ABSTRACT

The No Child Left Behind Act of 2001 (NCLB) has been described by some as “the most sweeping intrusions into state and local control of education in the history of the United States” (Cook, 2004, p. 8) and the most significant change in the federal regulation of public schools in 30 years (Hardy, 2002). School boards are responsible for enacting policies that adhere to the spirit and letter of federal, state, and local laws and codes to help the school system ensure students are being provided an education that meets the needs of all students being served. This study explored how a school board functions in the Commonwealth of Virginia within the parameters set by contemporary reform efforts as well as the board’s decision making processes compared with another board within the state. The findings revealed that the board does not initially recognize the majority of policymaking decisions on its own, relying rather on school district staff. Additionally the findings indicate that many of the policy decisions are most likely made outside the formal board venue. This reinforces the importance of staff members working with the board outside the arena of formal meetings while developing and revising school district policies. The chi-square analysis also revealed significant differences between decision-making processes between the two boards. These results are highly significant because, while it may seem intuitive that boards operate in different manners because of the unique make-up and background of each board and each board member, studies verifying this are lacking. A perennial and ever increasing argument revolving around the nature of schools is the lack of an empirical research base. This study provides a solid foundation to further explore the unique characteristics and decision-making patterns of boards in order to better inform educational planners and change agents as they work with the boards to meet varying student needs.

INTRODUCTION

The current manifestation of attempts to reform public schools in the United States was signed into law on January 8, 2002 by President George W. Bush. Commonly referred to as the No Child Left Behind Act of 2001 (NCLB), the reauthorization of the Elementary and Secondary Education Act (ESEA) has been described by some as “the most sweeping intrusions into state and local control of education in the history of the United States” (Cook, 2004, p. 8) and the most significant change in the federal regulation of public schools in 30 years (Hardy, 2002). While the basic concepts of the legislation have garnered wide support - as few can debate the merits of accountability, research-based education programs, increased parental opportunities, and expanded local control and flexibility (McColl, 2005) - school officials across the nation say they are frustrated and perplexed by the mandates of NCLB (Hardy, 2002). Many educators have asserted federal legislators were quick to demand reform and changes, yet funds for the mandates are not being provided (Mathis, 2003; Sanders, 2003).

Public education has often been described as being a national interest, a state responsibility, and a local operation. While wide-spread attention has been proffered to schools and school districts due to heightened accountability efforts, undoubtedly, the weight of accountability also falls heavily, too, on the shoulders of the local school boards. School boards are designed to act as the policy making body for the districts they serve (Cunningham & Cordeiro, 2006). They are responsible for enacting policies that adhere to the spirit and letter of federal, state, and local laws and codes to help school systems ensure students are being provided an education that meets their needs.

It is imperative to study school boards and identify how they function within the parameters set by contemporary reform efforts. Educational leaders who are planning a change effort within a school and/or school system must be keenly aware of how boards operate and whether there is a discernable pattern to their actions. In this manuscript we present an overview of a study conducted on one school board located in the Commonwealth of Virginia (Hellman, 2008). We begin with a review of pertinent literature that grounds the study and provides the methodological framework. We then present salient findings of the study and discuss the implications of these findings.
NO CHILD LEFT BEHIND AND THE CONTEXT OF THE COMMONWEALTH OF VIRGINIA

While the generalities of NCLB are familiar within the educational community, it is prudent to review certain conditions of the law to frame the study. Additionally, this information will be presented within the context of the Commonwealth of Virginia, which was the setting for the research. The role of the federal government in public education has been hotly debated and the guidelines implemented under the act “amount to a sweeping effort by the federal government to change what Americans mean when they think of education” (Wermers, 2002, p. A1). Four areas identified within NCLB as cornerstones to education reform are (a) increasing accountability for student performance, (b) focusing on what works, (c) reducing bureaucracy and increasing flexibility, and (d) empowering parents (NCLB, 2002). Specific strategies contained within the act are designed to ensure that each of these four areas is addressed.

Rewarding divisions and states that improve performance represents a strategy to increase accountability. States that fail to meet adequate yearly progress goals either face sanctions or are allowed opportunities for improvement. Schools and divisions are also accountable to the public for their test results. Assessment is mandatory for reading and math in Grades 3-8. With the goal of focusing on what works, NCLB places emphasis on research-based programs and specifically targets funds to assist in school improvement and enhance teacher quality. Combining similar federal programs reduces bureaucracy, and allowing funds to be spent within broader categories increases flexibility. Parents are empowered with more knowledge about their schools, and school choice is allowed for parents whose children are in consistently low-performing schools (NCLB, 2002). One means of empowering parents with knowledge is to increase communication between the school and parents. In the Commonwealth of Virginia, all division superintendents are reminded annually of the parental notification requirements required under NCLB (Wright, 2006).

In 2002, Susan Noble, Virginia Board of Education member, believed that Virginia was ahead of most other states regarding the implementation of the new law. In an editorial published in *The Richmond Times Dispatch* she stated, “Fortunately, Virginia, because of the strong foundation put in place by the SOL program is in a far better position than almost all other states to implement the law” (Noble, 2002). In fact, at the start of the NCLB act, Virginia had been considered to be at “the forefront of the accountability movement” (Duke, Grogan, Tucker, and Heinecke, 2003, p. 8). The Standards of Learning (SOL) are the achievement assessments used to measure student progress and these assessments had already been developed during the 1990s as a response to a lengthy reform process in Virginia aimed at improving student achievement and adding more rigor and consistency to instruction (Duke et al.).

High-stakes testing may have been in place for nearly a decade in the Commonwealth of Virginia, but sadly, many schools and divisions were not meeting federal Adequate Yearly Progress. In fact, during the 2007-2008 school year 26% of all schools did not meet AYP (Virginia Department of Education, n.d.). “Interestingly enough, while Virginia was miles ahead of many other states in terms of educational accountability prior to NCLB, no policy measures had previously been in place requiring attention to achievement gaps between groups of students . . . which may have acted as one factor contributing to such a large number of schools failing to meet AYP” (Crum & Sherman, 2008). At the division level, over half (59%) of the school divisions did not meet AYP in 2007-2008 (Virginia Department of Education). The American educational system at large has been highly criticized for large gaps between student groups and the alarmingly high number of divisions failing to meet AYP is indicative of this criticism (Darling-Hammond, 2004; Easley, 2005; Fusarelli, 2004; Gatto, 1991; Kozol, 2005; Sizer, 2004; Wood, 2004).

The implications for school boards are overwhelming. It is imperative that actions be taken by the boards that set clear policy to enable divisions to meet the diverse needs of their students. While it is easy to make sweeping statements that decry the need for change, no change should be enacted without adequately planning. And planning requires a study into the various components of the system. We therefore further examine the role of boards and their decision making processes in light of the need to make changes based upon the evolving complexities of NCLB.
Decision Making

Public administrative decisions have three unique qualities: They affect people’s lives, are made in the name of the public, and use public resources (Harmon & Mayer, 1986). In order to effectively serve as good stewards of the community, school boards must make sound administrative decisions. We are not presenting this statement as fodder for a debate on the effectiveness of public boards. Rather, it serves as a springboard to address the question of what is decision making.

At its root, decision making means making choices (Harmon & Mayer, 1986). It involves choosing one alternative over another; in a general context, decision making implies action (Griffiths, 1959). Griffiths referred to decision making as “essentially a judicial proceeding” (p. 75), a judgment that will ultimately influence some course of action. He believed all judgments that affect actions are ultimately decisions; the researcher also considered decision making to be a process, a process composed of not only the decision itself but also the acts necessary to put the decision into operation (Griffiths). It is clear that decision making is not a single action performed in isolation; to the contrary, decision making is a process that is influenced by many factors.

Decision making can be viewed as an incremental process when all the factors that enter into the process are considered. Decision making involves the choice to execute, or not to execute, a particular action. One can assume that decisions are made in the best interest of the individual or organization making the decision; however, it is not difficult to imagine tensions within the process when the desires of the individual conflict with the values of the organization. Observations of this process can be of great value to researchers. Studying the decision-making process reveals much about the organization making the decision and allows those in an organization to plan in a sound and rational manner.

According to Griffiths (1959), “An understanding of the decision-making process in a particular enterprise is the key to its organizational structure” (p. 80). Griffiths purported that a flat, decentralized organizational structure is best if an organization desires the decision-making process to be carried out by those close to the problem. Conversely, a tall, hierarchical structure is desired if the goal of the organization is to have centralized decision making. The structure of the organization has an impact on where the decision-making process occurs; likewise, where the decision-making process occurs has an impact on the structure of the organization.

Griffith’s (1959) administrative decision making model provides the framework for our decision making analysis. “Because of his belief that the decision-making process is an integral part of administration, Griffiths (1959) specifically studied educational administration and the decision-making process of administrators” (Crum, 2006, p. 39). According to Griffiths, “The administrative decisions are those which establish criteria by which others in the organization make their decisions” (p. 93). Griffiths’ decision-making process consisted of six steps:

1. Recognize, define, and limit the problem.
2. Analyze and evaluate the problem.
3. Establish criteria and standards by which the solution will be evaluated or judged as acceptable and adequate to the need.
4. Collect data.
5. Formulate and select the preferred solution or solutions. Test them in advance.
6. Put into effect the preferred solution.
   a. Program the solution.
   b. Control the activities in the program.
   c. Evaluate the results and the process.

Role of the School Board and Decision Making

School boards are the policy making body for the division they serve. Their role, essentially, is to effectively govern the education of the community (Gemberling, Smith, & Villani, 2000; Hess, 2002; The Twentieth Century Fund, 1992). School boards have historically “perceived their role to be supportive in nature, approving the budget and legal documents, dealing with constituents, receiving reports, campaigning for bond issues and providing ‘cover’ on politically sensitive issue” (Resnick,
Yet, boards have been called upon to take on greater leadership roles within the divisions because of the heightened calls for accountability and high student achievement (Resnick).

Within the context of NCLB, school boards are “responsible for (a) ensuring that all schools within the division meet adequate yearly progress (AYP) related to NCLB and (b) putting plans in place to assist schools that have not yet reached AYP” (Crum, 2007). While bound by state law, school board members “have enormous discretion as to how active its members wish to be on which issues . . . the board also has the formal authority to bring about changes in division policy in virtually any area of the educational program” (Sergiovanni, Burlingame, Coombs, & Thurston, 1999, p. 253) and their roles are extensive, combining “the legislative, executive, and judicial functions of government” (Kirst, 1994, ¶ 6). Board members are considered public school “trustees” (Rosenberer, 1997) and are responsible for meeting the needs of the community, as well as implementing the policies of the system (Crum).

The root of success for school boards lies in effective decision making (Smoley, 1999). And the authority of the local school board for its decision making power is derived from state legislatures and state constitutions (Reeves, 1954). In 1964 Goldhammer identified five sources of authority for local school boards, which are still applicable today: (a) the state constitution, (b) legislative enactments (statutory law), (c) rules and regulations of the state board of education, (d) decisions of the courts, and (e) societal demands. Goldhammer listed the board’s responsibilities as “the making of decisions, the formulation of policies, the development of programs, the employment of personnel, the levying of taxes, the provision of educationally related service, and the management of the use of the physical facilities of the school division” (p. 4).

Legislation by the federal government is cited as having a profound effect on the source of authority of local boards. As asserted earlier, it is imperative to study the decision making process of the school board, as it is still generally described as being the entity that converts federal and state legislation into local action (McAdams, 2002). The thoughts of Etzioni (1964) regarding school boards are as relevant today as they were 40 years ago when he suggested that a better understanding of the decision-making process and how it impacts organizations was needed. But, the political landscape is much different for school boards today compared to school boards 40 years ago as local school boards are facing increasing demands for accountability resulting from both state and federal legislation. It is critical to add to the body of research on school boards and explore the impact of the NCLB legislation on the decision-making process of school boards is not found in the literature.

METHODOLOGY

The selected school board was located in the Commonwealth of Virginia. The school board consisted of seven members, elected by the residents of the jurisdiction; all seven members of the school board were included in this study. Regular school board meetings were held once a month, in the evening, and were broadcast live and recorded by the local cable company. Approximately 36,000 residents lived in the jurisdiction served by the school board being examined. There were nine schools within the division. The division enrollment as of December 2005 was approximately 6,040 students in grades kindergarten through twelve. Demographics for the student population revealed that approximately 85.5% of the students were Caucasian, 10.7% African American, 1.8% Hispanic, and 2.0% other.

This study utilized a mixed-methods approach to answer the research questions. Although the study employed the case-study approach of qualitative research, chi-square testing, as used in quantitative studies, was also used to test for significance. The data for review consisted of recorded video tapes, as well as recorded minutes, of the meetings. Only regular meetings for the period of January 2005 through December 2005 were examined. There were no video records of special meetings or closed (executive) sessions (Hellman, 2008).

DECISION-MAKING FRAMEWORK

The decision-making framework utilized for this study was developed by Griffiths (1959), further refined by Howerton (1971), and also used in Crum’s (2006) study. Howerton’s expanded framework included operational criteria for classifying specific comments or actions within the working definitions.

1. Recognize and define the problem.
a. Problem was recognized, defined, or limited.
b. Problem was redefined.

2. Analyze and evaluate the problem.
   a. Problem was linked with the organization.
   b. Problem was clarified.
   c. Data previously presented were clarified.
   d. Specific elements of the problem were identified.
   e. Direction was given to the problem.
   f. The question of when to decide was considered.
   g. The question of whether or not a decision should be made was considered.
   h. The question of who was best qualified to decide was considered.

3. Establish criteria for evaluating solutions.
   a. The conditions of a satisfactory solution were considered.
   b. Objectives which the solution should meet were established.
   c. Specific requirements or needs were considered.
   d. Existing policies, standards, goals, or governmental provisions were considered.

4. Collect data relevant to the problem.
   a. Data were requested.
   b. Data were offered.
   c. A procedure for collecting data was recommended.
   d. Opinion or advice in data form was offered.

5. Select alternatives and weigh consequences.
   a. The use of previously formulated solution to a similar problem was suggested.
   b. Ways of combining elements of data into a solution were suggested.
   c. Additional alternatives were requested.
   d. The outcome of an alternative solution was considered.

Research Questions
This study was designed to ascertain whether or not the characteristics surrounding school board decision making today were influenced by NCLB and whether or not they were similar to those characteristics found in previous research. The study conducted by Crum (2006) was used as a model for analysis. This study sought to answer seven research questions:

1. What are the characteristics surrounding the initial awareness by a school board of a need to make a decision?
2. What characteristics of decision making can be identified from an analysis of the actions that occur in public school board meetings?
3. What are the characteristics surrounding the termination of action by a school board on a decision-needing situation?
4. What influence, if any, has the NCLB legislation had on the decision-making process of the school board being studied?
5. Are the current characteristics surrounding the initial awareness by a school board of a need to make a decision similar to the characteristics found in past studies?
6. Are the current characteristics of decision making identified through an analysis of the actions that occur in public school board meeting similar to the characteristics found in past studies?
7. Are the current characteristics surrounding the termination of action by a school board on a decision-needing situation similar to the characteristics found in past studies?

Research Question 1
The first research question required determination of the characteristics surrounding the initial awareness by a school board of a need to make a decision. To answer this question, the study used the same procedure that was followed by Howerton (1971) and Crum (2006).

Step 1. Through a content analysis of recorded video tapes and minutes of meetings, data were
collected to determine who first identified the decision-needing situation, when and how it was identified, and what problem area was involved. The protocol instrument is shown in Table 1. This instrument, developed by Crum (2006), was adapted for this study. Crum expanded upon Howerton’s (1971) three classifications, using four classifications, with the addition of the category of superintendent. The four classifications for this study were as follows: (a) board member, an individual serving in the capacity of school board member for the locality being investigated; (b) superintendent, a person serving in the capacity of superintendent of schools for the locality being investigated; (c) staff member, any salaried, full-time employee of the school system being investigated; or (d) other, any individual addressing the school board who does not fit into one of the other three categories.

**Step 2.** Three classifications were utilized to record when the decision-making situation was identified: during the meeting, in the agenda letter, or prior to the agenda letter.

**Step 3.** The means for communicating the initial awareness of the decision-making situation was recorded into one of two categories: written or spoken.

**Step 4.** Problem areas were identified through a content analysis of the recorded video tapes and minutes. Problem areas were the same as those used by Howerton (1971) and Crum (2006). The additional area of Policy was added to help further clarify the actions taken by the board in this study. The problem identified for the study were: (1) **Curriculum**; (2) **Facility**; (3) **Finance**; (4) **Miscellaneous**; (5) **Personnel**; (6) **Student Concerns**; and (7) **Policy**.

**Research Question 2**

The second research question asked what characteristics of decision making could be identified from an analysis of the actions that occurred in public school board meetings. To answer this question, the following steps were taken:

**Step 1.** Utilizing Table 1 as a protocol for recording data, a content analysis was conducted of the verbatim recording of each meeting. Review of written minutes was used as a cross reference to ensure recording accuracy. Utilizing the framework for analysis developed by Howerton (1971), the researcher categorized statements into one of the following decision-making process steps: (a) recognize and define problem, (b) analyze and evaluate problem, (c) establish criteria for evaluating solutions, (d) collect data relevant to problem, or (e) select alternatives and weigh consequences.

**Step 2.** The researcher recorded each statement onto the protocol in the appropriate category and recorded who made the statement. In recording each verbal utterance, the researcher categorized it as either a statement or a question.

**Research Question 3**

Research question 3 examined the characteristics surrounding the termination of each decision-making situation. The following procedure was utilized to answer this question:

**Step 1.** Utilizing the protocol found in Table 1, the researcher recorded data to identify how the decision-making situation was terminated. Situations were terminated in one of three ways: (a) formal procedure, that is, motion and vote; (b) informal procedure, that is, reaching consensus; or (c) no action, that is, no board action required.

**Step 2.** The information was sorted and categorized by problem area and source of identification. Data were then cross checked with recorded minutes.

**Research Question 4**

The fourth research question investigated the effect, if any, of NCLB legislation on the decision-making process of school boards. To answer this question, the recorded video tapes were scrutinized for direct or indirect references to NCLB. Meeting minutes were also reviewed. Any reference to NCLB was recorded on the Decision-Making Process Step Protocol Instrument in the designated location. In addition, the researcher reviewed each decision-needing situation and determined if there was any relationship to NCLB. These results were recorded on the Researcher-Identified Problem Area - NCLB Identification Protocol Instrument shown in Appendix 1. The table in Appendix 2 depicts the protocol form that was used for recording data; it is similar to the table used by Howerton (1971) and modified for
use by Crum (2006). Appendix 1 depicts the protocol form that was used by the researcher to determine whether or not there was any connection between the decision and NCLB.

**Research Questions 5, 6, and 7**

The fifth, sixth, and seventh questions were addressed through the utilization of chi-square testing. Chi-square testing was the appropriate measure for comparing observed frequencies of occurrence with expected frequencies (Hinkle, Wiersna, & Jurs, 1998). Hinkle et al. explained, “Observed frequencies are those that the researcher obtains empirically through direct observation; theoretical or expected frequencies are developed on the basis of some hypothesis” (p. 575).

Question 5 was addressed using the observed data collected for Question 1; Question 6 was addressed using the observed data collected for Question 2; and Question 7 was addressed using the observed data collected for Question 3. To answer Questions 5, 6, and 7 the following steps were followed:

- **Step 1.** Observed frequencies used to answer Research Questions 1, 2, and 3 were recorded in total and by problem area.
- **Step 2.** Total frequencies reported by Crum (2006) to answer Research Questions 1, 2, and 3 of her study were reviewed and used as the basis for expected frequencies.
- **Step 3.** Chi-square testing was utilized to determine if the observed frequencies were significantly different ($p < .05$) from the expected frequencies found in Crum’s study.

**DATA ANALYSIS**

The method of data analysis for this study was a content analysis of verbatim recordings of actions by the various participants during monthly school board meetings. According to Gall, Gall, and Borg (2005), content analysis is a reliable method of analysis provided the categories are clearly defined and worthwhile, the procedure for sampling is sound, and the categories can be utilized reliably by observers. Based upon the content analysis, descriptive statistics were generated. Hinkle et al. (1998) wrote, “Descriptive statistics are used to classify and summarize numerical data; i.e., to describe data” (p. 17). Data were presented in both tables and charts for each of the first three research questions (Hellman, 2008).

Chi-square analysis was also utilized in this study. Because it is appropriate when comparing observed data to expected data (Hinkle et al., 1998), chi-square is a popular nonparametric test requiring few assumptions, which are easily met (Abrami, Cholmsky, & Gordon, 2001). Abrami et al. listed the three assumptions for use of the chi-square statistic:

1. The samples have been randomly selected.
2. The observations are independent.
3. Group sample sizes are sufficiently large.

**Reliability and Validity**

The techniques utilized in this study have been proven to be reliable and valid based upon the results of previous studies. Howerton (1971), Rock (1981), and Crum (2006) all employed techniques similar to those used in this study. Crum stated, “As previous studies have shown, the use of a steady school board, one whose composition does not change within the study cycle, as well as one whose categories are similar throughout meetings, is a dependable source to study” (p. 68). Howerton stated, “Reliable information can be gained so long as relatively stable attributes are described in the means of the investigation” (p. 66).

Reliability and validity were also enhanced for this case study through the use of both recorded video data and typed minutes. Using more than one source of information for data is referred to as triangulation of information (Creswell, 1998).

All data were collected via two protocol instruments. Creswell (1998) defined a protocol as “a predetermined sheet on which one logs information learned during the observation or interview” (p. 126). Creswell contended that protocols enable a researcher to organize thoughts regarding the development of items such as headings and categories. The protocol instrument utilized for Research Questions 1 – 3 of this study was similar to the protocol used by Crum (2006). In her study, Crum established an interrater reliability coefficient of .875 for the Decision-Making Process Step protocol instrument.
The second protocol instrument was used to answer Question 4 of this study. An interrater reliability coefficient of .927 was established by the researcher for the Researcher-Identified Problem Area - NCLB Identification Protocol Instrument. To establish the interrater reliability, the researcher, along with another doctoral student, reviewed excerpts from video tapes and recorded the data on the protocol instrument. The coefficient was established by dividing the number of agreements by the number of opportunities for agreement.

**FINDINGS**

**Question 1**

School board members, the superintendent, staff members, and others identified the problems for the decision-making situations. The number and percentage of problems by source of origin are shown in Table 1. As indicated in Table 1, for the 164 decision-making situations that were observed in this study, 99 or well over half (60.4%) of the problems were identified by staff. The board identified close to one fourth (23.2%) of the problems. The superintendent and others identified fewer problems--9.7 % and 6.7% respectively--than did the board. In fact, those two groups collectively identified fewer problems than did the board. Furthermore, the board, the superintendent, and others combined identified fewer problems than did the staff alone. This pattern is similar to the pattern found by Crum (2006).

**Table 1:**

<table>
<thead>
<tr>
<th>Source</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board</td>
<td>38</td>
<td>23.2</td>
</tr>
<tr>
<td>Superintendent</td>
<td>16</td>
<td>9.7</td>
</tr>
<tr>
<td>Staff</td>
<td>99</td>
<td>60.4</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>164</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Question 2**

Review of the data indicated that 3,692 actions were recorded as the board acted on the 164 decision-needing situations. More than one third (35.8%) of the actions occurred in the data collection category. The next highest frequency of actions was noted in the analysis and evaluation category; that category contained over one fourth (27.0%) of all actions taken by the subject board. The two categories combined accounted for almost two thirds (62.8%) of all actions observed during the study. This fact suggests that data made up an integral component of the decision-making process. Conversely, the problem recognition area contained only 373 actions (10.1%). The areas involving the selection of alternatives and weighing of consequences and the establishment of criteria generated 478 (12.9%) and 522 (14.2%) actions, respectively. Each of these three categories involved less than 15% of the total actions; combined, they generated slightly over one third (37.2%) of the actions (Hellman, 2008). These data are delineated for the reader in Table 2.
Table 2:

Distributions of Actions by Categories

<table>
<thead>
<tr>
<th>Recognize Problem</th>
<th>Analyze &amp; Evaluate</th>
<th>Establish Criteria</th>
<th>Collect Data</th>
<th>Select Alternatives &amp; Weigh Consequences</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>373</td>
<td>998</td>
<td>522</td>
<td>1,321</td>
<td>478</td>
</tr>
<tr>
<td>Percent</td>
<td>10.1</td>
<td>27.0</td>
<td>14.2</td>
<td>35.8</td>
<td>12.9</td>
</tr>
</tbody>
</table>

Question 3

Table 3 depicts the distribution of problems by method of termination and source of problem identification. Slightly less than three fourths (73.2%) of all problems were terminated formally. The data also indicated that almost one fourth (24.4%) of all problems were terminated with no action taken by the school board to resolve them. A very small percentage (2.4%) of the problems were terminated by informal methods. This finding suggests that for those problems requiring resolution, the school board tended to terminate them in a formal manner. The problems that did not require action were often informational items brought to the attention of the board. It is significant to note that all but two (94.8%) of the problems identified by the board were terminated formally. A lower percentage (81.3%) of the problems identified by the superintendent were terminated formally, and even fewer (67.7%) of the problems identified by staff were terminated in a formal manner. Problems identified by others generated the lowest percentage (36.4%) of formal termination procedures.

Table 3:

Distribution of Problems by Method of Termination and Source of Identification

<table>
<thead>
<tr>
<th>Termination Method</th>
<th>Source</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Board</td>
<td>No.</td>
<td>%</td>
<td>Superintendent</td>
<td>No.</td>
<td>%</td>
<td>Staff</td>
<td>No.</td>
</tr>
<tr>
<td>Formal</td>
<td>36</td>
<td>94.8</td>
<td>13</td>
<td>81.3</td>
<td>67</td>
<td>67.7</td>
<td>4</td>
<td>36.4</td>
</tr>
<tr>
<td>Informal</td>
<td>1</td>
<td>2.6</td>
<td>0</td>
<td>0.0</td>
<td>3</td>
<td>3.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>No Action</td>
<td>1</td>
<td>2.6</td>
<td>3</td>
<td>18.7</td>
<td>29</td>
<td>29.3</td>
<td>7</td>
<td>63.6</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
<td>16</td>
<td>100.0</td>
<td>99</td>
<td>100.0</td>
<td>11</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Question 4

Question 4 addressed how NCLB was identified both by method and by area (researcher identified, through discussion, through minutes or agenda, or through both discussion and minutes or agenda). The data indicated that the researcher identified the relevance of NCLB in 62 (37.8%) of the 164 decision-needing problems. The data further reveal that there were only three (1.8%) incidents of NCLB’s being mentioned in discussion, minutes or agenda, or both. This is a significant finding in that it suggests that although NCLB played a major role in the decision-making process of the subject school board, the board proceeded with the decision-making process with little or no mention of NCLB. One plausible explanation for this phenomenon suggests that the legal framework had been previously assimilated into the decision-making process of the subject board (Hellman, 2008). In fact, almost three fourths (72.7%) of all problems within the curriculum area were identified by the researcher as being impacted by NCLB. Conversely, none of the problems in the facilities area were identified as being impacted by NCLB.

Questions 5, 6, & 7

Data presented in this section detail the chi-square analysis of characteristics associated with problem identification, analysis, and termination by the subject school board for this study as well as the school board studied by Crum (2006). To determine if the characteristics surrounding problem identification were similar, a chi-square analysis was performed on the data found in Table 1 of this study as well as similar data from Crum’s study. To determine if the characteristics associated with the actual decision making were similar between the two boards, a chi-square analysis was performed on the data found in Table 2 of this study and similar data from Crum’s study. The final chi-square analysis was performed on data found in Table 3 of this study and similar data from Crum’s study. The purpose of this analysis was to determine if there were any similarities between the findings of this study and Crum’s study regarding problem termination.

With regard to similarities related to problem identification, the results shown in Table 1 were compared to the results found in Crum’s (2006) study. H₀ for this analysis was stated as follows: There is no difference in the parties responsible for problem identification between the two studies. The resulting $\chi^2 = 431.9$, with 3 degrees of freedom and a confidence level of $p < .05$, caused $H_0$ to be rejected. In rejecting the null hypothesis, it was concluded that the differences between the two studies regarding problem identification were not due to chance; there was a statistically significant difference between the two boards regarding problem identification. Chi-square testing was performed on the data found in Table 2 of this study and similar data found in Crum’s (2006) study. H₀ for this analysis was stated as follows: There is no difference in the activities within the action categories between the two studies. The resulting $\chi^2 = 2,100.8$, with 4 degrees of freedom and a confidence level of $p < .05$, caused $H_0$ to be rejected. In rejecting the null hypothesis, it was concluded that the differences between the findings of the two studies regarding characteristics of problem analysis were not due to chance; there was a statistically significant difference in how the problems were recognized, analyzed, evaluated, and solved by the two boards. The final chi-square testing was performed on the data found in Table 4 of this study and similar data found in Crum’s (2006) study. H₀ for this analysis was stated as follows: There is no difference in the methods of problem termination between the two studies. The resulting $\chi^2 = 166.4$, with 2 degrees of freedom and a confidence level of $p < .05$, caused $H_0$ to be rejected. In rejecting the null hypothesis, it was concluded that the differences between the two studies regarding method of problem termination were not due to chance; there was a statistically significant difference in how the problems were terminated by the two boards (Hellman, 2008).

Discussion and Conclusions

Undoubtedly, educational planners and change agents must understand how school boards make decisions in order to effectively enact policy changes within school systems. With the overwhelming number of demands placed upon educational agencies by NCLB, it is further vital to determine if the
policies boards are acting upon are related to the mandates set forth by the federal legislation. While some of the findings in this study may at first appear to be intuitive, it is important to note that the literature has not revealed any tangible studies that have explored contemporary boards and compared their decision making patterns, as well as exploring the NCLB actions of boards.

Results from this study demonstrated that the majority of the problems (decision-needing situations) were presented to the school board by staff and the highest percentages of problems occurred in the area of finance. Results also indicate that all groups were responsible for introducing problems. Data were conclusive in indicating that the staff presented the majority of the problems in the areas of finance, facility, curriculum, miscellaneous, and policy, whereas the board presented the majority of the problems in the personnel and student concerns areas. The overwhelming majority of the problems were introduced to the board in writing, thereby indicating the board was aware of most of the decision-needing situations prior to the meetings. This conclusion supports the findings from Crum’s (2006) study. It appears, therefore, that boards rely heavily on their designated staff within the school system to identify action needing situations, rather than seeking out issues on their own. It is incumbent upon the division staff to identify the salient issues that are germane to the needs of the school system and present them in an effective manner to the board in order to help enact and promote positive change.

Supporting our assertion that board members are aware of issues prior to the start of the board meeting, and taking this theory one step further, are the findings revolving around the actual statements and questions made throughout the course of the board meetings. More than three-fourths of all the verbal statements were made by a combination of staff and school board members. NOTE: This sentence does not tell us who made the statements, board or staff, yet the following sentences focus on board statements, please clarify. Further, a high percentage of the actions were in the form of declarative statements compared to a relatively small percentage of questions. This finding may be surprising to some, but may also reaffirm the beliefs of others. While boards may appear to be in the process of deliberating issues within the context of the actual board meetings, these findings reveal, due to the lack of probing questions and more declarative statements (which at time proved to be verbose and lengthy!), that many of the decisions are most likely made outside the formal board venue. This reinforces the importance of staff members working with the board outside the arena of formal meetings while developing and revising division policies.

Interestingly, while data revealed that actions were distributed across all five categories of the decision-making framework, two categories—analysis and evaluation, and data collection—accounted for over half of all the actions. Over one-third of the problems examined in this study generated actions involving all five categories of the framework and over half involved actions in at least four of the categories. This finding supports the conclusion that this board took a very pragmatic, methodical approach to decision making. Data revealed that the researcher identified 62 of the 164 decision-needing situations as being related to NCLB. Examination of the minutes, agendas, and tapes, however, indicated that NCLB was mentioned during only three of the decision-needing situations. From a phenomenological perspective, this represents a significant finding. During a period when accountability and mandates were paramount in education, the board under study proceeded to make decisions that were influenced by NCLB, with little or no mention of the law. Again, this finding supports the conclusion that although faced with numerous constraints and mandates, the board completed its tasks with little mention for the legal framework for its decisions. One plausible explanation for this phenomenon suggests that the legal framework had been previously assimilated into the decision-making process of the subject board (Hellman, 2008). This again supports the need for division staff to diligently identify the integral components related to the NCLB legislation to bring them to the awareness of the board.

Finally, the statistical analysis between the current study conducted by Hellman (2008) and the previous study by Crum (2006) provide an important and necessary look into the overall workings of boards. A chi-square analysis was performed on selected data, utilizing the findings of Crum’s study for the expected outcomes. Problem identification, characteristics of analysis, and problem termination were all analyzed. Statistical analysis revealed a significant difference between the two boards in each of the three areas. These results are highly significant because, while it may seem intuitive that boards operate in different manners because of the unique make-up and background of each board and each board
member, studies verifying this are lacking.
A perennial and ever increasing argument revolving around the nature of schools is the lack of an empirical research base. This study provides a solid foundation to further explore the unique characteristics and decision-making patterns of boards in order to better inform educational planners and change agents as they work with the boards to meet the varying needs of students.

REFERENCES


# Appendix 1

## Researcher-Identified Problem Area - NCLB Identification Protocol Instrument

<table>
<thead>
<tr>
<th>Problem Area:</th>
<th>Curriculum</th>
<th>Facility</th>
<th>Finance</th>
<th>Personnel</th>
<th>Policy</th>
<th>Miscellaneous</th>
<th>Student Concerns</th>
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</tbody>
</table>

**Researcher-Identified Problem Related to NCLB:**

- **Title I - Improving The Academic Achievement of the Disadvantaged**
  - Improving Basic Programs Operated by LEAs
  - Reading First
- **Title II - Preparing, Training, and Recruiting High Quality Teachers and Principals**
  - Teacher and Principal Training And Recruiting
  - Enhancing Education Through Technology
- **Title III - Language Instruction for LEP and Immigrant Students**
- **Title IV – 21st Century Schools**
  - Safe and Drug-Free Schools and Communities
  - 21st Century Community Learning Centers
- **Title V - Promoting Informed Parental Choice and Innovative Programs**
  - Innovative Programs
- **Title VI – Flexibility and Accountability**
- **Title VII – Indian, Native Hawaiian, and Alaska Native Education**
- **Title VIII – Impact Aid Program**
- **Title IX – Unsafe School Choice**
- **Title X – Repeals, Redesignations, and Amendments to Other Statutes**
  - McKinney-Vento Homeless Education Assistance Improvements
### Decision-Making Process Step Protocol Instrument

<table>
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<tr>
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<th>Date Originated _________________</th>
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</table>

#### Problem Area:
- Curriculum ______
- Facility ______
- Finance ______
- Personnel ______
- Policy ______
- Miscellaneous ______
- Student Concerns ______

| Problem Outcome | | |
|-----------------|---|---|---|---|
|                 |   |   |   |   |

#### Decision-making process steps

<table>
<thead>
<tr>
<th>Decision-making process steps</th>
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<tbody>
<tr>
<td>A. Recognize and define problem</td>
<td>Superintendent, Staff, Board, Others, Total</td>
</tr>
<tr>
<td>B. Analyze and evaluate problem</td>
<td></td>
</tr>
<tr>
<td>C. Establish criteria for evaluating solutions</td>
<td></td>
</tr>
<tr>
<td>D. Collect data relevant to problem</td>
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<tr>
<td>E. Select alternatives and weigh consequences</td>
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<tr>
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<th>Prior to Letter</th>
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