2. Areas of conflict between the board and superintendent
3. Political characteristics of the community
4. Training of the school board and superintendent
5. Characteristics of teaching and learning in the district
6. General influence of the superintendent in the district
7. Demographic characteristics of the community

Each group of variables was represented in a section of probing questions in the body of the survey.

Method of Evaluation

Method of evaluation was determined by a set of nine questions or variables directly related to the three evaluation methods precisely described by Candoli et al. (1997) in *Superintendent Performance Evaluation: Current Practice and Directions for Improvement*. The researcher added a fourth category called *None*, meaning that no evaluation was done.

- Evaluation Type *Global*: The board makes a broad *gut* level judgment or defers authority, and an evaluator is brought in from outside. (Normative) *This is “done to” the superintendent from inside or outside the organization.*
- Evaluation Type *Judgment*: A checklist or report card is used, often based on the AASA superintendent competencies. (Summative) *This is the board “doing it to” the superintendent.*
- Evaluation Type *Data-driven*: The board evaluates on the basis of the achievement of established goals and often uses a portfolio reporting method. (Formative) *This is both the board and the superintendent contributing to a “process” of improvement.*
- Evaluation Type *None*: No evaluation is done by the board.

A set of 26 questions established variables that sought to determine the effects of the evaluation method currently in use upon the relationship between the board and the superintendent, including goal setting, basis of evaluation, recent changes in evaluation method, satisfaction with the current method, and preferences.

Conflict

Thirty-five variables delved into perceived conflict in the board and superintendent relationship. The indicators of conflict were directly derived from the AASA publication *Building Better Board-Administrator Relations* (1992), and the NSBA's *Key Role of School Boards* (2000). These questions dealt with levels of respect, expectations, communication, leadership style, district educational philosophy, and perceived levels of conflict. Preferences were also assessed with indicators derived from Marcus, et al. (2003), including evaluation criteria and fairness/effectiveness of the evaluation method in current use.

Political Climate

Twenty-three variables sought information on district political climate. Four variables focused on identification of the specific district's political climate. These questions directly related to the

research of McCarty and Ramsey (1971). Table 1 provides a graphic delineation of categories derives from the McCarty and Ramsey study.

The four political categories were as follows:

1. Dominated. The board members themselves controlled board nominations and effectively controlled the board membership. The superintendent was a functionary. The general policy of the board was to keep taxes low and target education to meet specific local needs.
2. Factional. The board nominations were a carousel of members with issue-based agendas. The board itself was factionalized most of the time. The superintendent functioned as a political strategist. The general state of board policy was that policy changed with factional changes in an atmosphere of high conflict.
3. Pluralistic. An inclusive nominating caucus characterized the board, and members were status congruent. The superintendent served as a professional advisor. Board policy was generally based on research and community input.
4. Inert. The superintendent controlled the board nominations, and members sanctioned such power. The superintendent was the

decision maker and avoided conflict. Board policy was controlled by the superintendent and generally focused on the most basic education.

Nineteen variables sought to identify the political Strength of Relationship, and these included board meeting agenda, size of board, integrity, and educational levels.

Training

A set of 28 variables addressed development of related skills by the board and superintendent as public school officials (NSBA, 1996, 2000). Topics of inquiry included were membership and participation in state and national organizations, forms of training locally, and recognition of the key roles of the board members and the superintendent.

Teaching & Learning

A set of 13 variables attempted to identify the generally accepted teaching style in the district and the general attitude toward instruction based on the Newman and Wehlage (1995) model for authentic teaching and learning. The Newman and Wehlage model was a part of the basis for the development of the MEAP state assessment test and corresponding curriculum standards in Michigan.

General

A five-statement set probed ways in which the superintendent exerted influence in the district (Crowson & Morris, 1992). These contributed to the calculation of the Overall Strength of Relationship.

Demographic Data

Age, gender, and ethnicity of each respondent were collected in the online survey format. Other demographic data were collected from the Standard and Poor's School Economic Survey of Michigan (Standard & Poor's, 2003) website. Nonsurvey-based demographic data was entered into the database by a graduate research assistant and verified by the researcher. Data collected for each Michigan district included (a) socioeconomic status, (b) size of district, (c) Michigan Education Assessment Program (MEAP) passing rate, and (d) per-pupil expenditure. These data were not used to calculate the Strength of Relationship Scale.

Response Format

Most items required the respondent to choose the degree of agreement or choose one from an interval. A scale of four response categories was used intentionally (*Strongly Agree, Agree, Disagree, Strongly Disagree*) to limit reflexive selection of the middle ground. In

some cases respondents were asked to explain their choices in a few sentences. The complete survey instrument, as copyrighted by the researcher, is attached at the end of this document as Appendix A. The Human Subjects Institutional Review Board (IRB) of Eastern Michigan University determined that the rights and welfare of the individual subjects involved in this research were carefully guarded, that the methods used to obtain informed consent were appropriate, and that the individuals were not at risk. The IRB letter of approval may be found as Appendix B, and the Informed Consent Statement may be found as Appendix C.

Procedures

The following strategies and tactics (in chronological order) were employed to maximize the response rates in both subgroups:

- Survey questions were entered into the online server (zTelligence) and tested through the paid services of Markettools, a California-based, online-survey coordination service. Two individuals administered the survey process; one oversaw the survey while one maintained daily communication and gave instruction to the researcher on the use of zTelligence reporting software.

- Markettools deployed invitations to participate in the survey via email addresses provided by MASA and MASB to all superintendents and school board presidents of K-12 public school districts in Michigan. The researcher designed and wrote all communiqués. All email messages and printed mailings used in this study may be found in Appendix D. Each respondent was assigned a unique identifiable link to the active survey site directly accessible from the original email invitation. Nonmember districts (10 MASA, 1 MASB) were telephoned, and email addresses were obtained for their superintendents and board presidents. Approximately 230 of the board presidents had no email listings, whereas all superintendents had listings. These email-deficient respondents were mailed a written invitation to participate through a general link provided on the home web page of MASA.
- All respondents were informed that if they would rather complete the survey on paper, a paper copy would be mailed to them with a stamped return envelope. Four respondents chose the paper format; responses were entered through the general

link at MASA by the researcher. All other data was collected on line.

- Informed consent was given via a printable opening Consent Page. Respondents were required to consent before the online survey could be accessed. The informed-consent statement as approved by the Human Subjects Institutional Review Board of Eastern Michigan University may be found as Appendix C.
- The survey remained on line for a 6-week period, from April 15, 2004, to May 31, 2004. Weekly reminders were emailed to all respondents who had not responded by that date. Individual messages were emailed to those respondents who had begun but not completed the survey. These weekly reminders were designed and written by the researcher and deployed by Markettools. See Appendix D for all written and printed material.
- MASB provided the email addresses for all district executive secretaries. The researcher wrote a communiqué to all district-level secretaries to inform them of the survey and provide them with all the information they needed to support their superintendents and board presidents in completion of the survey. During the 6-week survey period, three such

communiqués were emailed to secretaries whose superintendents and board presidents had not responded.

- During the course of the 6-week deployment, two mailings were sent through the United States Postal Service to potential respondents who had not participated. At Week 2, a brochure was sent, and at Week 4, a post card was sent. See Appendix D: Printed Materials for all email messages and printed mailings.
- Some difficulties that occurred with using the online survey, as reported by respondents, were the following:
 - In two cases, the unique access link did not work. These respondents were referred to the general link at www.gomasa.org.
 - The survey programming would not let the respondent continue without answering all previous questions and filling in all response boxes. Four (4) respondents were frustrated by this and were directed to type “none” in response boxes in order to continue.
 - Two respondents replied that they did not complete the survey because they came to a question that, in their opinion, had no appropriate response for selection.

- The MASA and MASB websites each carried a top-priority announcement and link to the survey on its home web page. Thematic graphics were depicted on the announcement in order to maintain the visual theme for easy recognition of materials related to the survey. Every communication carried similar graphics.
- MASA included an article about the survey in its *Fortnighter* publication, both online and in print over a 1-month period, or two publications.
- Survey data was collected online and downloaded as a Microsoft Excel file and as an SPSS Mac- or PC-compatible “.por” file.

Variable Constructions

Several variables were used in a group to identify certain characteristics. Certain new variables were created by the researcher from data sets within the questionnaire for use in analysis. These were as follows:

- Identification of evaluation type (EvalID)
- Identification of political climate type (PolID)

- Individual strength of relationship for evaluation type, conflict level, political climate, training, teaching and learning, and general (EvalSOR, PolSOR, TrainSOR, TLSOR, Gensor)
- Overall strength of relationship (OverSOR)
- Demographic constructs (district size, per-pupil expenditure, socioeconomic status, and student achievement)
- Identification of groups of conflict (money, roles, other, and none)
- Identification of areas of and degree of agreement/disagreement between the board and superintendent

Specific procedures and logic were used in each of these constructions, as discussed in detail below.

EvalID Construction

Eight variables (variables 8-15 in the downloaded data set) were used to determine the type of evaluation used in the district of each respondent. These variables were combined and recoded into four categories, which corresponded to the Candoli et al. (1997) designations. The None category was added by the researcher. The resulting variable was assigned a letter designation that distinguished the respondent's category of evaluation: A = Global, B = Judgment,

C = Data Driven, and D = None. Appendix E.1: Recode Syntax for Constructed Variables, SPSS 11.0 delineates the specific means of recoding the eight variables.

Respondents were given the option to choose Other and type a short explanation into the online database in response to the question item regarding the type of evaluation used. Forty-nine respondents chose to respond by writing in the field provided. All 49 fill-ins in the Other designation were recoded into a constructed variable (A, B, C, D). Appendix E.2 Variable 15: Recode Syntax for Constructed Variables, SPSS 11.0 reports the specific path for constructing the variable. A qualitative-style, color-coded, open coding theme analysis, corroborated by previous answers from the respondents, placed each of these 49 in a category A, B, C, or D.

After the second recoding, nine responses fell into a double-letter group (Examples: AB, BC, CD). The researcher studied each individual respondent's answers as a whole. It was determined that each of the eight double-coded respondents recognized the need for positive change and was in transition from one form of evaluation to another. The decision was made that if the recoded category were a double letter, then the default would be to the second letter, or the

category to which the respondent strove to achieve. These nine were recoded into A, B, C, and D. The SPSS syntax is reported in Appendix E.3 *_m*: Recode Syntax for Constructed Variables, SPSS 11.0.

Finally, all (evaluation type) recodes were integrated into the constructed variable “_m,” with all 397 cases categorized into one of the four letter designations.

Using a fill-in format in the online database, variable 38 (var38 in the downloaded data set) asked the respondent’s “preference” of evaluation method. Using an open coding, color-coded, qualitative-style system to identify themes, the responses were recoded into the A through D evaluation-identification categories. “No response” was recoded as “Satisfied.” The constructed variable for preference of evaluation method became “_p,” which when integrated, designated one of the four letter categories for evaluation (A through D).

Appendix E.4 *EvalID_p*: Recode Syntax for Constructed Variables, SPSS 11.0 reports the process.

PolID Construction

The district political climate type was determined by posing a set of four descriptions, then offering the respondent a range of agreement choices (*Strongly Agree, Agree, Disagree, Strongly*

Disagree). The four variables (var73-76 in the downloaded data set) were recoded into letter categories corresponding to the McCarty and Ramsey (1971) study of political climate in public school districts (E = Dominated, F = Factional, G = Pluralistic, and H = Inert). The format for recoding is outlined in Appendix E.5 PolID: Recode Syntax for Constructed Variables, SPSS 11.0.

The results produced numerous combinations of the four letter categories. Therefore, the set was recoded again, such that combinations where F or G dominated with a response of *Strongly Agree* or *Agree*, the category reverted to F or G. If F and G appeared together equally, F dominated because if a school board is factionalized, then pluralism is never truly possible. Appendix F: EvalID and PolID Frequencies, depicts frequencies for political type and evaluation type and theory to explain the high number of reported G (Pluralistic) political type.

These PolID constructions resulted in all 397 cases being designated by one of four letters (E through H) corresponding to political climate categories from the McCarty and Ramsey (1971) study.

Individual Strength of Relationship Constructions

One goal of this study was to create a quantifiable scale that might be used to assess the relation and degree of influence between various factors that affect the board and superintendent relationship (evaluation type, conflict level, political climate, training of board members, teaching and learning styles, and general). The created scale was named the Strength of Relationship Scale. The use of lowercase *sor* indicated individual strength of relationship in the factors listed above. The use of uppercase *SOR* indicated the combination of *sor* scores into an Overall Strength of Relationship (OverSOR) designation.

The 152 variables of the survey questionnaire were identified and numbered. Each variable represented a response to questions in the six areas of inquiry: evaluation type, conflict level, political climate, training, teaching and learning, and general. Each variable was rated from -3 to 3 on a 6-point scale (-3, -2, -1, 1, 2, 3). Ratings were derived from prior research in conjunction with corroboration from anecdotal writing. This process in large part depended upon the judgment of the researcher and the researcher's correlation of research and experiential reporting from the field even though the

ratings were grounded in the literature. The higher was the number assigned, the stronger was the relationship. The Strength of Relationship Scale (Duvall, 2004) ratings may be found in Appendix G.

The questionnaire included two other options for respondents to write in a response rather than choose among a group (var130 and var131 in the downloaded data set, respectively) describing the role of the board and the superintendent. The researcher recoded the open-ended *fill in* questions by grouping responses according to the context of the variable in the area of inquiry, that is, superintendent's role or board member's role. See Appendix E.6 Role of Board: Recode Syntax for Constructed Variables, SPSS 11.0 and Appendix E.7: Role of Superintendent: Recode syntax for constructed variables, SPSS 11.0 for details of the recoding. This process resembled the qualitative analysis process of open coding color-coded words and grouping input thematically. These theme words were indexed into broader thematic categories for later use. Indexed responses were then recoded into the 6-point scale and were included in the Strength of Relationship (sor) scores.

Strength of Relationship (sor) scores were calculated for each area of inquiry. A factor analysis of the calculated Evaluation sor,

Conflict sor, Political sor, Training sor, Teaching and Learning sor, and General sor scales revealed that only the evaluation, conflict, political climate, and general Strength of Relationship scales correlated highly to form the Overall Strength of Relationship factor (OverSOR). The training of the board sor scale (Trainsor) was found to correlate with the teaching and learning sor scale (TLsor) to form a second factor (TLSOR). This two-factor solution was found to explain roughly 65% of the original variation in the six sub-scale variables. The Overall Strength of Relationship (OverSOR) factor, calculated from the scores on the first four sor subscales, became the variable OverSOR, and the scores on the Training sor scale and the Teaching and Learning sor scale were combined to form the variable TLSOR.

Demographic Constructs

The *headcount* variable was transformed into district Size using the designations Urban, Suburban, and Rural as defined by Glass (2000). Rural = 300 to 2,999 pupils, Suburban = 3,000 to 24,499 pupils, and Urban = 25,000 or more pupils. Appendix E.8 District Size: Recode Syntax for Constructed Variables, SPSS 11.0 specifies the syntax for accomplishment of the constructed variable for district size. The other district-level data (per-pupil expenditure, socioeconomic

status, and student achievement) were used in their original form from the Standard and Poor's (2003) School Economic Survey database

Conflict Constructs

Using a fill-in format in the online database, variables 70 through 72 (var70-72 in the downloaded data set) asked the respondents to list three prevalent types of conflict between the board and the superintendent. Using an open coding, color-code, qualitative-style system to identify themes, the responses were recoded into three categories of conflict that were labeled "Money," "Roles," and "Other." No response, the word *none*, or similar words were recoded as "No Conflict." Appendix E.9 Conflict: Recode Syntax for Constructed Variables, SPSS 11.0 reports the syntax for this process. Constructed variables *_m* (self identified evaluation type) and *_p* (preferred evaluation type) were compared and included in calculations of the level of conflict.

Agreement Constructs

In order to calculate Agreement between superintendent and board, a data set was derived from the Complete data set that identified Paired responses. Complete response was defined as all

questions on the survey being answered in full. Paired response was defined as Complete response by both the superintendent and the board president in a given district. Of the 397 Complete responses, 86 districts reported Paired responses. District superintendents were identified in the Paired data set as *1* and board presidents as *0*. This Paired data set was used in the construction of agreement variables.

First, the 28 variables for use in assessment of Agreement were identified as reported in Appendix H. The responses to these original variables were compared within the Paired data set. If the responses did not agree for the board president and the superintendent, a score of 1 was assigned. Then, agreement was assessed in terms of self-identified evaluation type (*_m*) and political climate type (*PolID*). Disagreement between the board president and the superintendent was indicated with a score of 1. Scores in the three areas were added. The higher the numerical score was, the lower was the level of Agreement. See Appendix E.10 Agreement: Recode Syntax for Constructed Variables, SPSS 11.0 for the specific variables used and the recode syntax. These agreement scores were later used in analyses.

Summary of Constructed Variables

SPSS coding methods, as described in the appendices, were used to identify evaluation types and political climate types by letter designations. A Strength of Relationship Scale was devised, and individual scores were derived for each area of inquiry. The higher the number score was, the stronger the relationship was. A factor analysis that identified Overall Strength of Relationship (OverSOR) and Training, Teaching, Learning Strength of Relationship (TLSOR) as two separate constructs in the data was completed. Conflict categories were derived from the data, and district-level areas of agreement and disagreement were constructed from the data for use in analyses.

Data Analysis

Sample Size

The size of the Population was $N = 1052$, that is, the total number of districts in Michigan ($N = 526$ districts \times 2 respondents from each district). The researcher tabulated the Complete responses ($n_{\text{complete}} = 397$) and Partial responses ($n_{\text{partial}} = 675$). Complete was defined as all questions on the survey instrument being fully answered. Partial was defined as some but not all questions on the survey instrument responded to in full. Also tabulated were the

number of districts where both the superintendent and the board president responded completely, Paired responses (n = 86), and the number of districts where at least one of the pair responded completely (n = 308). Three districts were dropped from the Paired data set because they fell into the None category, and so few responses in this category did not permit effective analysis.

Statistical Analyses

Descriptive statistical analyses (e.g., descriptive summaries, frequency tabulation, and cross tabulation) were initially carried out to describe the sample of respondents in terms of Complete and incomplete status, Paired responses, conflict levels, and demographic characteristics. Descriptive analyses were used to identify unusual data points for the key analysis variables that might have had an influence on any subsequent analyses.

The following statistical analyses of the data were then performed in order to test the hypotheses proposed earlier in this chapter:

Hypothesis 1: Evaluation Method. Method of evaluation of the superintendent is a significant indicator (either positive or negative depending on the type of evaluation) of the strength of relationship between school board and superintendent. In order to test Hypothesis

1, means were computed on the six Strength of Relationship variables for respondents claiming each evaluation method, and the means were then compared using one-way Analysis of Variance (ANOVA). General linear models were then fitted to the data in order to compare the means for the different evaluation methods while adjusting for other factors that might have influenced the scores on each Strength of Relationship outcome. Standard assumptions behind the general linear regression model were assessed in all cases, and appropriate transformations were conducted when necessary using Box-Cox (Box & Cox, 1964) methodology. Hypothesis 1 would be supported if the means on the strength of relationships variables were to differ significantly between the different methods of evaluation when controlling for other likely predictors of strength of relationship.

Hypothesis 2: Conflict Levels. Low levels of conflict between the board and the superintendent correlate with Data-driven evaluation type and Pluralistic political climate type. In order to test Hypothesis 2, four separate logistic regression analyses were conducted, considering the four dummy variables indicating the four types of conflicts (Money, Roles, Other, and No Conflict) as dependent variables and the self-reported evaluation type, the self-reported

political type (PolID), and district-level variables (e.g., size, per-pupil expenditure, socioeconomic status, and student achievement) as predictor variables. Hypothesis 2 would be supported if data-driven evaluation type and pluralistic political type were to predict higher odds of No Conflict and lower odds of Money, Roles, and Other types of conflict.

Hypothesis 3: Agreement, Overall Strength of Relationship (OverSOR), and MEAP. High levels of agreement and higher Overall Strength of Relationship (OverSOR) between the board and the superintendent correlate with higher district student achievement (MEAP passing rate). In order to test Hypothesis 3, the correlation between the total number of disagreements between the board president and superintendent and the district-level MEAP score was assessed in the district-level (Paired) data file described earlier. Similarly, the average of the Overall Strength of Relationship variable (OverSOR) was computed for each Paired district (both the board president and superintendent reporting), and the correlation of the MEAP score with the average Overall Strength of Relationship variable was assessed. A linear regression model was then fitted to the district-level data, considering the MEAP score as the dependent variable, and

the average Overall SOR, total number of disagreements, and other likely district-level predictors of MEAP performance as independent variables. As in Hypothesis 1, standard linear regression modeling assumptions and diagnostics were assessed, and appropriate measures were taken if there were violations of the assumptions. Hypothesis 3 would be supported if the relationship between the MEAP score and the total number of disagreements were estimated to be negative and statistically significant in the regression model when controlling for other district-level predictors and if the relationship between the average Overall SOR variable and MEAP score were positive and statistically significant in the regression model.

Summary

In this chapter, the researcher discussed the three hypotheses, research questions, and the research design. Construction of the survey instrument and tests for internal validity were detailed. The variables in the study and procedures for the collection of data were reported. Sample-size characteristics and a report on the construction of certain variables from the raw data preceded analysis objectives, and measures were reported for each hypothesis.

In the next chapter, data collected during the survey period will be analyzed in terms of the stated hypotheses and research questions and reported as *Results*.

Chapter 4: Presentation of Data Analysis

Introduction

In the midst of a dramatically changing educational paradigm, from universal access and opportunity to universal proficiency (Houston, 2004b), our nation has begun to view school leadership as a catalyst for student achievement. In this context the researcher needed to inquire into the nature of leadership in the districts and into what that implied in terms of proficiency.

This chapter not only reports what the researcher found as the demographic reality related to the research questions but also applies the Strength of Relationship Scale to the hypotheses posed in this study. Chapter 5 reports the results of analyses surrounding each of the three hypotheses. The introductory section restates the three hypotheses and their concomitant analysis objectives and summarizes the main results. Variables are defined, and the sample is described. Bivariate correlations between Independent and Dependent variables are reported. Next, in terms of Analysis Objective 1, the nature of Strength of Relationship (SOR) in relation to the predictor variables of interest is reported in detail. A section on the nature of conflict and

levels of Agreement encompasses Analysis Objectives 2 and 3. The fourth section examines the nature of Strength of Relationship (SOR) in relation to student achievement (MEAP) as suggested by Analysis Objective 4. Finally, the hypotheses are restated with the apparent specific results summarized. A Glossary of Statistical Terms can be found as Appendix J as a ready reference.

Hypotheses, Analysis Objectives, and Results

Prior research suggested three hypotheses that guided this study. In order to investigate the three hypotheses, the researcher established four analysis objectives. These are summarized here with the major findings, which are detailed later in the chapter. Two data sets were used. The *Complete* data set was defined as responses wherein all variables in the survey questionnaire were answered in full with no missing data. The *Paired* data set was derived from the Complete data set wherein both the superintendent and the board president from the district responded in full.

Hypothesis 1

Hypothesis 1: Evaluation Method. The method of evaluation of the superintendent is a significant indicator (either positive or negative depending on the type of evaluation) of the strength of

relationship between school board and superintendent (AASA and NSBA, 1980; AASA, 1992).

Analysis Objective 1: Compare evaluation type (EvalID), political type (PolID), and demographic variables in terms of means on Overall Strength of Relationship (OverSOR) and the six Strength of Relationship subscales: Evaluation (Evalsor), Political Climate (Polsor), Conflict (Confsor), Superintendent's Influence (Gensor), Teaching and Learning (TLsor), and Training (Trainsor).

This analysis was performed with the use of the Complete data set. The finding was that when pluralistic board interaction was paired with data-driven superintendent evaluation, Strength of Relationship increased approximately two-fold in most cases. Furthermore, the stronger the superintendent's influence on the district, the higher the student achievement. The operating budget and the size of the district had little impact on Overall Strength of Relationship.

Hypothesis 2

Hypothesis 2: Conflict Levels. Low levels of conflict between the board and the superintendent correlate with the Data-driven evaluation type and the Pluralistic political climate type (Cuban, 1998; Lashway, 2002a; Ondrovich, 1997; Purdy, 2002).

Analysis Objective 2: Determine what type of conflict groups with what evaluation type (EvalID) and political climate type (PolID).

This analysis was performed with the use of the individual Complete data set. Political climate type emerged as a strong predictor of conflict level. Boards that work together in a pluralistic manner are 87–93% less likely to report conflict. When pluralistic political climate paired with data-driven evaluation, conflict decreased even more and student achievement passing rate was higher.

When conflict was reported, it centered first on role definition and fulfillment and second on financial issues. The most frequently reported conflict focused on staff negotiations, an issue that spans both role definition and financial considerations, as well as external (local, state, federal) and internal forces.

Hypothesis 3

Hypothesis 3: Agreement, Overall Strength of Relationship (OverSOR), and Student Achievement (MEAP). High levels of agreement and higher Overall Strength of Relationship (OverSOR) between the board and the superintendent correlate with higher Michigan Education Assessment Program (MEAP) passing rates.

Analysis Objective 3: Determine where board presidents and superintendents agree and disagree (on selected variables) and correlate that with district-level indicators.

This analysis was performed with the use of the district-level Paired data set. The finding was that the lower the level of disagreement between the board and the superintendent, the higher the MEAP passing rate. This remained the case regardless of district size, per-pupil expenditure, or socioeconomic status.

Analysis Objective 4: Determine the relationship of Overall Strength of Relationship with MEAP passing rate (student achievement) and other district variables.

This analysis was performed with the use of the district-level Paired data set. The finding was that the higher the Overall Strength of Relationship between the board and superintendent, the higher the MEAP passing rate. This remained the case regardless of district size, per-pupil expenditure, or socioeconomic status. Student achievement was shown to be as much as 3-4 times higher in districts exhibiting a pluralistic political type in conjunction with a data-driven superintendent evaluation method.

In consideration of these summarized main results, the researcher now reports the details of these findings.

Variables

The dependent variables for Analysis Objective 1 were Strength of Relationship (sor) for the six subgroups Evaluation (Evalsor), Conflict (Confsor), Political (Polsor), General (Gensor), Training (Trainsor), Teaching & Learning (TLsor), and Overall (OverSOR). Analysis Objective 2 considered four binary indicators of certain types of conflict (Money, Roles, Other, No Conflict) as dependent variables, while Analysis Objective 3 used amount of disagreement as the dependent variable (Disagreement). Analysis Objective 4 used Michigan Education Assessment Program (MEAP) scores as a dependent variable.

The independent variables posited to have a relationship with the dependent were type of evaluation (EvalID_m and its components A = Global, B = Judgment, C = Data-driven, and D = None), political climate type (PolID and its components E = Dominated, F = Factional, G = Pluralistic, and H = Inert), district size as measured by headcount (Size), per-pupil expenditure (Operating\$), socioeconomic status as measured by free and reduced-priced lunch calculations (SES), student

achievement as measured by MEAP passing rate (this variable was both independent and dependent depending on the analysis objective), age of respondent (Age), and gender of respondent (Gender). Table 3 depicts these variables in an overview format.

Table 3

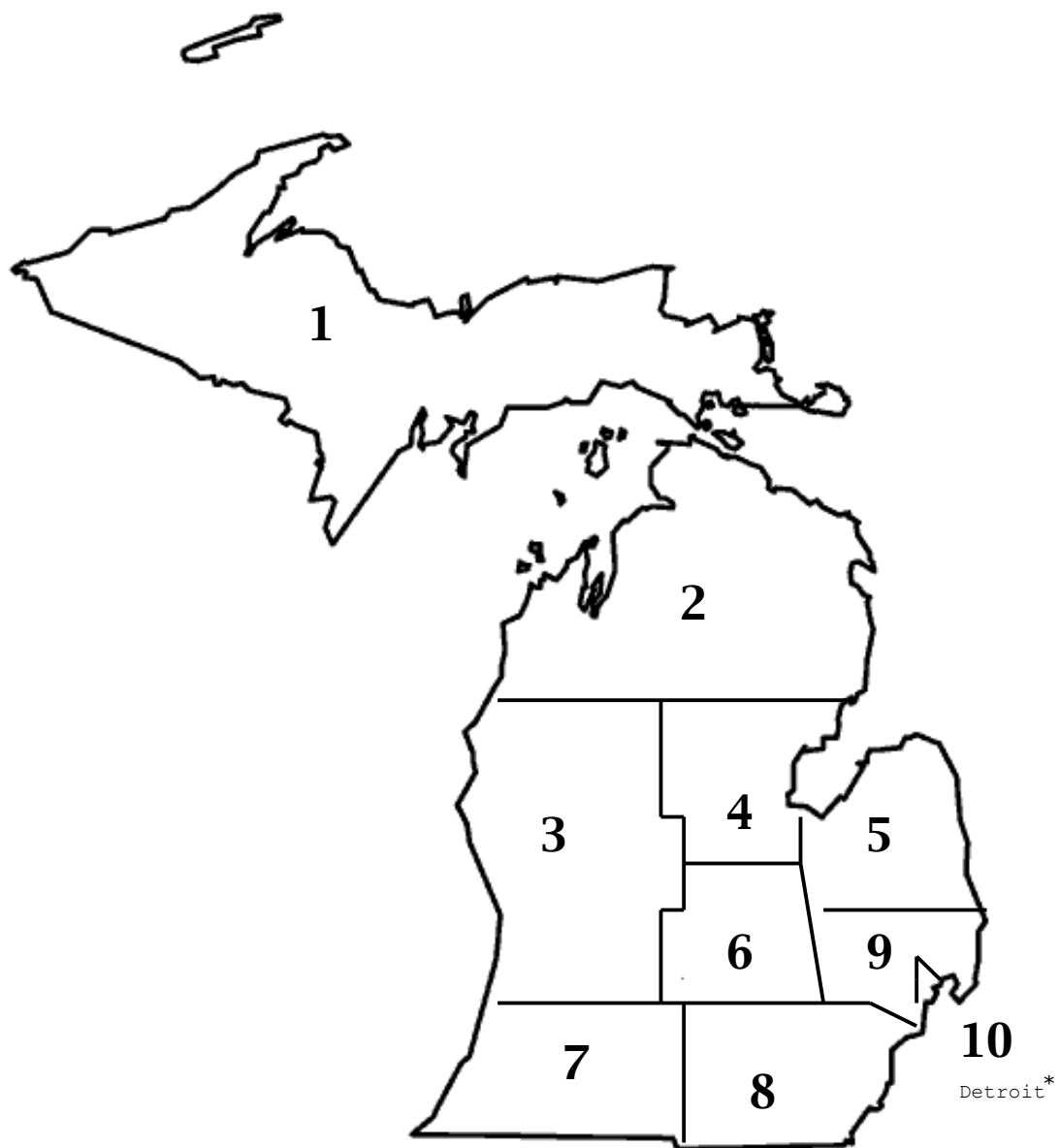
Analyses Variables and the Associated Objectives

Dependent variables/objective #	Independent variables
Evalsor / 1	EvalID
Confsor / 1	PolID
Polsor / 1	Size
Gensor / 1	\$ / pupil
Trainsor / 1	SES
TLsor / 1	MEAP
OverSOR / 1,2,3,4	Age
Money / 2	Gender
Role / 2	
Other / 2	
No Conflict / 2	
Disagreement / 3	
MEAP / 4	

Sample Descriptive Statistics

Characteristics of the Population

All public school district superintendents and board presidents (N = 526 school districts, N = 1052 potential respondents) were invited to respond to the online survey. The Michigan Association of School Administrators (MASA) has identified and designated ten regions for purposes of organizing the large number of school districts in a conceptual working model. Figure 2 depicts the ten MASA Regions. Appendix I identifies the counties that compose each region.



* MASA designates Detroit as its own region, which was not reported in this study.

Figure 2. Michigan Association of School Administrators regional designations.

Sample Size and Representation

No attempt was made to preselect a sample. A self-selected sample ($n = 1047$, 99.5%) responded to the survey, and all Partial responses ($n_{\text{partial}} = 650$, 62.1%) and Complete responses ($n_{\text{complete}} = 397$, 37.9%) were tabulated. A Complete response meant that all 153 variables contained in 55 questions on the survey were responded to in full with no missing data, while all Partial responses had missing data on one or more variables.

Complete responses included Board Presidents ($n_{\text{board}} = 165$, 41.6%) and Superintendents ($n_{\text{super}} = 232$, 58.4%) from a majority of districts in the state ($n_{\text{districts}} = 308$, 59%). Seven districts were not considered in the analysis because they were too small for effective analysis, resulting in there being 300 districts for analysis. Responses were received from board presidents and superintendents in rural (291 responses, 73.3%), suburban (105 responses, 26.4%), and urban (1 response, 0.3%) districts. Districts where both the superintendent and the board president responded were referred to as Paired responses ($n_{\text{paired}} = 86$, 28.6%).

Small Case Sets Eliminated

The final analyses eliminated cases reporting evaluation type "D" (None, 3 responses) and political type "E" (Dominated, 4 responses), as there were too few cases to analyze effectively. Only Complete cases were used ($n_{\text{complete}} = 390$ respondents, $n_{\text{districts}} = 300$ districts, $n_{\text{paired}} = 86$ pairs).

Chi-square Test

A Chi-square test was used to determine if the sample distribution in terms of districts ($n_{\text{districts}} = 308$), based on the Complete data set ($n_{\text{districts}} = 300$), mirrored what was expected based on the distribution of districts in the MASA population. A Chi-square test is a nonparametric test of statistical significance appropriate when data are in the form of frequency counts; it compares frequencies actually observed with expected frequencies to see if they are significantly different (Agresti & Finlay, 1997). Figure 3 reports the results of a Chi-square test comparing the observed district counts in the nine regions of interest with expected district counts based on the population distribution. Figure 4 graphically depicts the close relationship of the sample to the population. The Chi-square statistic was not significant, suggesting that the observed sample distribution

of districts was statistically no different from what was expected on the basis of the population distribution.

Region

	Observed N	Expected N	Residual
1.00	26	32.4	-6.4
2.00	39	34.5	4.5
3.00	49	48.3	.7
4.00	28	22.8	5.2
5.00	36	31.8	4.2
6.00	20	21.9	-1.9
7.00	32	36.6	-4.6
8.00	31	28.5	2.5
9.00	39	43.2	-4.2
Total	300		

Test Statistics

	region
Chi-Square ^a	4.973
df	8
Asymp. Sig.	.761

- a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 21.9.

Figure 3. Chi-square test of the sample versus the population.

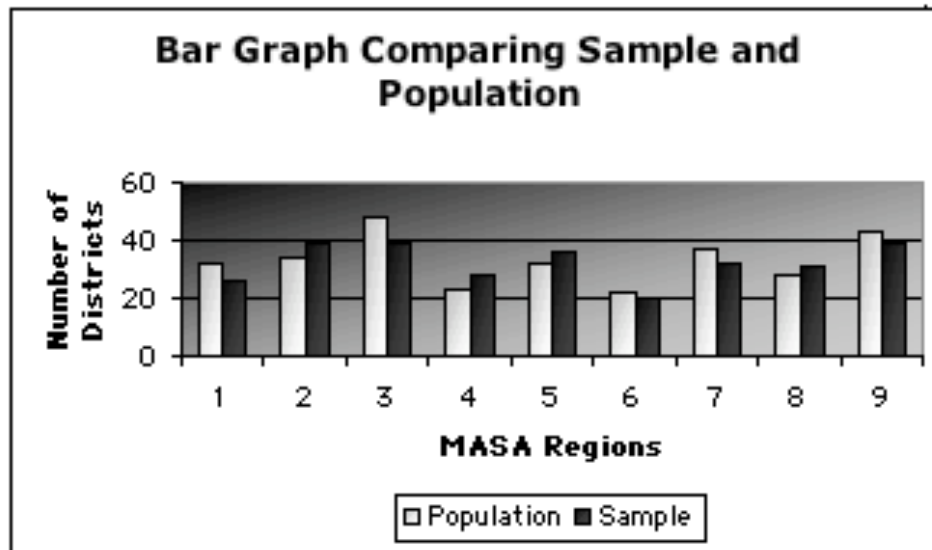


Figure 4. Bar graph of the sample relative to the population by MASA region, depicting an evenly distributed and representative sample of school districts.

On the basis of the results of the Chi-square test, the 37.9% Complete response rate was a representative sample population. The researcher made the decision to use only Complete responses for this analysis, as the Complete data provided an evenly distributed and representative sample of the entire state by region and district size from which the researcher might generalize with confidence.

Bivariate Analysis Results

A Bivariate Correlation Analysis yields a correlation coefficient, symbolized by the letter r , indicating the degree of relationship that exists between scores on two variables (Agresti & Finlay, 1997). Table 4 specifies the results of the Bivariate Correlation Analysis for Overall Strength of Relationship and the six subgroups (Evalsor, Confsor, Polsor, Gensor, Tlsor, and Trainsor) that was conducted with district-level data as independent variables. Three distinctions became clear.

- First, the *lower* the socioeconomic status of a school district was, the *lower* the Overall Strength of Relationship and all six subgroups were.

- Second, the *higher* the Strength of Relationship in all subgroups was, the *higher* the student achievement as measured by the MEAP passing rate were.
- Furthermore, the *larger* the district size was, the *stronger* were the Conflict Strength of Relationship, Political Strength of Relationship, Teaching and Learning Strength of Relationship, and Training Strength of Relationship.

These results are depicted in Table 4.

Table 4

Bivariate Correlation Analysis Results

VARIABLES Dependent ↓	Independent →			
	Size of district	SES	Per-pupil expenditure	MEAP
Evaluation sor	none	$r = -.108, p = .033$	none	$r = .147, p = .004$
Conflict sor	$r = .104, p = .041$	$r = -.120, p = .018$	none	$r = .195, p = .000$
Political sor	$r = .157, p = .002$	$r = -.192, p = .000$	none	$r = .223, p = .000$
General sor	none	$r = -.188, p = .000$	none	$r = .268, p = .000$
Teach/Learn sor	$r = .210, p = .000$	$r = -.215, p = .000$	none	$r = .239, p = .000$
Training sor	$r = .177, p = .000$	$r = -.176, p = .001$	none	$r = .114, p = .026$
Overall SOR	none	$r = -.145, p = .004$	none	$r = .233, p = .000$

Correlation coefficients (r) and associated p-values (p) are reported in Table 4.

*Relation of Predictor Variables
with Strength of Relationship (SOR) Variables*

Analysis Objective 1: Compare evaluation type (EvalID), political type (PolID), and demographic groups in terms of means on Overall Strength of Relationship (OverSOR), and the six Strength of Relationship subscales: Evaluation (Evalsor), Political Climate (Polsor), Conflict (Confsor), Superintendent's Influence (Gensor), Teaching and Learning (TLsor), and Training (Trainsor).

The first section on Evaluation Strength of Relationship will define statistical terminology as they are used. The following sections will not define these tests and terminology repeatedly. Appendix J: Glossary of Statistical Terminology serves as a reference for the later sections.

Evaluation strength of relationship modeling results. The Evaluation Strength of Relationship (Evalsor) outcome variable was considered in a multiple linear regression model with the aforementioned independent variables as predictors. A linear regression model is a statistical technique using a prediction equation

with two or more variables in combination to predict a criterion (Agresti & Finlay, 1997).

Fitting the initial model resulted in evidence of a violation of the normality assumption for the model residuals, as observed in the Normal Q-Q Plot of Standardized Residuals. Normality Assumptions consist of two aspects: (a) Constant Variance, or the same value for all individual cases within the extent to which scores differ from one another and (b) Normality of the Residuals, or a theoretical *bell shaped* distribution as found in *typical* populations (Agresti & Finlay, 1997). As a result, Box-Cox methodology (Box & Cox, 1964) was used in the SAS software package (PROC TRANSREG) to determine a reasonable transformation of the response variable. Box-Cox methodology proposes algorithms for estimating optimal transformations for the achievement of normality of assumptions (Agresti & Finlay, 1997). The most reasonable transformation of the data to meet model assumptions based on the Box-Cox method was an $(X+1)^3$ transformation (add 1 to the outcome, and cube the result). Refitting the model with the transformed outcome variable resulted in satisfaction of all key assumptions behind the regression model (i.e., constant variance and normality of the residuals).

Political type, evaluation type, and the interaction between the two were found to have significant relationships with Evaluation Strength of Relationship when adjusting for all of the other independent variables in the multivariable model, as indicated in Table 5. The observed power of the sample to detect these effects was strong for each of these factors, with the standard being 80%. The *power* of a test is the probability that the null hypothesis will be rejected when there is a difference in the populations or the ability of a test to avoid Type II error (Agresti & Finlay, 1997).

Table 5

*Significant Effects on Evaluation Strength of Relationship (Evalsor)**

<u>Variable</u>	<u>F value**</u>	<u>P value</u>	<u>Power</u>
Political type	F (2,368)=13.453	p=.000	.998
Evaluation type	F (2,368)= 5.782	p=.003	.868
Interaction between Political type and Evaluation type	F (4,368)= 2.901	p=.022	.781

* Nonsignificant results are not reported but were still considered in the model.

**Large effect = Large F

Pairwise multiple comparisons (a numerical index describing the relationship between predicted and actual scores using multiple regressions; the correlation between criterion and the *best combination* of predictors) of the estimated Evaluation Strength of Relationship (Evalsor) means in the political type (PolID) groups (Factional, Pluralistic, Inert) based on the regression model (with a Bonferroni adjustment to the significance level of 0.05 (refer to Appendix J for explanation of this adjustment) indicated the following:

- Significant differences were indicated between Pluralistic political type and both Factional (diff = -3.252, p = .005) and Inert (diff = 1.729, p=.020) political types.
- The mean in the Pluralistic group was higher than the mean in either the Factional or Inert groups.
- Pluralistic political type had a significantly higher mean Evaluation Strength of Relationship score than either Factional or Inert.

Pairwise multiple comparisons of the estimated Evaluation Strength of Relationship means in the evaluation type (EvalID) groups (Global, Judgment, Data-driven) based on the regression model (with a

Bonferroni adjustment to the significance level of 0.05) indicated the following:

- There was a significant difference between Global and Judgment (diff = -1.701, $p = .005$) where the mean for evaluation type Judgment was higher than the mean for evaluation type Global.
- The significant negative difference indicated that Global evaluation type had lower Evaluation Strength of Relationship in all cases in relation to Judgment evaluation type.
- In all cases, Pluralistic political type and Data-driven evaluation type were estimated to have the highest Evaluation Strength of Relationship means. However, due to the amount of variability in these estimates, these means were not found to be significantly different from the means in the other groups.
- Also significant was the interaction between how the board works together (political climate type) and how the board evaluates the superintendent (evaluation type). When combined, the two factors became highly predictive of Evaluation Strength of Relationship.

Figure 5 depicts the estimated marginal means of the transformed Evaluation Strength of Relationship (t_Evalsor) variable. Pluralistic political type (G) was consistently higher with every evaluation type.

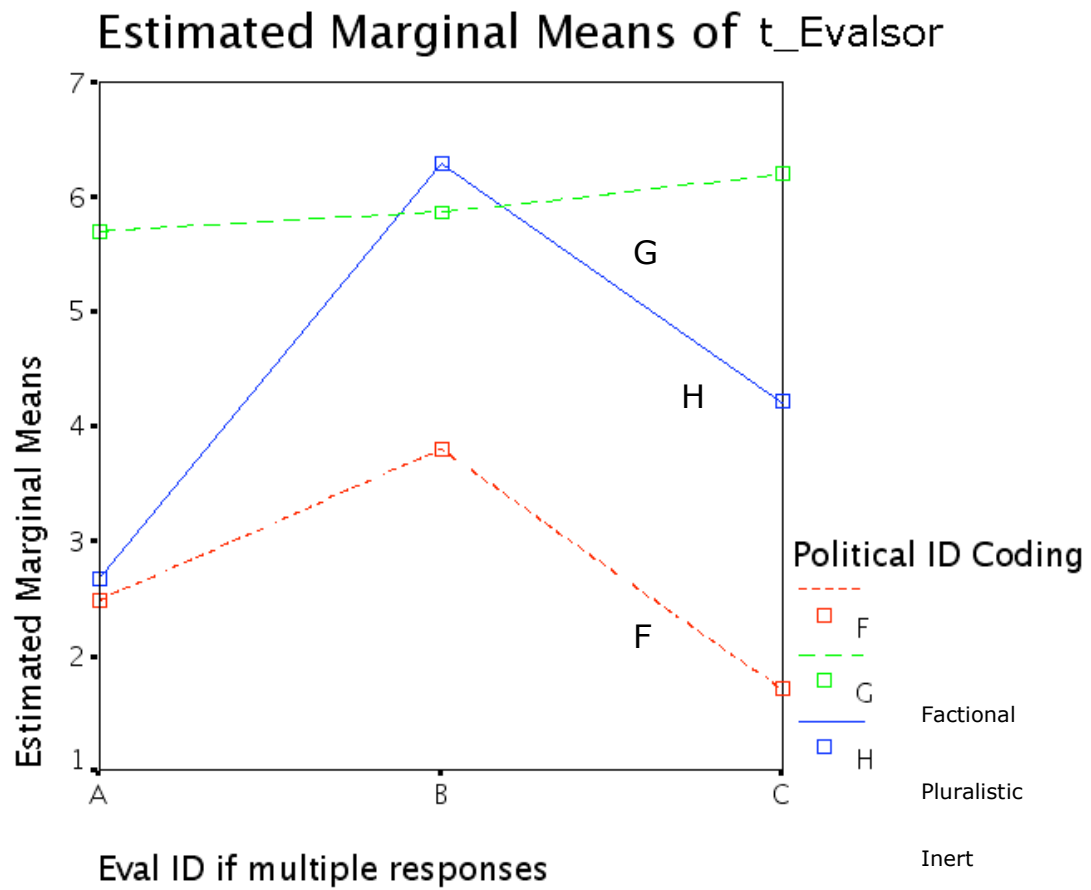


Figure 5. Estimated marginal means of transformed Evaluation Strength of Relationship (t_Evalsor).

Conflict strength of relationship modeling results. The Conflict Strength of Relationship (Confsor) outcome variable was considered in a multiple linear regression model with the aforementioned (Table 3, p. 121) independent variables as predictors. Fitting the initial model resulted in evidence of a violation of the normality assumption for the model residuals. The most reasonable transformation of the data to meet model assumptions based on the Box-Cox method was an $(X+1)^{1.75}$ transformation (add 1 to the outcome, and raise the result to the power of 1.75). Refitting the model with the transformed outcome variable resulted in satisfaction of all key assumptions behind the regression model (i.e., constant variance and normality of the residuals).

Political type, evaluation type, and the continuous variable for student achievement (MEAP) ($B = 0.012$, $p = .041$) were found to have significant relationships with Conflict Strength of Relationship when adjusting for all of the other independent variables in the multivariable model, as indicated in Table 6. The observed power of the sample to detect these effects was strong for the political type factor and weak for both evaluation type and MEAP (student achievement), with the standard being 80%.

Table 6

*Significant Effects on Conflict Strength of Relationship (Confso)**

<u>Variable</u>	<u>F value**</u>	<u>P value</u>	<u>Power</u>
Political type	(2,368) = 28.113	.000	1.000
Evaluation type	(2,368) = 2.908	.056	.566
Student achievement	(1,368) = 4.202	.041	.534

* Nonsignificant results are not reported but were still considered in the model.

**Large effect = Large F

Pairwise multiple comparisons of the estimated Conflict Strength of Relationship (Confsor) means in the political type (PolID) groups (Factional, Pluralistic, Inert) based on the regression model (with a Bonferroni adjustment) indicated the following:

- A significant difference was indicated between Pluralistic political type and both Factional (diff = -1.728, p = .000) and Inert (diff = .993, p = .000) political types where the mean in the Pluralistic group was higher than the means in the Factional and Inert groups.
- Pluralistic political type had significantly higher level of Conflict Strength of Relationship (lower levels of conflict) than either Factional or Inert.

Pairwise multiple comparisons of the estimated Conflict Strength of Relationship (Confsor) means in the evaluation type (EvalID) groups (Global, Judgment, Data-driven) based on the regression model (with a Bonferroni adjustment to the significance level of 0.05) indicated the following:

- A borderline significant difference was indicated between Global evaluation type and Judgment evaluation type (diff = -.506, p =

.049) where the mean for Judgment evaluation type was higher than the mean for Global evaluation type.

- In terms of Conflict Strength of Relationship, Judgment evaluation type had consistently lower levels of conflict than Global evaluation type.
- In all cases, Data-driven evaluation type was estimated to have the highest Conflict Strength of Relationship means, and Global evaluation type was always lowest for all types of evaluation. However, due to the amount of variability in these estimates, these means were not found to be significantly different from the means in the other groups.
- Considering the MEAP passing rate (student achievement), the higher the Conflict Strength of Relationship was, the higher the MEAP passing rate was, or lower levels of conflict indicated higher student achievement.

Political strength of relationship modeling results. The Political Strength of Relationship (Polsor) outcome variable was considered in a multiple linear regression model with the aforementioned independent variables as predictors. Fitting the initial model resulted in evidence of a violation of the normality assumption for the model

residuals. The most reasonable transformation of the data to meet model assumptions based on the Box-Cox method was an $(X+1)^2$ transformation (add 1 to the outcome, and raise the result to the power of 2). Refitting the model with the transformed outcome variable resulted in satisfaction of all key assumptions behind the regression model (i.e., constant variance and normality of the residuals).

Political climate type, evaluation type, and the continuous predictor variable indicating district Size ($B = 0.00005$, $p = .045$) were found to have significant relationships with Political Strength of Relationship when adjusting for all of the other independent variables in the multivariable model, as indicated in Table 7. The observed power of the sample to detect these effects was strong for the political climate type factor and acceptable for the evaluation type and Size factors, with the standard being 80%.

Table 7

*Significant Effects on Political Strength of Relationship (Polsor)**

<u>Variable</u>	<u>F value**</u>	<u>P value</u>	<u>Power</u>
Political type	(2,368) = 16.205	.000	1.000
Evaluation type	(2,368) = 3.970	.020	.710
Size of district	(1,368) = 4.029	.045	.517

* Nonsignificant results are not reported but were still considered in the model.

**Large effect = Large F

Pairwise multiple comparisons of the estimated Political Strength of Relationship (Polsor) means in the political type (PolID) groups (Factional, Pluralistic, Inert) based on the regression model (with a Bonferroni adjustment) indicated the following:

- A significant difference was indicated between Pluralistic political climate type and both Factional (diff = 2.645, $p < .001$) and Inert (diff = 1.809, $p < .001$) political types with the mean in the Pluralistic group being higher than the mean in the Factional and Inert groups.
- Recognizing that the power to predict this effect was not strong, Pluralistic political type had a significantly higher level of Political Strength of Relationship than either Factional or Inert.

Pairwise multiple comparisons of the estimated Political Strength of Relationship (Polsor) means in the evaluation type (EvalID) groups (Global, Judgment, Data-driven) based on the regression model (with a Bonferroni adjustment to the significance level of 0.05) indicated the following:

- A significant difference was indicated between Global evaluation type and Judgment) (diff = -1.223, $p = .022$), where the mean for Judgment evaluation type was higher than the mean for Global

evaluation type. In terms of Political Strength of Relationship, Judgment evaluation type was consistently stronger than Global evaluation type.

- In all cases, Pluralistic political type and Data-driven evaluation type were estimated to have the highest Political Strength of Relationship means, and Factional political type was always lowest for all types of evaluation. However, the means for Data-driven evaluation type were not found to be significantly different from the means in the other evaluation type groups.
- Recognizing that the power to detect the Size effect was marginal, whether a district was rural, suburban, or urban had a significant positive effect on the Political Strength of Relationship. This suggests that larger districts tend to have higher Political Strength of Relationship.

General strength of relationship modeling results. The General Strength of Relationship (Gensor) outcome variable (the strength of the influence of the superintendent on the district) was considered in a multiple linear regression model with the aforementioned independent variables as predictors. Fitting the initial model, with the removal of one outlier, resulted in satisfaction of all key assumptions

behind the regression model (i.e., constant variance and normality of the residuals).

Political climate type and continuous variables Per-Pupil Expenditure (Operating\$) ($B = 0.00005$, $p = .040$) and Student Achievement (MEAP) ($B = 0.009$, $p = .009$) were found to have significant relationships with General Strength of Relationship when adjusting for all of the other independent variables in the multivariable model, as indicated in Table 8. The observed power of the sample to detect these effects was strong for the political type factor and within acceptable parameters for the per-pupil expenditure and student achievement factors, with the standard being 80%.

Table 8

*Significant Effects on General Strength of Relationship (Gensor)**

<u>Variable</u>	<u>F value**</u>	<u>P value</u>	<u>Power</u>
Political type	(2,367) = 11.988	.000	.995
Per-pupil expenditure	(1,367) = 4.240	.040	.537
Student achievement	(1,367) = 6.909	.009	.746

* Nonsignificant results are not reported but were still considered in the model.

**Large effect = Large F

Pairwise multiple comparisons of the estimated General Strength of Relationship means in the political type groups (Factional, Pluralistic, Inert) based on the regression model (with a Bonferroni adjustment) indicated the following:

- A significant difference was indicated between Pluralistic political type and both Factional (diff = .707, $p < .001$) and Inert (diff = .418, $p = .008$) political types, with the mean in the Pluralistic group being higher than the mean in either the Factional or Inert groups.
- Pluralistic political type had a significantly higher level of General Strength of Relationship (stronger influence by the superintendent on the district) than either the Factional or Inert groups.
- In all cases, respondents reporting Pluralistic political type had higher means on General Strength of Relationship than did the other two political climate types. When respondents reported Data-driven evaluation type with Pluralistic political type, the means were approximately 3.5 times higher. Inert was always lowest.

- In terms of per-pupil expenditure, the more money a district has to spend in its operating budget, the higher the influence of the superintendent is.
- In terms of student achievement (MEAP passing rate), the stronger the influence of the superintendent was, the higher the student achievement was.

Teaching and learning strength of relationship modeling results.

The Teaching and Learning Strength of Relationship (TLsor) outcome variable (higher Tlsor relates to the *authentic* teaching and learning style, per Newman and Wehlage, 1995) was considered in a multiple linear regression model with the aforementioned independent variables as predictors. Fitting the initial model resulted in satisfaction of all key assumptions supporting the regression model (i.e., constant variance and normality of the residuals).

The continuous variable Size of District ($B = 0.00002$, $p = .002$) was found to have a significant relationship with Teaching and Learning Strength of Relationship when adjusting for all of the other independent variables in the multivariable model, as indicated in Table 9. The observed power of the sample to detect this effect was strong, with the standard being 80%.

Table 9

*Significant Effects on Teaching and Learning Strength of Relationship (TLsor)**

<u>Variable</u>	<u>F value**</u>	<u>P value</u>	<u>Power</u>
Size of district	(1,367) = 9.325	.002	.861

* Nonsignificant results are not reported but were still considered in the model.

**Large effect = Large F

The findings indicated that

- In terms of the effect of Size of District on Teaching and Learning Strength of Relationship, a positive significant relationship indicated that the larger the district was, the higher the Teaching and Learning Strength of Relationship was, or the higher the level of *authenticity* of teaching and learning was as defined by Newman and Wehlage (1995).
- Means of all political types increased when combined with Data-driven evaluation type, (e.g., Inert political type was approximately two times higher when combined with Pluralistic evaluation type).

Training strength of relationship modeling results. The Training Strength of Relationship (Trainsor) outcome variable was considered in a multiple linear regression model with the aforementioned independent variables as predictors. Fitting the initial model resulted in satisfaction of all key assumptions behind the regression model (i.e., constant variance and normality of the residuals).

Age of Board Member and the continuous variable socioeconomic status (SES) ($B = -0.05$, $p = .002$) were found to have significant relationships with Training Strength of Relationship, and

continuous variable per-pupil expenditure ($B = 0.0004$, $p = .056$) was found to have a borderline significant relationship with Training Strength of Relationship when adjusting for all of the other independent variables in the multivariable model, as indicated in Table 10. The observed power of the sample to detect these effects was strong for the Age and SES factors and was borderline for per-pupil expenditure, with the standard being 80%.

Table 10

*Significant Effects on Training Strength of Relationship (Trainsor)**

<u>Variable</u>	<u>F value**</u>	<u>P value</u>	<u>Power</u>
Age	(4,363) = 2.914	.021	.783
Per-pupil expenditure	(1,363) = 3.684	.056	.482
SES	(1,363) = 9.650	.002	.872

* Nonsignificant results are not reported but were still considered in the model.

**Large effect = Large F

The findings indicated that

- In terms of Age, the younger the board member was, the higher the Training Strength of Relationship was, or the more likely board members were to receive training in boardsmanship.
- The higher the per-pupil expenditure was, the higher the Training Strength of Relationship was, or the higher the operating budget was, the more likely board members were to receive training in boardsmanship.
- The lower the socioeconomic status of the district was, the lower the Training Strength of Relationship was, or the less likely board members were to receive training in boardsmanship.

Overall Strength of Relationship modeling results. The Overall Strength of Relationship (OverSOR) outcome variable was considered in a multiple linear regression model with the aforementioned independent variables as predictors. The most reasonable transformation of the data to meet model assumptions based on the Box-Cox method was an $(X+1)^{1.75}$ transformation (add 1 to the outcome, and raise the result to the power of 1.75). The researcher made the decision to add 4 rather than 1 because a score of -3 was possible on this scale. The transformation was adjusted to

$(X + 4)^{1.75}$. Refitting the model with the transformed outcome variable resulted in satisfaction of all key assumptions behind the regression model (i.e., constant variance and normality of the residuals).

Political type, evaluation type, and continuous variable student achievement (MEAP) ($B = 0.081$, $p = .005$) were found to have significant relationships with Overall Strength of Relationship when adjusting for all of the other independent variables in the multivariable model, as indicated in Table 11. The observed power of the sample to detect these effects was strong for both political type and student achievement and within acceptable parameters for evaluation type, with the standard being 80%.

Table 11

*Significant Effects on Overall Strength of Relationship (OverSOR)**

<u>Variable</u>	<u>F value**</u>	<u>P value</u>	<u>Power</u>
Political type	(2,367) = 30.527	.000	1.000
Evaluation type	(2,367) = 3.827	.023	.693
Student achievement	(1,367) = 7.929	.005	.802

* Nonsignificant results are not reported but were still considered in the model.

**Large effect = Large F

Pairwise multiple comparisons of the estimated Overall Strength of Relationship means in the political type (PolID) groups (Factional, Pluralistic, Inert) based on the regression model (with a Bonferroni adjustment) indicated the following:

- A significant difference was indicated between Pluralistic political type and both Factional (diff = 9.151, $p < .001$) and Inert (diff = 4.965 $p < .001$) political types, with the mean in the Pluralistic group being higher than the mean in either Factional or Inert groups.
- Pluralistic political type had a significantly higher level of Overall Strength of Relationship than either Factional or Inert.

Pairwise multiple comparisons of the estimated Overall Strength of Relationship means in the evaluation type (EvalID) groups (Global, Judgment, Data-Driven) based on the regression model (with a Bonferroni adjustment to the significance level of 0.05) indicated the following:

- A significant difference was indicated between Global evaluation type and Judgment (diff = -2.853, $p = .020$), where the means for Judgment evaluation type was higher than the means for Global evaluation type.

- Judgment evaluation type had consistently higher Overall Strength of Relationship means than did Global evaluation type.
- In all cases, Judgment evaluation type was estimated to have the highest Overall Strength of Relationship means except when combined with Pluralistic political type, in which case Data-driven evaluation type exhibited the highest means.
- In terms of student achievement (MEAP passing rate), the higher the Overall Strength of Relationship was, the higher the student achievement was.

The Nature of Conflict and Levels of Agreement

Analysis Objective 2: Determine what type of conflict groups with what evaluation type (EvalID) and political type (PolID).

The analyses of conflict type used the Complete subset of data wherein all survey questions were answered completely by the board presidents or the superintendents in the 301 districts ($n_{\text{complete}} = 390$ respondents). Conflict was reported in 120 cases, and No Conflict was reported in 266 cases. The remaining four cases had missing data on at least one of items considered in these analyses and were eliminated for this test. Table 12 depicts the broad range and frequency of

conflict reported, whereas Table 13 reports the grouping and frequency of conflict into four overarching conflict categories.

Table 12

Frequency of Conflict Type by Number of Citations

Conflict	Citations
Staff negotiations	112
Money	91
Roles	90
Hiring staff	61
Micromanagement	59
Communication	51
Leadership style	33
Discipline (staff & student)	29
Community	23
Athletics	22
Outside mandates	7
Schools of choice	5
Technology	4
Achievement	4
Total citations of conflict	591

Table 13

Conflict Types Grouped into Four Categories of Conflict

MONEY/citations		ROLES/citations		OTHER/citations		NONE/citations
Staff negotiations	112	Roles	90	Athletics	22	266
Money	91	Micromanagement	59	Mandates	7	
Hiring staff	61	Communication	51	Achievement	4	
Schools of choice	5	Leadership style	33	Technology	4	
		Discipline	29			
Total (Percentage of reported conflict)	269 (44.17%) <i>MONEY</i>	303 (49.75%) <i>ROLES</i>		37 (6.08%) <i>OTHER</i>		266(0%) <i>NONE</i>

Dummy variables indicating whether or not respondents reported the particular types of conflict identified in Table 13 (Money, Roles, Other, and No Conflict) were used to perform four separate multivariate logistic regression analyses. The dummy variables were evaluation and political types reported by the respondents and the district-level indicators as independent predictor variables (Size, SES, Operating\$, and MEAP).

Money conflict analysis results. Conflict over money matters defined 44.17 percent of all conflict citations, and the logistic regression analysis indicated that none of the predictor variables had a significant relationship with the likelihood of citing money conflict.

Role conflict analysis results. Conflict over roles defined 49.75 percent of all conflict citations, and political type was found to be a significant predictor of the likelihood of reporting Role conflict when controlling for the other predictors [Wald Chi-square (2) = 23.708, $p < 0.001$]. Respondents reporting Factional political type were about 11.6 times more likely than respondents reporting a Pluralistic political type to report role conflict [Odds Ratio (OR) = 11.611, 95% CI = (3.422, 39.405)]. Respondents reporting a Inert political type were

about 9.9 times more likely than those reporting Pluralistic political type to report role conflict [OR = 9.879, 95% CI = (2.188, 44.600)].

Other conflict analysis results. Other conflict defined 6.08 percent of all conflict citations, and no predictor variables were found to have a significant relationship with the odds of reporting other types of conflict.

No conflict analysis results. No Conflict was reported in 266 cases, and political type was found to be a significant predictor of the likelihood of reporting No Conflict when controlling for the other predictors [Wald Chi-square (2) = 10.225, $p = 0.006$]. Respondents reporting a Factional political type were about 93% less likely than respondents reporting Pluralistic political type to report No Conflict [Odds Ratio (OR) = 0.073, 95% CI = (0.010, 0.543)]. Respondents reporting Inert political type were about 87% less likely than those reporting Pluralistic political type to report No Conflict [OR = 0.130, 95% CI = (0.017, 1.003)].

Summary. The way a board works together and with its superintendent, also called the political type, was found to have a significant relationship with the odds of a board president or superintendent reporting either Role conflict or No Conflict. A

respondent in the Pluralistic political type was significantly *more* likely to report No Conflict and significantly *less* likely to report Role conflict. Table 14 depicts the Wald Chi-square statistics from the four categories of conflict models, and Table 15 depicts the Odds Ratios from the four categories of conflict models.

Table 14

Wald Chi-square Statistics from the Estimated Logistic Regression Models for the Four Categories of Conflict

	Money	Roles	Other	None
Data-driven	.953	.594	1.631	0.528
Pluralistic	.595	23.708*	.197	10.225*
Size of district	.011	2.486	2.582	1.407
SES	.062	.272	1.751	0.019
Per-pupil expenditure	1.498	1.140	.031	1.531
MEAP	1.410	2.031	.333	1.436

¹ Chi-square statistics have 2 df; remaining Chi-square statistics have 1 df.

* denotes $p < 0.001$

Table 15

Odds Ratios from the Estimated Logistic Regression Models for the Four Categories of Conflict*

	Money	Roles	Other	None
Global	0.085 (0.352, 1.838)	1.398 (0.582, 3.359)	4.125(0.465, 36.598)	0.801 (0.328, 1.960)
Judg- ment	1.087 (0.566, 2.085)	1.258 (0.628, 2.519)	3.469 (0.449, 26.798)	0.771 (0.382, 1.555)
Data- driven	ref	ref	ref	ref**
Faction	1.235(0.443, 3.445)	9.879(2.188, 44.600)	1.347 (0.278, 6.538)	0.130(0.017, 1.003)**
Plural	ref	ref**	ref	ref
Inert	0.780 (0.359, 1.692)	11.611(3.422, 39.405)**	0.845(0.185, 3.854)	0.073(0.010, 0.543)

* 95% Confidence Intervals (CI) have been included with the estimated odds ratios.

** Significant at $p < 0.05$

*The Nature of Overall Strength of Relationship (OverSOR) and
District-Level Variables and Disagreement*

Analysis Objective 3: Determine the levels of board president and superintendent agreement and disagreement, and correlate that with district level indicators.

This analysis used the Paired data set ($n_{\text{paired}} = 86$ districts), wherein both the superintendent and the board president from each district answered all variables completely. Disagreement was calculated on the basis of the comparison of responses of the board president and the superintendent on 28 variables. Appendix H identifies the specific variables considered in the analysis of Agreement/Disagreement. Both agreement and disagreement scores were calculated, representing the number of agreements and the number of disagreements for a given district.

A multiple regression model was fitted to the data considering the number of Disagreements as the continuous dependent variable. The average of the two Overall Strength of Relationship scores for the two respondents from the district (factor scores based on Evalsor, Polsor, Confsor, and Gensor, as described in Chapter 3), as well as other district-level variables, were used as independent predictors.

Fitting the initial model resulted in evidence of a violation of the constant variance assumption for the model residuals. The most reasonable transformation of the response data to meet model assumptions based on the Box-Cox method, was a square-root transformation, which is often appropriate for stabilizing variance in count variables (such as the total number of disagreements). Refitting the model with the transformed outcome variable resulted in satisfaction of all key assumptions behind the regression model (i.e., constant variance and normality of the residuals). A problem with multicollinearity was also observed in the initial model in that MEAP (student achievement) scores were highly correlated with district-level SES (socioeconomic status). As a result, MEAP scores were retained in the model, and district-level SES was removed.

The results of the regression analysis indicated the following:

- Overall Strength of Relationship (OverSOR) was highly correlated with the number of Disagreements reported when controlling for the other district-level predictors.
- Overall Strength of Relationship had a significant negative relationship with the transformed total number of Disagreements ($B = -0.257$, $p = .001$), suggesting that a higher

mean Overall Strength of Relationship tends to result in a lower number of disagreements.

- None of the other district-level predictors were found to be significantly correlated with the total number of disagreements, but it is worth noting that MEAP scores had a borderline significant relationship with the total number of disagreements ($B = -0.014$, $p = 0.103$). This suggests that higher MEAP scores also result in a lower number of disagreements.

The Nature of Student Achievement (MEAP) and Overall Strength of Relationship (OverSOR)

Analysis Objective 4: Determine the relationship of Overall Strength of Relationship (OverSOR) with student achievement (MEAP).

The adjusted Paired data set ($n_{\text{paired}} = 86$ districts), wherein both the board president and the superintendent answered all variables completely, was used to construct a multiple regression model. The data were fitted to the model in consideration of student achievement (MEAP) as the continuous dependent variable. Overall Strength of Relationship (OverSOR), a factor score based on EvalSOR, Polsor, Confsor, and Gensor, as described in Chapter 3, and other district-level variables (Size of District, SES, and per-pupil expenditure) were

modeled as independent predictors. The relationship between the average Overall Strength of Relationship reported by the respondents in the district and student achievement (MEAP) performance was estimated, controlling for other potential district-level predictors of MEAP performance. Fitting the initial model resulted in satisfaction of all key assumptions behind the regression model (i.e., constant variance and normality of the residuals).

Student achievement (MEAP) was found to have a significant positive relationship with Overall Strength of Relationship (OverSOR) ($B = 1.598$, $p = 0.024$) and a significant negative relationship with SES ($B = -0.411$, $p < 0.001$). Size of district was found to have a significant positive relationship with MEAP ($B = 0.0005$, $p = 0.014$) when adjusted for all of the other independent variables in the multivariable model.

In other words, the findings indicated that

- The higher the Overall Strength of Relationship was, the higher the student achievement was.
- The lower the socioeconomic status was, the lower the student achievement was.
- The larger the district size was, the higher the student achievement was.

A district achieved a high Overall Strength of Relationship by exhibiting (a) Data-driven methods of superintendent evaluation, (b) low levels of conflict, (c) pluralistic interaction among the board members, (d) high levels of influence by the superintendent, (e) authentic teaching and learning styles in classrooms, and (f) board members with more training. The closer a district came to this profile, the higher its MEAP passing rate was. Table 16 depicts the results of the regression analysis of student achievement (MEAP) with Overall Strength of Relationship (OverSOR) and the district-level predictors.

Table 16

Results of Regression Analysis of Student Achievement (MEAP) with Overall Strength of Relationship (OverSOR) and Other District Level Variables*

Variable	B	Std. error	Sig.
Overall SOR	1.598	.697	p = 0.024
SES	-.411	.049	p < 0.001
Size of district	0.0005	.001	p = 0.014

* Nonsignificant results are not reported but associated predictors were still considered in the model.

Hypotheses' Results Summarized

Hypothesis 1: Evaluation Method. Method of evaluation of the superintendent is a significant indicator (either positive or negative depending on the type of evaluation) of the strength of relationship between school board and superintendent. Findings were positive and more complex than suggested by Hypothesis 1.

Considering Overall Strength of Relationship (OverSOR) and its six subgroups (Evaluation, Conflict, Political Climate, Superintendent's Influence, Teaching and Learning Style, and Board Training), the following summarizes the results of the multiple linear regression analyses.

1. *Evaluation Strength of Relationship (Evalsor)* was significantly influenced by
 - a. Political climate type (PolID) [$F(2,368) = 13.453, p < 0.001$],
 - b. Evaluation method type (EvalID) [$F(2,368) = 5.782, p = .003$],
 - and
 - c. the interaction between the two factors (PolID*EvalID) [$F(4,368) = 2.901, p = .022$].

In all cases Pluralistic political type and Data-driven evaluation type were estimated to have the highest means. Pluralistic political type was

significantly higher than both Factional (diff = -3.252, $p < 0.001$) and Inert (diff = 1.523, $p = .020$). Judgment evaluation type was significantly higher than Global (diff = 1.701, $p = .005$).

2. *Conflict Strength of Relationship (ConfSor)* was significantly influenced by

- a. Political climate type (PolID) [$F(2,368) = 28.113, p < .001$],
- b. Evaluation method type (EvalID) [$F(2,368) = 2.908, p = .056$],

and

- c. Student achievement (MEAP, a continuous variable)

[$B = 0.012, F(1,368) = 4.202, p = .041$]. The higher the

Conflict Strength of Relationship was, the higher the student achievement was, or the lower the rate of Conflict was, the higher the MEAP passing rate was.

In all cases, Pluralistic political type and Data-driven evaluation type were highest, with Pluralistic political type being significantly higher than either Factional (diff = 1.728, $p < .001$) or Inert (diff = .993, $p < .001$).

3. *Political Strength of Relationship (Polsor)* was significantly influenced by

- a. Political climate type (PolID) [$F(2,368) = 16.205, p < .001$],
- b. Evaluation method type (EvalID) [$F(2,368) = 3.970, p = .020$],
and
- c. Size of District (continuous variable) [$B = 0.00005, F(1,368) = 4.029, p = .045$]. The larger the district was, the higher the Political Strength of Relationship was.

In all cases, Pluralistic political type and Data-driven evaluation type exhibited the highest Political Strength of Relationship means, with Pluralistic political type being higher than Factional (diff = 2.645, $p < .001$) and Inert (diff = 1.809, $p < .001$) and with Global evaluation type being lower than Judgment (diff = -1.223, $p = .022$).

4. *General Strength of Relationship (Gensor, the influence of the superintendent on the district)* was influenced by

- a. Political climate type (PolID) [$F(2,367) = 11.988, p < .001$],
- b. Per-pupil expenditure (Operating\$, a continuous variable) [$B = 0.00005, F(1,367) = 4.240, p = .040$], wherein the higher the operating budget was, the higher the influence of the superintendent was, and

c. Student achievement (MEAP, a continuous variable)

[$B = 0.009$, $F(1,367) = 6.909$, $p = .009$], wherein the stronger the superintendent influence on the district was, the higher the student achievement was.

In all cases, Pluralistic political type had higher means when combined with Data-driven evaluation type, and Inert was always lowest. Pluralistic political type was always significantly higher than Factional ($\text{diff} = .707$, $p < .001$) and Inert ($\text{diff} = .418$, $p = .008$).

5. *Teaching and Learning Strength of Relationship (TLsor)* was influenced by

a. Size of District (a continuous variable) [$B = 0.00002$, $F(1,367) = 9.325$, $p = .002$], wherein the larger the district was, the higher the Strength of Teaching and Learning Relationship was.

b. Means in all Political type cases (Factional, Pluralistic, Inert) increased when combined with Data-driven evaluation method type; for example, Political type Inert was approximately two times higher when combined with Data-driven.

6. *Training Strength of Relationship (Trainsor, pertaining to board members)* was influenced by

- a. Age of board member [$F(4,363) = 2.914, p = .021$], wherein the younger the board member was, the more training was obtained,
- b. Per-pupil expenditure (Operating\$, a continuous variable) [$B = 0.0004, F(1,363) = 3.684, p = .056$], wherein the higher operating budget was, the more training was received, and
- c. Socioeconomic status (SES, a continuous variable) [$B = -0.05, F(1,363) = 9.650, p = .002$], wherein low SES indicated less training.

7. *Overall Strength of Relationship (OverSOR, a factor score including scores in all six strength of relationship groups)* was influenced by

- a. Political climate type (PolID) [$F(2,367) = 30.527, p < .001$],
- b. Evaluation method type (EvalID) [$F(2,367) = 3.827, p = .023$],
and
- c. Student achievement (MEAP, a continuous variable) [$B = 8.112, F(1,367) = 7.929, p = .005$], wherein the higher the Overall Strength of Relationship was, the higher the student achievement (MEAP passing rate) was.

In all cases, Pluralistic political type was significantly higher than either Factional (diff = 9.151, $p < .001$) or Inert (diff = 4.965, $p < .001$). When combined with Data-driven evaluation type, Pluralistic political type means increased approximately 33% over Factional and 66% over Inert.

Hypothesis 2: Conflict Levels. Low levels of Conflict between the board and the superintendent correlate with Data-driven evaluation type and Pluralistic political climate type.

Conflict was reported by 120 of 386 respondents. Citations of conflict were grouped into four dummy variables (Money, Roles, Other, None). The dummy variables were used to fit a multivariate logistic regression model. The results were as follows:

1. Money

- a. Conflict over money drew 269 citations, 44.17% of all citations of conflict.
- b. The likelihood of reporting Money conflict had no significant relationship with predictor variables. In other words, conflict over money crosses all district categories.

2. Roles

- a. Role conflict drew 303 citations, 49.75% of all citations of conflict.
- b. Political climate type (PolID) was a significant predictor of the likelihood of reporting Role conflict [Wald Chi-square (2) = 23.708, $p < 0.001$].
- c. Factional political type was 11.6 times as likely to report Role conflict than was Pluralistic political type [OR = 11.611, 95%CI = (3.422, 39.405)].
- d. Inert political type was 9.9 times as likely to report Role conflict than was Pluralistic political type [OR = 9.879, 95%CI = (2.188, 44.600)].

3. Other

- a. Other conflict drew 37 citations, 6.08% of all reported conflict.
- b. The likelihood of reporting Other conflict had no significant relationship with predictor variables.

4. No Conflict

- a. There were 266 citations of No Conflict.

- b. Political climate type (PoIID) was a significant predictor of the likelihood of reporting No Conflict [Wald Chi-square (2) = 10.225, $p = 0.006$].
- c. Factional political type was 93% less likely to report No Conflict than was Pluralistic political type [OR = 0.073, 95%CI = (0.010, 0.543)].
- d. Inert political type was 87% less likely to report No Conflict than was Pluralistic political type [OR = 0.130, 95%CI = (0.017, 1.003)].
- e. Pluralistic political type was significantly more likely to report No Conflict and significantly less likely to report Role conflict.

Hypothesis 3: Agreement, Overall Strength of Relationship (OSOR), and Student Achievement (MEAP). High levels of agreement and higher Overall Strength of Relationship between the board and the superintendent correlate with a higher district MEAP passing rate.

The relationship between the average Overall Strength of Relationship reported by the respondents in the district and student achievement (MEAP performance) was calculated in a model that controlled for other potential district-level predictors of MEAP performance. The results were as follows:

1. Overall Strength of Relationship (OverSOR) was found to have a significant positive relationship with MEAP ($B = 1.598$, $p = 0.024$).
2. Socioeconomic status (SES) was found to have a significant negative relationship with MEAP ($B = -0.411$, $p < 0.001$).
3. The findings indicated that the stronger the relationship between the board and superintendent was, the higher the student achievement was, and the lower the socioeconomic status of a district was, the lower the student achievement was.

Conclusion

In this chapter, each of the three Hypotheses was tested through execution of its parallel Analysis Objective(s). Detailed results of the data analyses were reported and then summarized.

The final chapter (Chapter 5: Discussion and Conclusions) will apply these results to existing research and the body of knowledge in the field and present implications of the study in terms of context, further research, and professional practice.

Chapter 5: Discussion and Conclusions

Introduction

Earlier chapters discussed the context of leadership in public education, reviewed the relevant literature in the field, detailed the methodology employed for this study, and reported the findings. This final chapter will begin with an overview of the significant findings of the study with regard to each hypothesis. The findings are discussed and related to existing research. Two sections conclude this discussion: Implications for Further Study and Implications for Professional Practice.

Overview of Significant Findings

Hypothesis 1: Evaluation Method. Method of evaluation of the superintendent is a significant indicator (either positive or negative depending on the type of evaluation) of the strength of relationship between school board and superintendent.

Hypothesis 1 was positive; data were able to define a more complex picture of Strength of Relationship and evaluation than the primary hypothesis had posited. The researcher began this study with the assumption that method of superintendent evaluation would be a powerful indicator of the nature of the relationship

between the board and the superintendent. Although evaluation method correlated with Strength of Relationship and its six subgroups, the power of that correlation was not as robust as expected. Data-driven evaluation had consistently higher means compared to other evaluation types, yet it was not the factor that compelled Strength of Relationship. It appeared that other factors were at work.

These data revealed that when evaluation method was paired with political climate, the power to predict Strength of Relationship became dynamic. When boards worked together in a pluralistic way, pluralism became the decisive indicator of positive Strength of Relationship. When pluralistic interaction was paired with data-driven superintendent evaluation type, Strength of Relationship was increased approximately two-fold in most cases.

The general influence of the superintendent on the district had independently strong results. The stronger the superintendent's influence on the district was, the higher the student achievement was. The operating budget and the size of the district had little impact on Strength of Relationship.

The data surrounding socioeconomic status (SES) reiterated the Malone (2002) findings that SES was highly correlated with student achievement (MEAP). The data went on to reveal that SES negatively predicts conflict levels, disagreement, and Strength of Relationship between board members and the superintendent; the lower the SES was, the higher were the levels of Conflict and Disagreement, and the lower was the Strength of Relationship.

A hierarchy of evaluation types and political types emerged from these data, as depicted in Table 17, with Pluralistic political type and Data-driven evaluation type yielding the highest Strength of Relationship scores. The issue becomes *Can a school board be capable of intentional change toward pluralism and data-driven evaluation when the board is functionally Inert or Factional?* The researcher addresses this issue later in this chapter.

Table 17

Data-driven Hierarchy of Evaluation Types and Political Types

Strength of relationship	Evaluation type	Political type
Strongest	Data-driven	Pluralistic
Least strong	Judgment	Inert
Weak	Global	Factional

Hypothesis 2: Conflict Levels. Low levels of Conflict between the board and the superintendent correlate with Data-driven evaluation type and Pluralistic political climate type.

Hypothesis 2 was shown to be positive. Once again, political climate type emerged as a strong predictor of conflict level. Boards that work in a pluralistic manner are 87–93% percent less likely to report conflict.

The nature of conflict was clarified by these data. When conflict was reported, it centered first on role definition and fulfillment and second on financial issues. The most frequently reported conflict focused on staff negotiations, an issue that spans both role definition and financial considerations, as well as external (local, state, federal) and internal forces. The least reported conflicts were student achievement and technology.

Hypothesis 3: Agreement, Overall Strength of Relationship (OSOR), and MEAP. High levels of agreement and higher Overall Strength of Relationship between the board and the superintendent correlate with higher district Michigan Education Assessment program (MEAP) scores.

Hypothesis 3 was shown to be positive. The lower the level of Disagreement between the board and the superintendent was, the higher the MEAP passing rate rose. The higher the Overall Strength of Relationship between the board and superintendent was, the higher the MEAP passing rate rose. This remained true regardless of district size, per-pupil expenditure, or socioeconomic status. The data were clear.

A school board that works pluralistically and evaluates the superintendent on the basis of a data-driven method that sets goals for the district and assesses the district's achievement on the basis of the goals contributes to higher student achievement. Student achievement is shown to be as much as 3-4 times higher in the districts where Pluralistic political type and Data-driven evaluation method combine.

The data surrounding socioeconomic status (SES) reiterated the Malone (2002) findings in that SES correlated with student achievement (MEAP) and went on to reveal that SES negatively predicted Conflict levels, Disagreement, and Strength of Relationship between the board members and the superintendent;

the lower the SES was, the higher the levels of Conflict and Disagreement were, and the lower the Strength of Relationship was.

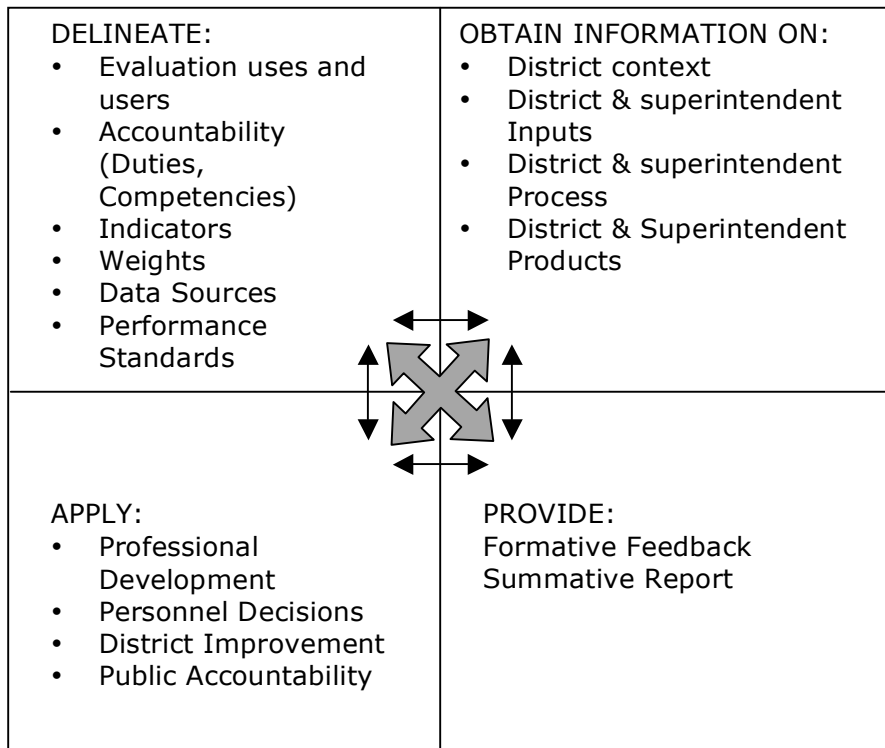
Findings and Existing Research

Candoli, Cullen, and Stufflebeam

Candoli, Cullen, and Stufflebeam's (1997) book, *Superintendent Performance Evaluation: Current Practice and Direction for Improvement*, reviewed research and literature in the area of superintendent evaluation. Their concise categorization of four evaluation methods was used throughout this research. The authors described an emerging model of superintendent evaluation that was comprehensive of the literature if somewhat complex and daunting for practice. It seems likely that the amount of historical and current data-gathering, interviews, and research necessary to actualize the Candoli et al. model is beyond the energy of most lay school board members. Figure 6 depicts the Candoli et al. model.

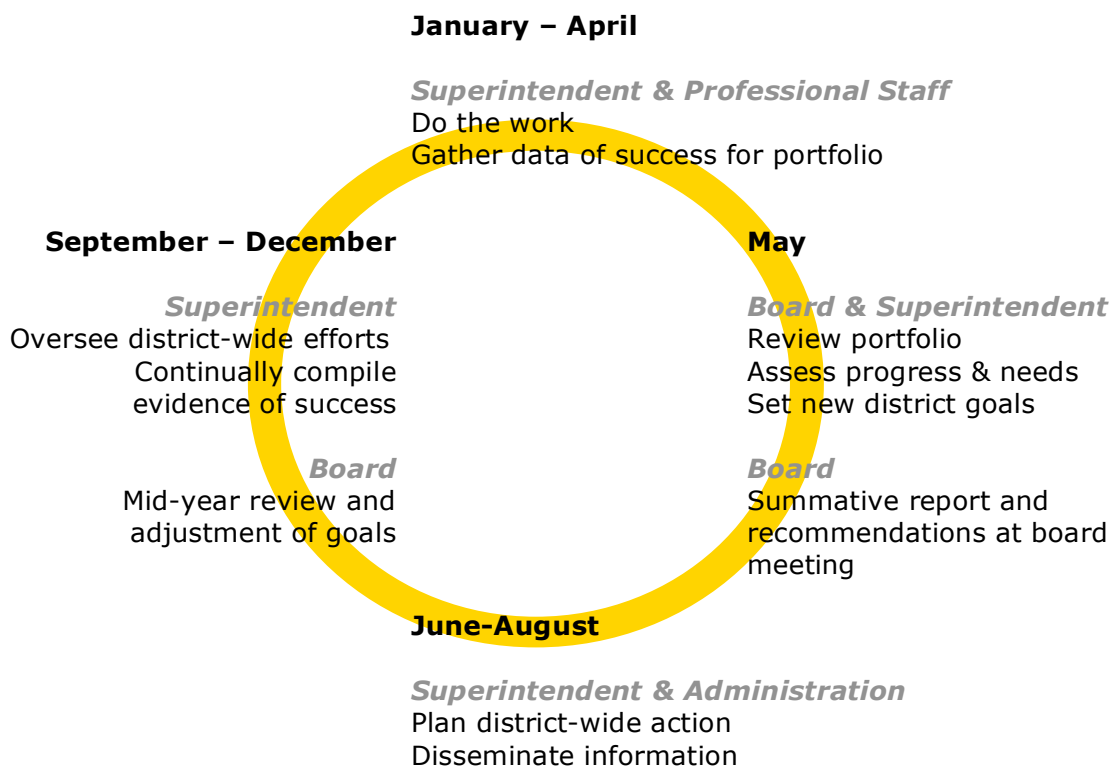
The data from this study suggested that districts use a more practical model that focuses on a continuous and collaborative process between the board and the superintendent. Figure 7 depicts the new model suggested by this study. There is little theoretical

difference between the two models, yet the emphasis on collaboration and team effort characterizes the new model.



* Candoli, Cullen, and Stufflebeam, 1997, p. 121

Figure 6. General and specific tasks in evaluating superintendent performance.*



* Timing is based on researcher observation in a "G – C" paired Michigan school district.

Figure 7. Model of a continuing cycle of goal setting, communication, data gathering, and assessment: Data-driven superintendent evaluation combined with pluralistic board interaction.*

Goodman and Zimmerman

Goodman and Zimmerman's (2000) report for the New England School Development Council (NESDC), *Thinking Differently: Recommendations for 21st Century School Board/Superintendent Leadership, Governance, and Teamwork for High Student Achievement*, was grounded in the theoretical concept that school districts cannot effectively raise student achievement without strong leadership and teamwork from the school board and superintendent. The National Advisory Committee for the report included 36 nationally recognized educational leaders whose theories were supported by the findings of this research. This study found that Strength of Relationship predicts student achievement (MEAP).

Iowa Lighthouse Study

The data from this study supported the findings of the Iowa Association of School Boards' (IASB, 2000) *Lighthouse Study*, which based its findings on interviews of administrators, teachers, students, and parents at six demographically similar schools with differing achievement levels. The Lighthouse Study found that the

difference between high student achievement and low student achievement was based on the following factors:

1. The attitude and beliefs of the school board and superintendent team
2. Communication between the central office team and the staff
3. Action taken on a consistent basis

This study suggested that board and superintendent actions play a leading role in creating the *culture of improvement* necessary to overcome the barriers to student success.

McCarty and Ramsey

McCarty and Ramsey (1971) conducted the defining research on how school board members relate to each other, to their superintendent, and to their community. Their study also discussed the effect that those interactions had on roles and relationships. The study undertaken here extended the McCarty and Ramsey findings with evidence that political climate is the strongest factor influencing the Strength of Relationship between a board and the superintendent. The section entitled *Implications for Further Study* will discuss specific implications of this evidence.

Prior Research

Prior research has shown repeatedly that a weak relationship between the superintendent and board

1. discourages school improvement (Danzberger et al., 1992),
2. affects the quality of the curriculum and programs (Nygren, 1992),
3. weakens the morale and stability of the district (Renchler, 1992),
4. negatively influences the superintendent's credibility with the board members (Petersen & Short, 2001),
5. impedes reform efforts, such as district restructuring (Konnert & Augenstein, 1995), collaborative long-range planning, and visioning (Kowalski, 1999), and
6. results in the shortened tenure of district leaders (Carter & Cunningham, 1992; Petersen & Fusarelli, 2001).

The data from this research suggested strategies for increasing the Strength of Relationship between the board and the superintendent. These align directly with pluralistic, data-driven, collaborative school leadership, and other variables included in this study. It can be inferred that a strong relationship between the

board and the superintendent can promote school improvement, the development of quality curriculum, high morale and stability, credibility of the superintendent with the board, collaborative long-range planning and visioning, and longer tenure for superintendents. The study identified the most effective underpinnings of the climate for improvement: pluralistic, collaborative, and data-driven school leadership. More important, these characteristics are indicative of higher student achievement, suggesting that board members and the superintendent can directly influence student achievement for better or worse.

Implications of the Study for Further Research

Political Context

The defining study of political climate in public school districts was the McCarty and Ramsey (1971) study that identified four categories of political climate: Dominated, Factional, Pluralistic, and Inert. When these categories were applied in this study, the researcher found a more complex and perhaps more dynamic political reality. During the process of constructing the four political type dummy variables from the data, the researcher became aware that many districts were in the process of change

from one political identity to another. The same was true of evaluation type classification. Many districts exhibited characteristics of two categories of political or evaluation type. This indicated that many districts are in transition or are unclear about or disagree on how they work together politically. Given that political climate emerged as the major predictor of Strength of Relationship between the board and superintendent and positively predicted student achievement, a new and comprehensive study of political climate in public school districts would add significantly to the field of knowledge. The data set from this study will be made available for further secondary analyses and reconsideration of political and evaluation type identifications.

Cause and Effect

This research demonstrated a correlational relationship, not a causal relationship, between Strength of Relationship and student achievement. The research method to prove causality in relation to student achievement is difficult to conceptualize. Nonetheless, such research would be useful for educational leaders as they attempt to make data-driven decisions to improve the potential for all students to succeed.

Unique Urban Challenges

This study included only one urban district in its analyses, thus limiting the relevance of these data for the urban setting. One would suspect that the principles of pluralistic collaboration, goal setting, and data-driven evaluation presented here might apply in urban districts, yet on the basis of these data, one cannot confidently generalize to urban settings. Researchers with particular interest in the complex issues of urban public education may wish to include some assessment of political climate in future research.

AASA Longitudinal Study of the Superintendency

Given the importance of political climate, as revealed in this study, the AASA longitudinal study of the superintendency may wish to design specific questions that identify political identity and other influences not currently included in the ongoing study. Data on political climate over a long period of time would contribute to in-depth analyses.

Implications of the Study for Professional Practice

The results of this study can inform the work of school boards and superintendents interested in the goal of higher student achievement.

Hypothesis 1 findings revealed that pluralistic, data-driven board political climates are indicative of higher Strength of Relationship, more superintendent influence, and higher student achievement. Superintendent influence included the elements delineated by Crowson and Morris (1992) in that the superintendent was respected in the community, worked well with board members, was a risk-taker, and supported principals collaboratively. These are characteristics that contribute positively to the board and superintendent Strength of Relationship.

Hypothesis 2 findings suggested the relevance of the development of a clear process for defining board and superintendent roles and district goals. Findings also suggested that the roles-and-goals process be implemented in conjunction with a Data-driven assessment of superintendent performance that is based on the achievement of the district goals.

Hypothesis 3 findings highlighted the need for boards and superintendents to communicate in both directions. They underscored the importance of the goal-setting process and the requirement that district leadership adhere to the goals they create. Also important is the contextualization of personal agendas unrelated to the goals set by the board. The board needs to keep its focus on the good of all children. Simply stated, high levels of agreement indicate high levels of student achievement. Next, the researcher will expand on these concepts.

Context

Since *A Nation at Risk* (United States Commission on Excellence in Education, 1985), school reform has jumped and floundered in fits and starts across a spectrum of theories and philosophies. Paul Houston, Executive Director of AASA, has a clear understanding of the implications for today's educational leaders:

When No Child Left Behind (NCLB) was enacted on January 8, 2002, public education got a new mission: universal high achievement. That mission was added to the existing missions of universal access and equal educational opportunity for all students. The new mission is the logical outgrowth of

accomplishing universal access and being off to a good start on equal educational opportunity. Absent universal access and the goal of equal educational opportunity, universal high achievement would be unthinkable. Without equal educational opportunity, universal high achievement is unachievable.

(Houston, 2004a, p. 1)

In America, all children have access to a public school system, but in practice they may not have equal opportunity within each district or each state. Sorting and dividing is still an all-too-common practice, even in schools with the best intentions. This study demonstrated that focused board and superintendent team leadership was one important factor in the achievement of opportunity and proficiency for all students.

Intentional Structural Change

These data give the information needed to begin deep conversations in communities and among educational leaders, faculty, and students about the future of American public education. These data seem to challenge school boards to initiate intentional structural change for the achievement of the goals of access, opportunity, and proficiency for all students. To restructure

schooling (beyond the *Model T* structure) to meet our students' future needs, not our past needs, is a formidable challenge. These data provide the board and the superintendent a place to begin the change process.

Board Self-Evaluation

The results of this study suggest the need for school boards to commit to periodic self-evaluation as one component of the pluralistic process. Earlier, the issue of board self-evaluation was briefly raised as a missing element in the change and reform process. These data suggest that the notion be revived and developed; change without self-reflection has severely marked our recent past history of failed attempts at school reform. The national associations for superintendents and school board members might take on the task of the research and development needed to adopt methods of board self-evaluation.

The concept of board self-evaluation suggests that the researcher might develop the questionnaire and online format for the general use of school boards in the self-evaluation process. It may be helpful for boards to begin the process with a quantifiable

statement of their Strength of Relationship. Further, this toll might identify specific areas for intentional improvement.

Relevancy of Teaching and Learning and Board Training

Board training and district teaching and learning styles were found to form a group of their own as distinct from the variables that formed the Strength of Relationship Scale. The TLSOR (Training, Teaching, and Learning Strength of Relationship) findings revealed that board member training predicted *only* student achievement. In other words, if a board member wishes to personally contribute to student achievement, the board member should participate in board training programs. Working with the other board members, she/he can lead the district toward authentic teaching and learning practices and participate in community-wide conversations about future-thinking education. In large city schools and small, an important factor to recognize is the need for change focused on *relevancy* of teaching and learning for the reality of the student population in largely underfunded public schools.

Conclusion

Alvin Toffler, the author of the 1971 best-selling book *Future Shock*, paraphrased psychologist Herbert Gerjuoy when he said, “The illiterate of the twenty-first century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn” (Toffler, 1971, p. 367). Educational leaders understand this and stand in the midst of a multifaceted challenge to change school culture. They are expected to produce a culture of access, opportunity, and universal proficiency in schools structured for assembly-line convenience. They are called upon to create relevancy with eroding finances, rising costs, class and race barriers, and ambiguous community support. These are indeed difficult and demanding times for public education. The data from this study suggest that educational leadership and governance that are pluralistic and data-driven are more important than ever before. There has never been a time in American history when educators have been asked to do more and to fulfill more roles in society and family life than they are now. In order to achieve these goals in uncertain times, educators must rethink how they organize, how

they lead, how they teach, how they support learning, and how they govern public education. Partial measures will no longer suffice.

This study provides educational leaders with data to support the breadth of necessary change. This dissertation reported data on the strength of the relationships between boards and superintendents and what differences these relationships might make for student success. It identified the pluralistic, data-driven, and collaborative organizational pattern that predicts higher student achievement. There is no time like the present to go forward and further test these findings. School boards and superintendents are challenged to take these findings and implement new school structures to move American public education into the 21st century.

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Appendixes

Appendix A: Superintendent and School Board Strength of Relationship Survey and Scale for K-12 Public Schools in the U.S.



SARA0010004_FINAL DEPLOY Questionnaire

Questionnaire Last Modified: April 15, 2004 2:56 PM PDT

P1



P1 A

The name of my school district is:

- Schools

P1 1

[M]

I am the:

- President of the School Board
- Superintendent

P1 57

Script

[hidden zscript]

P2 Confid

[M]

By completing this online survey, I agree to participate in the research study entitled: "Influences on the choice of superintendent evaluation method in Michigan," which is supported by MASA and MASB. I freely consent to participate by answering all questions as accurately and candidly as possible. • I understand that this research is being undertaken by Sara Duvall as part of her doctoral program at Eastern Michigan University Department of Leadership & Counseling. • I understand that to complete the online survey will take about 30 minutes and that my participation is entirely voluntary. • I understand that the results of the survey may be published, and that my identity and the identity of my school district will not be revealed in any reports or publications; the researcher guarantees confidentiality of individual replies. • I understand that even though I have accessed the survey through the web site of the state organization, that none of the raw data will be collected by or revealed to the organization. These data remain solely with the researcher. • I understand that the results of the survey will be made available to me upon request, or through dissemination of the research. The research protocol has been reviewed and approved by the University Committee of Protection of Human Subjects. If I have any questions about the approval process of the survey, I may contact Dr. Patrick Melia, or Dr. Steve Pernecky of Eastern Michigan University Human Subjects Committee at 734.487.0379. I may contact the researcher at: Sara Duvall 190 Barton Shore Drive Ann Arbor, MI 48105 734.994-5070 saraduvall@sbcglobal.net

- I have read the consent statement and agree to participate.

P2

[Click here for a printer-friendly version](#)

P3 1

[M]

How would you characterize the process of evaluation of the superintendent in your district? (Choose the one that most appropriately describes your district)

- No evaluation is done.
- An outside consultant is used to evaluate the superintendent.
- The Board gets together and makes a judgment call.
- Our stakeholders do the evaluation.
- Board Members complete a report card or checklist focused on areas of competency.
- We use a Management by Objectives/ Duties-based format.
- The superintendent provides data concerning achievement of district goals, which we review and discuss.
- We base our evaluation on student outcome measures and/or district accreditation status.
- Other (describe in a few sentences)

P4 2

[M]

How often does your district evaluate the superintendent?

- 2 times per year
- Once per year
- Every other year
- Not regularly - upon board request

P4 3

Which of the following parties are involved in writing district goals? (Choose all that apply)

- Board
- Superintendent
- Principals
- Teachers
- Students
- Parents
- Community members
- We don't write goals [**Exclusive**]

P4 4

[M]

How frequently are the goals updated?

- We don't write district goals
- Quarterly
- Yearly
- Every other year
- Every five years
- Only when the board deems it necessary

P5 5

[M]

Our superintendent evaluation is based on: (Choose all that apply)

- Written district goals
- Job description - written
- AASA Superintendent Competencies
- Gut feeling, you either "click" or you don't
- Balancing the district budget
- Other, please explain in a few sentences

P5 6

[M]

How long has the current method of superintendent evaluation been in use?

- 1 Year
- 2-4 Years
- 5-7 Years
- 9-10 Years
- More than 10 Years

P5 7

Before use of the current method, what method was used?

- No evaluation was done.
- We used an outside consultant to do our superintendent evaluation.
- The Board got together and made a judgment call.
- Our stakeholders did the evaluation.
- We used a report card or checklist focused on areas of competency that trustees completed.
- We used a Management by Objectives/ Duties-based format.
- The superintendent provided data concerning achievement of district goals, which we reviewed and discussed.
- We based our evaluation on student outcome measures and/or district accreditation status.
- I don't know.

P6 8

[M]

If your evaluation method has changed in the last few years, in a few brief sentences, explain why you changed it.

P6 9

[M]

How did you decide to adopt the method of evaluation you currently use? (Choose the one that most appropriately describes your district)

- We don't think it's necessary to evaluate our superintendent.
- We hired a consultant to assess our superintendent's performance.
- We asked the Michigan Association of School Boards for a format of superintendent evaluation and adopted what they sent us.
- We got a number of optional superintendent evaluation formats from various sources, evaluated them and choose the most appropriate for our situation.
- The Superintendent suggested the format.
- We wrote our own evaluation method. (Explain characteristics of your method in a few brief sentences)

P7 11

[M]

Are you satisfied with the superintendent evaluation method currently in use?

- Very satisfied
- Satisfied
- Unsatisfied
- Very unsatisfied

P7 12

[M]

What would your preference be? Why? (Explain in a few brief sentences)

P7 13

Describe 3 good things about your current superintendent evaluation process.

P8 14

[M]

Choose one statement most applicable to your district:

- Superintendent Evaluation is just an “exercise.”
- Superintendent evaluation leads to better schools for the children.

P8 15

[M]

Evaluation is too complex for a lay Board Member to participate in.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

P9 16

[M]

Rate the degree to which you agree with the following statements: (Click in the box to select one in each row) The current method of superintendent evaluation...

	Strongly Agree	Agree	Disagree	Strongly Disagree
Makes the board members uncomfortable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promotes communication	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is a one-way street - The board makes a judgment call	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Results in change and improvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clarifies goals for the next school year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

P9 17

[M]

Rate the degree to which you agree with the following statements: (Click in the box to select one in each row)

	Strongly Agree	Agree	Disagree	Strongly Disagree
The Board and the Superintendent understand and respect each other's roles.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Board and the Superintendent are clear about what we expect from each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Superintendent provides consistent, high quality information to the board.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Board and the Superintendent have clearly defined roles.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

P10 18

Describe 3 good things about your district:

P10 19

Describe 3 accomplishments of your Board/Superintendent team:

P10 20

Do you feel your district is 'moving ahead' with its goals?

- Yes
- No
- No goals defined

P11 21

Briefly describe the Superintendent's Leadership Style.

P11 22

Briefly describe the educational philosophy of your district.

P12 23

Rate how effectively the superintendent communicates with the: (Click in the box to select one in each row)

	Very Effective	Effective	Ineffective	Very Ineffective
Board	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

P12 24

How disruptive to the functioning of the district is the ineffective communication between the superintendent and the: (Click in the box to select one in each row)

	Very Disruptive	Disruptive	Not Disruptive
Board	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

P13 25

[M]

Indicate your perception of the level of conflict between the board and the superintendent.

- Little to no conflict
- Rare conflict
- Frequent Conflict
- Continual conflict

P13 26

[M]

Is the level of conflict disruptive of the functioning of the district?

- Very disruptive
- Disruptive
- Not disruptive

P13 27

[M]

List 3 issues over which the board and superintendent have conflict.

P14 28

[M]

Rate the level to which you agree with the following statements: (Click in the box to select one in each row)

	Strongly Agree	Agree	Disagree	Strongly Disagree
Local prominent businessmen or prominent citizens take turns sitting on the board.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We usually have split votes between two groups who rarely agree. The majority often shifts with board elections.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All board members work together towards a common goal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most decisions are left up to the superintendent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

P14 29

Who sets the agenda for the board meeting? (Choose one that most accurately describes your district)

- Board President alone
- Superintendent alone
- Secretary alone
- Board President & Superintendent together
- Business Manager or other administrator
- Other: (briefly describe)

P14 30

[M]

How frequently do board members introduce topics at the board meetings that are not on the agenda?

- Never
- Rarely
- Sometimes
- Frequently

P15 31

[M]

How many members are on your school board?

- 3
- 5
- 7
- 9
- More than 9

P15 32

[M]

Is that enough board members or too many?

- Enough
- Too many

P16 33

[M]

Rate the level to which you agree with the following statements: (Click in the box to select one in each row)

	Strongly Agree	Agree	Disagree	Strongly Disagree
The board trusts the superintendent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The superintendent is honest	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The superintendent has integrity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

P16 34

[M]

Indicate the highest level of education of board members: (Type in the number of members in each category)

↕ Did not finish high school	0 - 10 0
↕ High School graduate	0 - 10 0
↕ Associates Degree or Trade Certification	0 - 10 0
↕ Some College	0 - 10 0
↕ Bachelor's Degree	0 - 10 0
↕ Master's Degree	0 - 10 0
↕ Doctoral Degree	0 - 10 0

P17 35

[M]

Indicate the highest level of education of the superintendent: (Please select one)

- Bachelor's Degree
- Master's Degree
- Doctoral Degree

P17 36

[M]

Our board is a member of a state and/or national school board association.

- Yes
- No
- Don't know

P18 37

[M]

Our superintendent is a member of a state and/or national school administrators association.

- Yes
- No
- Don't know

P18 38

[M]

Does the board participate in state or national school board meetings? (choose all that apply)

- Together as a board
- Together as a board with the superintendent
- Individually
- Individually with the superintendent
- We don't participate [**Exclusive**]

P18 39

[M]

Does the superintendent participate in state or national school administrator meetings? (choose all that apply)

- Together with board members
- Yes, Individually
- He/she doesn't participate
- Individually with other district administrators
- I don't know [**Exclusive**]

P19 40

[M]

Do new board members receive training in roles, duties, responsibilities and ethics of board membership?

- Yes
- No

P19 41

[M]

In our district, school board training takes the following form(s): (Choose all that apply)

- Informal orientation by other board members
- Formal orientation by other board members
- Formal orientation by Superintendent
- Written materials given by district
- Periodic board and superintendent retreat(s)
- Voluntary attendance at state conferences and training
- National Conferences
- Other: explain
- We do not provide training [**Exclusive**]

P19 42

How long have board members served on the board? (Type in the number of members in each category)

↕ 1 Term	0 - 10 0
↕ 2-3 Terms	0 - 10 0
↕ 4-6 Terms	0 - 10 0
↕ 7-9 Terms	0 - 10 0
↕ More than 9 Terms	0 - 10 0

P20 43

[M]

Has there ever been a period of high turnover in board membership?

- Yes
- No
- If Yes, briefly state why.

P20 44

[M]

Rate your level of agreement with the following statements: (Click in the box to select one in each row)

	Strongly Agree	Agree	Disagree	Strongly Disagree
The Board President is well prepared to evaluate the Superintendent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The majority of board members are well prepared to evaluate the Superintendent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The board president is uncomfortable evaluating the Superintendent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The majority of board members are uncomfortable evaluating the Superintendent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

P20 45

[M]

How do you feel about the handling of government mandates (such as Michigan YES and No Child Left Behind) in your district?

- Very well handled
- Well handled
- Handled poorly
- Handled very poorly
- I don't know how we handle such mandates

P21 46

[M]

How much pressure do you feel about resolving financial issues in your district?

- No pressure
- Some Pressure
- Considerable pressure
- Extreme pressure

P21 47

[M]

How long has the superintendent served as superintendent in your district? (Type in a number)

<input type="text" value=""/>	Years	<input type="text" value="0 -"/>
		<input type="text" value="10"/>
		<input type="text" value="0.0"/>
		<input type="text" value="0"/>

P21 48

[M]

How long had the immediately previous superintendent served as superintendent in your district? (Type in a number)

<input type="text" value=""/>	Years	<input type="text" value="0 -"/>
		<input type="text" value="10"/>
		<input type="text" value="0"/>

P22 49

[M]

What is the most important job of the School Board?

P22 50

[M]

What is the most important job of the Superintendent?

P22 51

[M]

My age is: (Select the appropriate range)

- 21-29 years
- 30-39 years
- 40-49 years
- 50-59 years
- 60-69 years
- 70-79 years
- 80 or more years

P23 52

[M]

What is your gender?

- Male
- Female

P23 53

[M]

What is your ethnicity? (Chose one)

- Caucasian
- African American
- Asian
- Middle Eastern
- Native American

P24 54

[M]

Rate your agreement with the following statements: (Click in the box to select one in each row) Teaching in the district is mainly characterized by

	Strongly Agree	Agree	Disagree	Strongly Disagree
Lecture, reading, note-taking, & written tests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students with similar skill levels are grouped together for instruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students often make presentations of what they have learned to other students, parents, or the community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community service is required/expected	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lots of hands-on experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quiet, controlled classrooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
First we find out what students already know, then relate new inquiry to old knowledge, and have students express the new knowledge in terms of the world outside the classroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instructional technology is up-to-date in our district.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instructional technology is well integrated into teaching and learning in our district.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

P25 55

Rate your agreement with the following statements: (Click in the box to select one in each row)

	Strongly Agree	Agree	Disagree	Strongly Disagree
All students can learn, but the extent of their learning is determined by their innate ability or aptitude. We have little influence over the extent of their learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All students can learn if they elect to put forth the effort. We provide the opportunity to learn. It is the student's decision if they elect to do so.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All students can learn and it is our responsibility to help each student demonstrate some growth as a result of their experience with us. The extent of student learning is dependent on factors over which we have little control.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All students can and must learn at relatively high levels of achievement. We create the classroom environment that results in high performance. With our support students can master challenging academic material and we expect them to do so.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

P26 56

[M]

Rate your agreement with the following statements: (Click in the box to select one in each row)

	Strongly Agree	Agree	Disagree	Strongly Disagree
The schools have a positive reputation with the community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The superintendent maintains a positive relationship with the school board.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The superintendent is a risk-taker.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The superintendent distances himself/herself from building principals, yet continually encourages them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our process of evaluating our superintendent contributes to the effectiveness of our schools.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank You Page

Sara Duvall 2004 ©

Thank You Page



study.

Thank you for participating in this important

Screen Out Page

Thank you for your interest. However, at this time, we are looking for survey respondents who fit a different profile. Please do not be discouraged, as there may be future studies to which you will be invited to participate.

Survey Closed Page

Thank you for your willingness to participate, however this study has been completed and is closed. We hope you will visit us in the future for other surveys.

Appendix B: Human Subjects Approval Letter



EASTERN MICHIGAN UNIVERSITY

April 14, 2004

Sara Duvall
Department of Leadership and Counseling

RE: *"Influences on the choice of superintendent evaluation method in Michigan."*

The Human Subjects Institutional Review Board (IRB) of Eastern Michigan University has granted approval to your proposal: "Influences on the choice of superintendent evaluation method in Michigan".

After careful review of your application, the IRB determined that the rights and welfare of the individual subjects involved in this research are carefully guarded. Additionally, the methods used to obtain informed consent are appropriate, and the individuals are not at a risk.

You are reminded of your obligation to advise the IRB of any change in the protocol that might alter your research in any manner that differs from that upon which this approval is based. Approval of this project applies for one year from the date of this letter. If your data collection continues beyond the one-year period, you must apply for a renewal.

On behalf of the Human Subjects Committee, I wish you success in conducting your research.

Sincerely,

A handwritten signature in black ink that reads "Patrick Melia".

Dr. Patrick Melia
Administrative Co-Chair
Human Subjects Committee

CC: Dr. Steve Pernecky, Faculty Co-Chair

Appendix C: Informed Consent

[Posted online before the survey begins. Respondent must acknowledge consent before the survey may be taken]

By completing this online survey, I agree to participate in the research study entitled: *“Influences on the choice of superintendent evaluation method in Michigan,”* which is supported by MASA and MASB. I freely consent to participate by answering all questions as accurately and candidly as possible.

- I understand that this research is being undertaken by Sara Duvall as part of her doctoral program at Eastern Michigan University Department of Leadership & Counseling.
- I understand that to complete the online survey will take about 30 minutes and that my participation is entirely voluntary.
- I understand that the results of the survey may be published, and that my identity and the identity of my school district will not be revealed in any reports or publications; the researcher guarantees confidentiality of individual replies.
- I understand that even though I have accessed the survey through the web site of the state organization, that none of the raw data will be collected by or revealed to the organization. These data remain solely with the researcher.
- I understand that the results of the survey will be made available to me upon request, or through dissemination of the research.

The research protocol has been reviewed and approved by the University Committee of Protection of Human Subjects. If I have any questions about the approval process of the survey, I may contact Dr. Patrick Melia, or Dr. Steve Pernecky of Eastern Michigan University Human Subjects Committee at 734.487.0379. I may contact the researcher at:

Sara Duvall
 190 Barton Shore Drive
 Ann Arbor, MI 48105
 734.994-5070
 saraduvall@sbcglobal.net

Print this page

Click the box below to agree and continue:

I have read the consent statement and agree to participate.

Appendix D.1: E-Invitation

MASA / MASB Supported Survey



This is an invitation to all Michigan superintendents and school board presidents to participate in **important statewide research**.

Please, contribute to a database of information related to the board/superintendent relationship, which is unique in the United States.

Our goal is **100% participation**, so that Michigan will have the strongest data in the nation.

Responses are **STRICTLY** confidential to the researcher. MASA & MASB will see only the general results and **NEVER** replies specific to you or your district.

Link to the survey now by clicking on the link below. The survey should take less than 1/2 an hour.

[This is a place holder for the URL and instructions that will be displayed in the recipient's email message.]

Thank you for your contribution,

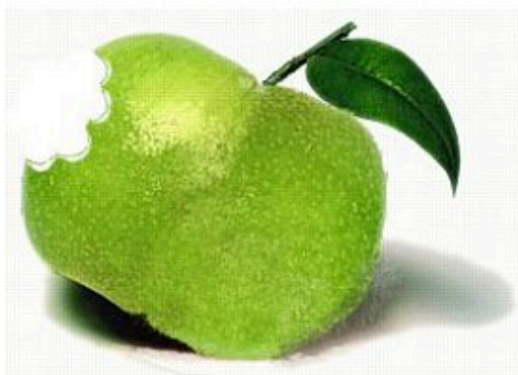
A handwritten signature in black ink that reads "Sara Duvall".

Sara Duvall, Primary Researcher
saraduvall@sbcglobal.net

Appendix D.2: Reminder

Subject: Reminder: MASA/MASB Supported Survey

Message:



Please participate in this important statewide data collection.

[This is a place holder for the URL and instructions that will be displayed in the recipient's email message.]

or

Go to: www.gomasa.org

Your response to the survey is invaluable to the database, which will aid boards and superintendents statewide.

Data you can use to make decisions that effect student achievement and community support.

Please, complete the survey today.

If you prefer to take the survey on paper, email me and I will mail you the survey and a return envelop.

With thanks,

A handwritten signature in black ink that reads "SARA DUVALL". The signature is written in a cursive, slightly slanted style.

Sara Duvall, Primary Researcher
saraduvall@sbcglobal.net

Appendix D.3: Reminder Two

Please participate in the survey!

**The picture won't be
complete without you.**

[This is a place holder for the URL and instructions that will be displayed in the recipient's email message.]

**Your input is
very important
for districts
with your
demographic
profile!**



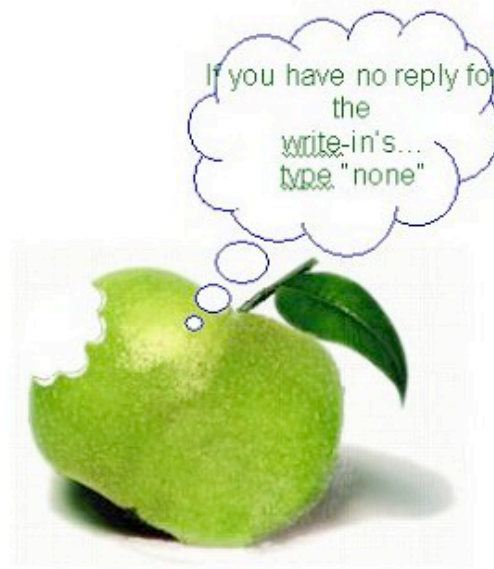
Appendix D.4: Reminder Three

Please complete the survey!

**When you log back on you
will automatically go to
where you left off.**

[This is a place holder for the URL and instructions that will be displayed in the recipient's email message.]

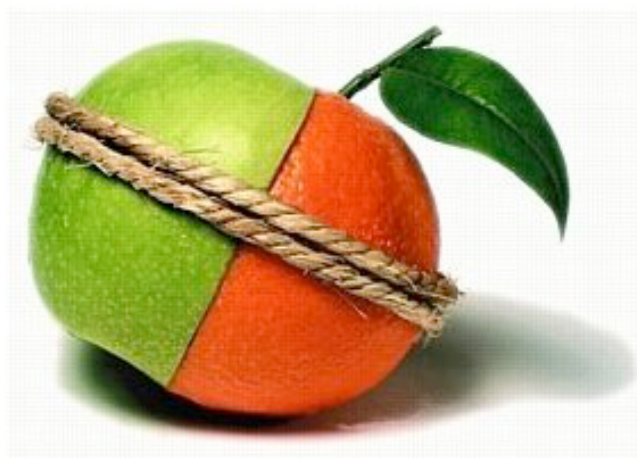
**Your input is
very important
for districts
with your
demographic
profile!**



Appendix D.5: Reminder Four

**Deadline
Approaches**

31st May is the
last day to
participate



Your input is important to the
study!

[This is a place holder for the URL and instructions that will be displayed in the recipient's email message.]

OR www.gomasa.org

Appendix D.6: Non-access

MASA / MASB Supported Survey



This is an invitation to all Michigan superintendents and school board presidents to participate in **important statewide research**.

Please, contribute to a database of information related to the board/superintendent relationship, which is unique in the United States.

Our goal is **100% participation**, so that Michigan will have the strongest data in the nation.

Responses are **STRICTLY** confidential to the researcher. MASA & MASB will see only the general results and **NEVER** replies specific to you or your district.

Link to the survey now by clicking on the link below. The survey should take less than 1/2 an hour.

[This is a place holder for the URL and instructions that will be displayed in the recipient's email message.]

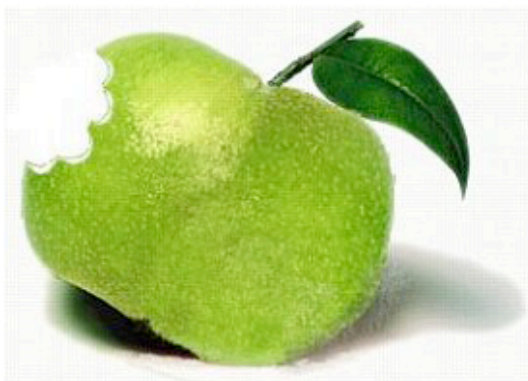
Thank you for your contribution,

A handwritten signature in black ink that reads "SARA DUVALL".

Sara Duvall, Primary Researcher
saraduvall@sbcglobal.net

Appendix D.7: Partialals

Message:



You accessed the survey on-line yet you didn't take it.

[This is a place holder for the URL and instructions that will be displayed in the recipient's email message.]

Click on the link above or

Go to: www.gomasa.org

Your response to the survey is invaluable to the database, which will aide boards and superintendents statewide.
Please, complete the survey today.

If you prefer to take the survey on paper, email me and I will mail you the survey and a return envelop.

With thanks,

SARA DUVALL

Sara Duvall, Primary Researcher
saraduvall@sbglobal.net

Appendix D.8: Graphic License Agreement



Graphic licensed from gettyimages
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Seattle, WA 98103
206.925.5000
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Product: FD004374 (RF) Apple and Orange Tied Up
Photodisc Green
Photographer: Andy Sotiriou
Order Number: 3410892
01.03.05

Appendix D.9: Brochure (inside)*

 <p>These are challenging times for the board and superintendent partnership.</p> <p>The public asks for data, we can give only anecdote.</p> <p>Participate in this statewide survey of all superintendents and board presidents and help provide Michigan districts with data to make informed and intentional decisions.</p> <p>All responses are strictly confidential.</p>	<p>Help Michigan be the first in the nation to gather comprehensive & reliable DATA</p> <p>WHO Superintendents & Board Presidents</p> <p>WHAT Statewide survey of the influences on the board/superintendent relationship</p> <p>WHEN April 12th through May 31st 2004 24/7</p> <p>WHERE Online at www.gomasa.org</p>	<p>The Essential Question: What conditions should be present for optimum learning to take place, and to what extent do those conditions relate to governance and leadership?</p> <p>Base your answer on data rather than anecdote.</p> <p>PARTICIPATE TODAY</p> 
--	---	---

*Mailed to all superintendents and board presidents prior to start of online survey process.


Appendix D.10: Brochure (outside)



Apples & Oranges
are tough to hold together!

Yes **No**

Goal:
100% participation
in statewide study




MASA & MASB Supported Survey
Duvall
190 Barton Shore Drive
Ann Arbor, MI 48105
saraduvall@sbcglobal.net

Every school district
can take a bite
of the benefits of
current and reliable
statewide data

GO TO
www.gomasa.org

Complete the survey on-line
TODAY



Appendix D.11: Postcard

(front)

Apples & Oranges ?



hard
to hold
together

Help Michigan lead the nation
Support school governance
& leadership with
DATA not Anecdote

What: Statewide Survey

Who: Superintendents & Board Presidents

When: April 12 through May 31, 2004

Where: Online @ www.gomasa.org (24-7)

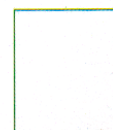
TO DO



Supported by MASA and MASB

(back)

MASA / MASB Supported Survey
Sara Duvall
190 Barton Shore Drive
Ann Arbor, MI 48105
saraduvall@sbcglobal.net



1/2 an hour to support
leadership in Michigan

SCHEDULE IT !

All responses are strictly confidential

Appendix D.12: Secretaries Card

(front)



To: District Secretary
 From: Sara Duvall,
 Primary Researcher
 Re: MASA/MASB supported
 statewide survey

WITH THANKS FOR YOUR SUPPORT

We have announced an important on-line survey to all Michigan's Superintendents and Board Presidents.

Please help us to remind them each to schedule 1/2 an hour with a computer at www.gomasa.org to respond to the survey.

Our goal is 100% participation!
 12th April - 31st May

(back)

Superintendents & Board Presidents

On-line survey

Help collect data to support school governance and leadership.

GO TO:
www.gomasa.org
 12 April - 31 May

All responses are strictly confidential.

Appendix E.1: Evalid

```

/*****
/* recode and compute evaluation SOR items */
*****/

STRING evalid (A8) .
RECODE var14 (1 = 'D') (2 thru 4 = 'A') (5 thru 6 = 'B') (7 = 'C') (8 =
'B') into evalid .
EXECUTE .

RECODE var16 (1 = -1) (2 = 1) (3 thru 4 = -1) into evalsor1 .
EXECUTE .

RECODE var17 (1 = 1) into board .
EXECUTE .

RECODE var18 (1 = 1) into superint .
EXECUTE .

RECODE var19 (1 = 1) into princip .
EXECUTE .

RECODE var20 (1 = 1) into teachers .
EXECUTE .

RECODE var21 (1 = 1) into students .
EXECUTE .

RECODE var22 (1 = 1) into parents .
EXECUTE .

RECODE var23 (1 = 1) into communit .
EXECUTE .

RECODE var24 (1 = -2) into dontwrit .
EXECUTE .

RECODE var25 (1 = -2) (2 = -1) (3 = 1) (4 = -1) (5 = -1) (6 = -1)
into evalsor3 .
EXECUTE .

```

RECODE var26 (1 = 1) into evalsr4a .
EXECUTE .

RECODE var27 (1 = 1) into evalsr4b .
EXECUTE .

RECODE var28 (1 = 1) into evalsr4c .
EXECUTE .

RECODE var29 (1 = -1) into evalsr4d .
EXECUTE .

RECODE var30 (1 = -1) into evalsr4e .
EXECUTE .

STRING prevalid (A8) .
RECODE var33 (1 = 'D') (2 thru 4 = 'A') (5 thru 6 = 'B') (7 = 'C') (8 =
'B') into prevalid .
EXECUTE .

RECODE var35 (1 = -2) (2 = -1) (3 = -1) (4 = 1) (5 = 1) into evalsr5
. EXECUTE .

RECODE var37 (1 = 2) (2 = 1) (3 = -1) (4 = -2) into evalsr6 .
EXECUTE .

IF var39 = " evalsr7a = -1 .
EXECUTE .

IF var40 = " evalsr7b = -1 .
EXECUTE .

IF var41 = " evalsr7c = -1 .
EXECUTE .

IF var39 ^= " evalsr7a = 1 .
EXECUTE .

IF var40 ^= " evalsr7b = 1 .
EXECUTE .

IF var41 ^= " evalsr7c = 1 .
EXECUTE .


```
COMPUTE evalsor =  
MEAN.10(evalsor1,board,superint,princip,teachers,students,parents,co  
mmunit,dontwrit,  
evalsor3,evalsr4a,evalsr4b,evalsr4c,evalsr4d,evalsr4e,evalsor5,evalsor  
6,evalsr7a,evalsr7b,evalsr7c) .  
EXECUTE .
```

Appendix E.2: Variable 15

```
/******  
/* var 15 recodes*/  
/******  
  
/*global category*/  
  
IF (index(var15, "informal") > 0) global = A .  
EXECUTE .  
  
IF (index(var15, "outside") > 0) global = A .  
EXECUTE .  
  
IF (index(var15, "superintendent fills out") > 0) global = A .  
EXECUTE .  
  
IF (index(var15, "anecdotal") > 0) global = A .  
EXECUTE .  
  
IF (index(var15, "verbal") > 0) global = A .  
EXECUTE .  
  
IF (index(var15, "stakeholder") > 0) global = A .  
EXECUTE .  
  
IF (index(var15, "stakeholders") > 0) global = A .  
EXECUTE .  
  
IF (index(var15, "constituencies") > 0) global = A .  
EXECUTE .  
  
IF (index(var15, "based on this discussion") > 0) global = A .  
EXECUTE .  
  
IF (index(var15, "facilitator") > 0) global = A .  
EXECUTE .  
  
IF (index(var15, "facilitates") > 0) global = A .
```

EXECUTE .

IF (index(var15, "No WRITTEN") > 0) global = A .
EXECUTE .

IF (index(var15, "casual") > 0) global = A .
EXECUTE .

IF (index(var15, "360") > 0) global = A .
EXECUTE .

IF (index(var15, "comments") > 0) global = A .
EXECUTE .

IF (index(var15, "narrative") > 0) global = A .
EXECUTE .

IF (index(var15, "staffers") > 0) global = A .
EXECUTE .

IF (index(var15, "up in the air") > 0) global = A .
EXECUTE .

IF (index(var15, "I'm working with") > 0) global = A .
EXECUTE .

IF (index(var15, "discussion") > 0) global = A .
EXECUTE .

/*judge catagory*/

IF (index(var15, "checklist") > 0) judge = B .
EXECUTE .

IF (index(var15, "card/checklist") > 0) judge = B .
EXECUTE .

IF (index(var15, "report card") > 0) judge = B .
EXECUTE .

IF (index(var15, "management by objectives") > 0) judge = B .
EXECUTE .

IF (index(var15, "policies") > 0) judge = B .
EXECUTE .

IF (index(var15, "Carver") > 0) judge = B .
EXECUTE .

IF (index(var15, "#5") > 0) judge = B .
EXECUTE .

IF (index(var15, "into one form") > 0) judge = B .
EXECUTE .

IF (index(var15, "criteria") > 0) judge = B .
EXECUTE .

IF (index(var15, "checklisindividually") > 0) judge = B .
EXECUTE .

IF (index(var15, "levels of achievement") > 0) judge = B .
EXECUTE .

IF (index(var15, "evaluation instrument") > 0) judge = B .
EXECUTE .

IF (index(var15, "set of criteria") > 0) judge = B .
EXECUTE .

IF (index(var15, "evaluation/checklist") > 0) judge = B .
EXECUTE .

IF (index(var15, "seven page") > 0) judge = B .
EXECUTE .

IF (index(var15, "subcommittee") > 0) judge = B .
EXECUTE .

IF (index(var15, "masa") > 0) judge = B .
EXECUTE .

IF (index(var15, "each functional area") > 0) judge = B .
EXECUTE .

/*data category*/

```
IF (index(var15, "data") > 0) data = C .  
EXECUTE .
```

```
IF (index(var15, "#7") > 0) data = C .  
EXECUTE .
```

```
IF (index(var15, "student outcome") > 0) data = C .  
EXECUTE .
```

Appendix E.3: Evalid_m

```
STRING evalid_m (A8) .  
RECODE  
  evalid  
  ('AB'='M') ('AC'='M') ('BC'='M') ('ABC'='M') (ELSE=Copy) INTO  
  evalid_m .  
VARIABLE LABELS evalid_m 'Eval ID if multiple responses'.  
EXECUTE .  
  
MEANS  
  TABLES=evalsor confsor polsor trainsor tlsor gensor BY evalid_m  
  /CELLS MEAN COUNT STDDEV .
```

Appendix E.4: Evalid_p

```
STRING evalidpm (A8) .  
RECODE  
  evalid_p  
  ('AB'='M') ('AC'='M') ('BC'='M') ('ABC'='M') (ELSE=Copy) INTO  
  evalidpm .  
VARIABLE LABELS evalidpm 'Preferred Eval ID if multiple responses'.  
EXECUTE .
```

Appendix E.5: Polid

From file: sor_recodes_computes.SPS
 Rename Var77: polor10 in final data

```

/*****/
/* recode and compute political id items */
/*****/

```

```

STRING polid1 (A8) .
STRING polid2 (A8) .
STRING polid3 (A8) .
STRING polid4 (A8) .

```

```

RECODE var73 (1 = 'E') (2 = 'E') (3 = 'Z') (4 = 'Z') into polid1 .
EXECUTE .

```

```

RECODE var74 (1 = 'F') (2 = 'F') (3 = 'Z') (4 = 'Z') into polid2 .
EXECUTE .

```

```

RECODE var75 (1 = 'G') (2 = 'G') (3 = 'Z') (4 = 'Z') into polid3 .
EXECUTE .

```

```

RECODE var76 (1 = 'H') (2 = 'H') (3 = 'Z') (4 = 'Z') into polid4 .
EXECUTE .

```

```

RECODE var79 (1 = 2) (2 = 1) (3 = -1) (4 = -2) into polor1 .
EXECUTE .

```

```

RECODE var81 (1 = 1) (2 = -1) into polor2 .
EXECUTE .

```

```

RECODE var82 (1 = 2) (2 = 1) (3 = -1) (4 = -2) into polor3 .
EXECUTE .

```

```

RECODE var83 (1 = 2) (2 = 1) (3 = -1) (4 = -2) into polor4 .
EXECUTE .

```



```
RECODE var84 (1 = 2) (2 = 1) (3 = -1) (4 = -2) into polsor5 .  
EXECUTE .
```

```
RECODE var122 (1 = 2) (2 = 1) (3 = -1) (4 = -2) into polsor6 .  
EXECUTE .
```

```
RECODE var123 (1 = 2) (2 = 1) (3 = -1) (4 = -2) into polsor7 .  
EXECUTE .
```

```
RECODE var124 (1 = -2) (2 = -1) (3 = 1) (4 = 2) into polsor8 .  
EXECUTE .
```

```
RECODE var125 (1 = -2) (2 = -1) (3 = 1) (4 = 2) into polsor9 .  
EXECUTE .
```

```
RECODE var77 (1 = -1) (2 = -1) (3 = -2) (4 = 1) (5 = -1) (6 = -1) into  
polsor10 .  
EXECUTE .
```

```
COMPUTE polsor = MEAN.5(polsor1 to polsor10) .  
EXECUTE .
```

Appendix E.6: Role of Board

```
/******  
/* var130 Bd Role recodes */  
/******  
  
/* hiring category */  
  
IF (index(var130,"hire") > 0) hiring = 1 .  
EXECUTE ,  
  
IF (index(var130, "hiring") > 0) hiring = 1 .  
EXECUTE .  
  
IF (index(var130, "Offer contract") > 0) hiring = 1 .  
EXECUTE .  
  
IF (index(var130, "select") > 0) hiring = 1 .  
EXECUTE .  
  
IF (index(var130, "employ") > 0) hiring = 1 .  
EXECUTE .  
  
IF (index(var130, "trust") > 0) hiring = 1 .  
EXECUTE .  
  
IF (index(var130, "choosing") > 0) hiring = 1 .  
EXECUTE .  
  
/* policy category */  
  
IF (index(var130,"policy") > 0) policy = 1 .  
EXECUTE .  
  
IF (index(var130,"policies") > 0) policy = 1 .  
EXECUTE .  
  
IF (index(var130,"POLICY") > 0) policy = 1 .  
EXECUTE .  
  
IF (index(var130,"Policy") > 0) policy = 1 .  
EXECUTE .
```

```
IF (index(var130, "Policies") > 0) policy = 1 .  
EXECUTE .
```

```
IF (index(var130, "procedural") > 0) policy = 1 .  
EXECUTE .
```

```
IF (index(var130, "procedural") > 0) policy = 1 .  
EXECUTE .
```

```
/* oversight category */
```

```
IF (index(var130, "over see") > 0) oversight = 1 .  
EXECUTE .
```

```
IF (index(var130, "oversee") > 0) oversight = 1 .  
EXECUTE .
```

```
IF (index(var130, "oversight") > 0) oversight = 1 .  
EXECUTE .
```

```
IF (index(var130, "oversite") > 0) oversight = 1 .  
EXECUTE .
```

```
IF (index(var130, "monitor") > 0) oversight = 1 .  
EXECUTE .
```

```
IF (index(var130, "monitoring") > 0) oversight = 1 .  
EXECUTE .
```

```
IF (index(var130, "operation") > 0) oversight = 1 .  
EXECUTE .
```

```
IF (index(var130, "operations") > 0) oversight = 1 .  
EXECUTE .
```

```
IF (index(var130, "management") > 0) oversight = 1 .  
EXECUTE .
```

```
IF (index(var130, "moving forward") > 0) oversight = 1 .  
EXECUTE .
```

```
IF (index(var130, "direct") > 0) oversight = 1 .  
EXECUTE .
```

IF (index(var130, "see to it that") > 0) oversight = 1 .
EXECUTE .

IF (index(var130, "see that") > 0) oversight = 1 .
EXECUTE .

IF (index(var130, "making decisions") > 0) oversight = 1 .
EXECUTE .

IF (index(var130, "guidance") > 0) oversight = 1 .
EXECUTE .

IF (index(var130, "team") > 0) oversight = 1 .
EXECUTE .

IF (index(var130, "is doing their job") > 0) oversight = 1 .
EXECUTE .

IF (index(var130, "are doing their jobs") > 0) oversight = 1 .
EXECUTE .

/*finance catagory*/

IF (index(var130, "Financially") > 0) finance = 1 .
EXECUTE .

IF (index(var130, "money") > 0) finance = 1 .
EXECUTE .

IF (index(var130, "finances") > 0) finance = 1 .
EXECUTE .

IF (index(var130, "FISCAL") > 0) finance = 1 .
EXECUTE .

IF (index(var130, "funds") > 0) finance = 1 .
EXECUTE .

IF (index(var130, "budget") > 0) finance = 1 .
EXECUTE .

IF (index(var130, "financial") > 0) finance = 1 .
EXECUTE .

IF (index(var130, "stability") > 0) finance = 1 .
EXECUTE .

IF (index(var130, "budget") > 0) finance = 1 .
EXECUTE .

IF (index(var130, "fiscal") > 0) finance = 1 .
EXECUTE .

IF (index(var130, "resources") > 0) finance = 1 .
EXECUTE .

IF (index(var130, "Fiscal") > 0) finance = 1 .
EXECUTE .

IF (index(var130, "\$") > 0) finance = 1 .
EXECUTE .

IF (index(var130, "revenues") > 0) finance = 1 .
EXECUTE .

/*ed op catagory*/

IF (index(var130, "moving forward") > 0) ed op = 1 .
EXECUTE .

IF (index(var130, "improvement of instruction") > 0) ed op = 1 .
EXECUTE .

IF (index(var130, "educating") > 0) ed op = 1 .
EXECUTE .

IF (index(var130, "advocate") > 0) ed op = 1 .
EXECUTE .

IF (index(var130, "best education") > 0) ed op = 1 .
EXECUTE .

IF (index(var130, "quality education") > 0) ed op = 1 .
EXECUTE .

IF (index(var130, "quality") > 0) ed op = 1 .

EXECUTE .

IF (index(var130, "standard") > 0) ed op = 1 .
EXECUTE .

IF (index(var130, "standards") > 0) ed op = 1 .
EXECUTE .

IF (index(var130, "student") > 0) ed op = 1 .
EXECUTE .

IF (index(var130, "students") > 0) ed op = 1 .
EXECUTE .

IF (index(var130, "environment") > 0) ed op = 1 .
EXECUTE .

IF (index(var130, "process") > 0) ed op = 1 .
EXECUTE .

IF (index(var130, "opportunity") > 0) ed op = 1 .
EXECUTE .

IF (index(var130, "opportunities") > 0) ed op = 1 .
EXECUTE .

/*rep comm catagory*/

IF (index(var130, "represent") > 0) rep comm = 1 .
EXECUTE .

IF (index(var130, "community") > 0) rep comm = 1 .
EXECUTE .

IF (index(var130, "representing") > 0) rep comm = 1 .
EXECUTE .

IF (index(var130, "celebrate") > 0) rep comm = 1 .
EXECUTE .

IF (index(var130, "constituents") > 0) rep comm = 1 .
EXECUTE .

```
IF (index(var130, "integrity") > 0) rep comm = 1 .  
EXECUTE .
```

```
IF (index(var130, "voice of the people") > 0) rep comm = 1 .  
EXECUTE .
```

```
IF (index(var130, "people") > 0) rep comm = 1 .  
EXECUTE .
```

```
IF (index(var130, "point of view") > 0) rep comm = 1 .  
EXECUTE .
```

```
IF (index(var130, "ownership") > 0) rep comm = 1 .  
EXECUTE .
```

```
/*stu achieve catagory*/
```

```
IF (index(var130, "student achievement") > 0) stu achieve = 1 .  
EXECUTE .
```

```
IF (index(var130, "achievement") > 0) stu achieve = 1 .  
EXECUTE .
```

```
IF (index(var130, "educational objectives") > 0) stu achieve = 1 .  
EXECUTE .
```

```
IF (index(var130, "student outcomes") > 0) stu achieve = 1 .  
EXECUTE .
```

```
/*vision catagory*/
```

```
IF (index(var130, "vision") > 0) vision = 1 .  
EXECUTE .
```

```
IF (index(var130, "visions") > 0) vision = 1 .  
EXECUTE .
```

```
IF (index(var130, "goal") > 0) vision = 1 .  
EXECUTE .
```

```
IF (index(var130, "goals") > 0) vision = 1 .
```

EXECUTE .

IF (index(var130, "direction") > 0) vision = 1 .
EXECUTE .

IF (index(var130, "directions") > 0) vision = 1 .
EXECUTE .

IF (index(var130, "governance") > 0) vision = 1 .
EXECUTE .

IF (index(var130, "governing") > 0) vision = 1 .
EXECUTE .

IF (index(var130, "mission") > 0) vision = 1 .
EXECUTE .

IF (index(var130, "strategic") > 0) vision = 1 .
EXECUTE .

IF (index(var130, "big picture") > 0) vision = 1 .
EXECUTE .

IF (index(var130, "objectives") > 0) vision = 1 .
EXECUTE .

IF (index(var130, "objective") > 0) vision = 1 .
EXECUTE .

/*lead catagory*/

IF (index(var130, "lead") > 0) lead = 1 .
EXECUTE .

IF (index(var130, "leading") > 0) lead = 1 .
EXECUTE .

IF (index(var130, "leadership") > 0) lead = 1 .
EXECUTE .

/*compli catagory*/


```
IF (index(var130, "compliance") > 0) compli = 1 .  
EXECUTE .
```

```
IF (index(var130, "mandates") > 0) compli = 1 .  
EXECUTE .
```

```
IF (index(var130, "law") > 0) compli = 1 .  
EXECUTE .
```

```
IF (index(var130, "laws") > 0) compli = 1 .  
EXECUTE .
```

```
/*eval catagory*/
```

```
IF (index(var130, "evaluate") > 0) eval = 1 .  
EXECUTE .
```

```
IF (index(var130, "Evaluate") > 0) eval = 1 .  
EXECUTE .
```

```
IF (index(var130, "evaluated") > 0) eval = 1 .  
EXECUTE .
```

```
IF (index(var130, "Eval") > 0) eval = 1 .  
EXECUTE .
```

```
IF (index(var130, "feedback") > 0) eval = 1 .  
EXECUTE .
```

```
/*accoun catagory*/
```

```
IF (index(var130, "accountable") > 0) accoun = 1 .  
EXECUTE .
```

```
IF (index(var130, "accountability") > 0) accoun = 1 .  
EXECUTE .
```

```
/*support catagory*/
```

```
IF (index(var130, "serve") > 0) support = 1 .  
EXECUTE .
```

```
IF (index(var130, "serving") > 0) support = 1 .  
EXECUTE .
```

```
IF (index(var130, "support") > 0) support = 1 .  
EXECUTE .
```

```
IF (index(var130, "supporting") > 0) support = 1 .  
EXECUTE .
```

```
/*curric catagory*/
```

```
IF (index(var130, "curriculum") > 0) curric = 1 .  
EXECUTE .
```

```
IF (index(var130, "program") > 0) curric = 1 .  
EXECUTE .
```

```
IF (index(var130, "programs") > 0) curric = 1 .  
EXECUTE .
```

```
IF (index(var130, "programming") > 0) curric = 1 .  
EXECUTE .
```

```
/*communic catagory*/
```

```
IF (index(var130, "communicate") > 0) communic = 1 .  
EXECUTE .
```

```
IF (index(var130, "communication") > 0) communic = 1 .  
EXECUTE .
```

Appendix E.7: Role of Superintendent

```

/*****
/* var131 Supe Role recodes */
*****/

/*inst lead catagory*/

IF (index(var131, "educational ") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "Educational") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "education") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "educate") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "quality education") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "efforts") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "curriculum") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "program") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "programs") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "academic") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "learning") > 0) inst lead = 1 .
EXECUTE .

```

IF (index(var131, "learnoing") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "practices") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "instruction") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "instructional") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "achievement") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "outcomes") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "students") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "Students") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "student") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "child") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "children") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "young people") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "learners") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "teaching") > 0) inst lead = 1 .
EXECUTE .

IF (index(var131, "learning") > 0) inst lead = 1 .
EXECUTE .

```
/*finance lead catagory*/
```

```
IF (index(var131, "Financial") > 0) finance lead = 1 .  
EXECUTE .
```

```
IF (index(var131, "financial") > 0) finance lead = 1 .  
EXECUTE .
```

```
IF (index(var131, "finance") > 0) finance lead = 1 .  
EXECUTE .
```

```
IF (index(var131, "finances") > 0) finance lead = 1 .  
EXECUTE .
```

```
IF (index(var131, "Finance") > 0) finance lead = 1 .  
EXECUTE .
```

```
IF (index(var131, "Finances") > 0) finance lead = 1 .  
EXECUTE .
```

```
IF (index(var131, "budget") > 0) finance lead = 1 .  
EXECUTE .
```

```
IF (index(var131, "budgets") > 0) finance lead = 1 .  
EXECUTE .
```

```
IF (index(var131, "Budget") > 0) finance lead = 1 .  
EXECUTE .
```

```
IF (index(var131, "funds") > 0) finance lead = 1 .  
EXECUTE .
```

```
IF (index(var131, "fiscal") > 0) finance lead = 1 .  
EXECUTE .
```

```
IF (index(var131, "fiscally") > 0) finance lead = 1 .  
EXECUTE .
```

```
IF (index(var131, "Fiscal") > 0) finance lead = 1 .  
EXECUTE .
```

IF (index(var131, "resources") > 0) finance lead = 1 .
EXECUTE .

IF (index(var131, "school open") > 0) finance lead = 1 .
EXECUTE .

IF (index(var131, "FISCAL") > 0) finance lead = 1 .
EXECUTE .

IF (index(var131, "dollar") > 0) finance lead = 1 .
EXECUTE .

/*vision lead catagory*/

IF (index(var131, "Vision") > 0) vision lead = 1 .
EXECUTE .

IF (index(var131, "vision") > 0) vision lead = 1 .
EXECUTE .

IF (index(var131, "Visionary") > 0) vision lead = 1 .
EXECUTE .

IF (index(var131, "visionary") > 0) vision lead = 1 .
EXECUTE .

IF (index(var131, "Direction") > 0) vision lead = 1 .
EXECUTE .

IF (index(var131, "sense of direction") > 0) vision lead = 1 .
EXECUTE .

IF (index(var131, "mission") > 0) vision lead = 1 .
EXECUTE .

IF (index(var131, "expectations") > 0) vision lead = 1 .
EXECUTE .

IF (index(var131, "future") > 0) vision lead = 1 .
EXECUTE .

IF (index(var131, "strategic") > 0) vision lead = 1 .
EXECUTE .

IF (index(var131, "tone") > 0) vision lead = 1 .
EXECUTE .

IF (index(var131, "Long range") > 0) vision lead = 1 .
EXECUTE .

/*imple policy catagory*/

IF (index(var131, "implement") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Implement") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Implementing") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "implementing") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "implementation") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Implementation") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "implements") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Implements") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "policy") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Policy") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "POLICY") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Policies") > 0) imple policy = 1 .

EXECUTE .

IF (index(var131, "policies") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "poicies") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "run") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Run") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "running") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Runining") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Takes care") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "make") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "guide") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "guidance") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "keep it going") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "moving") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "facilitate") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Handle") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "direct") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "direction") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Carries") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "carrying") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Carry") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Work with") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "everything") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "monitor") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Assessing") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "operations") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "OPERATIONS") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "operation") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "CEO") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "ceo") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, Administrating") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "administer") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Administering") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "admin.") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "administrative") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Manage") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "manage") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "manager") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Managing") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "managing") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "management") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Mgt") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "leadership") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Leadership") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "leader") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "lead") > 0) imple policy = 1 .

EXECUTE .

IF (index(var131, "Lead") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "leading") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "oversee") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Oversee") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "oversight") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "Perform") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "business") > 0) imple policy = 1 .
EXECUTE .

IF (index(var131, "partnership") > 0) imple policy = 1 .
EXECUTE .

/*goal set catagory*/

IF (index(var131, "goals") > 0) goal set = 1 .
EXECUTE .

IF (index(var131, "goal") > 0) goal set = 1 .
EXECUTE .

IF (index(var131, "Goals") > 0) goal set = 1 .
EXECUTE .

IF (index(var131, "Goal") > 0) goal set = 1 .
EXECUTE .

IF (index(var131, "educational plan") > 0) goal set = 1 .

EXECUTE .

/*staffing catagory*/

IF (index(var131, "measures") > 0) staffing = 1 .
EXECUTE .

IF (index(var131, "personnel") > 0) staffing = 1 .
EXECUTE .

IF (index(var131, "employees") > 0) staffing = 1 .
EXECUTE .

IF (index(var131, "employee") > 0) staffing = 1 .
EXECUTE .

IF (index(var131, "staff") > 0) staffing = 1 .
EXECUTE .

IF (index(var131, "staffing") > 0) staffing = 1 .
EXECUTE .

IF (index(var131, "principals") > 0) staffing = 1 .
EXECUTE .

IF (index(var131, "people") > 0) staffing = 1 .
EXECUTE .

IF (index(var131, "team") > 0) staffing = 1 .
EXECUTE .

IF (index(var131, "administrators") > 0) staffing = 1 .
EXECUTE .

IF (index(var131, "hire") > 0) staffing = 1 .
EXECUTE .

/*communication catagory*/

IF (index(var131, "community") > 0) communication = 1 .
EXECUTE .

IF (index(var131, "communities") > 0) communication = 1 .
EXECUTE .

IF (index(var131, "stakeholders") > 0) communication = 1 .
EXECUTE .

IF (index(var131, "data") > 0) communication = 1 .
EXECUTE .

IF (index(var131, "communicate") > 0) communication = 1 .
EXECUTE .

IF (index(var131, "communication") > 0) communication = 1 .
EXECUTE .

IF (index(var131, "communicator") > 0) communication = 1 .
EXECUTE .

IF (index(var131, "informed") > 0) communication = 1 .
EXECUTE .

IF (index(var131, "information") > 0) communication = 1 .
EXECUTE .

IF (index(var131, "Public") > 0) communication = 1 .
EXECUTE .

IF (index(var131, "public") > 0) communication = 1 .
EXECUTE .

IF (index(var131, "polit") > 0) communication = 1 .
EXECUTE .

IF (index(var131, "focused") > 0) communication = 1 .
EXECUTE .

IF (index(var131, "partnership") > 0) communication = 1 .
EXECUTE .

/*mandates catagory*/

IF (index(var131, "mandates") > 0) mandates = 1 .

EXECUTE .

IF (index(var131, "guidlines") > 0) mandates = 1 .
EXECUTE .

IF (index(var131, "laws") > 0) mandates = 1 .
EXECUTE .

IF (index(var131, "state") > 0) mandates = 1 .
EXECUTE .

IF (index(var131, "federal") > 0) mandates = 1 .
EXECUTE .

IF (index(var131, "fed") > 0) mandates = 1 .
EXECUTE .

Appendix E.8: District Size

```
/* create a head count classification variable */
```

```
RECODE  
  headcoun  
  (MISSING=SYSMIS) (Lowest thru 2999=1) (3000 thru 24999=2)  
  (25000 thru Highest=3) INTO headct_class .  
VARIABLE LABELS headct_class 'Categorical Head Count Variable'.  
EXECUTE .
```

```
CROSSTABS  
  /TABLES=complete BY headct_class  
  /FORMAT= AVALUE TABLES  
  /STATISTIC=CHISQ  
  /CELLS= COUNT ROW  
  /COUNT ROUND CELL .
```

```
CROSSTABS  
  /TABLES=complete BY headct_class BY region  
  /FORMAT= AVALUE TABLES  
  /STATISTIC=CHISQ  
  /CELLS= COUNT ROW  
  /COUNT ROUND CELL .
```

Appendix E.9: Conflict

```

/*****
/* var 70 to 72 recodes*/
*****/

/*staff_neg catagory*/

IF (index(var70, "Staff") > 0) or (index(var71, "Staff") > 0) or
(index(var72, "Staff") > 0) staff_neg = 1 .
EXECUTE .

IF (index(var70, "staff") > 0) or (index(var71, "staff") > 0) or
(index(var72, "staff") > 0) staff_neg = 1 .
EXECUTE .

IF (index(var70, "staffing") > 0) or (index(var71, "staffing") > 0) or
(index(var72, "staffing") > 0) staff_neg = 1 .
EXECUTE .

IF (index(var70, "Staffing") > 0) or (index(var71, "Staffing") > 0) or
(index(var72, "Staffing") > 0) staff_neg = 1 .
EXECUTE .

IF (index(var70, "evaluations") > 0) or (index(var71, "evaluations") >
0) or (index(var72, "evaluations") > 0) staff_neg = 1 .
EXECUTE .

IF (index(var70, "evaluation") > 0) or (index(var71, "evaluation") > 0)
or (index(var72, "evaluation") > 0) staff_neg = 1 .
EXECUTE .

IF (index(var70, "hire") > 0) or (index(var71, "hire") > 0) or
(index(var72, "hire") > 0) staff_neg = 1 .
EXECUTE .

IF (index(var70, "hires") > 0) or (index(var71, "hires") > 0) or
(index(var72, "hires") > 0) staff_neg = 1 .
EXECUTE .

IF (index(var70, "hiring") > 0) or (index(var71, "hiring") > 0) or
(index(var72, "hiring") > 0) staff_neg = 1 .

```


EXECUTE .

IF (index(var70, "Hiring") > 0) or (index(var71, "Hiring") > 0) or
(index(var72, "Hiring") > 0) staff_neg = 1 .
EXECUTE .

IF (index(var70, "Firing") > 0) or (index(var71, "Firing") > 0) or
(index(var72, "Firing") > 0) staff_neg = 1 .
EXECUTE .

IF (index(var70, "remove") > 0) or (index(var71, "remove") > 0) or
(index(var72, "remove") > 0) staff_neg = 1 .
EXECUTE .

IF (index(var70, "Personnel") > 0) or (index(var71, "Personnel") > 0)
or (index(var72, "Personnel") > 0) staff_neg = 1 .
EXECUTE .

IF (index(var70, "personnel") > 0) or (index(var71, "personnel") > 0)
or (index(var72, "personnel") > 0) staff_neg = 1 .
EXECUTE .

IF IF (index(var70, "Employee") > 0) or (index(var71, "Employee") >
0) or (index(var72, "Employee") > 0) staff_neg = 1 .
EXECUTE .

IF IF (index(var70, "Employees") > 0) or (index(var71, "Employees")
> 0) or (index(var72, "Employees") > 0) staff_neg = 1 .
EXECUTE .

IF IF (index(var70, "contract") > 0) or (index(var71, "contract") > 0)
or (index(var72, "contract") > 0) staff_neg = 1 .
EXECUTE .

IF IF (index(var70, "contracts") > 0) or (index(var71, "contracts") >
0) or (index(var72, "contracts") > 0) staff_neg = 1 .
EXECUTE .

IF IF (index(var70, "retire") > 0) or (index(var71, "retire") > 0) or
(index(var72, "retire") > 0) staff_neg = 1 .
EXECUTE .

IF IF (index(var70, "position") > 0) or (index(var71, "position") > 0)
or (index(var72, "position") > 0) staff_neg = 1 .

EXECUTE .

IF IF (index(var70, "non-renewal") > 0) or (index(var71, "non-renewal") > 0) or (index(var72, "non-renewal") > 0) staff_neg = 1 .
EXECUTE .

IF IF (index(var70, "Negotiations") > 0) or (index(var71, "Negotiations") > 0) or (index(var72, "Negotiations") > 0) staff_neg = 1 .
EXECUTE .

IF IF (index(var70, "negotiations") > 0) or (index(var71, "negotiations") > 0) or (index(var72, "negotiations") > 0) staff_neg = 1 .
EXECUTE .

IF IF (index(var70, "Bargaining") > 0) or (index(var71, "Bargaining") > 0) or (index(var72, "Bargaining") > 0) staff_neg = 1 .
EXECUTE .

IF IF (index(var70, "bus drivers") > 0) or (index(var71, "bus drivers") > 0) or (index(var72, "bus drivers") > 0) staff_neg = 1 .
EXECUTE .

IF IF (index(var70, "teacher") > 0) or (index(var71, "teacher") > 0) or (index(var72, "teacher") > 0) staff_neg = 1 .
EXECUTE .

IF IF (index(var70, "teachers") > 0) or (index(var71, "teachers") > 0) or (index(var72, "teachers") > 0) staff_neg = 1 .
EXECUTE .

IF IF (index(var70, "Search") > 0) or (index(var71, "Search") > 0) or (index(var72, "Search") > 0) staff_neg = 1 .
EXECUTE .

/*money catagory*/

IF (index(var70, "compensation") > 0) or (index(var71, "compensation") > 0) or (index(var72, "compensation") > 0) money = 1 .
EXECUTE .

IF (index(var70, "Compensation") > 0) or (index(var71, "Compensation") > 0) or (index(var72, "Compensation") > 0) money = 1 .
EXECUTE .

IF (index(var70, "budget") > 0) or (index(var71, "budget") > 0) or (index(var72, "budget") > 0) money = 1 .
EXECUTE .

IF (index(var70, "Budget") > 0) or (index(var71, "Budget") > 0) or (index(var72, "Budget") > 0) money = 1 .
EXECUTE .

IF (index(var70, "budgeting") > 0) or (index(var71, "budgeting") > 0) or (index(var72, "budgeting") > 0) money = 1 .
EXECUTE .

IF (index(var70, "budgetary") > 0) or (index(var71, "budgetary") > 0) or (index(var72, "budgetary") > 0) money = 1 .
EXECUTE .

IF (index(var70, "salaries") > 0) or (index(var71, "salaries") > 0) or (index(var72, "salaries") > 0) money = 1 .
EXECUTE .

IF (index(var70, "salary") > 0) or (index(var71, "salary") > 0) or (index(var72, "salary") > 0) money = 1 .
EXECUTE .

IF (index(var70, "Finances") > 0) or (index(var71, "Finances") > 0) or (index(var72, "Finances") > 0) money = 1 .
EXECUTE .

IF (index(var70, "finances") > 0) or (index(var71, "finances") > 0) or (index(var72, "finances") > 0) money = 1 .
EXECUTE .

IF (index(var70, "Financial") > 0) or (index(var71, "Financial") > 0) or (index(var72, "Financial") > 0) money = 1 .
EXECUTE .

IF (index(var70, "incentives") > 0) or (index(var71, "incentives") > 0) or (index(var72, "incentives") > 0) money = 1 .
EXECUTE .

IF (index(var70, "buy-out") > 0) or (index(var71, "buy-out") > 0) or
(index(var72, "buy-out") > 0) money = 1 .
EXECUTE .

IF (index(var70, "Layoffs") > 0) or (index(var71, "Layoffs") > 0) or
(index(var72, "Layoffs") > 0) money = 1 .
EXECUTE .

IF (index(var70, "Layoff") > 0) or (index(var71, "Layoff") > 0) or
(index(var72, "Layoff") > 0) money = 1 .
EXECUTE .

IF (index(var70, "lay off") > 0) or (index(var71, "lay off") > 0) or
(index(var72, "lay off") > 0) money = 1 .
EXECUTE .

IF (index(var70, "fund") > 0) or (index(var71, "fund") > 0) or
(index(var72, "fund") > 0) money = 1 .
EXECUTE .

IF (index(var70, "Fund") > 0) or (index(var71, "Fund") > 0) or
(index(var72, "Fund") > 0) money = 1 .
EXECUTE .

IF (index(var70, "funding") > 0) or (index(var71, "funding") > 0) or
(index(var72, "funding") > 0) money = 1 .
EXECUTE .

IF (index(var70, "sites") > 0) or (index(var71, "sites") > 0) or
(index(var72, "sites") > 0) money = 1 .
EXECUTE .

IF (index(var70, "bond") > 0) or (index(var71, "bond") > 0) or
(index(var72, "bond") > 0) money = 1 .
EXECUTE .

IF (index(var70, "Bond") > 0) or (index(var71, "Bond") > 0) or
(index(var72, "Bond") > 0) money = 1 .
EXECUTE .

IF (index(var70, "revenue") > 0) or (index(var71, "revenue") > 0) or
(index(var72, "revenue") > 0) money = 1 .
EXECUTE .

IF (index(var70, "charge") > 0) or (index(var71, "charge") > 0) or
(index(var72, "charge") > 0) money = 1 .
EXECUTE .

IF (index(var70, "money") > 0) or (index(var71, "money") > 0) or
(index(var72, "money") > 0) money = 1 .
EXECUTE .

IF (index(var70, "Money") > 0) or (index(var71, "Money") > 0) or
(index(var72, "Money") > 0) money = 1 .
EXECUTE .

IF (index(var70, "Purchasing") > 0) or (index(var71, "Purchasing") >
0) or (index(var72, "Purchasing") > 0) money = 1 .
EXECUTE .

IF (index(var70, "benefits") > 0) or (index(var71, "benefits") > 0) or
(index(var72, "benefits") > 0) money = 1 .
EXECUTE .

IF (index(var70, "dollar") > 0) or (index(var71, "dollar") > 0) or
(index(var72, "dollar") > 0) money = 1 .
EXECUTE .

IF (index(var70, "pay") > 0) or (index(var71, "pay") > 0) or
(index(var72, "pay") > 0) money = 1 .
EXECUTE .

IF (index(var70, "pay/salary") > 0) or (index(var71, "pay/salary") >
0) or (index(var72, "pay/salary") > 0) money = 1 .
EXECUTE .

IF (index(var70, "cuts") > 0) or (index(var71, "cuts") > 0) or
(index(var72, "cuts") > 0) money = 1 .
EXECUTE .

IF (index(var70, "FISCAL") > 0) or (index(var71, "FISCAL") > 0) or
(index(var72, "FISCAL") > 0) money = 1 .
EXECUTE .

IF (index(var70, "Calendar") > 0) or (index(var71, "Calendar") > 0) or
(index(var72, "Calendar") > 0) money = 1 .
EXECUTE .

IF (index(var70, "bid") > 0) or (index(var71, "bid") > 0) or
(index(var72, "bid") > 0) money = 1 .
EXECUTE .

IF (index(var70, "Organizational") > 0) or (index(var71,
"Organizational") > 0) or (index(var72, "Organizational") > 0) money
= 1 .
EXECUTE .

IF (index(var70, "construction") > 0) or (index(var71, "construction")
> 0) or (index(var72, "construction") > 0) money = 1 .
EXECUTE .

IF (index(var70, "Construction") > 0) or (index(var71, "Construction")
> 0) or (index(var72, "Construction") > 0) money = 1 .
EXECUTE .

IF (index(var70, "drink") > 0) or (index(var71, "drink") > 0) or
(index(var72, "drink") > 0) money = 1 .
EXECUTE .

/*role catagory*/

IF (index(var70, "role") > 0) or (index(var71, "role") > 0) or
(index(var72, "role") > 0) role = 1 .
EXECUTE .

IF (index(var70, "Role") > 0) or (index(var71, "Role") > 0) or
(index(var72, "Role") > 0) role = 1 .
EXECUTE .

IF (index(var70, "roles") > 0) or (index(var71, "roles") > 0) or
(index(var72, "roles") > 0) role = 1 .
EXECUTE .

IF (index(var70, "Roles") > 0) or (index(var71, "Roles") > 0) or
(index(var72, "Roles") > 0) role = 1 .
EXECUTE .

IF (index(var70, "power") > 0) or (index(var71, "power") > 0) or
(index(var72, "power") > 0) role = 1 .

EXECUTE .

IF (index(var70, "Power") > 0) or (index(var71, "Power") > 0) or
(index(var72, "Power") > 0) role = 1 .
EXECUTE .

IF (index(var70, "decisions") > 0) or (index(var71, "decisions") > 0)
or (index(var72, "decisions") > 0) role = 1 .
EXECUTE .

IF (index(var70, "member") > 0) or (index(var71, "member") > 0) or
(index(var72, "member") > 0) role = 1 .
EXECUTE .

IF (index(var70, "Member") > 0) or (index(var71, "Member") > 0) or
(index(var72, "Member") > 0) role = 1 .
EXECUTE .

IF (index(var70, "members") > 0) or (index(var71, "members") > 0)
or (index(var72, "members") > 0) role = 1 .
EXECUTE .

IF (index(var70, "surprises") > 0) or (index(var71, "surprises") > 0) or
(index(var72, "surprises") > 0) role = 1 .
EXECUTE .

IF (index(var70, "governance") > 0) or (index(var71, "governance") >
0) or (index(var72, "governance") > 0) role = 1 .
EXECUTE .

IF (index(var70, "Procedural") > 0) or (index(var71, "Procedural") >
0) or (index(var72, "Procedural") > 0) role = 1 .
EXECUTE .

IF (index(var70, "procedural") > 0) or (index(var71, "procedural") >
0) or (index(var72, "procedural") > 0) role = 1 .
EXECUTE .

IF (index(var70, "policy") > 0) or (index(var71, "policy") > 0) or
(index(var72, "policy") > 0) role = 1 .
EXECUTE .

IF (index(var70, "talks") > 0) or (index(var71, "talks") > 0) or
(index(var72, "talks") > 0) role = 1 .

EXECUTE .

IF (index(var70, "adjustments") > 0) or (index(var71, "adjustments") > 0) or (index(var72, "adjustments") > 0) role = 1 .
EXECUTE .

IF (index(var70, "Delegation") > 0) or (index(var71, "Delegation") > 0) or (index(var72, "Delegation") > 0) role = 1 .
EXECUTE .

IF (index(var70, "Committees") > 0) or (index(var71, "Committees") > 0) or (index(var72, "Committees") > 0) role = 1 .
EXECUTE .

IF (index(var70, "newest") > 0) or (index(var71, "newest") > 0) or (index(var72, "newest") > 0) role = 1 .
EXECUTE .

IF (index(var70, "favoritism") > 0) or (index(var71, "favoritism") > 0) or (index(var72, "favoritism") > 0) role = 1 .
EXECUTE .

IF (index(var70, "agendas") > 0) or (index(var71, "agendas") > 0) or (index(var72, "agendas") > 0) role = 1 .
EXECUTE .

IF (index(var70, "go away") > 0) or (index(var71, "go away") > 0) or (index(var72, "go away") > 0) role = 1 .
EXECUTE .

IF (index(var70, "control") > 0) or (index(var71, "control") > 0) or (index(var72, "control") > 0) role = 1 .
EXECUTE .

IF (index(var70, "ethics") > 0) or (index(var71, "ethics") > 0) or (index(var72, "ethics") > 0) role = 1 .
EXECUTE .

IF (index(var70, "disclosing") > 0) or (index(var71, "disclosing") > 0) or (index(var72, "disclosing") > 0) role = 1 .
EXECUTE .

IF (index(var70, "phone") > 0) or (index(var71, "phone") > 0) or (index(var72, "phone") > 0) role = 1 .

EXECUTE .

IF (index(var70, "recommendations") > 0) or (index(var71, "recommendations") > 0) or (index(var72, "recommendations") > 0) role = 1 .

EXECUTE .

IF (index(var70, "practices") > 0) or (index(var71, "practices") > 0) or (index(var72, "practices") > 0) role = 1 .

EXECUTE .

IF (index(var70, "Subordinate") > 0) or (index(var71, "Subordinate") > 0) or (index(var72, "Subordinate") > 0) role = 1 .

EXECUTE .

IF (index(var70, "mistrust") > 0) or (index(var71, "mistrust") > 0) or (index(var72, "mistrust") > 0) role = 1 .

EXECUTE .

/*communic catagory*/

IF (index(var70, "communication") > 0) or (index(var71, "communication") > 0) or (index(var72, "communication") > 0) communic = 1 .

EXECUTE .

IF (index(var70, "communications") > 0) or (index(var71, "communications") > 0) or (index(var72, "communications") > 0) communic = 1 .

EXECUTE .

IF (index(var70, "Communication") > 0) or (index(var71, "Communication") > 0) or (index(var72, "Communication") > 0) communic = 1 .

EXECUTE .

IF (index(var70, "communicate") > 0) or (index(var71, "communicate") > 0) or (index(var72, "communicate") > 0) communic = 1 .

EXECUTE .

IF (index(var70, "communicated") > 0) or (index(var71, "communicated") > 0) or (index(var72, "communicated") > 0)

communic = 1 .
EXECUTE .

IF (index(var70, "Timliness") > 0) or (index(var71, "Timliness") > 0)
or (index(var72, "Timliness") > 0) communic = 1 .
EXECUTE .

IF (index(var70, "information") > 0) or (index(var71, "information") >
0) or (index(var72, "information") > 0) communic = 1 .
EXECUTE .

IF (index(var70, "Information") > 0) or (index(var71, "Information") >
0) or (index(var72, "Information") > 0) communic = 1 .
EXECUTE .

IF (index(var70, "informing") > 0) or (index(var71, "informing") > 0)
or (index(var72, "informing") > 0) communic = 1 .
EXECUTE .

IF (index(var70, "questions") > 0) or (index(var71, "questions") > 0)
or (index(var72, "questions") > 0) communic = 1 .
EXECUTE .

IF (index(var70, "input") > 0) or (index(var71, "input") > 0) or
(index(var72, "input") > 0) communic = 1 .
EXECUTE .

IF (index(var70, "hear") > 0) or (index(var71, "hear") > 0) or
(index(var72, "hear") > 0) communic = 1 .
EXECUTE .

IF (index(var70, "full details") > 0) or (index(var71, "full details") > 0)
or (index(var72, "full details") > 0) communic = 1 .
EXECUTE .

IF (index(var70, "access") > 0) or (index(var71, "access") > 0) or
(index(var72, "access") > 0) communic = 1 .
EXECUTE .

IF (index(var70, "Legal") > 0) or (index(var71, "Legal") > 0) or
(index(var72, "Legal") > 0) communic = 1 .
EXECUTE .

IF (index(var70, "message") > 0) or (index(var71, "message") > 0) or

```
(index(var72, "message") > 0) communic = 1 .
EXECUTE .
```

```
IF (index(var70, "quick") > 0) or (index(var71, "quick") > 0) or
(index(var72, "quick") > 0) communic = 1 .
EXECUTE .
```

```
IF (index(var70, "notice") > 0) or (index(var71, "notice") > 0) or
(index(var72, "notice") > 0) communic = 1 .
EXECUTE .
```

```
IF (index(var70, "documentation") > 0) or (index(var71,
"documentation") > 0) or (index(var72, "documentation") > 0)
communic = 1 .
EXECUTE .
```

```
/*mic_man catagory*/
```

```
IF (index(var70, "micromanaging") > 0) or (index(var71,
"micromanaging") > 0) or (index(var72, "micromanaging") > 0)
mic_man = 1 .
EXECUTE .
```

```
IF (index(var70, "Micromanaging") > 0) or (index(var71,
"Micromanaging") > 0) or (index(var72, "Micromanaging") > 0)
mic_man = 1 .
EXECUTE .
```

```
IF (index(var70, "micromanagement") > 0) or (index(var71,
"micromanagement") > 0) or (index(var72, "micromanagement") > 0)
mic_man = 1 .
EXECUTE .
```

```
IF (index(var70, "Micromanagement") > 0) or (index(var71,
"Micromanagement") > 0) or (index(var72, "Micromanagement") > 0)
mic_man = 1 .
EXECUTE .
```

```
IF (index(var70, "Micro-management") > 0) or (index(var71, "Micro-
management") > 0) or (index(var72, "Micro-management") > 0)
mic_man = 1 .
EXECUTE .
```

```
IF (index(var70, "micro management") > 0) or (index(var71, "micro
management") > 0) or (index(var72, "micro management") > 0)
mic_man = 1 .
EXECUTE .
```

```
IF (index(var70, "micro-management") > 0) or (index(var71, "micro-
management") > 0) or (index(var72, "micro-management") > 0)
mic_man = 1 .
EXECUTE .
```

```
IF (index(var70, "micromanaging") > 0) or (index(var71,
"micromanaging") > 0) or (index(var72, "micromanaging") > 0)
mic_man = 1 .
EXECUTE .
```

```
IF (index(var70, "Micro managing") > 0) or (index(var71, "Micro
managing") > 0) or (index(var72, "Micro managing") > 0) mic_man =
1 .
EXECUTE .
```

```
IF (index(var70, "Micro-managing") > 0) or (index(var71, "Micro-
managing") > 0) or (index(var72, "Micro-managing") > 0) mic_man =
1 .
EXECUTE .
```

```
IF (index(var70, "micro-manage") > 0) or (index(var71, "micro-
manage") > 0) or (index(var72, "micro-manage") > 0) mic_man = 1 .
EXECUTE .
```

```
IF (index(var70, "micro manage") > 0) or (index(var71, "micro
manage") > 0) or (index(var72, "micro manage") > 0) mic_man = 1 .
EXECUTE .
```

```
IF (index(var70, "micro managing") > 0) or (index(var71, "micro
managing") > 0) or (index(var72, "micro managing") > 0) mic_man =
1 .
EXECUTE .
```

```
IF (index(var70, "speed") > 0) or (index(var71, "speed") > 0) or
(index(var72, "speed") > 0) mic_man = 1 .
EXECUTE .
```

```
IF (index(var70, "micrmanage") > 0) or (index(var71, "micrmanage")
> 0) or (index(var72, "micrmanage") > 0) mic_man = 1 .
```

EXECUTE .

IF (index(var70, "manage") > 0) or (index(var71, "manage") > 0) or
(index(var72, "manage") > 0) mic_man = 1 .
EXECUTE .

IF (index(var70, "board management") > 0) or (index(var71, "board
management") > 0) or (index(var72, "board management") > 0)
mic_man = 1 .
EXECUTE .

IF (index(var70, "too many opinions") > 0) or (index(var71, "too
many opinions") > 0) or (index(var72, "too many opinions") > 0)
mic_man = 1 .
EXECUTE .

IF (index(var70, "Construction") > 0) or (index(var71, "Construction")
> 0) or (index(var72, "Construction") > 0) mic_man = 1 .
EXECUTE .

IF (index(var70, "construction") > 0) or (index(var71, "construction")
> 0) or (index(var72, "construction") > 0) mic_man = 1 .
EXECUTE .

IF (index(var70, "Needless") > 0) or (index(var71, "Needless") > 0) or
(index(var72, "Needless") > 0) mic_man = 1 .
EXECUTE .

IF (index(var70, "Thinks He Runs") > 0) or (index(var71, "Thinks He
Runs") > 0) or (index(var72, "Thinks He Runs") > 0) mic_man = 1 .
EXECUTE .

IF (index(var70, "micro managing-when") > 0) or (index(var71,
"micro managing-when") > 0) or (index(var72, "micro managing-
when") > 0) mic_man = 1 .
EXECUTE .

IF (index(var70, "Operations") > 0) or (index(var71, "Operations") >
0) or (index(var72, "Operations") > 0) mic_man = 1 .
EXECUTE .

IF (index(var70, "daily operations") > 0) or (index(var71, "daily
operations") > 0) or (index(var72, "daily operations") > 0) mic_man =
1 .

EXECUTE .

IF (index(var70, "mic-ro manage") > 0) or (index(var71, "mic-ro manage") > 0) or (index(var72, "mic-ro manage") > 0) mic_man = 1 .
EXECUTE .

IF (index(var70, "involved") > 0) or (index(var71, "involved") > 0) or (index(var72, "involved") > 0) mic_man = 1 .
EXECUTE .

/*lead style catagory*/

IF (index(var70, "in charge") > 0) or (index(var71, "in charge") > 0) or (index(var72, "in charge") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "boss") > 0) or (index(var71, "boss") > 0) or (index(var72, "boss") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "leadership") > 0) or (index(var71, "leadership") > 0) or (index(var72, "leadership") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "Leadership") > 0) or (index(var71, "Leadership") > 0) or (index(var72, "Leadership") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "Time given") > 0) or (index(var71, "Time given") > 0) or (index(var72, "Time given") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "quicker change") > 0) or (index(var71, "quicker change") > 0) or (index(var72, "quicker change") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "quick") > 0) or (index(var71, "quick") > 0) or (index(var72, "quick") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "in buildings more") > 0) or (index(var71, "in

buildings more") > 0) or (index(var72, "in buildings more") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "Timing") > 0) or (index(var71, "Timing") > 0) or (index(var72, "Timing") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "Policy") > 0) or (index(var71, "Policy") > 0) or (index(var72, "Policy") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "Goals") > 0) or (index(var71, "Goals") > 0) or (index(var72, "Goals") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "goals") > 0) or (index(var71, "goals") > 0) or (index(var72, "goals") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "Val/Sal") > 0) or (index(var71, "Val/Sal") > 0) or (index(var72, "Val/Sal") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "protocal") > 0) or (index(var71, "protocol") > 0) or (index(var72, "protocol") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "gone from") > 0) or (index(var71, "gone from") > 0) or (index(var72, "gone from") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "his way only") > 0) or (index(var71, "his way only") > 0) or (index(var72, "his way only") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "choose to address") > 0) or (index(var71, "choose to address") > 0) or (index(var72, "choose to address") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "Following direction") > 0) or (index(var71, "Following direction") > 0) or (index(var72, "Following direction") > 0) lead style = 1 .

EXECUTE .

IF (index(var70, "decisive") > 0) or (index(var71, "decisive") > 0) or
(index(var72, "decisive") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "speed") > 0) or (index(var71, "speed") > 0) or
(index(var72, "speed") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "action taken") > 0) or (index(var71, "action taken")
> 0) or (index(var72, "action taken") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "objectivity") > 0) or (index(var71, "objectivity") > 0)
or (index(var72, "objectivity") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "Subordinate") > 0) or (index(var71, "Subordinate")
> 0) or (index(var72, "Subordinate") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "tough enough") > 0) or (index(var71, "tough
enough") > 0) or (index(var72, "tough enough") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "Lack of") > 0) or (index(var71, "Lack of") > 0) or
(index(var72, "Lack of") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "following through") > 0) or (index(var71, "following
through") > 0) or (index(var72, "following through") > 0) lead style =
1 .
EXECUTE .

IF (index(var70, "follow through") > 0) or (index(var71, "follow
through") > 0) or (index(var72, "follow through") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "mistrust") > 0) or (index(var71, "mistrust") > 0) or
(index(var72, "mistrust") > 0) lead style = 1 .
EXECUTE .

IF (index(var70, "long term") > 0) or (index(var71, "long term") > 0)

or (index(var72, "long term") > 0) lead style = 1 .
EXECUTE .

/*agenda catagory*/

IF (index(var70, "agendas") > 0) or (index(var71, "agendas") > 0) or
(index(var72, "agendas") > 0) agenda = 1 .
EXECUTE .

IF (index(var70, "agenda") > 0) or (index(var71, "agenda") > 0) or
(index(var72, "agenda") > 0) agenda = 1 .
EXECUTE .

IF (index(var70, "two board members") > 0) or (index(var71, "two
board members") > 0) or (index(var72, "two board members") > 0)
agenda = 1 .
EXECUTE .

IF (index(var70, "sway") > 0) or (index(var71, "sway") > 0) or
(index(var72, "sway") > 0) agenda = 1 .
EXECUTE .

IF (index(var70, "conflict of interest") > 0) or (index(var71, "conflict of
interest") > 0) or (index(var72, "conflict of interest") > 0) agenda = 1
.
EXECUTE .

IF (index(var70, "cannot unite") > 0) or (index(var71, "cannot unite")
> 0) or (index(var72, "cannot unite") > 0) agenda = 1 .
EXECUTE .

IF (index(var70, "amongst board members") > 0) or (index(var71,
"amongst board members") > 0) or (index(var72, "amongst board
members") > 0) agenda = 1 .
EXECUTE .

IF (index(var70, "Board President") > 0) or (index(var71, "Board
President") > 0) or (index(var72, "Board President") > 0) agenda = 1
.
EXECUTE .

IF (index(var70, "bias") > 0) or (index(var71, "bias") > 0) or
(index(var72, "bias") > 0) agenda = 1 .

EXECUTE .

IF (index(var70, "union president") > 0) or (index(var71, "union president") > 0) or (index(var72, "union president") > 0) agenda = 1 .
EXECUTE .

IF (index(var70, "special interest") > 0) or (index(var71, "special interest") > 0) or (index(var72, "special interest") > 0) agenda = 1 .
EXECUTE .

IF (index(var70, "not following board") > 0) or (index(var71, "not following board") > 0) or (index(var72, "not following board") > 0) agenda = 1 .
EXECUTE .

/*discip catagory*/

IF (index(var70, "Discipline") > 0) or (index(var71, "Discipline") > 0) or (index(var72, "Discipline") > 0) discip = 1 .
EXECUTE .

IF (index(var70, "discipline") > 0) or (index(var71, "discipline") > 0) or (index(var72, "discipline") > 0) discip = 1 .
EXECUTE .

IF (index(var70, "disipline") > 0) or (index(var71, "disipline") > 0) or (index(var72, "disipline") > 0) discip = 1 .
EXECUTE .

IF (index(var70, "disciplining") > 0) or (index(var71, "disciplining") > 0) or (index(var72, "disciplining") > 0) discip = 1 .
EXECUTE .

IF (index(var70, "Expulsions") > 0) or (index(var71, "Expulsions") > 0) or (index(var72, "Expulsions") > 0) discip = 1 .
EXECUTE .

IF (index(var70, "expulsions") > 0) or (index(var71, "expulsions") > 0) or (index(var72, "expulsions") > 0) discip = 1 .
EXECUTE .

IF (index(var70, "family/student") > 0) or (index(var71,

"family/student") > 0) or (index(var72, "family/student") > 0) discip = 1 .
EXECUTE .

IF (index(var70, "honor students") > 0) or (index(var71, "honor students") > 0) or (index(var72, "honor students") > 0) discip = 1 .
EXECUTE .

IF (index(var70, "curriculum") > 0) or (index(var71, "curriculum") > 0) or (index(var72, "curriculum") > 0) discip = 1 .
EXECUTE .

IF (index(var70, "standards") > 0) or (index(var71, "standards") > 0) or (index(var72, "standards") > 0) discip = 1 .
EXECUTE .

IF (index(var70, "programs") > 0) or (index(var71, "programs") > 0) or (index(var72, "programs") > 0) discip = 1 .
EXECUTE .

IF (index(var70, "enforcement") > 0) or (index(var71, "enforcement") > 0) or (index(var72, "enforcement") > 0) discip = 1 .
EXECUTE .

IF (index(var70, "early childhood") > 0) or (index(var71, "early childhood") > 0) or (index(var72, "early childhood") > 0) discip = 1 .
EXECUTE .

/*community catagory*/

IF (index(var70, "redistricting") > 0) or (index(var71, "redistricting") > 0) or (index(var72, "redistricting") > 0) community = 1 .
EXECUTE .

IF (index(var70, "community") > 0) or (index(var71, "community") > 0) or (index(var72, "community") > 0) community = 1 .
EXECUTE .

IF (index(var70, "criticisms") > 0) or (index(var71, "criticisims") > 0) or (index(var72, "criticisims") > 0) community = 1 .
EXECUTE .

```
IF (index(var70, "public relations") > 0) or (index(var71, "public
relations") > 0) or (index(var72, "public relations") > 0) community =
1 .
EXECUTE .
```

```
IF (index(var70, "graduation") > 0) or (index(var71, "graduation") >
0) or (index(var72, "graduation") > 0) community = 1 .
EXECUTE .
```

```
IF (index(var70, "publics") > 0) or (index(var71, "publics") > 0) or
(index(var72, "publics") > 0) community = 1 .
EXECUTE .
```

```
IF (index(var70, "parents") > 0) or (index(var71, "parents") > 0) or
(index(var72, "parents") > 0) community = 1 .
EXECUTE .
```

```
IF (index(var70, "complaints") > 0) or (index(var71, "complaints") >
0) or (index(var72, "complaints") > 0) community = 1 .
EXECUTE .
```

```
IF (index(var70, "facilities") > 0) or (index(var71, "facilities") > 0) or
(index(var72, "facilities") > 0) community = 1 .
EXECUTE .
```

```
/*athletics catagory*/
```

```
IF (index(var70, "Athletics") > 0) or (index(var71, "Athletics") > 0) or
(index(var72, "Athletics") > 0) athletics = 1 .
EXECUTE .
```

```
IF (index(var70, "athletics") > 0) or (index(var71, "athletics") > 0) or
(index(var72, "athletics") > 0) athletics = 1 .
EXECUTE .
```

```
IF (index(var70, "athletic") > 0) or (index(var71, "athletic") > 0) or
(index(var72, "athletic") > 0) athletics = 1 .
EXECUTE .
```

```
IF (index(var70, "coach") > 0) or (index(var71, "coach") > 0) or
```

(index(var72, "coach") > 0) athletics = 1 .
EXECUTE .

IF (index(var70, "coaches") > 0) or (index(var71, "coaches") > 0) or
(index(var72, "coaches") > 0) athletics = 1 .
EXECUTE .

IF (index(var70, "extracurricular") > 0) or (index(var71,
"extracurricular") > 0) or (index(var72, "extracurricular") > 0)
athletics = 1 .
EXECUTE .

IF (index(var70, "Extra curricular") > 0) or (index(var71, "Extra
curricular") > 0) or (index(var72, "Extra curricular") > 0) athletics = 1
.
EXECUTE .

IF (index(var70, "senior trip") > 0) or (index(var71, "senior trip") > 0)
or (index(var72, "senior trip") > 0) athletics = 1 .
EXECUTE .

IF (index(var70, "Overnight Trips") > 0) or (index(var71, "Overnight
Trips") > 0) or (index(var72, "Overnight Trips") > 0) athletics = 1 .
EXECUTE .

IF (index(var70, "athletics-focus") > 0) or (index(var71, "athletics-
focus") > 0) or (index(var72, "athletics-focus") > 0) athletics = 1 .
EXECUTE .

/*sch choice catagory*/

IF (index(var70, "schools of choice") > 0) or (index(var71, "schools of
choice") > 0) or (index(var72, "schools of choice") > 0) sch choice = 1
.
EXECUTE .

IF (index(var70, "School of choice") > 0) or (index(var71, "School of
choice") > 0) or (index(var72, "School of choice") > 0) sch choice = 1
.
EXECUTE .

IF (index(var70, "Schools of choice") > 0) or (index(var71, "Schools of
choice") > 0) or (index(var72, "Schools of choice") > 0) sch choice = 1

.
EXECUTE .

/*achieve catagory*/

IF (index(var70, "Instruction") > 0) or (index(var71, "Instruction") > 0) or (index(var72, "Instruction") > 0) achieve = 1 .
EXECUTE .

IF (index(var70, "curriculum") > 0) or (index(var71, "curriculum") > 0) or (index(var72, "curriculum") > 0) achieve = 1 .
EXECUTE .

IF (index(var70, "Student achievement") > 0) or (index(var71, "Student achievement") > 0) or (index(var72, "Student achievement") > 0) achieve = 1 .
EXECUTE .

/*tech catagory*/

IF (index(var70, "website") > 0) or (index(var71, "website") > 0) or (index(var72, "website") > 0) tech = 1 .
EXECUTE .

IF (index(var70, "technology") > 0) or (index(var71, "technology") > 0) or (index(var72, "technology") > 0) tech = 1 .
EXECUTE .

Appendix E.10: Agreement

```
/* create analysis pairs data set, containing records for those districts with  
two people reporting complete cases */
```

```
/* start with the analysis file from 9/21/04 */
```

```
SORT CASES BY  
  district (A) .
```

```
AGGREGATE  
  /OUTFILE='H:\Clients\Sara Duvall\district_nocases.sav'  
  /BREAK=district  
  /N_BREAK=N.
```

```
MATCH FILES /FILE=*  
  /TABLE='H:\Clients\Sara Duvall\district_nocases.sav'  
  /BY district.  
EXECUTE.
```

```
FILTER OFF.  
USE ALL.  
SELECT IF(N_BREAK = 2).  
EXECUTE .
```

```
SAVE OUTFILE='H:\Clients\Sara Duvall\analysis_pairs.sav'  
  /COMPRESSED.
```

```
/* restructure the pairs into a data set with a single record per district. */
```

```
/* if any variables don't get split into two variables in the restructured data  
set, use the following recode: */
```

```
RECODE var26 var27 var28 var29 var30 (MISSING = 99) .  
EXECUTE .
```

```
SORT CASES BY district .
```

```
CASESTOVARS  
  /ID = district  
  /GROUPBY = VARIABLE .
```

```
SAVE OUTFILE='H:\Clients\Sara Duvall\analysis_single_per_district.sav'  
  /COMPRESSED.
```

```
/* calculate disagreements */
```

IF (var26.1 ~= var26.2) var26d = 1 .
EXECUTE .

IF (var27.1 ~= var27.2) var27d = 1 .
EXECUTE .

IF (var28.1 ~= var28.2) var28d = 1 .
EXECUTE .

IF (var29.1 ~= var29.2) var29d = 1 .
EXECUTE .

IF (var30.1 ~= var30.2) var30d = 1 .
EXECUTE .

IF (var37.1 ~= var37.2) var37d = 1 .
EXECUTE .

IF (var42.1 ~= var42.2) var42d = 1 .
EXECUTE .

IF (var44.1 ~= var44.2) var44d = 1 .
EXECUTE .

IF (var49.1 ~= var49.2) var49d = 1 .
EXECUTE .

IF (var50.1 ~= var50.2) var50d = 1 .
EXECUTE .

IF (var68.1 ~= var68.2) var68d = 1 .
EXECUTE .

IF (var79.1 ~= var79.2) var79d = 1 .
EXECUTE .

IF (var126.1 ~= var126.2) var126d = 1 .
EXECUTE .

IF (var127.1 ~= var127.2) var127d = 1 .
EXECUTE .

IF (var135.1 ~= var135.2) var135d = 1 .
EXECUTE .

IF (var136.1 ~= var136.2) var136d = 1 .
EXECUTE .

IF (var137.1 ~= var137.2) var137d = 1 .
EXECUTE .

IF (var138.1 ~= var138.2) var138d = 1 .
EXECUTE .

IF (var139.1 ~= var139.2) var139d = 1 .
EXECUTE .

IF (var140.1 ~= var140.2) var140d = 1 .
EXECUTE .

IF (var141.1 ~= var141.2) var141d = 1 .
EXECUTE .

IF (var142.1 ~= var142.2) var142d = 1 .
EXECUTE .

IF (var143.1 ~= var143.2) var143d = 1 .
EXECUTE .

IF (var144.1 ~= var144.2) var144d = 1 .
EXECUTE .

IF (var145.1 ~= var145.2) var145d = 1 .
EXECUTE .

IF (var146.1 ~= var146.2) var146d = 1 .
EXECUTE .

IF (var147.1 ~= var147.2) var147d = 1 .
EXECUTE .

IF (var148.1 ~= var148.2) var148d = 1 .
EXECUTE .

IF (var149.1 ~= var149.2) var149d = 1 .
EXECUTE .

IF (var150.1 ~= var150.2) var150d = 1 .
EXECUTE .

IF (var151.1 ~= var151.2) var151d = 1 .
EXECUTE .

IF (var152.1 ~= var152.2) var152d = 1 .
EXECUTE .

COUNT

```
disag_sm = var26d var27d var28d var27d var28d var29d var30d var37d  
var42d var44d var49d var50d var68d var79d var126d var127d var135d  
var136d var137d var138d var139d var140d var141d var142d var143d  
var144d var145d var146d var147d var148d var149d var150d var151d  
var152d (1) .
```

```
VARIABLE LABELS disag_sm 'Total Number of Disagreements Reported' .
```

```
EXECUTE .
```

```
/* once cases have been cleaned, use VAR12 to distinguish between pres and  
supe. */
```

```
CASESTOVARS
```

```
/ID = district
```

```
/INDEX = var12
```

```
/GROUPBY = VARIABLE .
```

Appendix F: Evalid and Polid Frequencies

<i>Variable</i>		<i>Frequency</i>
EvalID	A	51
	B	290
	C	45
PolID	F	29
	G	341*
	H	16

* The researcher theorized that the large number of G (Pluralistic) designations could have been the result of 1) manic optimism on the part of the respondent, i.e. reluctance to report conflict and factionalism, or 2) the process of construction of the PolID variable was flawed in its assumptions for categorizing the numerous double-letter designations. The double-letter designations indicated to the research a much more complex political climate than hypothesized by McCarty and Ramsey's (1971) four basic categories of political climate. Some secondary analysis of the PolID categories may reveal more information on this phenomenon and lead to formulation of further specific study of the highly influential political climate factor in board and superintendent relations.

Appendix G: Strength of Relationship (SOR) Value Assignments

Variables	Scale	?#	Subject	Assigned Value	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
EVALUATION													
15	Eval ID	1	Method of Eval (recoded)		D	A	A	A	B	B	C	B	x
16	Eval SOR	2	Frequency of Eval		-1	1	-1	-1					
17-24	Eval SOR	3	Who writes goals		-2	1	1	1	1	1	1	1	
25	Eval SOR	4	Goals set frequency		-2	-1	1	-1	-1	-1			
26-30	Eval SOR	5	Eval Basis		1	1	1	-1	-1				
31	Eval SOR		IF OTHER, EXPLAIN										
32	Eval SOR	6	Length eval use		1	2-4	5-7	9-10	10+				
33	Eval SOR	7	Previous Method		D	A	A	A	B	B	C	B	0
34	Eval SOR	8	Why changed?										
35	Eval SOR	9	How adopted method		-2	-1	-1	1	1				
36	Eval SOR		OTHER other										
37	Eval SOR	10	Satisfaction w/ method		2	1	-1	-2					
38	Eval SOR	11	Preference										
39-41	Eval SOR	12	3 good things- FILLED IN		1	1	1						
	Eval SOR		3 Good things - NOT FILLED		-1	-1	-1						
CONFLICT													
42	Conflict SOR	13	Result of eval		-1	1							
43	Conflict SOR	14	Bd. Not Prepared to eval		-2	-1	1	2					
44	Conflict SOR	15.1	Eval makes bd uncomf		-2	-1	1	2					
45	Conflict SOR	15.2	Promotes Communic.		2	1	-1	-2					
46	Conflict SOR	15.3	One way street		-2	-1	1	2					
47	Conflict SOR	15.4	Results in change		2	1	-1	-2					
48	Conflict SOR	15.5	Clarifies goals		2	1	-1	-2					
49	Conflict SOR	16.1	Respect roles		2	1	-1	-2					
50	Conflict SOR	16.2	Clear expectations		2	1	-1	-2					
51	Conflict SOR	16.3	Sup provides info		2	1	-1	-2					
52	Conflict SOR	16.4	Defined roles		2	1	-1	-2					
53-55	Conflict SOR	17	3 Good things -FILLED IN		1	1	1						
			3 Good things - NOT FILLED		-1	-1	-1						
56-58	Conflict SOR	18	3 Accomplishments - filled		1	1	1						
			3 Accomplishments - Not filled		-1	-1	-1						
59	Conflict SOR	19	Moving Ahead Goals		1	-1	-2						
60	Conflict SOR	20	Sup's Lead Style - Clear		2								
			Sup's Lead Style - UnClear		-1								
			Sup's Lead Style - None		-2								
61	Conflict SOR	21	Ed Philosophy- Clear		2								
			Ed Philosophy- UnClear		-1								
			Ed Philosophy - None		-2								
62	Conflict SOR	22.1	Communicate w/ Bd		2	1	-1	-2					
63	Conflict SOR	22.2	Communicate w/ Employe		2	1	-1	-2					
64	Conflict SOR	22.3	Communicate w/ Commun		2	1	-1	-2					
65	Conflict SOR	23.1	Disruptive/Bd		-2	-1	1						
66	Conflict SOR	23.2	Disruptive/ Employees		-2	-1	1						
67	Conflict SOR	23.3	Disruptive/Community		-2	-1	1						
68	Conflict SOR	24	Perceived levelconflict		2	1	-1	-2					
69	Conflict SOR	25	Conflict disrupt district		-2	-1	1						
70-72	Conflict SOR	26	3 Issues of Conflict -filled										
			3 Issues of Conflict-not filled		1	1	1						
POLITICAL													
73	Political ID	27.1	Dominated		E	E							
74	Political ID	27.2	Factional		F	F							
75	Political ID	27.3	Pluralistic		G	G							
76	Political ID	27.4	Inert		H	H							
77	Political ID	28	Who sets agenda		E	H	F	G					
78			Other										
79	Political SOR	29	Intro topics not on agenda		2	1	-1	-2					
80	Political SOR	30	Board Size		3	5	7	9	>9				

Appendix G: Strength of Relationship (SOR) Value Assignments

81	Political SOR	31	Enough, Too Many	1	-1													
82	Political SOR	32.1	Sup is trustworthy	2	1	-1	-2											
83	Political SOR	32.2	Sup is honest	2	1	-1	-2											
74	Political SOR	32.3	Sup has integrity	2	1	-1	-2											
85-90	Political SOR	33	Bd Ed level	nohs	hs	Assoc	BA	MA	PhD									
91-93	Political SOR	34	Sup Ed Level	BA	MA	PhD												
			TRAINING															
93	Training SOR	35	Bd. Member of state/Natl org	1	-1	-2												
94	Training SOR	36	Sup Member of Nat'l org	1	-1	-2												
95-99	Training SOR	37	Bd. Participate as	2	2	1	2	-2										
100-104	Training SOR	38	Sup Participate as	2	1	-2	1	-2										
105	Training SOR	39	Training for Bd	2	-2													
106-113	Training SOR	40	Form of Training	1	2	1	1	2	2	1	-2							
114			Other															
115-119		41	Lgnth service	1	2-3	4-6	7-9	9+										
120	Conflict SOR	42	Ever High turnover	-2	2													
121			WHY YES															
122	Political SOR	43.1	BdPres OK to Eval sup	2	1	-1	-2											
123	Political SOR	43.2	Bd Member OK to eval sup	2	1	-1	-2											
124	Political SOR	43.3	BdPres not OK	-2	-1	1	2											
125	Political SOR	43.4	BdMembers not OK	-2	-1	1	2											
126	Conflict SOR	44	Handle Gov't Mandates	2	1	-1	-2	-3										
127	Conflict SOR	45	Pressure re \$ issues	2	1	-1	-2											
128	Conflict SOR	46	years of sup sevice	1-3	4-7	8-12	>12											
129	Conflict SOR	47	Previous sup service	1-3	4-7	8-12	>12											
130	Training SOR	48	Job of Board															
131	Training SOR	49	Job of Supe															
			DEMOGRAPHICS															
132		50	Age of Respondant	21-29	30-39	40-49	50-59	60-69	70-79	80+								
133		51	Gender	1	0													
134		52	Ethnicity	CA	AfAM	AS	ME	NA										
			Socioeconomic Status - SES															
			Per Pupil Expenditure- Foundation															
			Student Achievement - MEAP															
			Size - number of students															
			Region 1-9 per MASA															
			AUTHENTIC TEACH/LEARN															
135	SOT/L Scale	53.1	Lecture	-2	-1	1	2											
136	SOT/L Scale	53.2	Tracking	-2	-1	1	2											
137	SOT/L Scale	53.3	Demonstrated learning	2	1	-1	-2											
138	SOT/L Scale	53.4	Community Service req.	2	1	-1	-2											
139	SOT/L Scale	53.5	Hands-on	2	1	-1	-2											
140	SOT/L Scale	53.6	Quiet & Controlled	-2	-1	1	2											
141	SOT/L Scale	53.7	Welegde model	2	1	-1	-2											
142	SOT/L Scale	53.8	Tech is integrated	2	1	-1	-2											
143	SOT/L Scale	53.9	Tech is up to date	2	1	-1	-2											
144	SOT/L Scale	54.1	Little infl on learning- abil	-2	-1	1	2											
145	SOT/L Scale	54.2	Students elect to learn	-2	-1	1	2											
146	SOT/L Scale	54.3	Some growth	2	1	-1	-2											
147	SOT/L Scale	54.4	Can and must achieve	2	1	-1	-2											
			General															
148	SOR	55.1	Sch has pos. rep w/ comm	2	1	-1	-2											
149	SOR	55.2	Sup pos rel w/ Bd	2	1	-1	-2											
150	SOR	55.3	Sup is risktaker	2	1	-1	-2											
151	SOR	55.4	Sup & Bldg Principals	2	1	-1	-2											
152	SOR	55.5	Eval pos for effectiveness	2	1	-1	-2											

Appendix H: Variables Considered in Scoring Agreement/Disagreement
Between Board President and Superintendent

Variable number	Variable label
26	Basis of evaluation
37	Satisfaction with evaluation method
38	Preference of evaluation method
42	Result of evaluation
44	Discomfort of board members with evaluation of superintendent
49	Respect for roles
50	Clear expectations
68	Perceived level of conflict
126	Handling of government mandates
127	Pressure over issues of money
135-143	Style of teaching in the district
144-147	District philosophy re: students' ability to learn
148	Image of school district in community
149	Superintendent has a positive relationship with the board
150	Superintendent is a risk-taker
151	Superintendent style of working with building principals
152	Superintendent evaluation process is positive

Appendix I: Counties in the MASA Regions

Region 1

Alger
 Baraga
 Chippewa
 Delta
 Dickinson
 Gogebic
 Houghton
 Iron
 Keweenaw
 Luce
 Mackinac
 Marquette
 Menominee
 Ontonagon
 Schoolcraft

Region 2

Alcona
 Alpena
 Antrim
 Benzie
 Charlevoix
 Cheboygan
 Crawford
 Emmet
 Grand Traverse
 Iosco
 Kalkaska
 Leelanau
 Manistee
 Missaukee
 Montmorency
 Ogemaw
 Oscoda

Otsego
 Presque Isle
 Roscommon
 Wexford

Region 3

Allegan
 Barry
 Ionia
 Kent
 Lake
 Mason
 Mescota
 Montcalm
 Muskegon
 Newaygo
 Oceana
 Osceola
 Ottawa

Region 4

Arenac
 Bay
 Clare
 Gladwin
 Gratiot
 Isabella
 Midland
 Saginaw

Region 5

Huron
 Genessee
 Lapeer
 St. Clair

Sanilac
 Tuscola

Region 6

Clinton
 Eaton
 Ingham
 Livingston
 Shiawassee

Region 7

Berrien
 Branch
 Calhoun
 Cass
 Kalamazoo
 St. Joseph
 Van Buren

Region 8

Hillsdale
 Jackson
 Lenawee
 Monroe
 Washtenaw

Region 9

Macomb
 Oakland
 Wayne

Region 10

Detroit

Appendix J: Glossary of Statistical Terminology*

Bivariate correlation analysis:

This analysis yields a correlation coefficient, symbolized by the letter r , indicating the degree of relationship that exists between scores on two variables. Used to estimate the relationship between two continuous variables. r can range from -1 to 1, with values closer to 1 indicating strong positive relationships. Values closer to -1 indicate strong negative relationships. Hypothesis tests are used to test the null hypothesis that r is equal to 0 (no association).

Bonferroni adjustment:

When we plan a large number of pairwise comparisons, this method controls the probability that all intervals contain true difference. Such intervals are called simultaneous confidence intervals because all intervals contain the true parameters simultaneously with an overall fixed probability.

Bob-Cox:

Box-Cox methodology proposes algorithms for estimating optimal transformations for the achievement of normality of assumptions.

Chi-square test:

Chi-square is a nonparametric test of statistical significance that is appropriate when data are in the form of frequency counts; it compares frequencies actually observed with expected frequencies to see whether they are significantly different.

F-tests (in multiple regression models):

These are Omnibus (or overall) tests of whether or not certain factors in a linear model are explaining a significant amount of variation in the response variable.

Logistic Regression Model:

This is a multiple regression model for a binary response variable that can be used to estimate the simultaneous

relationships of several predictors with the odds of the response having a certain category (e.g., 1 vs. 0). Odds ratios are often calculated on the basis of the estimated coefficients in logistic regression models and can be used to determine the multiplicative impact of changes in a predictor variable on the odds of the response variable having a certain category. Odds ratios are often reported with 95% confidence intervals for the odds ratio: an odds ratio of 1 would indicate that changes in a predictor do not have a significant influence on the odds of interest when controlling for other predictors (the null hypothesis), and if a 95% CI for an odds ratio does NOT include 1, there is evidence against the null hypothesis.

Multiple linear regression model:

This is a technique using a prediction equation with two or more variables in combination to predict a criterion. These models estimate the simultaneous relationships of several predictor variables (either categorical or continuous) with a single response variable and can be used to determine whether or not these relationships are significant. The

estimated regression coefficients (or Betas) in the models can be tested to see whether they are significantly different from zero, meaning that the relationships of certain predictors with the response are significant when controlling for other predictors in the model. There are key assumptions behind these models: independence of observations, normality of residuals, and constant variance of residuals in different groups defined by the predictors.

Normality Assumptions:

1. Constant Variance, or the same value for all individual cases within the extent to which scores differ from one another.
2. Normality of the Residuals, or a theoretical bell-shaped distribution as found in typical populations.

Observed power of the sample to detect these effects:

The observed power is the probability that the null hypothesis will be rejected when there is a difference in the populations, or the ability of a test to avoid Type II error.

Pairwise multiple comparisons:

These are all pairwise statistical comparisons of the estimated means in several groups defined by a categorical factor in a multiple regression model or analysis of variance. If an F-test indicates that a factor is significant, interest lies in comparing the means of the DV in different groups defined by that factor and determining which means are different.

Wald Chi-square statistics:

These are omnibus tests like F-tests for factors in logistic regression models. Provide an overall idea of whether factors are significant. Odds ratios provide more specific information than these Wald tests.

* Brady West, Center for Statistical Consulting and Research, University of Michigan, January 2005

Appendix K: Computer Programs and Software

Microsoft Word for Mac OSX: employed for text, tables, and figures.

Microsoft Excel: employed for statistical appendixes.

SPSS 11.0 for OSX: employed for statistical analyses.

Adobe Photoshop for OSX: employed for graphics manipulation.