The Relationship Between School Board Governance Behaviors and Student Achievement

An Executive Summary
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About a year ago members of your school board participated in a study about the relationship between school board governance behaviors and student achievement. This study has now been completed and I thought I would share the results of the study with you through this Executive Summary. If you would like a copy of the complete dissertation, please let me know and I can forward an electronic copy.

Problem Statement: It is clear that the actions of teachers and principals have a direct effect on student achievement. What is not clear is whether actions of the school board affect student achievement. Although the relationship between school board governance behaviors and student achievement is not readily apparent, several studies have noted that school boards in districts with high student achievement scores behave differently than boards in districts with low student achievement scores.

Purpose of the Study: The purpose of this quantitative study was to examine the relationship between student achievement scores and elements of boardsmanship. Student achievement was measured by your district’s scores on Montana's Criterion Reference Test (CRT) for AY 2011-2012 using the portion that evaluates math, reading, and science in 10th grade. Boardsmanship was measured by the 69 question online survey – the Board Self Assessment Survey© (BSAS) authored by the Washington State School Directors Association (WSSDA) in 2010 – that members of your board completed last spring. This instrument describes effective boardsmanship on five governance Standards thought essential to raise
student achievement scores. It is vital that we understand whether or not boards affect student achievement. If they do, this needs to be described so boards could better understand their influence and more effectively contribute to district efforts to raise student achievement scores. Without empirical evidence showing a relationship boards may continue to unintentionally inflict harm on student achievement. Previous qualitative and anecdotal literature on boardsmanship has led to the conclusion that a relationship does exist between the actions of the school board and student achievement, however critical quantitative relationships have yet to be fully established. If such a quantitative relationship were better understood boards would have clear justification for embracing certain characteristics of boardsmanship that lead to improved student achievement and rejecting others.

**Research Question:** This study was guided by the research question: What is the relationship between boardsmanship as measured by the BSAS©, and student achievement as measured by Montana's CRT scores? If student achievement is to be seriously pursued by a school district, it is vital that school boards understand their possible role in district efforts to raise student achievement. While teachers and administrators can find quantitative research articulating established curricular and pedagogical advice that promote achievement there is no comparable research base for school boards to consult. This study was designed to remedy this deficit.

**Independent Variables:** The independent variables were the boardsmanship scores on the BSAS© authored by WSSDA. This organization has long recognized the role of the school board in student achievement and, spurred into action by the Washington State Education Reform Act of 1993 and federal NCLB in 2001, worked to identify a number of essential principles thought to be associated with student achievement. Guided by research from Waters
and Marzano (2006) of The Mid-continental Research for Education and Learning (McREL), the Lighthouse Inquiry (2000) of the Iowa Association of School Boards (IASB), and National School Board Association’s (NSBA) Key Work of School Boards (2000), the Washington Board Standards Task Force identified five essential principles, or Standards, in 2009. These became known as “The School Board Standards” in the state of Washington and school boards in Washington State were encouraged to embrace the Standards as the means to improve student achievement. Each of the five board Standards was further defined by more specific Benchmarks and Key Indicators to help boards translate each Standard into practice. Using these five School Board Standards WSSDA began the process of developing the BSAS©. Permission was obtained from WSSDA to use the BSAS© in this study.

The five board Standards are to: (a) provide responsible school governance, (b) set and communicate high expectations for student learning with clear goals and plans for meeting those expectations, (c) create conditions district-wide for student and staff success, (d) hold school district accountable for meeting student learning expectations, and (e) engage local community and represent the values and expectations they hold for their schools. In addition, each of the five board Standards is further subdivided into 22 Benchmarks, and 69 Key Indicators represented by each individual survey item. Each of the 69 individual survey questions was considered an independent variable at the most detailed level of analysis. The survey items and organizational scheme of the BSAS can be seen in Table 2.

**Dependent Variables:** The dependent variables were districts’ student achievement scores on the Montana's CRT. These scores were obtained from the state of Montana’s Office of Public Instruction (OPI) and comprised the quantitative CRT scores for each district which measured proficiency rates in math, reading, and science in 10th grade. Achievement scores on
the state CRT are categorized in four levels of proficiency: (a) novice, (b) nearing proficient, (c) proficient, and (d) advanced. In this study, proficiency was determined by the combined percentage of students who scored in the proficient and advanced range on Montana’s 2011-2012 CRT as reported by OPI.

Surveyed Population: The population for this study was all 121 public high school boards in the state of Montana. School board membership in the state of Montana range from 3 members in the smallest districts, to 11 members in the largest districts. Surveys were returned by 91 board members: 85 responded online, and 6 completed and returned paper surveys. These 91 surveys were received from board members representing 36 of the 121 public high school districts for an overall district board return rate of 29.75% (36/121). Seventeen of the 91 surveys were culled because the survey was in some way incomplete. The culling resulted in useable and complete surveys from 74 board members representing 27 districts, for a usable school board return rate of 22.31% (27/121). The BSAS© was administered in March, April and May of 2012 prior to annual school board elections in Montana.

Handling of the Data: Statistical calculations were made using Microsoft Excel and IBM SPSS Statistics 20 package (SPSS). The boards survey results from each district were then correlated with that district’s student achievement scores. Statistical significance levels were then examined for each Pearson $r$ correlation.

Results – The Correlations: Numerous statistically significant correlations were found between school board governance behaviors and student achievement. All five board Standards were in some way related to high student achievement to a statistically significant level, as were 16 of the 22 Benchmarks, and 30 of the 69 Key Indicators. This study not only identified which
elements of the BSAS© were correlated with student achievement it also prioritized the various elements.

School boards should first embrace the elements of good boardsmanship articulated by those Standards, Benchmarks, and Key Indicators showing highest percentages of statistically significant relationships with high student achievement (the top quartile of elements). The details under these seven elements (the top quartile) are described in the following paragraphs and are presented in summary form in Table 1. These, then are the select elements of the BSAS© which are most relevant to the discussion of board actions related to raising student achievement. The first things boards should work to accomplish are the elements within the first quartile of scores (Table 1). Second, boards could then pursue those statistically significant elements that were within the second, third and fourth quartiles, all of which generated statistically significant correlations (Table 2). Last, school boards should focus on those areas of governance with particular relevance to their home district. The unfortunate reality is that boards are so frequently overwhelmed by the large number of urgent local matters of apparent consequence they fail to recognize the important issues of sound governance and boardsmanship which have real consequence for student achievement, often ignoring them altogether.

Specifically, if boards are interested in contributing to district efforts to raise student achievement, they should focus their attention on the following top-quartile issues described in the following paragraphs. (A summary is presented in Table 1)

*First, 60% (12 / 20) of the items in Standard 4, Benchmark B, Key Indicators 61-63 were statistically significant. These survey items deal with holding the school district accountable for meeting student learning expectations (Standard 4), by evaluating the superintendent on clear and focused expectations (Benchmark B). This is accomplished when the district has written*
goals for the superintendent to focus on specific outcomes for student learning (Key Indicator 61), communicates performance expectations for the superintendent to the community (Key Indicator 62), and bases decisions about the superintendent’s contract on objective evaluation of his or her performance and achievement goals (Key Indicator 63).

Second, 45% (9 / 20) of the items in Standard 2, Benchmark C, Key Indicators 30-32 were statistically significant. These items refer to setting and communicating high expectations for student learning with clear goals and plans for meeting those expectations (Standard 2), by adopting a collaboratively developed district plan focused on learning and achievement outcomes for all students (Benchmark C). This is accomplished by collaborating with staff and the community to formulate and maintain a district plan with goals and outcomes (Key Indicator 30), basing it’s ongoing work, such as policy development, decision-making, and budgeting (Key Indicator 31), on the district goals, and continually monitoring progress toward the goals and outcomes of the district plan (Key Indicator 32).

Third, 37.50% (9 / 24) of the items in Standard 4, Benchmark A, Key Indicators 57-59 were statistically significant. These items also deal with holding the school district accountable for meeting student learning expectations (Standard 4), by committing to continuous improvement in student achievement at each school and throughout the district (Benchmark A). This is accomplished by following a schedule for the timely review of the district plan (Key Indicator 57), ensuring a high degree of coherence between the district plan and school improvement plans (Key Indicator 58), and annually reviewing and making recommendations to the district plan and school improvement plans (Key Indicator 59).

Fourth, 18.75% (3 / 16) of the items in Standard 1, Benchmark A, Key Indicator 6 were statistically significant. These items deal with providing responsible school district governance
(Standard 1), by conducting board and district business in a fair, respectful and responsible manner (Benchmark A). This is accomplished by committing to a clear and shared purpose (Key Indicator 6).

**Fifth, 18.75% (3 / 16) of the items in Standard 5, Benchmark D, Key Indicators 77-78 were statistically significant.** These items deal with engaging the local community and represent the values and expectations they hold for their schools (Standard 5), by soliciting input from staff and a wide spectrum of the community so that a diverse range of interests and perspectives on issues is considered (Benchmark D). This is accomplished by seeking community and staff input in its decision-making to gain community and staff support (Key Indicator 77), and carefully considering community and staff input in its decision-making (Key Indicator 78).

**Sixth, 16.67% (4 / 24) of the items in Standard 1, Benchmark F, Key Indicators 21-23 were statistically significant.** These items deal with providing responsible school district governance (Standard 1), by working as an effective and collaborative team (Benchmark F). This is accomplished by working with the superintendent to achieve mutual trust and commitment (Key Indicator 21), pursuing professional development to improve board members’ knowledge and skills by attending conferences, holding study sessions, etc. (Key Indicator 22), and using collaborative processes that result in well-informed problem-solving and decision making (Key Indicator 23).

**Seventh, 16.67% (6 / 36) of the items in Standard 3, Benchmark C, Key Indicators 44-47 were statistically significant.** These items deal with creating conditions district-wide for student and staff success (Standard 3), by providing for learning essentials, including rigorous curriculum, technology and high quality facilities (Benchmark C). This is accomplished by having a process that includes community and parent involvement in selecting curriculum (Key
Indicator 44), having policy that requires rigorous and regular evaluation of curriculum and supplemental materials to ensure they align with state and district standards (Key Indicator 45), have a process in place to support evaluation and updating of technology (Key Indicator 46), and have a long-term facilities plan in place for construction and maintenance (Key Indicator 47).

Again, all five board Standards were related to high student achievement to a statistically significant level, as were 16 of the 22 Benchmarks, and 30 of the 69 Key Indicators. All the statistically significant elements are bolded in Table 2.

**Results: The Standard Deviation** - The standard deviation (SD) was calculated from BSAS© scores for each school district in which a quorum of board members completed the survey. The size of the SD for any board arguably represents the degree of agreement or disagreement between individual board members on issues of boardsmanship. A large SD would represent wide variation of opinion with regard to the governance and leadership issues reflected in the BSAS©. When the board’s SD was correlated with that district's student achievement scores, the Pearson’s $r$ correlation coefficient was consistently negative, in two cases rising to a moderate level. This data provides evidence that student achievement was depressed in those districts where board members held disparate opinions regarding issues of boardsmanship as measured by the BSAS©. Conversely, the student achievement was higher in those districts with a smaller boardsmanship SD, reflecting a greater degree of agreement between board members on issues of boardsmanship. An argument could be made that agreement on boardsmanship issues between board members leads to less friction between board members, leading perhaps to a smoother functioning board and district, and conversely that greater disagreement on boardsmanship issues leads to more friction between board members, resulting in a district characterized by some degree of acrimony and lower student achievement. If this is true, it offers
compelling justification for board members to come to agreement on issues of governance for the
good of the students in the district. Admittedly, others have suggested as much based on
qualitative grounds, but this study provided quantitative data suggesting board consensus on
issues of governance and boardsmanship plays a pivotal role in a district's ability to improve
student achievement scores. It is not known the mechanisms through which board discord might
be transferred to the classroom and depress student achievement.

**Results: Analysis of Variance (ANOVA)** – The survey response rate was 22.31%. An
analysis of variance (ANOVA) was calculated comparing the mean CRT scores state wide with
the mean CRT scores from the survey. There was no statistically significant difference found.
Even though the sample size was too small to make generalizable statements from the results, the
ANOVA results do support the notion that the sample is in fact representative.

**Overall Findings of the Study** - The actions of school boards matter. This study focused
on identifying those actions related to student achievement that only a school board can
accomplish. No other entity in the public school system is legally or organizationally positioned
to undertake things like providing responsible governance, setting high expectations for student
learning, creating the conditions district-wide for student and staff success, holding the teachers
and administrators accountable for student success, and engaging the local community. If the
board fails to understand and accomplish these critical tasks they do not get accomplished and
the district goes without.

When there is a failure to embrace these exclusive board responsibilities, or when boards
are not aware that these are part of their primary duties, boards often experience mission drift
and begin appropriating duties of the superintendent, all the while believing they are acting
properly: “When board members and superintendents are unclear about who is responsible for
what duties, conflict, inefficiency, and frustration are inevitable” (Goodman & Zimmerman, 2000, p. 17). This all-too-common scenario leads to administrative complaints of micromanagement. If school boards were to work to accomplish the recommended actions described in the BSAS© Standards, Benchmarks, and Key Indicators especially those found to have statistically significant relationships with student achievement, they would be carrying out their exclusive duties and governing the district in a more effective manner.

Whether at the macro (Standard), intermediate (Benchmark), or micro (Key Indicator) level of analysis, and whether by actions of the collective board or individual board member, boardsmanship always involves a choice as to how to act. As a result of this study, if school boards, or individual board members, were to more closely adhere to the statements of the BSAS© identified as having statistically significant relationships to the student achievement CRT scores, they would be acting in a fashion similar to those board members who govern districts with the highest student achievement scores. By following the principles of good governance and effective board leadership described in the survey, boards could more effectively join efforts of parents, teachers, principals, and superintendents aimed at raising student achievement scores for their district.

The present study was designed to establish quantitative relationships between certain board actions and student achievement. This purpose was successfully achieved by the identification of a number of elements of boardsmanship found to have statistically significant relationships with student achievement. If student achievement is to continue to improve as schools respond to mandates for school reform, all relevant factors related to student achievement must be identified, employed, and aligned in service. The role of the effective board in this regard has become clearer as a result of this study.
It is not hard to imagine that boards who continue to overtly express conflict and discord could undermine efforts by parents, teachers, principals, and superintendents designed to raise achievement scores. This study provides evidence that when poor student achievement scores occur in a district, boards can no longer assume responsibility lies elsewhere and demand someone other than the board do something. When a district's student achievement scores are low, boards are not immune from responsibility. This study suggests boards would be well advised to acknowledge their own culpability and take action by behaving in ways consistent with the Standards, Benchmarks, and Key Indicators in the BSAS© determined to have statistically significant relationships with student CRT scores. Boards do in fact have a role in student achievement. In addition, were a board to focus on the issues identified in the BSAS©, together with a better resolve to address internal governance disagreements, little time would be left to meddle in administrative and management issues, which only serves to frustrate administrators, lead to district-wide strife, and, as the present study suggests, reduce student achievement.

**In Closing** – Please extend to your board my sincere thanks for their voluntary participation in this important study. The results are beginning to be noticed across the region and nation and it will be interesting to see how this verifiable idea takes shape in the months and years to come. I would be happy to visit more with you individually if you so desire. Please feel free to email me at: ilnorway@centurytel.net.

NOTE: This Executive Summary was written in the fall of 2013, and much has happened since that time. More detail has been added to this initial study, including extending the study to include 4th and 8th grade student achievement scores in Montana, as well as replicating the
studies using data from Washington and Texas. Although the statistical analysis in these states identified different key indicators as related to higher student achievement scores, there were clear trends in the findings, cementing the idea that board actions influence numerous student metrics, including student achievement. Several subsequent studies have furthered our understanding of the relationship between the board actions and student behaviors such as graduation rates and closing the poverty gap. As more research is conducted, it is our hope that the descriptions of effective boardmanship become more precise, thus assisting board members in knowing what they can do to participate in district-wide efforts to achieve the goal of every student succeeding.