Examining the Relationships Between Nebraska Superintendents' Perceptions of Their Involvement with School Improvement and Factors that may Affect Their Involvement

by

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Superintendents should be prepared to follow a research-based model of school improvement, and schools should utilize such a model to enhance educational opportunities for their students. This study was designed to focus on the degree to which Nebraska superintendents were involved in all phases of the Nebraska Model for Continuous Improvement, a school improvement model. A model of school improvement is necessary for continued instructional and/or curricular improvements that yield improved student results. Nebraska superintendents were given an opportunity to characterize their involvement in each phase of the school improvement process by completing a questionnaire with questions related to each phase of school improvement according to the Nebraska Model for Continuous Improvement.

The questionnaire contained additional school improvement informational items that helped the researcher examine superintendent experiences that may have contributed to an increase in the degree of involvement by the superintendent. These items included formal training in school improvement; advanced degree focused on curriculum, assessments, and/or instruction; advanced degree focused on school improvement and/or accountability; external team leader experience; external review team experience; student enrollment at the superintendent's district; experience in education; and experience as a

superintendent. Relationships between these items and the overall rank of superintendent involvement in school improvement were examined.

The results of this study indicate that formal school improvement training, external team experience as a member and/or leader, student enrollment at the superintendent's district, and experience in education all were related to the superintendent's perception of his/her involvement in school improvement. The results would also indicate that experience as a superintendent was not related to the superintendent's perceived involvement.

Based on the results, the researcher recommends that a superintendent should (a) serve on external review teams, (b) complete course work in school improvement as part of his/her preparatory course work, (c) attend annual school improvement training, and (d) become more involved in the development of the school profile.

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Table of Contents

List of Tables

List of Figures

List of Appendices

Chapter 1

Introduction

Since the passage of the *No Child Left Behind Act* of 2001 (NCLB), renewed emphasis has been placed on school accountability. With this renewed emphasis, school superintendents have been focusing on gains in student achievement. Cambron-McCabe, Cunningham, Harvey, and Koff (2005) stated that regardless of how NCLB develops, schools will sooner or later be judged on their ability to close the achievement gap. They continued by stating that this gap is often defined in racial terms, because so many minority students are from low-income families, but the gap is more likely to be a consequence of income and social class than of race or ethnicity. Bernhardt (1999) summarized the school improvement process as a mechanism that uses a systematic approach to help school close the achievement gap for all students. Therefore, schools need to recharge the school improvement process within their school buildings.

Beginning in May of 2000, the State of Nebraska implemented the School-based Teacher-led Assessment and Reporting System (STARS). According to the Nebraska Department of Education website, STARS was the model that Nebraska developed and then fine tuned in response to the federal law NCLB. STARS was the vehicle that the Nebraska Department of Education used to help schools meet the NCLB requirements. Cumulative data gathered under the STARS system was used in support of the State of Nebraska receiving federal acceptance under NCLB.

During the 2008 Nebraska Legislature session, the Unicameral passed LB987 and LB1157. The combination of these two bills led to the demise of the Nebraska Department of Education STARS program. According to Kevin Abourezk (2008), a

reporter for the *Lincoln Journal Star*, when formulated into LB 79-760, these two bills, forced the Nebraska Department of Education to change philosophical direction and ultimately led to the resignation of Commissioner Doug Christensen.

Nebraska State Accountability (NeSA) serves as the foundation for the new philosophy of assessment develop by the Nebraska Department of Education. The NeSA process has established timelines and guidelines for the Nebraska Department of Education to re-visit the state standards and formulate state assessments rather than locally developed assessments. The purpose of this new direction is to produce uniform statewide assessments and relieve the burden of assessment development from individual districts. Because they are uniform, these assessments will produce and provide the necessary data for district-to-district comparisons. Ultimately, the statewide assessments will yield additional pressure for school and superintendent accountability.

With increase pressure for accountability, superintendents will search for systemic processes that impact student learning. Riverbark and Wheeler (2008) stated that the AdvancED district accreditation process embraces a systems approach because it is designed as a systemic process that examines how all elements of a school district work together to impact results connected to student learning. All parts of the district are required to focus on a shared vision and goals for improvement, align operations to achieve a shared vision and goals, and connect improvement efforts to maximize results. To achieve this requirement, districts are expected to not only meet the AdvancED standard for quality systems, but to also identify and guide the implementation of a systemic continuous improvement process.

AdvancED was formed in April 2006 when North Central Association Commission on Accreditation and School Improvement (NCA CASI), Southern Association of Colleges and Schools Council on Accreditation and School Improvement (SACS CASI), and National Study of School Evaluation (NSSE) merged to form a strong unified organization dedicated to quality education. According to the AdvancED website, school districts must establish and maintain three pillars to be accredited. These three pillars are as follows: schools must meet high standards, schools must engage in continuous improvement, and schools must demonstrate quality assurance through an external review. This research focused on the pillar of continuous improvement.

The school improvement cycle within a school district provides the structure and framework for the pillar of continuous improvement. It also provides for continued gains in student achievement, hence accountability. Educational leaders need to understand the phases associated with the school improvement cycle in order for the process to be successful. In fact, "almost every school in America today is (or was) in the process of 'restructuring.' However, a large percentage of these schools will abandon their efforts before they complete their restructuring process" (Bernhardt, 1999, p. 1). The challenge today is to determine why school leaders are failing to complete the cycle and avoiding gains in student achievement. According to Forsyth and Turner (2004), several recent research studies of school districts that have significantly improved levels of student achievement converge on a critical finding, an effective superintendent was identified as key to the success of improvement efforts.

Many models for continuous school improvement have been established. However, because this dissertation research focused on superintendents in Nebraska and

because of familiar terminology, the researcher chose to use the Nebraska Model for Continuous Improvement as presented on the Nebraska Department of Education website at http://www.nde.state.ne.us/APAC/SchoolImprovement2.htm. The Nebraska Model for Continuous Improvement was highly influenced by the standards established by AdvancED.

The Nebraska Model for Continuous Improvement has established the following phases/steps for school improvement:

1. building understanding and commitment to the purpose and process of school improvement including establishing committees and a timeline;
2. creating and maintaining the district's profile including gathering, disaggregating, and analyzing the data;
3. determining and establishing the school improvement goal as targeted by the data;
4. developing an action plan that contains research-based strategies;
5. overseeing the implementation of the school improvement action plan; and
6. recognizing the progress of the plan and affirming the success to all stakeholders.

Statement of the Problem

Superintendents in the state of Nebraska are ultimately held accountable for the quality of student education and the improvement of that education. The Nebraska Department of Education Rule 10 has required all Nebraska schools to be involved in a school improvement process. Therefore, a two fold assumption could be made: first, that Nebraska superintendents are prepared and have the necessary skill sets to follow a

research-based model of school improvement, second, that all schools are utilizing such a model to enhance the educational opportunities for their students. As a result, this dissertation was designed to focus on the degree to which Nebraska superintendents are involved in implementing all phases of the school improvement processes that are necessary for continued instructional or curricular improvements that yield improved student results. In addition, this study examined the relationships between the superintendents' perceptions of their involvement in school improvement and factors that may affect their involvement.

Purpose of the Study

The purpose for conducting this quantitative research project was to determine the degree to which Nebraska superintendents are involved in administering the school improvement process that ultimately ensures improved achievement for all students. During the 2005 Nebraska Administrator Days held in Kearney, Nebraska, Dr. Doug Christiansen, Nebraska Commissioner of Education, stated that a national trend in school improvement indicates that the learning curve for students who are average and below does not mirror that of all students combined. Therefore, superintendents need to increase their overall knowledge and involvement of the school improvement process so they can focus their attention on educational growth of all students.

In addition, this research project will examine the relationships between the superintendents' perceptions of their involvement within school improvement and factors that may affect their involvement. These factors included formal training in school improvement; advanced degree focused on curriculum, assessments, and/or instruction; advanced degree focused on school improvement and/or accountability; external team

leader experience; external review team experience; student enrollment at the superintendent's district; experience in education; and experience as a superintendent.

Research Questions

Using the Nebraska Model for Continuous Improvement as the framework for this study, the following research questions will be addressed:

Superintendents' Involvement

1. To what extent are Nebraska superintendents involved in building understanding and commitment to the purpose and process of school improvement including establishing committees and a timeline?
2. To what extent are Nebraska superintendents involved in creating and analyzing the data?
3. To what extent are Nebraska superintendents involved in determining and establishing the school improvement goal as targeted by the data?
4. To what extent are Nebraska superintendents involved in developing an action plan that contains research-based strategies?
5. To what extent are Nebraska superintendents involved in overseeing the implementation of the school improvement action plan?
6. To what extent are Nebraska superintendents involved in recognizing the progress of the school improvement plan and affirming the success to all stakeholders?

Along with seeking the extent to which Nebraska superintendents are involved in the school improvement process, this dissertation will also address these three additional research questions:

7. Is there a relationship between the superintendents' perceptions of their involvement with the school improvement process and their opinion of the relative importance of these roles for a superintendent?
   (a) Providing educational leadership to the school district
   (b) Ensuring quality staff relations
   (c) Providing community leadership
   (d) Maintaining a working relationship with the Board of Education
   (e) Providing financial direction
   (f) Managing of facilities, grounds, and equipment
8. Is there a relationship between the superintendents' perceptions of their involvement with the school improvement process and their opinion of the relative importance of the phases of the school improvement process?
   (a) Building understanding and commitment to the purpose and process of school improvement including establishing committees and a timeline
   (b) Creating and maintaining the district's profile including gathering, disaggregating, and analyzing the data
   (c) Determining and establishing the school improvement goal as targeted by the data
   (d) Developing an action plan that contains research-based strategies
   (e) Overseeing the implementation of the school improvement action plan
   (f) Recognizing the progress of the plan and affirming the success to all stakeholders

9. Is there a relationship between superintendents' perceptions of their involvement with school improvement and each of these factors?
   (a) formal training in school improvement
   (b) advanced degree focused on curriculum, instruction, and/or assessments
   (c) advanced degree focused on school improvement and/or accountability
   (d) external team leader experience
   (e) external review team experience
   (f) student enrollment
   (g) experience in education
   (h) experience as a superintendent

Definition of Terms

Accountability – Answerable or capable of being explained. Associated with the district's ability to provide and show gains in student achievement for all students.

Appreciation of Diversity – Develops awareness, understanding and respect for differences, beliefs, and traditions of ethnic and cultural groups.

Best Practices – Actions, processes, or interventions that are based in research or supported by results and are most likely to achieve the desired goal or performance level.

Comprehensive Assessment System – A system and processes for gathering, managing, analyzing, and disseminating data from multiple measures needed by the school and staff to make informed decisions, monitor performance and effectiveness, determine gaps in performance, identify needs, and report results.

Comprehensive Materials Collections – The school secures, provides, and manages the materials and services needed to support and supplement learning. A

comprehensive materials collection may include, but is not limited to print and electronic media materials, visual aides, technology equipment, online materials access, classroom books and resources, and teaching aids.

Continuously Maintains – Regularly and purposefully updates and disseminates information and data.

Diversity – Ethnic, socioeconomic, gender, group, and/or cultural variety.

Equity – The quality of being just, impartial, and fair. In the educational setting, equity includes ensuring that all students have a fair and equal opportunity to access and benefit from all educational opportunities.

Formal Channels – Channels of communication that adhere to accepted and established policies, processes, and procedures.

Impact Statement – Description of what one would be able to see or observe in a school if the requisite standard is fully implemented and it describes the effect on the school resulting from full implementation of a standard.

Intervention – Intentional actions that are identified to meet improvement goals.

Learning Communities – Colleagues who come together regularly to learn, make decisions, and solve problems in a meaningful and professional manner.

No Child Left Behind – Federal law enacted by President George W. Bush, in 2001, which requires school districts to assess their students and report their results which in turn will provide school accountability to the students and parents of a school district.

Performance Indicators – An index or composite of measures used to gauge the levels of performance or effectiveness of a part of the school for the purpose of monitoring results.

Profile – Description of a school's current reality; students, their performance, school effectiveness, and the school and community contexts for learning.

Purpose – The reasons a school exists as defined by its mission, beliefs, values, philosophy, and/or goals.

Quality School Indicator – The operational definition of the practices, processes, or products required of a school as they relate to meeting accreditation standards.

Research Based – Programs, process, interventions, or practices that are supported by research resulting from scientific or quasi-scientific designs, using valid and reliable measures, and resulting in verifiable and repeatable positive results.

School Effectiveness – The research-based practices that impact student performance and the organizational conditions of improving schools.

School Improvement Process – A systematic process involving all staff to improve learning opportunities and to improve learning for all students.

Stakeholders – Staff, students, parents, community members, and others who have a vested interest in the school or district.

Standards – The seven established qualitative conditions for excellence required of all accredited schools.

Student Achievement – A measure in student comprehension gains over time as determined by an assessment that is norm or criterion referenced.

Student Performance – Knowledge, skills, or attitudes demonstrated by a student.

Systematic – Processes that are repeatable and predictable rather than anecdotal and episodic.

Systemic – Interdependent functions within a school that work together to improve results.

Validity – The extent to which a measure is capable of producing information that is meaningful.

Vision – An expression of the ideal or desired state of student learning and/or organizational operations based on expectations that are possible to achieve.

Delimitations

"Delimitations are the factors that prevent you from claiming that your findings are true for all people in all times and places" (Bryant, 2004, p. 57). This study is delimited to the perceptions of Nebraska superintendents. Also, because of the enormous scope of the school improvement process, this study will focus only on the extent of this group of superintendents and their degree of involvement in administrating the school improvement process at this particular point in time. This study will recognize the fact that it is narrowly focused considering the realm of the school improvement process. Other delimitations for this study are varying school organizational structures and the seven current Accreditation Standards for Quality Schools developed by AdvancED.

During the 2008 Nebraska legislative session, the Legislature and the Nebraska Department of Education clashed over which appropriate assessment system was necessary for districts within the state to use in order to assess their students. The Nebraska Department of Education continues to endorse STARS, while the legislature would like to require districts to move towards a common state assessment in math, reading, and social studies. These political maneuvers caused a delimitation of the study

by creating a rapidly changing assessment environment unique to the state of Nebraska over the duration of the data collection process.

Also during the duration of this research project, Dr. Doug Christensen resigned as the Nebraska Commissioner of Education. A change in commissioner will result in new goals being dictated to Nebraska school districts within the upcoming year; therefore, this change could be a delimitation of this study.

And finally, the United States' presidential election in November of 2008 could be a delimitation of the study. With the recent election of Democratic President Barack Obama, No Child Left Behind legislation is sure to migrate to a different form. President Obama's campaign promises for education called for educational reform of No Child Left Behind. However, with a current regressing economy, the nation will have to wait for educational change for the economic woes have forged to the forefront for the newly elected President and his cabinet.

Limitations

"Limitations are those restrictions created by your methodology" (Bryant, 2004, p. 58). This research is delimited to Nebraska superintendents. However, there may be certain limitations on generalizing this study's findings to other states or other positions within a school district. Because of distributing the survey instrument via an electronic mode of communications, there maybe some limitations as to the availability and accuracy of Nebraska superintendent's e-mail addresses, and the return rate of the Internet-based survey. And finally, future professional development opportunities for Nebraska superintendents may improve their skill sets and understanding of the school improvement process while this study is being authenticated.

Significance of the Study

This study seeks to determine the degree to which Nebraska superintendents are involved in administrating the school improvement process. In addition, this study examined relationships between the superintendents' perceptions of their involvement within school improvement and factors that may affect their involvement. These factors included formal training in school improvement; advanced degree focused on curriculum, assessments, and/or instruction; advanced degree focused on school improvement and/or accountability; external team leader experience; external review team experience; student enrollment at the superintendent's district; experience in education; and experience as a superintendent.

The results of this study will provide more insight into the superintendent's role in the school improvement process. This study will also determine to what extent and how active superintendents are involved in the school improvement process. These conclusions will be based upon their individual rating of the degree that they are actually involved in each of the phases/steps of the Nebraska Model for Continuous Improvement.

In the future, this study could assist the Nebraska Department of Education in establishing future professional development about the school improvement process for Nebraska superintendents. The Nebraska Department of Education could utilize the data gathered by this study to target particular standards that were rated low by Nebraska superintendents in administrating the school improvement process.

Superintendent hiring firms could use the results of this study in analyzing a potential superintendent's qualifications to help predict their success rate at improving student results. Based upon certain factors such as formal training in school

improvement; advanced degree focused on curriculum, assessments, and/or instruction; advanced degree focused on school improvement and/or accountability; external team leader experience; external review team experience; student enrollment at the superintendent's district; experience in education; and experience as a superintendent, schools looking to hire a new superintendent could then decide which candidate is best for enhancing their student achievement results through a research-based school improvement process.

Chapter 2

Literature Review

Introduction

With the passage of *No Child Left Behind* (NCLB), renewed emphasis has been placed on school accountability. With this renewed emphasis, school superintendents have been focusing on gains in student achievement. Cambron-McCabe, Cunningham, Harvey, and Koff (2005) stated that regardless of how NCLB develops, schools will sooner or later be judged on their ability to close the achievement gap. They continued by stating that this gap is often defined in racial terms, since so many minority students are from low-income families, but the gap is more likely to be a consequence of income and social class than of race or ethnicity. Bernhardt (1999) summarized the school improvement process as a mechanism that uses a systematic approach to help school close the achievement gap for all students. Therefore, schools need to recharge the school improvement process within their school buildings.

In order for schools to improve performance, school leaders will have to become more knowledgeable with all phases of the school improvement continuous cycle. According to Reeves (2002), the role of the superintendent has multiple facets: to foster school and community relations; to develop and maintain an effective school and district staff; to facilitate student learning; to provide organizational resources and operations; to develop, implement, and evaluate curriculum and instruction; to conduct professional development for school and district staff; to maintain group process; and to understand and respond to the larger political issues. These items identified by Reeves are directly related to the school improvement cycle. In other words, the superintendent will need to

obtain professional preparation to acquire the necessary skills to implement each of the phases of the school improvement cycle and to be able to serve as the driving force behind the process.

The superintendent must also share the vision with the district's principals, for they have a role in the school improvement process as well. Cambron-McCabe et al. (2005) indicated the importance of the superintendent preparing the principals to lead student learning. Lingstrom and Speck (2004) concurred and stated further that the principals should actually share the vision with the superintendent. In other words, ownership on behalf of the administrative team will result in the success of the school improvement process. In fact, Glanz (2002) suggested that using the team approach brings many leadership styles that aid in the success of the cycle.

Another important facet of the school improvement process is ownership amongst the staff. Garmston and Wellman (2002) established several different types of methods of developing ownership. Their book specifically identified techniques that superintendents could use to gain improved staff ownership in the school improvement process. In support, Conzemius and O'Neill (2001) suggested building a framework for shared responsibility. Their research included elements of focus, reflection, and collaboration. As stated in the preceding paragraph, the principal's role would also be to assist in staff ownership.

And finally, literature supports using research-based methods when determining strategies to produce gains in the school improvement targeted areas. Marzano, Pickering, and Pollock (2001) stated that educators stand at a special point in time because the "art" of teaching is rapidly becoming the "science" of teaching, which is a relatively new

phenomenon. Killion (2002a, 2002b) also published materials that provide educators with results-based staff development activities for both the elementary and high school levels. These authors have produced several publications that contain proven research developed methods of teaching strategies.

Emergence of Accountability

DuBois (2007) verified that the achievement gap between under-served children and children of privilege stands at a full standard deviation, which in raw terms means that vast numbers of kids are under-educated. The fact that the slope of student results of various sub-groups of students does not parallel that of the whole group has lawmakers pushing for school reform and accountability.

Hence, school accountability has been impacted by the *No Child Left Behind Act of 2001* (NCLB). The United States Department of Education website stated that accountability is a crucial step in addressing the achievement gaps that plague the nation. Poor achieving students are often lost in unrepresentative averages. African American, Hispanic, special education, limited English proficient, and many other student groups are left behind. Every state must set standards for grade-level achievement and develop a system to measure the progress of all students and subgroups of students.

Increased student results have become the catalyst in determining accountability. According to the Improving Data Quality for Title I Standards, Assessments, and Accountability Reporting (2006), “spurred by NCLB, virtually every educational reform program now includes an accountability component that requires sound data collection and reporting” (p. 2). The guidelines continue by stating that accountability provisions of

the NCLB significantly increased the urgency for states, local agencies, and local schools to produce accurate, reliable, high-quality educational data.

Adequate Yearly Progress (AYP) has educational leaders working towards accountability. AYP is defined as a school's ability to increase their student performance levels annually toward prescribed targets. AYP insures that no child should be trapped in an under-performing school. Students who attend a Title I school that does not make AYP as defined by their perspective states for two consecutive years have the option of transferring to a higher-performing public school within their district. In determining AYP, schools are required to demonstrate that at least 95% of all students participate in state/local assessments. This requirement applies to each student sub-group as well.

The state of Nebraska implemented School-based Teacher-led Assessment and Reporting System (STARS) as a direct response to the federal governments NCLB. According to the Nebraska Department of Education website, STARS was the model that Nebraska developed and fine tuned in response the federal governments NCLB. STARS was the vehicle that the Nebraska Department of Education used to deliver requirements to schools within the state. Cumulative data gathered under the STARS system was used in support of the State of Nebraska receiving federal acceptance under NCLB (Nebraska Department of Education Statewide Assessments, n.d.).

Under the STARS model, educational leaders must have their schools either adopt state standards in reading, writing, speaking, listening, mathematics, science, and social studies/history or have their locally developed standards approved as more rigorous than the state standards. The STARS model also required schools to submit a district assessment plan that outlines how they plan to measure student performance on the

standards. Each district was to develop multiple assessments that match their standards and meet six criteria as defined by the Burro's Institute. In the spring of each year, districts reported to the state the performances of all students.

To validate a school district's process, schools had to submit a portfolio to the state exclaiming how they met the requirements of STARS. And most recently, according to the School-based Teacher-led Assessment and Report System (2006), the Nebraska Department of Education, in response to the Federal Department of Education, has mandated Peer Reviews of every school within the state.

And finally, the whole NCLB movement has implemented state and local report cards. These report cards illustrate trends in student performance data. Report cards can be analyzed quickly by stakeholders of school districts regarding the most recent student performances.

Most recently, former Nebraska Senator Ron Raikes introduced LB987 (2008). According to Dr. Michael Dulaney, Executive Director of the Nebraska Council of School Administrator (NCSA), through a bill summary dated January 15, 2008, the bill would create the Quality Education Accountability Commission under the auspices of the Quality Education Accountability Act of 1998. The commission would be charged with the responsibility to establish standards and assessment procedures to meet the requirements of state and federal law, to adopt a plan for the assessment and reporting system, establish standards for statewide assessment, and to hire a director of statewide assessments who may hire staff as necessary to carry out the duties of the commission.

The commission rather than the Nebraska Department of Education would be required to conduct studies to verify the technical quality of assessment instruments and

demonstrate the comparability of assessment instrument results required by the Quality Education Accountability Act. The commission would be required to annually report findings to the Governor, the Legislature, and the State Board of Education. In other words, since adopted in 2008, LB987 replaced the Nebraska Department of Education STARS accountability system.

LB987 had the support of the entire education committee, along with the speaker of the Nebraska unicameral. According to Trent Nowka, Lobbyist of the Nebraska Legislature, this strong support suggested that the legislature is seeking new accountability for student results as the legislature continues to fund education across the state. LB987 was enacted into law at the conclusion of the 2008 legislative session.

The data collected will continue to be used to analyze student performances; however, accountability is more than just analyzing and reporting data. *A Guide to Education and NCLB* (n.d.) states accountability is a crucial step in addressing the achievement gaps that plague our nation. Using a systemic, continuous school improvement process is the vehicle that schools use to address achievement gaps.

School Improvement Process

Bernhardt (1999) stated that the systematic school improvement process serves as a means to improve student results. In fact, Marx (2006) predicted that a trend of continuous improvement will replace quick fixes and defense of the status quo.

Breakthrough School Improvement – An Action Guide for Greater and Faster Results published in 2005 by the National Study of School Evaluation (NSSE) serves as a complete guide for schools in implementing the school improvement process. According to this publication, the steps for school improvement evolved around four themes of

vision, profile, plan and implementation, and results. Figure 1 illustrates the continuous cycle of the Breakthrough School Improvement themes.

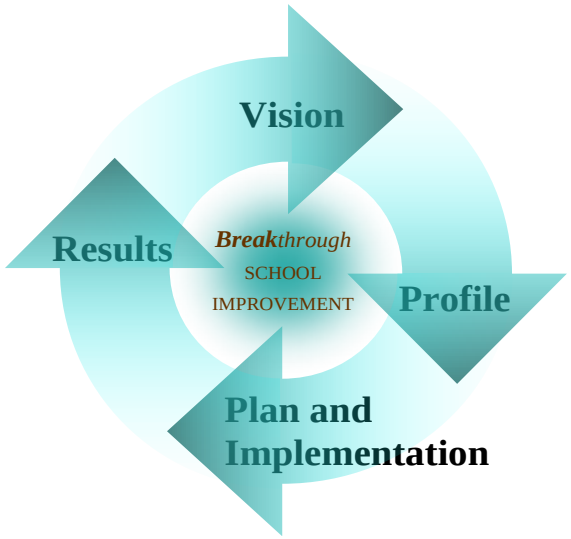

Figure 1. Breakthrough school improvement model.

A school with a focused vision shows enthusiasm for the school improvement process. A focused school through its vision has examined research-based factors related to student performance, determined beliefs, developed a shared vision to focus school improvement, and has determined expectations for student learning. This focused vision is shared commonly with all stakeholders of the school district.

A profile organizes data so that a school can draw a conclusion using their trend data. Key actions in organizing a profile include a description of students and their performances, a description of the school effectiveness, a description of the school and community contexts, and a determination of target areas for improvement. A school system clearly must have evidence of students' progress, and the data collected on

student achievement is the most critical category of data in the profile (System-wide Improvement: Focusing on Student Learning, 2003).

The Nebraska Department of Education continues to assist schools in developing a school's profile. Using a web-based environment, the department has created school report cards that show trend data for both the school and its students. Because of recent legislation, the Nebraska Department of Education must enhance the website so that schools can compare themselves with other schools within the state.

During the planning and implementation phase, schools identify gaps between current and expected student performances; set improvement goals; determine interventions; develop action plans; and implement, monitor, and adjust interventions. The implementation phase requires the most time and endurance. Without persistence, the process tends to break down and weaken during the implementation phase. Often times, a school must resort to its vision to keep the school improvement process moving forward with enthusiasm.

And finally, a school must look at the results yielded by the school improvement process. However, to examine results a school must identify measures to determine results, analyze and document student performance results, evaluate the success of interventions, and communicate and use results for further improvement.

Although the proceeding paragraphs define the school improvement process as linear, the reality is that the process is cyclical. In other words, schools continue to process over and over trying to improve targeted areas (National Study of School Evaluation, 2005). Figure 2 illustrates the continuous cycle of the school improvement process.

Figure 2. Nebraska model for continuous improvement.

The Nebraska Model for Continuous Improvement is reflective of *Breakthrough School Improvement – An Action Guide for Greater and Faster Results* as described in the preceding paragraphs (National Study of School Evaluation, 2005). According to the Nebraska Framework for School Improvement (n.d.), the Nebraska Model for Continuous Improvement is intended to assist Nebraska schools in aligning and coordinating the various school improvement initiatives that may be in progress in each district.

The Nebraska Model for Continuous Improvement established the following phases/steps for school improvement:

1. building understanding and commitment to the purpose and process of school improvement including establishing committees and a timeline;
2. creating and maintaining the district's profile including gathering, disaggregating, and analyzing the data;
3. determining and establishing the school improvement goal as targeted by the data;

4. developing an action plan that contains research-based strategies;
5. overseeing the implementation of the school improvement action plan; and
6. recognizing the progress of the plan and affirming the success to all stakeholders.

To implement the Nebraska Model for Continuous Improvement, schools must begin by appointing a leadership/steering committee whose purpose is to drive and oversee all phases. During this implementation stage, the leadership/steering committee would review previous school improvement activities, provide orientation/training/staff development for all staff, establish and communicate timelines to all staff, coordinate school or district initiatives for continuous improvement, and appoint and assist sub-committees.

During the phase of creating the profile, many different types of data need to be collected and analyzed. The types of data include student performance data, demographic data, program data, and perceptual data. Once the data are collected, the second part of this phase is organizing and presenting data to stakeholders of the district.

In the setting the goals phase, stakeholders examine the data to determine what major themes emerge. These themes are separated into strengths and challenges. Goals are selected from the list of challenges and then the goals are researched to determine effective strategies/interventions that will have the greatest impact upon student results.

An action plan is drafted during the planning to improve phase. The action plans serve as guides for all staff in implementing strategies to achieve the goals. Action plans include the goal, student learning expectations, targeted participants for whom the goal

will be evaluated, assessment instruments to be used to determine success, improvement strategies, responsibility chart, and a timeline for implementation.

The purpose of the implementing the plan phase is to allow time to implement all strategies. During this phase, the steering committee needs to monitor the progress closely, and provide assistance and support as needed. Part of this phase includes determine the effectiveness of the interventions. Also during this phase, any progress needs to be communicated and affirmed to all stakeholders of the district.

Accreditation Through AdvancED

According to the Nebraska Department of Education website, all public school systems are required by state statute to be accredited. Accreditation is a designation earned by complying with all provisions of Nebraska Department of Education Rule 10, Regulations and Procedures for the Accreditation of Schools. These regulations and procedures are intended to establish equality of educational opportunity for all students in public elementary and secondary schools.

The Nebraska Department of Education Accreditation and School Improvement website (n.d.) also stated that the North Central Association (NCA) is a voluntary regional accrediting association of institutions in 19 states, the Navajo Nation, and the Department of Defense Dependents Schools worldwide. Through its Commission on Accreditation and School Improvement, NCA accredits more than 7500 elementary, middle level, and high schools. Although membership is voluntary, schools who choose to join NCA must meet the NCA standards and criteria that--among other requirements--insure all teachers have preparation for the subjects they are teaching and the school pursues an improvement plan that focuses on student learning and verifies student

success. NCA and Nebraska State accreditation standards are similar, but they do not substitute for one another: public school districts must be state accredited; schools may elect to join NCA for accreditation.

In April 2006, North Central Association Commission on Accreditation and School Improvement (NCA CASI), Southern Association of Colleges and Schools Council on Accreditation and School Improvement (SACS CASI), and National Study of School Evaluation (NSSE) merged to form a strong unified organization dedicated to quality education. This unified organization is known as AdvancED. According to the AdvancED website (n.d.), school districts must establish and maintain three pillars to be accredited: schools must meet high standards, school must engage in continuous improvement, and schools must demonstrate quality assurance through an external review.

To assist schools in establishing and maintaining these three pillars, AdvancED developed seven standards. These seven standards are comprehensive statements of quality practices and conditions that research and best practice indicate are necessary for schools to achieve quality student performance and organizational effectiveness. These seven standards include vision and purpose, governance and leadership, teaching and learning, documenting and using results, resources and support systems, stakeholder communications and relationships, and commitment to continuous improvement.

To further clarify the seven standards, AdvancED drafted indicators that provide a comprehensive picture of each standard. These indicators also define or describe exemplary practices and processes.

As previously mentioned, in April 2006 AdvancED became the parent company of North Central Accreditation. According to the AdvancED website, in order for schools to receive accreditation through AdvancED, schools must:

1. adhere to the AdvancED Accreditation Standards for Quality Schools,
2. engage in ongoing self-assessment and continuous improvement,
3. document results of improvement efforts,
4. complete a Standards Assessment Report between six weeks and six months prior to the Quality Assurance Review,
5. host a Quality Assurance Review Team once every five years,
6. act on the Quality Assurance Review Team's recommendations, and
7. submit a progress report two years following the Quality Assurance Review.

Figure 3 illustrates the continuous school improvement model according to AdvancED.

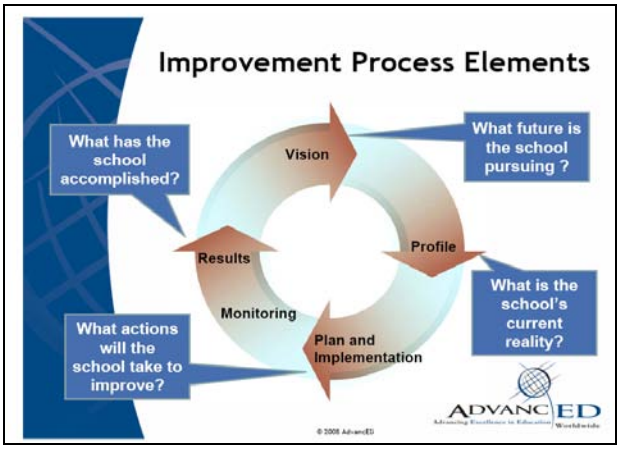

Figure 3. AdvancED model for school improvement.

The AdvancED Accreditation Standards for Quality Schools serve as the foundation for the accreditation process. The seven standards and accompanying

indicators are tied directly to the research on factors that impact student learning. The seven standards address the following areas:

1. Vision and Purpose
2. Governance and Leadership
3. Teaching and Learning
4. Documenting and Using Results
5. Resources and Support Systems
6. Stakeholder Communications and Relationships
7. Commitment to Continuous Improvement

AdvancED has developed impact statements for each of the standards. The impact statement serves as a method to let schools know when a particular standard is being met or not met. The AdvancED website provided the impact statements:

1. A school is successful in meeting the ‘vision and purpose’ standard when it commits to a shared purpose and direction. The school establishes expectations for student learning aligned with the school’s vision that is supported by school personnel and external stakeholders. These expectations serve as the focus for assessing student performance and school effectiveness. The school’s vision guides allocations of time and human, material, and fiscal resources.
2. A school is successful in meeting the ‘governance and leadership’ standard when it has leaders who are advocates for the school’s vision and improvement efforts. The leaders provide direction and allocate resources to implement curricular and co-curricular programs that enable students to

achieve expectations for their learning. Leaders encourage collaboration and shared responsibility for school improvement among stakeholders. The school's policies, procedures, and organizational conditions ensure equity of learning opportunities and support for innovation.

3. A school is successful in meeting the 'teaching and learning' standard when it implements a curriculum based on clear and measurable expectations for student learning that provides opportunities for all students to acquire requisite knowledge, skills, and attitudes. Teachers use proven instructional practices that actively engage students in the learning process. Teachers provide opportunities for students to apply their knowledge and skills to real world situations. Teachers give students feedback to improve their performance.
4. A school is successful in meeting the 'documenting and using results' standard when it uses a comprehensive assessment system based on clearly defined performance measures. The system is used to assess student performance on expectations for student learning, evaluate the effectiveness of curriculum and instruction, and determine interventions to improve student performance. The assessment system yields timely and accurate information that is meaningful and useful to school leaders, teachers, and other stakeholders, in understanding student performance, school effectiveness, and the results of improvement efforts.
5. A school is successful in meeting the 'resources and support systems' standard when it has sufficient human, material, and fiscal resources to implement a curriculum that enables students to achieve expectations for

student learning, to meet special needs, and to comply with applicable regulations. The school employs and allocates staff that is well qualified for their assignments. The school provides ongoing learning opportunities for all staff to improve their effectiveness. The school ensures compliance with applicable local, state and federal regulations.

6. A school is successful in meeting the ‘stakeholder communications and relationships’ standard when it has the understanding, commitment, and support of stakeholders. School personnel seek opportunities for collaboration and shared leadership among stakeholders to help students learn and advance improvement efforts.
7. A school is successful in meeting the ‘commitment to continuous improvement’ standard when it implements a collaborative and ongoing process for improvement that aligns the functions of the school with the expectations for student learning. Improvement efforts are sustained and the school demonstrates progress in improving student performance and school effectiveness. New improvement efforts are informed by the results of earlier efforts through reflection and assessment of the improvement process.

AdvancED portrays itself as the leader in advancing excellence in education world-wide so that every student is prepared for success in an ever-changing and diverse world. Ultimately, AdvancED’s accreditation process helps schools organize their school improvement efforts, which enable schools to successfully define their mission, to analyze their strengths and weaknesses, and then to design strategies for improvement.

Leadership

Evidence has been provided to support the phases of the school improvement cycle. However, without a competent educational leader, the process would be shallow and yield little or no student results. The American Association of School Administrators (AASA) (2006) stated in its Leadership for Change pamphlet that a superintendent's leadership requires a keen understanding of teaching, learning, and what works for students, as opposed to playing a management role as in the past. AASA continued by summarizing the leadership role of a superintendent to include engaging in creative and innovative approaches to learning and instruction and insuring a sound, well-rounded education to students from all different walks of life. Superintendents are setting goals for student achievement with key stakeholders and regularly evaluating progress. The AdvancED Source (Winter of 2008) confirmed that leadership characterized by systematic and collaborative decision-making appears to hold the most promise for improving student achievement and school/district effectiveness.

Behrens (1992) stated that the real question for a superintendent of schools is not only how to build sound relationships, monitor school district information, coordinate activities, manage financial resources, maintain school facilities, direct support services and effectively staff these facilities, but also how to establish an atmosphere conducive to learning, how to improve instructional leadership, and how to effectively set high expectations and goals. Behrens (1992) iterated the importance of a superintendent building an administrative team that will develop ways to maximize interaction and create commitment, and stated that the superintendent must be prepared to lead, organize, communicate, control, and influence if school reform is to occur.

The educational leader must create a school environment that challenges the school community to not be content with the status quo, but to instead develop a systematic approach to the school improvement process. NSSE through its System-wide Improvement: Focusing on Student Learning (2004) strongly suggested that in order to advance system-wide improvement, school system leaders need to fulfill two critical roles. They must continuously improve the overall education system, and they must provide support for the improvement efforts of individual schools. Forsyth and Turner (2004) stated that effective superintendents are identified as key to the success of improvement efforts.

Effective superintendents work hand in hand with their building principals and teachers in developing ownership of the school improvement process and the change that it will create. The superintendent models and believes in a proactive approach to school improvement.

Cambron-McCabe et al. (2005) suggested that a superintendent observe the happenings of a school from the balcony. The superintendent is able to step back away from the school trenches and develop an overall insight as to the achievements of the district and the shortfalls. Similar to the school improvement process, the superintendent can determine his/her perceived notations of the school as compared to his/her vision of what should be happening. The difference is then worked into the school improvement process through a series of in-services that focus on developing staff ownership.

Much literature supported the importance of effective leadership of the building administrator towards the school improvement process. However, the literature implied a supportive role for the superintendent within this process. The literature defined the role

of the building principal as providing the enthusiasm, resources, and training to those who immediately impact student learning. According to Fullan, Hill, and Crevola (2006), there are four new ingredients that teachers need.

1. A set of powerful and aligned assessment tools tied to the learning objectives of each lesson that give the teacher access to accurate and comprehensive information of the progress of each student on a daily basis and that can be administered without unduly interrupting normal classroom routines.
2. A method of allowing the formative assessment data to be captured in a way that is not time consuming, analyzed automatically, and converted into information that is powerful enough to drive instructional decisions not sometime in the future, but tomorrow.
3. A means of using each students' assessment information so the teacher can design and implement personalized instruction.
4. A built-in means of monitoring and managing learning, of testing what works, and of systematically improving the effectiveness of classroom instruction that more precisely responds to the learning needs of each student in the class.

Today, principals with superintendent support must provide these ingredients to classroom teachers.

With the emergence of school accountability, literature supports a direct correlation between the superintendent and student achievement.

> The superintendent who implements inclusive goal-setting processes that result in board-adopted non-negotiable goals for achievement and instruction, who assures that schools align their use of district resources for professional development with district goals, and who monitors and evaluates progress toward goal achievement is fulfilling multiple responsibilities correlated with high levels of achievement. (Marzano & Waters, 2007, p. 15)

They continued by indicating that when a superintendent encourages strong school-level leadership and encourages principals and others to assume responsibility for school success, he or she has fulfilled another responsibility—to establish a relationship with schools.

An additional benefit of the Marzano and Waters (2007) study was the positive correlation between length of superintendent service and student achievement. This study affirms the value of leadership stability and of the superintendent remaining in a district long enough to see the positive impact of his or her leadership on student leaning and achievement.

Dufour (2007) stated that superintendents who actually hope to foster improvement must simply build widespread consensus for a concept or initiative before proceeding. Without strong leaders, processes breakdown far before producing results.

> The key to improving schools is ensuring that educators do the right work, but too often leaders settle for the illusion of doing. Strategic planning isn't doing, training isn't doing, writing mission statements isn't doing, talking isn't doing, even making a decision isn't doing unless it results in action. Getting people to do differently, to act in new ways, remains the central challenge of every improvement process, and it takes intentional leadership to meet that challenge. (Dufour, 2007, p. 42)

In providing these ingredients, administrators must lead and understand the curriculum and assessment development processes. The curriculum must be comprised of high unit outcomes for students and these outcomes must be linked directly to a reliable classroom assessment. Technological trends allow assessments to be scored so that teachers can quickly study the student results and efficiency of the assessment.

The third piece to the administrator's task is providing research-based instructional strategies through a series of staff development in-services. These in-services should focus around identified student learning targets.

Whitaker (2003) stated school improvement is actually a very simple concept. However, like many other simple concepts, it is not easy to accomplish. There are two ways to improve a school significantly: "Get better teachers and improve the teachers you have." Therefore, the final responsibility of a building principal along with support of the superintendent is to ensure that the district has quality staff. The administrator will conduct many formal and informal observations to conclude his/her opinion as to a teacher's value to their students and school.

According to Fullan (2006), one could read a hundred books on change, and they all boil down to one word: motivation. The success of an instructional leader driving the school improvement process hinges upon their ability to motivate the people involved within the process. Intense motivation is directly correlated to the instructional leader's enthusiasm, involvement, and knowledge of the process. In other words, the instructional leader must be competence in the process and be able to demonstrate a high passion for the need of the process.

Staff members can be highly motivated, but if they don't understand "why" they are motivated, change will not occur. Therefore, the instructional leader must develop ownership amongst the constituents of the process. In developing ownership, the leader allows input and decision making amongst the staff. The leader also allows failure but provides enthusiasm and motivation beyond failure. At times, confusion can cause staff

members to think beyond their normal thinking (out of the box thinking), which promotes changes that ultimately affect student results.

Data without relationships merely increase the information glut (Fullan, 2004). Hence, the instructional leader needs to create a communication plan. The purpose of the communication plan is to establish a protocol by which the school will develop and maintain communications to stakeholders within the school district.

Changing Role of the Superintendent

The superintendent's roles in a school district along with the emphasis placed on each role have changed. Houston (2007) stated that the superintendent's role has dramatically changed from a community leader, to a school manager, to an educational leader, and most recently to a scapegoat. He claimed that for decades, superintendents have overseen the business of the schools--including the budget, buildings, and daily operation--and have gained power and prestige as major community leaders.

Events in history such as Sputnik, emergence of teacher unions, formation of special interest groups, federal reports and legislation including Nation at Risk, No Child Left Behind, the Elementary and Secondary Education Act, the Individuals with Disabilities Education Act, and Title IX have all lead to changes in the role of the superintendent. Houston (2007) stated that superintendents must be communicators, collaborators, consensus builders, community builders, child advocates, champions of curriculum, and masters of teaching and learning. He indicated that superintendents today are no longer custodians of books and buildings, but conductors of an orchestra charged with making beautiful music with all the players.

As lawmakers move towards school accountability, the superintendent has become the scapegoat when schools don't hit their prescribed targets in student gains. In other words, superintendents have become the target of community members who believe their children are not getting everything they deserve and policy makers who demand different outcomes from the education system.

Kowalski (2006) published the General Professional Standards for the Superintendency developed by the American Association of School Administrators in 1993. These eight standards include leadership and district culture, policy and governance, communicative/community relations, organizational management, curriculum planning/development, instructional management, human resources management, and leadership values/ethics. Houston (2007) would concur with these standards from the point that past superintendents were responsible for "things" while the modern superintendent must be responsible for relationships between stakeholders of the district.

Cambron-McCabe et al. (2005) framed the role of the school superintendent into seven categories. These categories include leadership, governance, standards and assessments, race and class, principals, collaboration, and public engagement. Superintendents of the 21st century are expected to master these seven categories.

Marzano and Waters (2007) found a strong relationship between the work of the superintendent and student achievement. They defined part of a superintendent's role as providing autonomy to their building principals to lead their schools, but expected alignment on district goals and use of resources for professional development.

Examining the Relationship between the Superintendent and Student Achievement

Previous sections in this literature review have discussed the relevance of accountability, school improvement, and leadership. Six dissertations were analyzed and reviewed that examined the role of the superintendent in correlation to student achievement. The results of this review were summarized into three major categories. These categories are shared vision/school culture, training of building principals, and superintendent tenure.

Vision and School Culture

The vision and school culture created by the superintendent were identified by the dissertations examined. Both vision and school-culture are indirect approaches to how a superintendent manipulates the pedagogy. In fact, Alonso (2006) stated that a superintendent has both formal and informal levers that allow him/her to focus the direction of the district. He continued by stating that other school personnel in turn manipulate a series of levers that implements, mandates, and obeys the cultural norms in ways that reflect their interpretation of the superintendent's culture and meeting the needs of the students.

Davidson (2005) further supported the Alonso study by attributing district-wide improvements in student academic achievement to superintendent's leadership practices. Edwards (2006) indicated that the instructional leadership behaviors practiced by superintendents do impact district performance outcomes. She determined the superintendent's establishment of a district mission and district climate, support of instructional management, and development of a system of practice were found to be statistically significant predictors of district performance outcome. The study specified

the following points as domains that could be manipulated by the superintendent that would have a positive impact on district performance outcomes.

- Ensure that building priorities of principals are consistent with the goals and direction of the district
- Articulate high expectations for all students
- Articulate high expectations for staff
- Articulate high expectations for buildings
- Focus on results to foster continuous improvement
- Prioritize the allocation of resources to meet district performance goals
- Assume individual responsibility to take the steps to create schools that show continuous improvement

Aitken (2001) indicated that the school climate plays a vital role in school improvement and the superintendent can significantly influence that climate. Superintendents are indeed important members of the restructured learning community and their relationship with boards and the school community continues to provide the foundation for educational leadership that supports classroom improvement. He summarized the indirect influence that a superintendent can have over school improvement through the creation of a rich school environment. Therefore, an effective superintendent, while not directly involved in the daily teaching and learning process, does have an influence of the culture of the school district, which in turn impacts student learning. When the superintendent focuses the resource of the school district on increasing individual student achievement, this sends a clear message to the entire school community that student learning is the purpose for the school district's existence.

Thompson (1997) proclaimed that besides establishing a clear vision and a rich culture, the superintendent's vision must be strong and compelling to others within the school district. In particular, Edwards (2006) suggested that superintendents must achieve a delicate balance between building autonomy and district authority to meet district performance goals. Specifically, her study indicated that superintendents of districts with high district performance scores monitored curriculum implementation less and provided building principals with the autonomy to meet building and district achievement goals.

Training of Building Principals

Davidson (2005) concluded that the superintendent's involvement in developing principals as instructional leaders is one of the significant factors in districts with improving student achievement. Since research studies provide ample information on the role principal leadership plays in improving student achievement, Boone (2001) suggested that current and aspiring superintendents be open and willing to engage in collaborative leadership behaviors to effect improvement in student achievement. This would suggest that superintendents and principals collaborate and lead jointly the school improvement process.

Superintendent Tenure

Davidson (2005) found that superintendent tenure also played an important role in influencing building principals. His study suggested that there was a significant difference in superintendents' reported involvement in developing principals as instructional leaders and planning for instruction. His study found that superintendents with less than three years of tenure within a district had no impact on influencing principal development.

Summary

With the passage of *No Child Left Behind* (NCLB), renewed emphasis has been placed on school accountability. With this renewed emphasis, school superintendents have been focusing on gains in student achievement. The goal of narrowing the achievement gaps within subgroups of students lies in the ability of the educational leader to provide a systematic approach to school improvement. A school superintendent must possess the necessary skill sets for all phases of the process in order to guarantee increase student productivity.

Many models of systematic school improvement exist. However, the focus of this study was the Nebraska Model for Continuous Improvement because of its familiarity within the state. This model is reflective of a circular model containing the phases/steps of creating/maintaining the profile, setting goals, planning to improve, and implementing the plan.

Having earned the endorsement of two accrediting institutions and the National Study of School Evaluation, AdvancED standards serve as guides to determine effectiveness of a district's school improvement process. AdvancED has established three pillars that schools must meet in order to receive their stamp of accreditation. To further clarify these pillars, AdvancED has established seven standards with each standard being further defined by quality indicators.

Literature would indicate that district-level leadership matters and that a correlation exists between district-level leadership and student results. Effective superintendents focus their efforts on creating goal-oriented districts. These goal-oriented districts involve and establish ownership among boards of education, administrators,

staff, students, and parents. And finally, superintendent tenure is positively correlated with student achievement.

A study by Marzano and Waters (2006) would concur with this literature review. Their study yielded three findings. First, district-level leadership does matter. They found a statistically significant relationship between district leadership and student achievement.

Second, effective superintendents focus their efforts on creating goal-oriented districts. In establishing goals for their districts, effective superintendents include all relevant stakeholders, including central office staff, building-level administrators, and board members. They also set specific achievement targets for schools and students, and then ensure the consistent use of research-based instructional strategies in all classrooms to reach those targets. Besides setting achievement targets, superintendents also monitor the progress of these targets and provide necessary resources such as time, money, and training.

The third finding states that there is a correlation between a superintendent's tenure and student achievement. The positive effects appear to manifest themselves as early as two years into a superintendent's tenure.

Chapter 3

Methodology

Introduction

This study was designed to examine the degree to which Nebraska superintendents are involved with each phase of the school improvement process. In addition, this research project also examined the relationships between the superintendents' perceptions of their involvement with school improvement and factors that may affect their involvement. These factors included formal training in school improvement; advanced degree focused on curriculum, assessments, and/or instruction; advanced degree focused on school improvement and/or accountability; external team leader experience; external review team experience; student enrollment at the superintendent's district; experience in education; and experience as a superintendent.

The researcher chose to use a quantitative study because this method of research is a systematic/scientific investigation of properties and phenomena, and their relationships. Quantitative research is often used as a way to research different aspects of education. According to Creswell and Shope (2006), quantitative research relies heavily upon data and the statistical summary of that data. The results were focused on conclusions with a high level of reliability and validity. In gathering data, the researcher used an instrument that minimizes error and bias, and was designed to be administrated to numerous individuals.

According to the AdvancED website (n.d.), school districts must establish and maintain three pillars to be accredited: schools must meet high standards, schools must engage in continuous improvement, and schools must demonstrate quality assurance

through an external review. The focus of this research study is on the pillar of engaging in continuous improvement.

Because the research focused on the involvement of Nebraska superintendents within the school improvement process, the Nebraska Model for Continuous Improvement was selected as the frameworks for the study. According to the Nebraska Department of Education Accreditation and School Improvement website (n.d.), the Nebraska Model for Continuous Improvement has established the following phases/steps for school improvement:

1. building understanding and commitment to the purpose and process of school improvement, including establishing committees and a timeline;
2. creating and maintaining the district's profile, including gathering, disaggregating, and analyzing the data;
3. determining and establishing the school improvement goal as targeted by the data;
4. developing an action plan that contains research-based strategies;
5. overseeing the implementation of the school improvement action plan; and
6. recognizing the progress of the plan and affirming the success to all stakeholders.

To implement the Nebraska Model for Continuous Improvement, schools must begin by appointing a leadership/steering committee whose purpose is to drive and oversee all phases. During this implementation stage, the leadership/steering committee would review previous school improvement activities, provide orientation/training/staff development for all staff, establish and communicate timelines to all staff, coordinate

school or district initiative for continuous improvement, and appoint and assist sub-committees.

During the phase of creating the profile, many different types of data need to be collected and analyzed: student performance data, demographic data, program data, and perceptual data. Once the data are collected the second part of this phase is organizing and presenting data to stakeholders of the district.

In the setting the goals phase, stakeholders examine the data to determine what major themes emerge. These themes are separated into strengths and challenges. Goals are selected from the list of challenges and the goals are researched to determine effective strategies/interventions that will have great impact upon student results.

An action plan is drafted during the planning to improve phase. The action plans serve as guides for all staff in implementing strategies to achieve the goals. Action plans include the goal, student learning expectations, targeted participants for whom the goal will be evaluated, what assessment instruments will be used to determine success, improvement strategies, responsibility chart, and timeline for implementation.

The purpose of the implementation of the plan phase is to allow time to develop strategies. During this phase, the steering committee needs to monitor the progress closely, and provide assistance and support as needed. Part of this phase includes determining the effectiveness of the interventions. Any progress needs to be communicated and affirmed to all stakeholders of the district.

At the end of each school improvement cycle, the school needs to reflect on the extent to which interventions have contributed to changes in improved student performances. During this phase, the steering committee compares the baseline and post-

intervention data results, displays performance data in graphic format with concise narrative descriptions, shares student performance result with all stakeholders, and documents key factors learned by the staff. In other words, the purpose of this phase is to have all stakeholders recognize progress and see the results of their actions. The hope is to increase awareness and understanding of effective practices and provide encouragement and support for staff and student accomplishments.

Research Questions

The research questions that guided this study focused on the degree to which Nebraska superintendents were involved in administering the school improvement process. The questions are related directly to the phases/steps of the Nebraska Model for Continuous Improvement. The research questions included:

Superintendents' Involvement

1. To what extent are Nebraska superintendents involved in building understanding and commitment to the purpose and process of school improvement including establishing committees and a timeline?
2. To what extent are Nebraska superintendents involved in creating and analyzing the data?
3. To what extent are Nebraska superintendents involved in determining and establishing the school improvement goal as targeted by the data?
4. To what extent are Nebraska superintendents involved in developing an action plan that contains research-based strategies?
5. To what extent are Nebraska superintendents involved in overseeing the implementation of the school improvement action plan?

6. To what extent are Nebraska superintendents involved in recognizing the progress of the school improvement plan and affirming the success to all stakeholders?

Along with seeking the extent to which Nebraska superintendents are involved in the school improvement process, this dissertation will also address these three additional research questions:

7. Is there a relationship between the superintendents' perceptions of their involvement with the school improvement process and their opinion of the relative importance of these roles for a superintendent?
   (a) Providing educational leadership to the school district
   (b) Ensuring quality staff relations
   (c) Providing community leadership
   (d) Maintaining a working relationship with the Board of Education
   (e) Providing financial direction
   (f) Managing of facilities, grounds, and equipment
8. Is there a relationship between the superintendents' perceptions of their involvement with the school improvement process and their opinion of the relative importance of the phases of the school improvement process?
   (a) Building understanding and commitment to the purpose and process of school improvement including establishing committees and timeline
   (b) Creating and maintaining the district's profile including gathering, disaggregating, and analyzing the data

(c) Determining and establishing the school improvement goal as targeted by the data

(d) Developing an action plan that contains research-based strategies

(e) Overseeing the implementation of the school improvement action plan

(f) Recognizing the progress of the plan and affirming the success to all stakeholders

9. Is there a relationship between superintendents' perceptions of their involvement with school improvement and each of these factors?

(a) formal training in school improvement

(b) advanced degree focused on curriculum, instruction, and/or assessments

(c) advanced degree focused on school improvement and/or accountability

(d) external team leader experience

(e) external review team experience

(f) student enrollment

(g) experience in education

(h) experience as a superintendent

Research Design

This study was designed as a quantitative study to determine the extent to which Nebraska superintendents are involved in the school improvement process. This study utilized the phases associated with the Nebraska Model for Continuous Improvement in designing the study. The Nebraska Model for Continuous Improvement has developed and established six phases/steps which correlate directly to the research questions of this study. Under each phase/step are descriptors that help school districts determine what

specific actions must be completed in order to successfully accomplish the phase/step. These descriptors were used to develop survey questions for each standard. They also ensured that the researcher covered all aspects of the phases/steps.

The key to designing this research project was to develop a survey instrument that would yield varying results that truly indicate a superintendent's involvement within their own school district. After examining several possibilities, the researcher designed an instrument that would inquire about a superintendent's involvement in each phase/step of the Nebraska Model for Continuous Improvement (see Appendix A). To thoroughly investigate the realm of each phase/step, the survey contained a number of inquiries per phase/step. These inquiries directly correlated to the phases/steps associated with the Nebraska Model for Continuous Improvement.

The responses to the inquiries were tailored to reflect different levels of superintendent involvement. The researcher used a four point Likert scale.

The "a" response indicates that the superintendent lead and facilitated the process. If the respondent selects this response, the respondent is highly involved with the process and fully aware of all needed activities required to complete this phase/step of the school improvement process.

The "b" response indicates that the superintendent delegated the leadership of this particular phase/step, but participated fully in the process and has been fully aware of all activities. In other words, the superintendent is present and has a voice in the decisions within the particular phase/step, but is not the chairman.

The "c" response indicates that the superintendent delegated the leadership of this particular phase/step, but has been only somewhat involved and has not participated in

the decision-making process. The superintendent who is somewhat involved receives information concerning a particular phase though an informant who is highly involved within this particular phase/step.

And finally, the “d” response indicates that the superintendent delegated all responsibility for the phase/step to someone else with the district. A superintendent who selects this response has not been involved within the leadership of the phase/step and is not aware of any necessary activities.

Population

To complete this study, 244 Nebraska superintendents with e-mail addresses available through the Nebraska Department of Education were asked to complete a survey with specific questions about their degree of involvement within the school improvement process.

Survey Instrument and Procedures

The researcher developed a survey to determine the degree to which Nebraska superintendents are involved in the school improvement process in their school districts. Data were collected using a web-based survey established by the researcher. The questions were developed using the phases/steps associated with the Nebraska Model for Continuous Improvement. The survey contained 16 questions that measure the extent to which superintendents are involved in each phase/step of the school improvement process.

The survey also contained two questions that had the respondent rank order a set of responses. The first question had the respondent prioritizing the different roles of the

superintendent. The second question had the respondent ranking the importance of the superintendent's involvement in each phase/step of the school improvement process.

The survey contained six additional school improvement information questions. The purpose of these questions was to gather needed information so that the researcher could examine any relationships between the superintendents' perceptions of their involvement within school improvement and factors that may affect their involvement. For this study, factors that may affect school improvement involvement included formal training in school improvement; advanced degree focused on curriculum, assessments, and/or instruction; advanced degree focused on school improvement and/or accountability; external team leader experience; external review team experience; student enrollment at the superintendent's district; experience in education; and experience as a superintendent.

The survey was delivered via e-mail using a direct link to the "Zoomerang" website because of costs, timing, and the fact that Nebraska superintendents utilize their e-mail in conducting other superintendent business and routines. The researcher utilized the Nebraska Department of Education's database of Nebraska superintendents' e-mail addresses.

The survey instrument began with an informed consent form (see Appendix A). Once the participant acknowledged the informed consent by agreeing to participate in the web-based survey, the survey program connected him/her to the actual survey instrument. At any time during the survey, the participant had the option of ending his or her participation. The participants had twenty-one days to complete the survey.

Content Validity

To ensure a high validity, a panel of four Nebraska superintendents who have experience as a Nebraska school improvement external leader within the state of Nebraska and an Educational Service Unit Staff Developer were assembled. The panel did an item analysis of the survey to determine item validity. Item validity was assumed if four out of five of the panelists agreed that the item would produce a valid response.

Once the item analysis was completed, then the panel discussed the survey from a holistic view. The purpose of this review was to insure that the survey covers all aspects of the school improvement process. Again, validity was assumed if 4 out of 5 of the panelist agree that the survey taken as whole produced valid responses for determining a superintendent involvement in the school improvement process for their particular school district. Table 1 displays the results of the validity study.

Table 1

Validity by Question

Question #	Agreement %	Question #	Agreement %	Question #	Agreement %
1.	100%	10.	100%	19.	100%
2.	100%	11.	80%	20.	100%
3.	100%	12.	100%	21.	100%
4.	100%	13.	100%	22.	100%
5.	100%	14.	100%	23.	100%
6.	100%	15.	100%	24.	100%
7.	100%	16	100%	25.	100%
8.	100%	17.	100%	26.	100%
9.	100%	18.	100%	27.	100%

Holistic Agreement Percentage – 100.0%

To further ensure content validity, the survey was piloted by utilizing an expert panel of ten superintendents. The number of superintendents that responded to the survey along with their proposed changes are summarized in Table 2. The results of the pilot survey were not used in the final results. However, the superintendents who participated in the pilot were given the opportunity to complete the survey with the rest of the superintendents and these responses were included in the final results.

Table 2

Results of Pilot Survey

Question #	Proposed Change	Researcher Response
11	Typo "specifics" to "specifies"	Corrected
11	A school improvement action plan specifies who will be responsible to assure the tasks are completed, the resources needed, the target dates for completion, professional development needs, and when and how the progress will be measured and evaluated. In writing an action plan I…	No change after conferring with proposal development committee.
17&18	Re-word for clarity on online version	Re-worded according to suggestions made by the proposal development committee and approved by Secondary Investigator.
19-24	Change "0" on Word survey form to and underscore	No change due to the actually survey being delivered using Zoomerang.

10 of 10 Superintendents responded

Reliability

Reliability refers to the consistency of different measurements of the same thing. A measurement procedure is said to be reliable if two different measures of the same thing obtain identical or near identical values.

Reliability of the survey was determined by the test-retest reliability method. The survey was piloted with ten Nebraska superintendents and then re-administered to those same individuals after a four week period had elapsed. A chart was developed so that results of individual items of the survey could be compared. To achieve a match, an exact match was used in questions 1-16 and 19-24. For questions 17 and 18, the researcher determined an individual question match if .70 of the six response yielded at least an adjacent match. An adjacent match was used in these two questions since there were 6 responses. If .70 or greater was achieved between initial and second responses for the ten superintendents, then reliability was assumed on that particular item.

After the item analysis was complete, the results were then compared to determine if the survey as whole would meet reliability. This was also accomplished by comparing all the results to insure a .70 or greater match was made between the pre and post survey. Results of the reliability study are summarized in Table 3. The results of the reliability study were not used in the final results. However, the superintendents who participated in the reliability study were given the opportunity to complete the survey with the rest of the superintendents and these responses were included in the final results.

Data Collection Procedures

A self-administered survey was designed for this research study. The researcher used the "Zoomerang" website to serve as the database to retrieve and store responses. The link to the survey was delivered via e-mail to each potential respondent.

Table 3

Results of Reliability Study

Question #	Agreement %	Question #	Agreement %	Question #	Agreement %
1.	80.0%	10.	80.0%	19.	100.0%
2.	90.0%	11.	70.0%	20.	100.0%
3.	80.0%	12.	80.0%	21.	100.0%
4.	90.0%	13.	70.0%	22.	80.0%
5.	70.0%	14.	80.0%	23.	70.0%
6.	90.0%	15.	80.0%	24.	90.0%
7.	90.0%	16	70.0%	25.	100.0%
8.	90.0%	17.	70.0%	26.	80.0%
9.	80.0%	18.	70.0%		

Holistic Agreement Percentage – 82.7%

The researcher e-mailed a pre-notice, cover letter, survey link and a follow-up letter following the timeline below. In addition, the researcher e-mailed a stronger cover letter to potential respondents who did not complete the survey following the first timeline of contacts.

Timeline

1. Setup Survey at www.zoomrang.com
2. E-mail Pre-notice (Day 1)
3. E-mail Survey (Day 2)
   - Cover letter
   - Survey link
4. E-mail Follow-up (Day 7)
   - Follow-up message
   - Survey link

5. E-mail Stronger Cover Letter (Day 14)
    - Non-respondents

6. E-mail Stronger Cover Letter Again (Day 18)
    - E-mail non-respondents

7. End of Data Collections (Day 21)

Data Analysis

Survey questions were designed to inquire about each of the phases/steps of the Nebraska Model for Continuous Improvement. To create a numerical mean score so a level of superintendent involvement could be established, a value for each possible response was assigned. Table 4 indicates the value associated with each response along with a brief description.

Table 4

Response Associated Value and Description

Response	Associated Value	Description
a.	4	Led and facilitated process
b.	3	Delegated leadership but highly participative in process
c.	2	Delegate leadership; only somewhat participative in process
d.	1	Delegated the whole process

In addition to calculating a mean score for each question, the researcher calculated a mean score for each phase of the school improvement process and a combined mean score for all phases of the school improvement process. Along with the mean scores, the standard deviations for each individual and summed score were also calculated.

After numeric scores were prepared, analysis of the data included descriptive statistics. The researcher analyzed the numeric scores by charting/graphing and providing a concise narrative description of the results of the survey by phases of the school improvement process.

For research question 7, the researcher intended to use a Chi Square analysis to determine if any relationship existed between the prioritizations of the roles of the superintendent (see survey item #17) and the superintendent's involvement level in the school improvement process as figured by the mean scores for each of the six phases of school improvement and the combined mean score (see survey items #1 - #16). However, the survey did not produce valid results to complete the proposed analysis.

For research question 8, the researcher used a Spearman Correlation to determine if any relationship existed between the rank order of the superintendent's involvement within each phase of the school improvement process (see survey item #18) and the superintendent's involvement level in the school improvement process as figured by the mean scores for each of the six phases of school improvement and the combined mean score (see survey items #1 - #16). In order for the researcher to be confident to the .05 level of significance, the correlation coefficient had to be less than -.2 or greater than .2.

For research question 9a, the researcher attempted to use the parametric Oneway ANOVA test to determine if a significant difference existed between the superintendents' formal training in school improvement (see survey item #19) and the superintendent's involvement level in the school improvement process as figured by the mean scores for each of the six phases of school improvement and the combined mean score (see survey items #1 - #16). If the Oneway ANOVA test met the Homogeneity of Variances (HOV)

test, then the researcher used the Tukey HSD test to establish a level of significant difference.

The researcher also used the non-parametric Kruskal-Wallis test for question 9a to determine if a significant difference existed between the superintendents' formal training in school improvement (see survey item #19) and the superintendent's involvement level in the school improvement process as figured by the mean scores for each of the six phases of school improvement and the combined mean score (see survey items #1 - #16). If a significant difference was present, the researcher pursued a further analysis by using the Mann-Whitney *U*-test to evaluate the significant differences between each of the possible pairs of a superintendent's formal training in school improvement and the superintendent's involvement level in the school improvement process as figured by the mean scores for each of the six phases of school improvement and the combined mean score.

For questions 9b – 9g, the researcher used the t-test to determine if a significant difference existed if a superintendent had an advanced degree focused on curriculum, assessments, and/or instruction; if a superintendent had an advanced degree focused on school improvement and/or accountability; the number of schools for which a superintendent served as the external team leader; the number of schools for which the superintendent served as a member of an external review team; a superintendent's school district's enrollment; the superintendent's number of years in education (see survey items #20 - #25); and the superintendent's involvement level in the school improvement process as figured by the mean scores for each of the six phases of school improvement and the combined mean score (see survey items #1 - #16). The Levene test was used to

determine whether the two groups have similar variation. If the two groups had similar variability ($p > .05$) then the "Equal" variance t-test was used. However, if the two groups did not have similar variability ($p < .05$) then the "Un-equal" variance t-test was used.

For research question 9h, the researcher used the parametric Oneway ANOVA test to determine if a significant difference existed between the number of years served as a superintendent (see survey item #26) and the superintendent's involvement level in the school improvement process as figured by the mean scores for each of the six phases of school improvement and the combined mean score (see survey items #1 - #16). Since the Oneway ANOVA test met the Homogeneity of Variances (HOV) test, the researcher used the Tukey HSD test to establish a level of significant difference.

Chapter 4

Results

Purpose

The purpose for conducting this quantitative research project was to determine the degree to which Nebraska superintendents were involved in administering the school improvement process that ultimately ensures improved achievement for all students. Nebraska superintendents were surveyed about their involvement in the school improvement process using a survey developed by the researcher. The researcher measured and tracked this involvement across each phase of the school improvement process. This group of superintendents was selected because they are familiar with the Nebraska Model for Continuous Improvement. The researcher used Zoomerang, a computer generated method to deliver the survey. The results are based upon those respondents who decided to participate in the survey.

Research Questions

The research questions that guided this study focused on the degree to which Nebraska superintendents were involved in the administration of the school improvement process. The questions were related to the phases/steps of the Nebraska Model for Continuous Improvement. The research questions included:

Superintendents' Involvement

1. To what extent are Nebraska superintendents involved in building understanding and commitment to the purpose and process of school improvement including establishing committees and a timeline?

2. To what extent are Nebraska superintendents involved in creating and analyzing the data?
3. To what extent are Nebraska superintendents involved in determining and establishing the school improvement goal as targeted by the data?
4. To what extent are Nebraska superintendents involved in developing an action plan that contains research-based strategies?
5. To what extent are Nebraska superintendents involved in overseeing the implementation of the school improvement action plan?
6. To what extent are Nebraska superintendents involved in recognizing the progress of the school improvement plan and affirming the success to all stakeholders?

Along with seeking the extent to which Nebraska superintendents were involved in the school improvement process, this dissertation will also address these three additional research questions:

7. Is there a relationship between the superintendents' perceptions of their involvement with the school improvement process and their opinion of the relative importance of these roles for a superintendent?
   (a) Providing educational leadership to the school district
   (b) Ensuring quality staff relations
   (c) Providing community leadership
   (d) Maintaining a working relationship with the Board of Education
   (e) Providing financial direction
   (f) Managing of facilities, grounds, and equipment

8. Is there a relationship between the superintendents' perceptions of their involvement with the school improvement process and their opinion of the relative importance of the phases of the school improvement process?
   (a) Building understanding and commitment to the purpose and process of school improvement including establishing committees and timeline
   (b) Creating and maintaining the district's profile including gathering, disaggregating, and analyzing the data
   (c) Determining and establishing the school improvement goal as targeted by the data
   (d) Developing an action plan that contains research-based strategies
   (e) Overseeing the implementation of the school improvement action plan
   (f) Recognizing the progress of the plan and affirming the success to all stakeholders
9. Is there a relationship between superintendents' perceptions of their involvement with school improvement and each of these factors?
   (a) formal training in school improvement
   (b) advanced degree focused on curriculum, instruction, and/or assessments
   (c) advanced degree focused on school improvement and/or accountability
   (d) external team leader experience
   (e) external review team experience
   (f) student enrollment,
   (g) experience in education
   (h) experience as a superintendent

Participants

The survey population consisted of all superintendents employed in the state of Nebraska during the 2008-2009 school year who had a valid e-mail address. This group included 244 individuals. Participants received an e-mail about the nature of the survey on March 23, 2009, with the actual survey being delivered on March 24, 2009. Three reminders where sent to participants who did not return the survey throughout the 21 day timeline. The survey concluded on April 12, 2009. Of the 244 surveys delivered via Zoomerang, 197 surveys were returned, for a return rate of 80.7%.

The survey also collected some additional school improvement information concerning the participants: their formal training associated with the school improvement process; their completion of an advanced degree in curriculum, assessment and/or instruction; their completion of an advanced degree in school improvement and/or accountability; the number of schools the participant served as a school improvement external team leader; the number of schools the participant served as a school improvement external review team member; the enrollment of their school as of September 2008 K-12 fall enrollment; the number of years they served in education; and the number of years they served as a superintendent.

Participants were asked about the formal training they received concerning the school improvement process. The results are presented in Table 5. Of the respondents, 14% indicated no formal training, 41% indicated participation in training facilitated by the Nebraska Department of Education, 5% indicated participation in training facilitated

Table 5

Training in School Improvement Process (n=195)

No Training	NDE Training	Regional Training	Both NDE & Regional
14%	41%	5%	41%

by a regional accreditation institution, and 41% indicated participation in training facilitated by both the Nebraska Department of Education and a regional accreditation institution.

Participants were asked if they had an advanced degree focused on curriculum, assessments, and/or instruction. The results are presented in Table 6. Of the respondents, 49% indicated that they had an advanced degree focused in these areas, while 51% indicated that they did not have an advanced degree focused in these areas. In response to the question about an advanced degree focused on school improvement and/or accountability, 35% of the respondents indicated that they had an advanced degree focused in these areas, while 65% of the respondents indicated that they did not have an advanced degree focused in these areas.

Table 6

Advanced Degree (n=196)

Curriculum, Assessments and/or Instruction		School Improvement and/or Accountability	
Yes	No	Yes	No
49%	51%	35%	65%

Participants were asked about the number of schools that they served as the school improvement external team leader. The results are presented in Table 7. Of the respondents, 67% indicated none, 18% indicated one, 7% indicated two, 3% indicated three, and 5% indicated four or more. Participants were then asked about the number of schools for which they had served on the school improvement external review team. The results are also presented in Table 7. Of the respondents, 52% indicated none, 15% indicated one, 14% indicated two, 8% indicated three, and 10% indicated four or more.

Table 7

External Review Team Experience

	0	1	2	3	4 or more
# of Schools Serve as External Leader (n=195)	67%	18%	7%	3%	5%
# of School Improvement External Review Teams (n=196)	52%	15%	14%	8%	10%

Participants were asked about the number of students who were enrolled in their district as of the September 2008 fall enrollment. The results are presented in Table 8. Of the respondents, 44% indicated 300 or fewer students, 30% indicated 301-600 students, 11% indicated 601-900 students, 4% indicated 901-1200 students, 6% indicated 1201-2500 students, 6% indicated 2501-10,000 students, and 1% indicated more than 10,000 students.

Participants were also asked about their experience in education. The results are presented in Table 9. Of the respondents, 1% reported between 1-5 years, 2% reported

Table 8

Number of Students in District (n=197)

Number of Students in District	Percent	Number of Students in District	Percent
1-300	44	1201-2500	6
301-600	30	2501-10,000	6
601-900	11	More than 10,000	1
901-1,200	4		

Table 9

Experience in Years

	1-5	6-10	11-15	16-20	21-25	26 or more
In Education (n=194)	1%	2%	8%	12%	18%	60%
As Superintendent (n=197)	37%	22%	12%	11%	7%	11%

between 6-10 years, 8% reported between 11-15 years, 12% reported between 16-20 years, 18% reported between 21-25 years, and 60% reported 26 years or more. The superintendents were asked about the number of years they had served as a superintendent. The results are also presented in Table 9. Of the respondents, 37% reported between 1-5 years, 22% reported between 6-10 years, 12% reported between 11-15 years, 11% reported between 16-20 years, 7% reported between 21-25 years, and 11% reported 26 years or more.

Findings by Research Question

The purpose of this descriptive quantitative study was to examine the relationships between superintendents' perceptions of their involvement within school

improvement and factors that may affect their involvement. The researcher used the Nebraska Model for Continuous Improvement as a guide to determine the phases associated with school improvement. These six phases included the leadership role – who and what, creating a profile, setting the goals, planning to improve, implementing the plan, and evaluating the plan. The total score possible, mean, standard deviation, and variance for each of these phases plus the total results are reported in Table 10.

Table 10

Results by School Improvement Phase

Section	Total Score Possible	Summed Mean	Standard Deviation	Variance
1: The Leadership Role – Who and What	8	6.000	1.432	2.051
2: Creating the Profile	12	8.426	2.061	4.246
3: Setting the Goals	12	8.355	2.004	4.016
4: Planning to Improve	16	10.614	2.690	7.238
5: Implementing the Plan	8	5.701	1.373	1.884
6: Evaluating the Effectiveness of the Plan	8	5.701	1.248	1.558
Total	64	44.797	9.462	89.530

The first 16 questions of the survey related directly to the six phases of the school improvement process. An item analyses is provided by Table 11. All of these questions were scored using a 4-point Likert Scale: “Led and facilitated the process” (4), “Delegated the leadership of the process, but was a participant of the process and fully aware of all activities” (3), “Delegated the leadership of the process, but was only

Table 11

Item Analysis of the Questionnaire

Question	Percent of Respondents Who Led & Facilitated	Percent of Respondents Who Delegated Leadership, but Participated	Percent of Respondents Who Delegated Leadership, but Only Somewhat Participated	Percent of Respondents Who Delegated Entire Process	Mean	Standard Deviation
1: Establishing a steering committee (n=195)	23	59	15	3	3.010	0.711
2: Developing a timeline and revising mission statement (n=196)	37	53	16	4	3.036	0.760
3: Determining type of data for profile (n=197)	17	55	22	6	2.832	0.768
4: Disaggregating the results by sub groups (n=196)	12	45	31	12	2.566	0.854
5: Communicating results to stakeholders (n=196)	26	57	14	3	3.056	0.725
6: Targeting and prioritizing areas of need (n=196)	24	57	16	3	3.015	0.727
7: Determining and writing quality goals (n=197)	10	57	23	9	2.685	0.778
8: Researching effective practices (n=197)	11	53	27	9	2.670	0.788

Table 11 continues

Item Analysis of the Questionnaire

Question	Percent of Respondents Who Led & Facilitated	Percent of Respondents Who Delegated Leadership, but Participated	Percent of Respondents Who Delegated Leadership, but Only Somewhat Participated	Percent of Respondents Who Delegated Entire Process	Mean	Standard Deviation
9: Developing action plan strategies (n=197)	12	56	26	6	2.741	0.748
10: Identifying and recommending support activities (n=197)	10	55	30	5	2.690	0.715
11: Writing an action plan (n=195)	10	56	25	8	2.687	0.766
12: Establishing baseline/post-intervention evaluation data (n=195)	7	54	27	12	2.549	0.794
13: Helping staff develop an understanding of goals and strategies (n=197)	20	50	27	3	2.873	0.762
14: Monitoring the implementation of the action plan (n=196)	14	59	24	3	2.842	0.680
15: Determining effectiveness of interventions (n=197)	9	58	31	3	2.726	0.652
16: Recognizing progress and affirming success (n=196)	22	56	19	2	2.990	0.709

somewhat of a participant within the process" (2), and "Delegated the entire process to someone else in the district" (1). The summed score for these 16 questions could range from 16 to 64, with a higher score indicating a stronger involvement by the superintendent in the school improvement process. The summed scores for the superintendents actually ranged from a low of 16 to a high of 64.

Research Question 1: To what extent are Nebraska superintendents involved in building understanding and commitment to the purpose and process of school improvement including establishing committees and timeline?

The first section in the survey included questions about the extent to which superintendents were involved in the building understanding and commitment to the purpose and process of the school improvement process, including establishing committees and a timeline. This section included two questions scored on a 4-point Likert Scale. The total score could and did range from 2 to 8, with a higher score indicating a stronger involvement in building understanding and commitment to the purpose and process of the school improvement including establishing committees and timelines.

The majority of superintendents indicated that they established and worked with a steering committee composed of representative stakeholders of the district for the school improvement process. Of the respondents, 23% led and facilitated the process; 59% delegated the leadership of the process, but participated in the process and were fully aware of all activities; 15% delegated the leadership of the process, but only participated somewhat in the process; and 3% delegated the entire process to someone else in the district. The superintendents' responses had a mean score of 3.010.

A high percentage of superintendents indicated that they were involved in building understanding and commitment of the purpose and process of school improvement including developing a timeline and revising the mission statement. Of the respondents, 27% led and facilitated the process; 53% delegated the leadership of the process, but were participants in the process and fully aware of all activities; 16% delegated the leadership of the process, but were only somewhat of a participant within the process; and 4% delegated the entire process to someone else in the district. The combined mean score was 3.036.

Research Question 2: To what extent are Nebraska superintendents involved in creating and analyzing the data?

The second section in the survey included questions about the extent to which superintendents were involved in creating and analyzing the data. This section included three questions scored on a 4-point Likert Scale. The total score could and did range from 3 to 12, with a higher score indicating a stronger involvement in creating and analyzing the data.

The majority of superintendents indicated that they assisted in determining the type of data to include within their schools profile. Of the respondents, 17% led and facilitated the process; 55% delegated the leadership of the process, but participated in the process and were fully aware of all activities; 22% delegated the leadership of the process, but only participated somewhat in the process; and 6% delegated the entire process to someone else in the district. The superintendents' responses had a mean score of 2.832.

The superintendent results varied when asked about disaggregating the results of student performance and school effectiveness data according to their district's student sub-groups. Of the respondents, 12% led and facilitated the process; 45% delegated the leadership of the process, but were participants in the process and fully aware of all activities; 31% delegated the leadership of the process, but were only somewhat of a participant within the process; and 12% delegated the entire process to someone else in the district. The superintendents' responses had a combined mean score of 2.566.

A high percentage of superintendents indicated that they were involved in communicating the results of student performance and school effectiveness data to all stakeholders; with 26% of the respondents indicating that they led and facilitated the process; 57% delegated the leadership of the process, but were participants in the process and fully aware of all activities; 14% delegated the leadership of the process, but were only somewhat of a participant within the process; and 3% delegated the entire process to someone else in the district. The combined mean score was 3.056.

Research Question 3: To what extent are Nebraska superintendents involved in determining and establishing the school improvement goal as targeted by the data?

The third section in the survey included questions about the extent to which the superintendents were involved in determining and establishing the school improvement goals as targeted by the data. This section included three questions scored on a 4-point Likert Scale. The total score could and did range from 3 to 12, with a higher score indicating a stronger involvement in determining and establishing the school improvement goals as targeted by the data.

The majority of superintendents indicated that they assisted in targeting and prioritizing the areas of need for the district's school improvement plan. Of the respondents, 24% led and facilitated the process; 57% delegated the leadership of the process, but participated in the process and were fully aware of all activities; 16% delegated the leadership of the process, but only participated somewhat in the process; and 3% delegated the entire process to someone else in the district. The superintendents' responses had a mean score of 3.015.

Most superintendents indicated that they had not actually led the process of determining and writing quality school improvement goals. Of the respondents, 10% led and facilitated the process; 57% delegated the leadership of the process, but were participants in the process and fully aware of all activities; 23% delegated the leadership of the process, but were only somewhat of a participant within the process; and 9% delegated the entire process to someone else in the district. The superintendents' responses had a combined mean score of 2.685.

Superintendents indicated that they were involved in developing school improvement action plan strategies. Of the respondents, 12% led and facilitated the process; 56% delegated the leadership of the process, but were participants in the process and fully aware of all activities; 26% delegated the leadership of the process, but were only somewhat of a participant within the process; and 6% delegated the entire process to someone else in the district. The superintendents' responses had a combined mean score of 2.670

Research Question 4: To what extent are Nebraska superintendents involved in developing an action plan that contains research-based strategies?

The fourth section in the survey included questions about the extent to which the superintendents were involved in developing an action plan that contains research-based strategies. This section included four questions scored on a 4-point Likert Scale. The total score could and did range from 4 to 16, with a higher score indicating a stronger involvement in developing an action plan that contains research-based strategies.

The majority of superintendents indicated that they assisted in developing school improvement action plan strategies. Of the respondents, 12% led and facilitated the process; 56% delegated the leadership of the process, but participated in the process and were fully aware of all activities; 26% delegated the leadership of the process, but only participated somewhat in the process; and 6% delegated the entire process to someone else in the district. The superintendents' responses had a mean score of 2.741.

The superintendent responses varied when asked about identifying and recommending support activities that will help all staff implement the strategies and interventions. Of the respondents, 10% led and facilitated the process; 55% delegated the leadership of the process, but were participants in the process and fully aware of all activities; 30% delegated the leadership of the process, but were only somewhat of a participant within the process; and 5% delegated the entire process to someone else in the district. The superintendents' responses had a combined mean score of 2.690.

A high percentage of superintendents indicated that they were involved in writing an action plan that specifies who will be responsible to assure the tasks are completed, the resources needed, the target dates for completion, professional development needs, and

when and how the progress will be measured and evaluated. Of the respondents, 10% led and facilitated the process; 56% delegated the leadership of the process, but were participants in the process and fully aware of all activities; 25% delegated the leadership of the process, but were only somewhat of a participant within the process; and 8% delegated the entire process to someone else in the district. The superintendents' responses had a combined mean score of 2.687.

The final question of this phase gathered information pertaining to the superintendent's involvement in establishing baseline/post-intervention evaluation data. Respondents indicated that 7% led and facilitated the process; 54% delegated the leadership of the process, but were participants of the process and fully aware of all activities; 27% delegated the leadership of the process, but were only somewhat of a participant within the process; and 12% delegated the entire process to someone else in the district. The superintendents' responses had a combined mean score of 2.549.

Research Question 5: To what extent are Nebraska superintendents involved in overseeing the implementation of the school improvement action plan?

The fifth section in the survey included questions about the extent to which the superintendents were involved in overseeing the implementation of the school improvement action plan. This section included two questions scored on a 4-point Likert Scale. The total score could and did range from 2 to 8, with a higher score indicating a stronger involvement in overseeing the implementation of the school improvement action plan.

The majority of superintendents indicated that they assisted in helping all staff develop an understanding of the goals and strategies. Of the respondents, 20% led and

facilitated the process; 50% delegated the leadership of the process, but participated in the process and were fully aware of all activities; 27% delegated the leadership of the process, but only participated somewhat in the process; and 3% delegated the entire process to someone else in the district. The superintendents' responses had a mean score of 2.873.

A high percentage of superintendents indicated that they were involved in monitoring the implementation of the action plan to ensure the desired results. Of the respondents, 14% led and facilitated the process; 59% delegated the leadership of the process, but were participants of the process and fully aware of all activities; 24% delegated the leadership of the process, but were only somewhat of a participant within the process; and 3% delegated the entire process to someone else in the district. The mean score was 2.842.

Research Question 6: To what extent are Nebraska superintendents involved in recognizing the progress of the plan and affirming the success to all stakeholders?

The sixth section in the survey included questions about the extent to which the superintendents were involved in recognizing the progress of the plan and affirming the success to all stakeholders. This section included two questions scored on a 4-point Likert Scale. The total score could and did range from 2 to 8, with a higher score indicating a stronger involvement in recognizing the progress of the plan and affirming the success to all stakeholders.

The majority of superintendents indicated that they determined the effectiveness of the interventions on student performances. Of the respondents, 9% led and facilitated the process; 58% delegated the leadership of the process, but participated in the process

and were fully aware of all activities; 31% delegated the leadership of the process, but only participated somewhat in the process; and 3% delegated the entire process to someone else in the district. The superintendents' responses had a mean score of 2.726.

A high percentage of superintendents indicated that they recognized the progress and affirmed the success of the plan to stakeholders. Of the respondents, 22% led and facilitated the process; 56% delegated the leadership of the process, but were participants of the process and fully aware of all activities; 19% delegated the leadership of the process, but were only somewhat of a participant within the process; and 2% delegated the entire process to someone else in the district. The combined mean score was 2.990.

Research Question 7: Is there a relationship between the superintendents' perceptions of their involvement with the school improvement process and their opinion of the relative importance of these roles for a superintendent?

Participants of the survey had difficulty in responding correctly to the corresponding question that matches this research question. Because the respondents where unfamiliar with a ranking question from one to six on a Zoomerang survey, many respondents failed to mark all responses leaving the question invalid. In fact, of the 197 returned surveys, 185 respondents ranked their first priority, 177 ranked their second priority, 151 ranked their third priority, 134 ranked their fourth priority, 136 ranked their fifth priority, and 139 ranked their sixth priority. The drop in the last three ranks would indicate that respondents abandoned the question or were confused prior to ranking all six responses correctly; hence, the overall results intended by this question were skewed. However, a brief description of each could be reported.

(7a) Providing educational leadership to the school district. Fifty-four percent of all respondents ranked educational leadership as their first or second priority.

(7b) Ensuring quality staff relations. Twenty-four percent of all respondents ranked ensuring quality staff relations as their fourth priority while 28% ranked it as their fifth priority.

(7c) Providing community leadership. Fifty-four percent of all respondents ranked providing community leadership as their fifth or sixth priority.

(7d) Maintaining a working relationship with the Board of Education. Twenty-eight percent of all respondents ranked maintaining a working relationship with the Board of Education as their second choice and 31% ranked it as their third choice.

(7e) Providing financial direction. Forty-two percent of all respondents ranked providing financial direction as their number one choice. And, 25% of the superintendents marked it as their second choice.

(7f) Managing of facilities, grounds, and equipment. Managing of facilities, grounds, and equipment was ranked by Nebraska superintendent fairly even across the six possible responses.

Overall, Nebraska superintendents see their main role as providing financial direction to a school district, followed by maintaining a working relationship with the Board of Education. The following statement is validated because the majority of superintendents ranked both of these roles within their top three priorities. Their third choice was providing educational leadership to the school district, which would include the school improvement process.

Research Question 8: Is there a relationship between the superintendents' perceptions of their involvement with the school improvement process and their opinion of the relative importance of the phases of the school improvement process?

To determine the relationships that existed between the superintendents' perceptions of their involvement with the school improvement process and their opinion of the relative importance of the phases of the school improvement process including the combined mean score for all phases, the researcher used the Spearman correlation. If the correlation coefficient was less than -.2 or greater than .2, then the researcher was confident that the level of significance would be less than .05. The number of respondents who ranked each sub-questioned varied. Table 12 contains the results of the Spearman correlation.

(a) Building understanding and commitment to the purpose and process of school improvement including establishing committees and timeline. Building understanding and commitment to the purpose and process of school improvement, including establishing committees and timelines, received responses from 138 of the respondents, with a mean rank of 2.17. When analyzing sub-research question a, an inverse relationship existed between how a superintendent would rank sub-research question a in comparison with other sub-questions of research question 8 and how they perceived their involvement with the leadership phase of the school improvement process (r = -.347, n = 138, p < .001, two tails). An inverse relationship was also present between how superintendents ranked research sub-question a in comparison with other sub-questions of research question 8 and how they perceived their involvement with the setting the goals phase of the school improvement process (r = -.204, n = 138, p = .016, two tails).

Table 12

Correlations between Research Question 8 and Mean Score of School Improvement Perceptions

			Correlations – Spearman's rho				
Rank Choices	***Phases of School Improvement***		***n***	***Mean***	***Std. Deviation***	***r***	***Sig (2-tailed)***
Building understanding and commitment to the purpose and process of school improvement including establishing committees and timeline	1.	Leadership Role	138	2.17	1.504	-.347*	.000
	2.	Creating the Profile				-.123	.150
	3.	Setting the Goals				-.204*	.016
	4.	Planning to Improve				-.115	.180
	5.	Implementing the Plan				-.181	.034
	6.	Evaluating the Plan				-.121	.158
	7.	Overall				-.184	.031
Creating and maintaining the district's profile including gathering, disaggregating, and analyzing the data	1.	Leadership Role	145	4.12	1.648	-.152	.069
	2.	Creating the Profile				-.399*	.000
	3.	Setting the Goals				-.242*	.003
	4.	Planning to Improve				-.263*	.001
	5.	Implementing the Plan				-.142	.089
	6.	Evaluating the Plan				-.281*	.001
	7.	Overall				-.281*	.001
Determining and establishing the school improvement goal as targeted by the data	1.	Leadership Role	136	3.56	1.343	-.172	.045
	2.	Creating the Profile				-.227*	.008
	3.	Setting the Goals				-.198	.021
	4.	Planning to Improve				-.172	.045
	5.	Implementing the Plan				-.181	.035
	6.	Evaluating the Plan				-.079	.358
	7.	Overall				-.223*	.009
Developing an action plan that contains research-based strategies	1.	Leadership Role	151	4.01	1.288	-.100	.223
	2.	Creating the Profile				-.017	.834
	3.	Setting the Goals				-.052	.523
	4.	Planning to Improve				-.097	.238
	5.	Implementing the Plan				-.113	.168
	6.	Evaluating the Plan				-.009	.908
	7.	Overall				-.071	.386
Overseeing the implementation of the school improvement action plan	1.	Leadership Role	155	3.28	1.602	.119	.143
	2.	Creating the Profile				.129	.109
	3.	Setting the Goals				.084	.297
	4.	Planning to Improve				.124	.123
	5.	Implementing the Plan				.103	.203
	6.	Evaluating the Plan				.138	.086
	7.	Overall				.136	.092
Recognizing the progress of the plan and affirming the success to all stakeholders	1.	Leadership Role	193	3.14	1.861	.169	.019
	2.	Creating the Profile				.146	.042
	3.	Setting the Goals				.063	.387
	4.	Planning to Improve				.045	.533
	5.	Implementing the Plan				.066	.365
	6.	Evaluating the Plan				-.027	.712
	7.	Overall				.081	.260

**Difference is significant*

(b) Creating and maintaining the district's profile including gathering, disaggregating, and analyzing the data. Creating and maintaining the district's profile, including gathering, disaggregating, and analyzing the data, received responses from 145 of the respondents, with a mean rank of 4.12. The majority of the phases of the school improvement process along with the combined mean would indicate an inverse correlation between how superintendents rank this sub-research question and their perceptions of the corresponding phases of school improvement including the combined mean scores. In fact, the creating the profile (r = -.399, n = 145, p < .001, two tails), setting the goals (r = -.242, n = 145, p = .003, two tails), planning to improve (r = -.263, n = 145, p = .001, two tails), evaluating the plan (r = -.281, n = 145, p = .001, two tails) and the combined mean (r = -.281, n = 145, p = .001, two tails) all showed this inverse correlation.

(c) Determining and establishing the school improvement goal as targeted by the data. Determining and establishing the school improvement goal as targeted by the data received responses from 136 of the respondents with a mean rank of 3.56. When analyzing research sub-question c, an inverse relationship existed between how superintendents ranked research sub-question c in comparison with other sub-questions of research question 8 and how they perceived their involvement with the creating the profile phase of the school improvement process (r = -.227, n = 136, p = .008, two tails). An inverse relationship was also present between how superintendents ranked research sub-question c in comparison with other sub-questions of research question 8 and how they perceived their overall involvement with all phases of the school improvement process (r = -.223, n = 136, p = .009, two tails).

(d) Developing an action plan that contains research-based strategies. Developing an action plan that contains research-based strategies received responses from 151 of the respondents, with a mean rank of 4.01. However, in analyzing the relationships between the rank of research sub-question d and superintendent mean perceptions, no correlations were discovered using a Spearman Correlation.

(e) Overseeing the implementation of the school improvement action plan. Research Question e received responses from 155 of the respondents, with a mean rank of 3.28. Similar to research sub-question d, no correlations were discovered using the Spearman Correlation method. However, all the correlations were positive in contrast to all the negative correlations studied in the previous sub-research questions.

(f) Recognizing the progress of the plan and affirming the success to all stakeholder. Research sub-question f received responses from 193 of the respondents with a mean rank of 3.14. Again, no correlations were discovered using a Spearman Correlation. And similar to sub-research question e, six out of seven correlation factors were positive.

Research Question 9: Is there a relationship between superintendents' perceptions of their involvement with school improvement and each of these factors?

(9a) Formal training. In terms of the formal training, 27 respondents had no formal training, 79 respondents attended training by the Nebraska Department of Education, 9 respondents attended training by a regional institution, and 80 respondents attended both training by the Nebraska Department of Education and a regional institution. Because of the low number of responses for attended regional training, the researcher used only three groups for comparison—(a) no training, (b) Nebraska

Department of Education training, and (c) both Nebraska Department of Education training and regional training.

A parametric Oneway ANOVA test was used to determine if a significant difference existed between each phase of the school improvement phases plus the combined mean score. The phases of school improvement included leadership role, creating the profile, setting the goals, planning to improve, implementing the plan, and evaluating the plan. Planning to improve and evaluating the plan passed the Homogeneity of Variances (HOV) test. Table 13 summarized all the results for each phase, plus the combined scores.

If the Oneway ANOVA test met the HOV test, then the researcher used the Tukey HSD test to establish a level of significant difference. If the HOV failed for a particular phase, then the non-parametric Kruskal-Wallis test was used to determine if a significant difference existed between the three levels of training and each phase of the school improvement process plus the combined mean score of all phases. If a significant difference was present, the researcher pursued a further analysis by using the Mann-Whitney *U*-test to evaluate the significant difference between each of the possible pairs of levels of formal training. Since there was three possible combinations of outcomes between (a) no training, (b) Nebraska Department of Education training, and (c) both Nebraska Department of Education training and regional training, the *p* value had to be less than .01667 (.05/3) to be considered significant.

Table 13

Formal Training

Parametric Oneway ANAOVA Test

		N	Mean	Std. Deviation	Std. Error	HOV >.05
Leadership Role	1. No training	27	2.5926	.93064	.17910	.002
	2. Attended training by NDE	79	3.0316	.62194	.06997	
	3. Attended both NDE and regional training	79	3.1266	.60164	.06769	
	4. Total	185	3.0081	.68659	.05048	
Creating the Profile	1. No training	27	2.4074	.88835	.17096	.030
	2. Attended training by NDE	79	2.8819	.60867	.06848	
	3. Attended both NDE and regional training	80	2.9000	.62169	.06951	
	4. Total	186	2.8208	.67927	.04981	
Setting the Goals	1. No training	27	2.4321	.89067	.17141	.003
	2. Attended training by NDE	79	2.8312	.61527	.06922	
	3. Attended both NDE and regional training	80	2.8625	.59698	.06674	
	4. Total	186	2.7867	.66706	.04891	
Planning to Improve	1. No training	27	2.3056	.80364	.15466	*.116
	2. Attended training by NDE	79	2.7257	.62277	.07007	
	3. Attended both NDE and regional training	80	2.7500	.62389	.06975	
	4. Total	186	2.6752	.66630	.04886	
Implementing the Plan	1. No training	27	2.5185	.91443	.17598	.001
	2. Attended training by NDE	79	2.9051	.63081	.07097	
	3. Attended both NDE and regional training	80	2.9313	.58322	.06521	
	4. Total	186	2.8602	.67129	.04922	

Table 13 continues

		N	Mean	Std. Deviation	Std. Error	HOV >.05
Evaluating the Plan	1. No training	27	2.4630	.80773	.15545	*.068
	2. Attended training by NDE	79	2.9241	.54941	.06181	
	3. Attended both NDE and regional training	80	2.9563	.56922	.06364	
	4. Total	186	2.8710	.62126	.04555	
Overall	1. No training	27	2.4306	.80848	.15559	.005
	2. Attended training by NDE	79	2.8590	.52216	.05875	
	3. Attended both NDE and regional training	80	2.8945	.51849	.05797	
	4. Total	186	2.8121	.58885	.04318	

**Indicates a significant Homogeneity of Variance (HOV) Score*

The first phase of school improvement is leadership role. Since the HOV score for this phase was not greater than .05, non-parametric tests were used to determine if a significant difference was present. Table 14 summarizes the results of the non-parametric tests.

Table 14

Non-Parametric Test – Leadership Role

	Sig. *p* value <.05		**Sig. *p* value <.01667**
Kruskal-Wallis Test	*.014		
Mann-Whitney Test		No training NDE training	.033
Mann-Whitney Test		No training Both NDE and regional training	*.006
Mann-Whitney Test		NDE training Both NDE and regional training	.178

**Difference is significant*

The Kruskal-Wallis test indicated a significant differences among the levels of formal training, $H = 8.598$ (2, $N = 186$), $p = .014$. Because of the results of the Kruskal-Wallis, a Mann-Whitney *U*-test was used to compare the formal levels of education for the $n = 27$ (a) no training versus the $n = 79$ (b) Nebraska Department of Education training. The results indicated no significant difference between (a) no training and (b) Nebraska Department of Education training, $U = 785.500$, $p = .033$, with the sum of the ranks equal to 1163.50 for (a) no training and 4507.50 for (b) Nebraska Department of Education training.

The Mann-Whitney *U*-test was then used to compare the formal levels of education for the $n = 27$ (a) no training versus the $n = 79$ (c) Nebraska Department of Education training and regional training. The results indicated a significant difference between (a) no training and (c) both Nebraska Department of Education training and regional training, $U = 704.000$, $p = .006$, with the sum of the ranks equal to 1082.00 for (a) no training and 4589.00 for (c) both Nebraska Department of Education training and regional training.

The Mann-Whitney *U*-test was again used to compare the formal levels of education for the $n = 79$ (b) Nebraska Department of Education training versus the $n = 79$ (c) Nebraska Department of Education training and regional training. The results indicated no significant difference between (b) Nebraska Department of Education training and (c) both Nebraska Department of Education training and regional training, $U = 2760.000$, $p = .178$, with the sum of the ranks equal to 5920.00 for (b) Nebraska Department of Education training and 6641.00 for (c) both Nebraska Department of Education training and regional training.

The second phase of school improvement is creating the profile. Since the HOV score for this phase was not greater than .05, non-parametric tests were used to determine if a significant difference was present. Table 15 summarizes the results of the non-parametric tests.

The Kruskal-Wallis test indicated a significant differences among the levels of formal training, $H = 9.147$ (2, $N = 186$), $p = .010$. Because of the results of the Kruskal-Wallis, a Mann-Whitney *U*-test was used to compare the formal levels of education for

Table 15

Non-Parametric Test – Creating the Profile

	Sig. *p* value <.05		**Sig. *p* value <.01667**
Kruskal-Wallis Test	*.010		
Mann-Whitney Test		No training NDE training	*.007
Mann-Whitney Test		No training Both NDE and regional training	*.004
Mann-Whitney Test		NDE training Both NDE and regional training	.613

**Difference is significant*

the *n* = 27 (a) no training versus the *n* = 79 (b) Nebraska Department of Education training. The results indicated a significant difference between (a) no training and (b) training sponsored by the Nebraska Department of Education, *U* = 701.000, *p* = .007, with the sum of the ranks equal to 1079.00 for no training and 4592.00 for Nebraska Department of Education training.

The Mann-Whitney *U*-test was used to compare the formal levels of education for the *n* = 27 (a) no training versus the *n* = 79 (c) both Nebraska Department of Education training and regional training. The results indicated a significant difference between (a) no training and (c) both training sponsored by the Nebraska Department of Education and regional training, *U* = 685.500, *p* = .004, with the sum of the ranks equal to 1063.50 for (a) no training and 4714.50 for (c) both Nebraska Department of Education training and regional training.

The Mann-Whitney *U*-test was again used to compare the formal levels of education for the *n* = 79 (b) Nebraska Department of Education training versus the *n* = 80

(b) both Nebraska Department of Education training and regional training. The results indicated no significant difference between (b) Nebraska Department of Education training and (c) both Nebraska Department of Education training and regional training, $U = 3016.000$, $p = .613$, with the sum of the ranks equal to 6176.00 for (b) Nebraska Department of Education training and 6544.00 for (c) both Nebraska Department of Education training and regional training.

The third phase of school improvement is setting the goals. Since the HOV score for this phase was not greater than .05, non-parametric tests were used to determine if a significant difference was present. Table 16 summarizes the results of the non-parametric tests.

Table 16

Non-Parametric Test – Setting the Goals

	Sig. *p* value <.05		**Sig. *p* value <.01667**
Kruskal-Wallis Test	*.091		
Mann-Whitney Test		No training NDE training	.058
Mann-Whitney Test		No training Both NDE and regional training	.034
Mann-Whitney Test		NDE training Both NDE and regional training	.695

**Difference is significant*

The Kruskal-Wallis test indicated significant differences among the levels of formal training, $H = 4.789$ (2, $N = 186$), $p = .091$. Because of the results of the Kruskal-Wallis, a Mann-Whitney *U*-test was used to compare the formal levels of education for

the $n = 27$ (a) no training versus the $n = 79$ (b) Nebraska Department of Education training. The results indicated no significant difference between (a) no training and (b) Nebraska Department of Education training, $U = 810.000$, $p = .058$, with the sum of the ranks equal to 1188.00 for (a) no training and 4483.00 for (b) Nebraska Department of Education training.

The Mann-Whitney *U*-test was used to compare the formal levels of education for the $n = 27$ (a) no training versus the $n = 80$ (c) both Nebraska Department of Education training and regional training. The results indicated a significant difference between (a) no training and (c) both Nebraska Department of Education training and regional training, $U = 793.000$, $p = .034$, with the sum of the ranks equal to 1171.00 for (a) no training and 4607.00 for (c) both Nebraska Department of Education training and regional training.

The Mann-Whitney *U*-test was again used to compare the formal levels of education for the $n = 79$ (b) Nebraska Department of Education training versus the $n = 80$ (c) both Nebraska Department of Education training and regional training. The results indicated no significant difference between (b) Nebraska Department of Education training and (c) both Nebraska Department of Education training and regional training, $U = 3049.000$, $p = .695$, with the sum of the ranks equal to 6209.50 for (b) Nebraska Department of Education training and 6510.50 for (c) both Nebraska Department of Education and regional training.

The fourth phase of school improvement is planning for improvement. Since the Test of Homogeneity of Variances produced a score greater than .05, parametric tests verified by non-parametric tests were used to determine if a significant difference was

present. Table 17 summarizes the results of the parametric tests and Table 18 summarizes the results of the non-parametric tests.

Table 17

Parametric Test – Planning to Improve

			Sig. *p* value <.05
ANOVA	$F(2, 183) = 5.103$, $p = .007$		
	Tukey HSD	No training NDE training	*.012
	Tukey HSD	No training Both NDE and regional training	*.007
	Tukey HSD	NDE training Both NDE and regional training	.970

**Difference is significant*

Table 18

Non-Parametric Test – Planning to Improve

	Sig. *p* value <.05		**Sig. *p* Value <.01667**
Kruskal-Wallis Test	*.024		
Mann-Whitney Test		No training NDE training	*.013
Mann-Whitney Test		No training Both NDE and regional training	*.010
Mann-Whitney Test		NDE training Both NDE and regional training	.735

**Difference is significant*

The results of a parametric test was acceptable since the significance score produced by the Homogeneity of Variances was greater that .05. In review of the results

of the ANOVA ($F(2, 183) = 5.103$, $p = .007$) significant differences were found. The Tukey HSD was used as the Post Hoc Test. The Tukey HSD indicated that there were significant differences between the perceptions of superintendents who had (a) no training and those who had (b) Nebraska Department of Education training; and between those who had (a) no training and who had (c) both Nebraska Department of Education training and regional training.

The non-parametric Kruskal-Wallis test also indicated a significant differences among the levels of formal training, $H = 7.480$ (2, $N = 186$), $p = .024$. Because of the results of the Kruskal-Wallis, a Mann-Whitney *U*-test was used to compare the formal levels of education for the $n = 27$ (a) no training versus the $n = 79$ (b) Nebraska Department of Education training. The results indicated a significant difference between (a) no training and (b) training attended sponsored by the Nebraska Department of Education, $U = 727.500$, $p = .013$, with the sum of the ranks equal to 1105.50 for (a) no training and 4565.50 for (b) Nebraska Department of Education training.

The Mann-Whitney *U*-test was then used to compare the formal levels of education for the $n = 27$ (a) no training versus the $n = 80$ (c) both Nebraska Department of Education training and regional training. The results indicated a significant difference between (a) no training and (c) training sponsored by both the Nebraska Department of Education and regional training, $U = 733.000$, $p = .010$, with the sum of the ranks equal to 1111.00 for (a) no training and 4667.00 for (c) both Nebraska Department of Education training and regional training.

The Mann-Whitney *U*-test was again used to compare the formal levels of education for the $n = 79$ (b) Nebraska Department of Education training versus the $n = 80$

(c) both Nebraska Department of Education training and regional training. The results indicated no significant difference between (b) Nebraska Department of Education training and (c) both the Nebraska Department of Education training and regional training, $U = 3065.000$, $p = .735$, with the sum of the ranks equal to 6225.00 for (b) Nebraska Department of Education training and 6495.00 for (c) both Nebraska Department of Education training and regional training.

The fifth phase of school improvement is implementing the plan. Since the HOV score for this phase was not greater than .05, non-parametric tests were used to determine if a significant difference was present. Table 19 summarizes the results of the non-parametric tests.

Table 19

Non-Parametric Test – Implementing the Plan

	Sig. *p* value <.05		**Sig. *p* value <.01667**
Kruskal-Wallis Test	.080		
Mann-Whitney Test		No training NDE training	.048
Mann-Whitney Test		No training Both NDE and regional training	.030
Mann-Whitney Test		NDE training Both NDE and regional training	.797

The non-parametric Kruskal-Wallis test did not produce a significant difference among the levels of formal training, $H = 5.057$ (2, $N = 186$), $p = .080$. The Mann-Whitney *U*-test was used to compare the formal levels of education for the $n = 27$ (a) no training versus the $n = 79$ (b) Nebraska Department of Education training. The results

indicated no significant difference between (a) no training and (b) Nebraska Department of Education training, $U = 803.500$, $p = .048$, with the sum of the ranks equal to 1181.50 for (a) no training and 4489.50 for (b) Nebraska Department of Education training.

The Mann-Whitney *U*-test was used to compare the formal levels of education for the $n = 27$ (a) no training versus the $n = 80$ (c) both Nebraska Department of Education training and regional training. The results indicated a significant difference between (a) no training and (c) both Nebraska Department of Education training and regional training, $U = 792.500$, $p = .030$, with the sum of the ranks equal to 1170.50 for (a) no training and 4607.50 for (c) both Nebraska Department of Education training and regional training.

The Mann-Whitney *U*-test was again used to compare the formal levels of education for the $n = 79$ (b) Nebraska Department of Education training versus the $n = 80$ (c) both Nebraska Department of Education training and regional training. The results indicated no significant difference between (b) Nebraska Department of Education training and (c) both Nebraska Department of Education training and regional training, $U = 3089.500$, $p = .797$, with the sum of the ranks equal to 6249.50 for (b) Nebraska Department of Education training and 6470.50 for (c) both Nebraska Department of Education training and regional training.

The sixth phase of school improvement is evaluating the plan. Since the HOV score for this phase was greater than .05, then parametric tests verified by non-parametric tests were used to determine if a significant difference was present. Table 20 summarizes the results of the parametric tests and Table 21 summarizes the results of the non-parametric tests.

Table 20

Parametric Test – Evaluating the Plan

			Sig. *p* value <.05
ANOVA	$F(2, 183) = 7.335$, $p = .001$		
	Tukey HSD	No training NDE training	*.002
	Tukey HSD	No training Both NDE and regional training	*.001
	Tukey HSD	NDE training Both NDE and regional training	.939

**Difference is significant*

Table 21

Non-Parametric Test – Evaluating the Plan

	Sig. *p* value <.05		**Sig. *p* value <.01667**
Kruskal-Wallis Test	*.004		
Mann-Whitney Test		No training NDE training	*.003
Mann-Whitney Test		No training Both NDE and regional training	*.001
Mann-Whitney Test		NDE training Both NDE and regional training	.673

**Difference is significant*

The results of a parametric test was acceptable since the significance score produced by the Homogeneity of Variances was greater that .05. In review of the results of the ANOVA ($F(2, 183) = 7.335$, $p = .001$) significant differences were found. The Tukey HSD was used as the Post Hoc Test. The Tukey HSD indicated that there were significant differences between the perceptions of superintendents who had (a) no

training and those who had (b) Nebraska Department of Education training; and between those who had (a) no training and (c) both Nebraska Department of Education training and regional training.

The non-parametric Kruskal-Wallis test also indicated a significant differences among the levels of formal training, $H = 11.038$ (2, $N = 186$), $p = .004$. Because of the results of the Kruskal-Wallis, a Mann-Whitney *U*-test was used to compare the formal levels of education for the $n = 27$ (a) no training versus the $n = 79$ (b) Nebraska Department of Education training. The results indicated a significant difference between (a) no training and (b) training sponsored by the Nebraska Department of Education, $U = 678.500$, $p = .003$, with the sum of the ranks equal to 1056.50 for (a) no training and 4614.50 for (b) Nebraska Department of Education training.

The Mann-Whitney *U*-test was then used to compare the formal levels of education for the $n = 27$ (a) no training versus the $n = 80$ (c) both Nebraska Department of Education training and regional training. The results indicated a significant difference between (a) no training and (c) both Nebraska Department of Education training and regional training, $U = 654.000$, $p = .001$, with the sum of the ranks equal to 1032.00 for (a) no training and 4746.00 for (c) both Nebraska Department of Education training and regional training.

The Mann-Whitney *U*-test was again used to compare the formal levels of education for the $n = 79$ (b) Nebraska Department of Education training versus the $n = 80$ (c) both Nebraska Department of Education training and regional training. The results indicated no significant difference between (b) Nebraska Department of Education training and (c) both Nebraska Department of Education training and regional training,

U = 3044.500, p = .673, with the sum of the ranks equal to 6204.50 for (b) Nebraska Department of Education training and 6515.50 for (c) both Nebraska Department of Education training and regional training.

And finally, the researcher analyzed the significant difference between the combined mean score and difference levels of training. Since the HOV score for the combined mean was not greater than .05, non-parametric tests were used to determine if a significant difference was present. Table 22 summarizes the results of the non-parametric tests.

Table 22

Non-Parametric Test – Overall

	Sig. *p* value <.05		**Sig. *p* value <.01667**
Kruskal-Wallis Test	.011		
Mann-Whitney Test		No training NDE training	*.009
Mann-Whitney Test		No training Both NDE and regional training	*.003
Mann-Whitney Test		NDE training Both NDE and regional training	.653

**Difference is significant*

The non-parametric Kruskal-Wallis test also indicated a significant difference among the levels of formal training, H = 9.073 (2, N = 186), p = .011. Because of the results of the Kruskal-Wallis, a Mann-Whitney U-test was used to compare the formal levels of education for the n = 27 (a) no training versus the n = 79 (b) Nebraska Department of Education training. The results indicated a significant difference between

(a) no training and (b) Nebraska Department of Education training, $U = 706.500$, $p = .009$, with the sum of the ranks equal to 1084.50 for (a) no training and 4586.50 for (b) Nebraska Department of Education training.

The Mann-Whitney *U*-test was then used to compare the formal levels of education for the $n = 27$ (a) no training versus the $n = 80$ (c) both Nebraska Department of Education training and regional training. The results indicated a significant difference between (a) no training and (c) both Nebraska Department of Education training and regional training, $U = 671.000$, $p = .003$, with the sum of the ranks equal to 1049.00 for (a) no training and 4729.00 for (c) both Nebraska Department of Education training and regional training.

The Mann-Whitney *U*-test was again used to compare the formal levels of education for the $n = 79$ (b) Nebraska Department of Education training versus the $n = 80$ (c) both Nebraska Department of Education training and regional training. The results indicated no significant difference between (b) Nebraska Department of Education training and (c) both Nebraska Department of Education training and regional training, $U = 3030.000$, $p = .653$, with the sum of the ranks equal to 6190.00 for (b) Nebraska Department of Education training and 6530.00 for (c) both Nebraska Department of Education training and regional training.

(9b) Advanced degree focused on curriculum, instruction, and/or assessments. In terms of an advanced degree focused on curriculum, instruction, and/or assessment, the respondents reported that 97 of them had an advanced degree focused on curriculum, assessments, and/or instruction. Ninety-nine respondents indicated that they did not have an advanced degree focused on curriculum, assessments, and/or instruction.

The Levene test was used to determine whether the two groups have similar variation. If the two groups had similar variability ($p > .05$) then the "Equal" variance t-test was used. However, if the two groups did not have similar variability ($p < .05$) then the "Un-equal" variance t-test was used. Significant differences were explored between each phase of the school improvement process plus the combined mean score. Table 23 summarizes the results of how an advanced degree focused on curriculum, instruction, and/or assessments impacts the school improvement process.

Table 23

Degree Focused on Curriculum, Instruction, and/or Assessments

			Levene's Test of Equality of Variances		**t-test for Equality of Means**		
Phase	**Response**	***N***	***F***	**Sig.**	***t***	***df***	**Sig. 2-tailed**
Leadership Role	Yes No	96 99	.197	.658	.895	193	.372
Creating the Profile	Yes No	97 99	.365	.547	.977	194	.330
Setting the Goals	Yes No	97 99	.052	.821	.922	194	.357
Planning to Improve	Yes No	97 99	.634	.427	.740	194	.460
Implementing the Plan	Yes No	97 99	.056	.813	.970	194	.333
Evaluating the Plan	Yes No	97 99	3.772	.054	1.591	194	.113
Overall	Yes No	97 99	.512	.475	1.086	194	.279

The first phase of school improvement is the leadership role. Within the leadership role phase of school improvement, those who had an advanced degree focused on curriculum, assessments, and/or instruction had a mean quality rating of 3.0677

(*std* = .69819), whereas those who did not have an advanced degree focused on curriculum, assessments, and/or instruction had a mean rating of 2.9798 (*std* = .67355). Superintendents who had an advanced degree focused on curriculum, assessments, and/or instruction did not have a significantly higher mean rating than those who did not have an advanced degree focused on curriculum, assessments, and/or instruction. ($t(193) = .895$, $p = .372$).

The second phase of school improvement is creating the profile. Within the creating the profile phase of school improvement, those who had an advanced degree focused on curriculum, assessments, and/or instruction had a mean quality rating of 2.8625 (*std* = .67143), whereas those who did not have an advanced degree focused on curriculum, assessments, and/or instruction had a mean rating of 2.7677 (*std* = .68752). Superintendents who had an advanced degree focused on curriculum, assessments, and/or instruction did not have a significantly higher mean rating than those who did not have an advanced degree focused on curriculum, assessments, and/or instruction. ($t(194) = .977$, $p = .330$).

The third phase of school improvement is setting the goals. Within the setting the goals phase of school improvement, those who had an advanced degree focused on curriculum, assessments, and/or instruction had a mean quality rating of 2.8316 (*std* = .68907), whereas those who did not have an advanced degree focused on curriculum, assessments, and/or instruction had a mean rating of 2.7441 (*std* = .63857). Superintendents who had an advanced degree focused on curriculum, assessments, and/or instruction did not have a significantly higher mean rating than those who did not have an

advanced degree focused on curriculum, assessments, and/or instruction. ($t(194) = .922$, $p = .357$).

The fourth phase of school improvement is planning to improve. Within the planning to improve phase of school improvement, those who had an advanced degree focused on curriculum, assessments, and/or instruction had a mean quality rating of 2.6985 (*std* = .66334), whereas those who did not have an advanced degree focused on curriculum, assessments, and/or instruction had a mean rating of 2.6279 (*std* = .67020). Superintendents who had an advanced degree focused on curriculum, assessments, and/or instruction did not have a significantly higher mean rating than those who did not have an advanced degree focused on curriculum, assessments, and/or instruction. ($t(194) = .740$, $p = .460$).

The fifth phase of school improvement is implementing the plan. Within the implementing the plan phase of school improvement, those who had an advanced degree focused on curriculum, assessments, and/or instruction had a mean quality rating of 2.9021 (*std* = .68328), whereas those who did not have an advanced degree focused on curriculum, assessments, and/or instruction had a mean rating of 2.8081 (*std* = .67275). Superintendents who had an advanced degree focused on curriculum, assessments, and/or instruction did not have a significantly higher mean rating than those who did not have an advanced degree focused on curriculum, assessments, and/or instruction. ($t(194) = .813$, $p = .333$).

The sixth phase of school improvement is evaluating the plan. Within the evaluating the plan phase of school improvement, those who had an advanced degree focused on curriculum, assessments, and/or instruction had a mean quality rating of

2.9278 (*std* = .57278), whereas those who did not have an advanced degree focused on curriculum, assessments, and/or instruction had a mean rating of 2.7879 (*std* = .65501). Superintendents who had an advanced degree focused on curriculum, assessments, and/or instruction did not have a significantly higher mean rating than those who did not have an advanced degree focused on curriculum, assessments, and/or instruction. ($t(194) = 1.591$, $p = .113$).

And finally, the mean scores of all the phases of school improvement were combined. In using the combined mean, those who had an advanced degree focused on curriculum, assessments, and/or instruction had a mean quality rating of 2.8536 (*std* = .57342), whereas those who did not have an advanced degree focused on curriculum, assessments, and/or instruction had a mean rating of 2.7626 (*std* = .59926). Superintendents who had an advanced degree focused on curriculum, assessments, and/or instruction did not have a significantly higher mean rating than those who did not have an advanced degree focused on curriculum, assessments, and/or instruction. ($t(194) = 1.086$, $p = .279$).

(9c) Advanced degree focused on school improvement and/or accountability. In terms of an advanced degree focused on school improvement and/or accountability, the respondents reported that 68 of them had an advanced degree focused on school improvement and/or accountability, while 128 respondents indicated that they did not have an advanced degree focused on school improvement and/or accountability.

The Levene test was used to determine whether the two groups have similar variation. If the two groups had similar variability ($p > .05$) then the “Equal” variance t-test was used. However, if the two groups did not have similar variability ($p < .05$) then

the “Un-equal” variance t-test was used. Significant differences were explored between in each phase of the school improvement process plus the combined mean score. Table 24 summarizes the results of how an advanced degree focused on school improvement and/or accountability impacts the school improvement process.

Table 24

Degree Focused on School Improvement and/or Accountability

			Levene's Test of Equality of Variances		**t-test for Equality of Means**		
Phase	**Response**	***N***	***F***	**Sig.**	***t***	***df***	**Sig. 2-tailed**
Leadership Role	Yes	68	1.211	.273	1.484	193	.139
	No	127					
Creating the Profile	Yes	68	.920	.339	2.912	194	.004*
	No	128					
Setting the Goals	Yes	68	.350	.555	2.471	194	.014*
	No	128					
Planning to Improve	Yes	68	.142	.706	2.237	194	.026*
	No	128					
Implementing the Plan	Yes	68	2.340	.128	1.848	194	.066
	No	128					
Evaluating the Plan	Yes	68	.510	.476	2.769	194	.006*
	No	128					
Overall	Yes	68	.138	.711	2.653	194	.009*
	No	128					

**Indicates a significant difference*

The first phase of school improvement is leadership role. Within the leadership role phase of school improvement, those who had an advanced degree focused on school improvement and/or accountability had a mean quality rating of 3.1250 (*std* = .72470), whereas those who did not have an advanced degree focused on school improvement and/or accountability had a mean rating of 2.9724 (*std* = .66161). Superintendents who

had an advanced degree focused on school improvement and/or accountability did not have a significantly higher mean rating than those who did not have an advanced degree focused on school improvement and/or accountability. ($t(193) = 1.484$, $p = .139$).

The second phase of school improvement is creating the profile. Within the creating the profile phase of school improvement, those who had an advanced degree focused on school improvement and/or accountability had a mean quality rating of 3.0049 (*std* = .65536), whereas those who did not have an advanced degree focused on school improvement and/or accountability had a mean rating of 2.7135 (*std* = .67285). Superintendents who had an advanced degree focused on school improvement and/or accountability had a significantly higher mean rating than those who did not have an advanced degree focused on school improvement and/or accountability. ($t(194) = 2.912$, $p = .004$).

The third phase of school improvement is setting the goals. Within the setting the goals phase of school improvement, those who had an advanced degree focused on school improvement and/or accountability had a mean quality rating of 2.9461 (*std* = .68534), whereas those who did not have an advanced degree focused on school improvement and/or accountability had a mean rating of 2.7031 (*std* = .63883). Superintendents who had an advanced degree focused on school improvement and/or accountability had a significantly higher mean rating than those who did not have an advanced degree focused on school improvement and/or accountability. ($t(194) = 2.471$, $p = .014$).

The fourth phase of school improvement is planning to improve. Within the planning to improve phase of school improvement, those who had an advanced degree

focused on school improvement and/or accountability had a mean quality rating of 2.8088 (*std* = .68311), whereas those who did not have an advanced degree focused on school improvement and/or accountability had a mean rating of 2.5872 (*std* = .64777). Superintendents who had an advanced degree focused on school improvement and/or accountability had a significantly higher mean rating than those who did not have an advanced degree focused on school improvement and/or accountability. ($t(194) = 2.237$, $p = .026$).

The fifth phase of school improvement is implementing the plan. Within the implementing the plan phase of school improvement, those who had an advanced degree focused on school improvement and/or accountability had a mean quality rating of 2.9706 (*std* = .65153), whereas those who did not have an advanced degree focused on school improvement and/or accountability had a mean rating of 2.7852 (*std* = .67778). Superintendents who had an advanced degree focused on school improvement and/or accountability did not have a significantly higher mean rating than those who did not have an advanced degree focused on school improvement and/or accountability. ($t(194) = 1.848$, $p = .066$).

The sixth phase of school improvement is evaluating the plan. Within the evaluating the plan phase of school improvement, those who had an advanced degree focused on school improvement and/or accountability had a mean quality rating of 3.0221 (*std* = .60120), whereas those who did not have an advanced degree focused on school improvement and/or accountability had a mean rating of 2.7695 (*std* = .61125). Superintendents who had an advanced degree focused on school improvement and/or accountability had a significantly higher mean rating than those who did not have an

advanced degree focused on school improvement and/or accountability. ($t(194) = 2.769$, $p = .006$).

And finally, the mean scores of all the phases of school improvement were combined. In using the combined mean score, those who had an advanced degree focused on school improvement and/or accountability had a mean quality rating of 2.9579 (*std* = .58781), whereas those who did not have an advanced degree focused on school improvement and/or accountability had a mean rating of 2.7278 (*std* = .57277). Superintendents who had an advanced degree focused on school improvement and/or accountability had a significantly higher mean rating than those who did not have an advanced degree focused on school improvement and/or accountability ($t(194) = 2.653$, $p = .009$).

(9d) External team leader experience. In terms of external team leader experience, the respondents reported that 131 had not served as an external team leader, 36 had been the external leader for one school, 13 had been the external leader for two schools, 6 had been the external leader for three schools, and 9 had been the external leader for 4 or more schools. Because of the distribution of respondents, the researcher decided to compare respondents who have not served as an external team leader to those who had served on one or more.

The Levene test was used to determine whether the two groups have similar variation. If the two groups had similar variability ($p > .05$) then the “Equal” variance t-test was used. However, if the two groups did not have similar variability ($p < .05$) then the “Un-equal” variance t-test was used. Significant differences were explored between each phase of the school improvement process plus the combined mean score. Table 25

Table 25

Experience as an External Team Leader

			Levene's Test of Equality of Variances		t-test for Equality of Means		
Phase	**Response**	***N***	***F***	**Sig.**	***t***	***df***	**Sig. 2-tailed**
Leadership Role	0 1 or more	131 63	1.594	.208	-2.552	192	.011*
Creating the Profile	0 1 or more	131 64	7.847	.006	-3.045	152.675	.003*
Setting the Goals	0 1 or more	131 64	4.237	.041	-1.980	144.226	.050*
Planning to Improve	0 1 or more	131 64	.175	.676	-1.783	193	.076
Implementing the Plan	0 1 or more	131 64	3.500	.063	-1.621	193	.107
Evaluating the Plan	0 1 or more	131 64	1.788	.183	-2.731	193	.007*
Overall	0 1 or more	131 64	3.701	.056	-2.462	193	.015*

**Indicates a significant difference*

summarizes the results of how experience as an external team leader impacted the school improvement process.

The first phase of school improvement is leadership role. Within the leadership role phase of school improvement, those who did not serve as an external leader had a mean quality rating of 2.9427 (*std* = .71962), whereas those who had at least served as one external leader had a mean rating of 3.2063 (*std* = .56536). Superintendents who at least served as one external leader had a significantly higher mean rating than those without external team leader experience ($t(192) = -2.552$, $p = .011$).

The second phase of school improvement is creating the profile. Within the creating the profile phase of school improvement, those who did not serve as an external

leader had a mean quality rating of 2.7226 (*std* = .71151), whereas those who had at least served as one external leader had a mean rating of 3.0104 (*std* = .56957). Superintendents who at least served as one external leader had a significantly higher mean rating than those without external team leader experience ($t(152.675) = -3.045$, $p = .003$).

The third phase of school improvement is setting the goals. Within the setting the goals phase of school improvement, those who did not serve as an external leader had a mean quality rating of 2.7277 (*std* = .69159), whereas those who had at least served as one external leader had a mean rating of 2.9167 (*std* = .59094). Superintendents who at least served as one external leader had a significantly higher mean rating than those without external team leader experience ($t(144.226) = -1.980$, $p = .050$).

The fourth phase of school improvement is planning to improve. Within the planning to improve phase of school improvement, those who did not serve as an external leader had a mean quality rating of 2.6043 (*std* = .65391), whereas those who had at least served as one external leader had a mean rating of 2.7852 (*std* = .68699). Superintendents who at least served as one external leader did not have a significantly higher mean rating than those without external team leader experience ($t(193) = -1.783$, $p = .076$).

The fifth phase of school improvement is implementing the plan. Within the implementing the plan phase of school improvement, those who did not serve as an external leader had a mean quality rating of 2.8015 (*std* = .70895), whereas those who had at least served as one external leader had a mean rating of 2.9688 (*std* = .60340). Superintendents who at least served as one external leader did not have a significantly higher mean rating than those without external team leader experience ($t(193) = -1.621$, $p = .107$).

The sixth phase of school improvement is evaluating the plan. Within the evaluating the plan phase of school improvement, those who did not serve as an external leader had a mean quality rating of 2.7786 (*std* = .62376), whereas those who had at least served as one external leader had a mean rating of 3.0313 (*std* = .56957). Superintendents who at least served as one external leader had a significantly higher mean rating than those without external team leader experience ($t(193) = -2.731$, $p = .007$).

And finally, the mean scores of all the phases of school improvement were combined. In using the combined mean score, those who did not serve as an external leader had a mean quality rating of 2.7386 (*std* = .61375), whereas those who had at least served as one external leader had a mean rating of 2.9568 (*std* = .50729). As concluded, superintendents who at least served as one external leader had a significantly higher mean rating than those without external team leader experience ($t(193) = -2.462$, $p = .015$).

(9e) External review team experience. In terms of external review team experience, the respondents reported that 102 of them had not served on a school improvement external team, 30 of them had served on one school's external team, 28 of them had served on two schools' external teams, 16 of them had served on three schools' external teams, and 20 of them had served on four or more schools' external teams. Because of the distribution of respondents, the researcher decided to compare respondents who had not served on an external team to those who have served on one or more.

The Levene test was used to determine whether the two groups have similar variation. If the two groups had similar variability ($p > .05$) then the "Equal" variance t-test was used. However, if the two groups did not have similar variability ($p < .05$) then

the “Un-equal” variance t-test was used. Significant differences were explored between in each phase of the school improvement process plus the combined mean score. Table 26 summarizes the results of how experience on an external review team impacts the school improvement process.

Table 26

Experience on an External Review Team

			Levene's Test of Equality of Variances		**t-test for Equality of Means**		
Phase	**Response**	***N***	***F***	**Sig.**	***t***	***df***	**Sig. 2-tailed**
Leadership Role	0 1 or more	102 93	4.734	.031	-2.511	185.967	.013*
Creating the Profile	0 1 or more	102 94	12.711	.000	-3.183	184.680	.002*
Setting the Goals	0 1 or more	102 94	12.617	.000	-2.509	182.227	.013*
Planning to Improve	0 1 or more	102 94	6.494	.012	-2.891	192.947	.004*
Implementing the Plan	0 1 or more	102 94	13.069	.000	-3.254	190.598	.001*
Evaluating the Plan	0 1 or more	102 94	11.767	.001	-3.849	188.568	.000*
Overall	0 1 or more	102 94	11.745	.001	-3.407	182.959	.001*

**Indicates a significant difference*

The first phase of school improvement is leadership role. Within the leadership role phase of school improvement, those who had not served on an external team had a mean quality rating of 2.9167 (*std* = .75807), whereas those who had served on at least one external team had a mean rating of 3.1559 (*std* = .56616). Superintendents who had

served on at least one external team had a significantly higher mean rating than those without external team experience ($t(185.967) = -2.511$, $p = .013$).

The second phase of school improvement is creating the profile. Within the creating the profile phase of school improvement, those who did not serve on an external team had a mean quality rating of 2.6765 (*std* = .75410), whereas those who had served on at least one external team had a mean rating of 2.9752 (*std* = .55140). Superintendents who at least served on one external team had a significantly higher mean rating than those without external team experience ($t(184.680) = -3.183$, $p = .002$).

The third phase of school improvement is setting the goals. Within the setting the goals phase of school improvement, those who had not served on an external team had a mean quality rating of 2.6797 (*std* = .75039), whereas those who had served on at least one external team had a mean rating of 2.9113 (*std* = .53139). Superintendents who had served on at least one external team had a significantly higher mean rating than those without external team experience ($t(182.227) = -2.509$, $p = .013$).

The fourth phase of school improvement is planning to improve. Within the planning to improve phase of school improvement, those who had not served on an external team had a mean quality rating of 2.5351 (*std* = .70159), whereas those who had served on at least one external team had a mean rating of 2.8041 (*std* = .60002). Superintendents who had served on at least one external team had a significantly higher mean rating than those without external team experience ($t(192.947) = -2.891$, $p = .004$).

The fifth phase of school improvement is implementing the plan. Within the implementing the plan phase of school improvement, those who had not served on an external team had a mean quality rating of 2.7108 (*std* = .72589), whereas those who had

served on at least one external team had a mean rating of 3.0160 (*std* = .58407). Superintendents who had served on at least one external team had a significantly higher mean rating than those without external team experience ($t(190.598) = -3.254$, $p = .001$).

The sixth phase of school improvement is evaluating the plan. Within the evaluating the plan phase of school improvement, those who had not served on an external team had a mean quality rating of 2.7010 (*std* = .66474), whereas those who had served on at least one external team had a mean rating of 3.0266 (*std* = .51518). Superintendents who had served on at least one external team had a significantly higher mean rating than those without external team experience ($t(188.568) = -3.849$, $p < .001$).

And finally, the mean scores of all the phases of school improvement were combined. In using the combined mean score, those who had not served on an external team had a mean quality rating of 2.6789 (*std* = .65412), whereas those who had served on at least one external team had a mean rating of 2.9540 (*std* = .46754). As concluded, superintendents who had served on at least one external team had a significantly higher mean rating than those without external team experience ($t(182.959) = -3.407$, $p = .001$).

(9f) Student enrollment. In terms of their school districts' September 2008 K-12 fall student enrollment, the respondents indicated that 86 served in school districts with an enrollment of 300 or fewer, 59 served in school districts with an enrollment between 301 and 600, 21 served in school districts with an enrollment between 601 and 900, 7 served in school districts with an enrollment between 901 and 1,200, 12 served in school districts with an enrollment between 1,201 and 2,500, 11 served in school districts with an enrollment between 2,501 and 10,000, and 1 served in school district with an enrollment more than 10,000. Because of the distribution of respondents, the researcher

decided to compare respondents who indicated a September 2008 K-12 fall enrollment of 300 or less to those who have an enrollment of more than 300.

The Levene test was used to determine whether the two groups had similar variation. If the two groups had similar variability ($p > .05$) then the "Equal" variance t-test was used. However, if the two groups did not have similar variability ($p < .05$) then the "Un-equal" variance t-test was used. Significant differences were explored between each phase of the school improvement process plus the combined mean score. Table 27 summarizes the results of how student enrollment impacts the school improvement process.

Table 27

Student Enrollment

			Levene's Test of Equality of Variances		**t-test for Equality of Means**		
Phase	**Response**	***N***	***F***	**Sig.**	***t***	***df***	**Sig. 2-tailed**
Leadership Role	1-300 more than 300	85 111	2.647	.105	2.525	194	.012*
Creating the Profile	1-300 more than 300	86 111	.658	.418	2.661	195	.008*
Setting the Goals	1-300 more than 300	86 111	.328	.568	2.009	195	.046*
Planning to Improve	1-300 more than 300	86 111	.322	.571	3.258	195	.001*
Implementing the Plan	1-300 more than 300	86 111	.125	.724	3.832	195	.000*
Evaluating the Plan	1-300 more than 300	86 111	.395	.530	2.901	195	.004*
Overall	1-300 more than 300	86 111	.765	.383	3.231	195	.001*

**Indicates a significant difference*

The first phase of school improvement is leadership role. Within the leadership role phase of school improvement, those who had an enrollment of 300 or less had a mean quality rating of 3.1647 (*std* = .72123), whereas those who had an enrollment of more than 300 had a mean rating of 2.9189 (*std* = .63797). Superintendents who served in a school district with an enrollment of 300 or less had a significantly higher mean rating than those who served in a school district with an enrollment of more than 300 ($t(194) = 2.525$, $p = .012$).

The second phase of school improvement is creating the profile. Within the creating the profile phase of school improvement, those who had an enrollment of 300 or less had a mean quality rating of 2.9612 (*std* = .71477), whereas those who had an enrollment of more than 300 had a mean rating of 2.7057 (*std* = .63044). Superintendents who serve in a school district with an enrollment of 300 or less had a significantly higher mean rating than those who served in a school district with an enrollment of more than 300 ($t(195) = 2.661$, $p = .008$).

The third phase of school improvement is setting the goals. Within the setting the goals phase of school improvement, those who had an enrollment of 300 or less had a mean quality rating of 2.8953 (*std* = .68459), whereas those who had an enrollment of more than 300 had a mean rating of 2.7057 (*std* = .63523). Superintendents who served in a school district with an enrollment of 300 or less had a significantly higher mean rating than those who served in a school district with an enrollment of more than 300 ($t(195) = 2.009$, $p = .046$).

The fourth phase of school improvement is planning to improve. Within the planning to improve phase of school improvement, those who had an enrollment of 300

or less had a mean quality rating of 2.8372 (*std* = .67275), whereas those who had an enrollment of more than 300 had a mean rating of 2.5330 (*std* = .63168). Superintendents who served in a school district with an enrollment of 300 or less had a significantly higher mean rating than those who served in a school district with an enrollment of more than 300 ($t(195) = 3.258$, $p = .001$).

The fifth phase of school improvement is implementing the plan. Within the implementing the plan phase of school improvement, those who had an enrollment of 300 or less had a mean quality rating of 3.0581 (*std* = .70050), whereas those who had an enrollment of more than 300 had a mean rating of 2.6982 (*std* = .61526). Superintendents who served in a school district with an enrollment of 300 or less had a significantly higher mean rating than those who served in a school district with an enrollment of more than 300 ($t(195) = 3.832$, $p < .001$).

The sixth phase of school improvement is evaluating the plan. Within the evaluating the plan phase of school improvement, those who had an enrollment of 300 or less had a mean quality rating of 3.0000 (*std* = .63246), whereas those who had an enrollment of more than 300 had a mean rating of 2.7477 (*std* = .58338). Superintendents who served in a school district with an enrollment of 300 or less had a significantly higher mean rating than those who served in a school district with an enrollment of more than 300 ($t(195) = 2.901$, $p = .004$).

And finally, the mean scores of all the phases of school improvement were combined. In using the combined mean score, those that had an enrollment of 300 or less had a mean quality rating of 2.9593 (*std* = .60994), whereas those that had an enrollment of more than 300 had a mean rating of 2.6936 (*std* = .54159). Superintendents who

served in a school district with an enrollment of 300 or less had a significantly higher mean rating than those who served in a school district with an enrollment of more than 300 ($t(195) = 3.231$, $p = .001$).

(9g) Experience in education. In terms of experience in education, the respondents reported that 1 had between 1 and 5 years experience, 3 had between 6 and 10 years experience, 16 had between 11 and 15 years experience, 23 had between 16 and 20 years experience, 34 had between 21 and 25 years experience, and 34 had 26 or more. Because of the distribution of respondents, the researcher decided to compare respondents who had less than 26 years of experience to those who had 26 or more years of experience in education.

The Levene test was used to determine whether the two groups have similar variation. If the two groups had similar variability ($p > .05$) then the "Equal" variance t-test was used. However, if the two groups did not have similar variability ($p < .05$) then the "Un-equal" variance t-test was used. Significant differences were explored between each phase of the school improvement process plus the combined mean score. Table 28 summarizes the results of how experience in education impacts the school improvement process.

The first phase of school improvement is leadership role. Within the leadership role phase of school improvement, superintendents who had less than 26 years of experience in education had a mean quality rating of 3.0909 (*std* = .60550), whereas those that had 26 or more years of experience in education had a mean rating of 2.9914 (*std* = .73420). Superintendents who had less than 26 years of experience in education did

Table 28

Experience in Education

			Levene's Test of Equality of Variances		t-test for Equality of Means		
Phase	**Response**	***N***	***F***	**Sig.**	***t***	***df***	**Sig. 2-tailed**
Leadership Role	less than 26 26 or more	77 116	.217	.642	.987	191	.325
Creating the Profile	less than 26 26 or more	77 117	.792	.375	2.793	192	.006*
Setting the Goals	less than 26 26 or more	77 117	1.842	.176	1.909	192	.058
Planning to Improve	less than 26 26 or more	77 117	2.199	.140	2.471	192	.014*
Implementing the Plan	less than 26 26 or more	77 117	1.532	.217	1.942	192	.054
Evaluating the Plan	less than 26 26 or more	77 117	1.435	.232	2.534	192	.012*
Overall	less than 26 26 or more	77 117	.526	.469	2.490	192	.014*

**Indicates a significant difference*

not have a significantly higher mean rating than those with 26 or more years of experience in education ($t(191) = 0.987$, $p = .642$).

The second phase of school improvement is creating the profile. Within the creating the profile phase of school improvement, superintendents who had less than 26 years of experience in education had a mean quality rating of 2.9870 (*std* = .64082), whereas those who had 26 or more years of experience in education had a mean rating of 2.7123 (*std* = .68914). Superintendents who had less than 26 years of experience in education had a significantly higher mean rating than those with 26 or more years of experience in education ($t(192) = 2.793$, $p = .006$).

The third phase of school improvement is setting the goals. Within the setting the goals phase of school improvement, superintendents who had less than 26 years of experience in education had a mean quality rating of 2.9091 (*std* = .59392), whereas those who had 26 or more years of experience in education had a mean rating of 2.7265 (*std* = .68735). Superintendents who had less than 26 years of experience in education did not have a significantly higher mean rating than those with 26 or more years of experience in education ($t(192) = 1.909$, $p = .058$).

The fourth phase of school improvement is planning to improve. Within the planning to improve phase of school improvement, superintendents who had less than 26 years of experience in education had a mean quality rating of 2.8128 (*std* = .61789), whereas those who had 26 or more years of experience in education had a mean rating of 2.5734 (*std* = .68676). Superintendents who had less than 26 years of experience in education had a significantly higher mean rating than those with 26 or more years of experience in education ($t(192) = 2.471$, $p = .014$).

The fifth phase of school improvement is implementing the plan. Within the implementing the plan phase of school improvement, superintendents who had less than 26 years of experience in education had a mean quality rating of 2.9740 (*std* = .63813), whereas those who had 26 or more years of experience in education had a mean rating of 2.7821 (*std* = .69600). Superintendents who had less than 26 years of experience in education did not have a significantly higher mean rating than those with 26 or more years of experience in education ($t(192) = 1.942$, $p = .054$).

The sixth phase of school improvement is evaluating the plan. Within the evaluating the plan phase of school improvement, superintendents who had less than

26 years of experience in education had a mean quality rating of 3.0000 (*std* = .59604), whereas those who had 26 or more years of experience in education had a mean rating of 2.7735 (*std* = .61761). Superintendents who had less than 26 years of experience in education had a significantly higher mean rating than those with 26 or more years of experience in education ($t(192) = 2.534$, $p = .012$).

And finally, the mean scores of all the phases of school improvement were combined. In using the combined mean score, superintendents who had less than 26 years of experience in education had a mean quality rating of 2.9424 (*std* = .54637), whereas those who had 26 or more years of experience in education had a mean rating of 2.7307 (*std* = .60016). Superintendents who had less than 26 years of experience in education had a significantly higher mean rating than those with 26 or more years of experience in education ($t(192) = 2.490$, $p = .014$).

(9h) Experience as a superintendent. In terms of experience as a superintendent, the respondents reported that 73 had between 1 and 5 years experience, 44 had between 6 and 10, 23 had between 11 and 15, 22 had between 16 and 20, 14 had between 21 and 25, and 21 had 26 or more years of experience. Homogeneity of Variances (HOV) test was administered and the results passed the test. Therefore, a Oneway ANOVA was used to determine if a significant difference existed between years of experience as a superintendent and the mean scores for each of the phases of school improvement along with the combined mean score of all the phases of the school improvement process. The Tukey HSD was used as the Post Hoc Test to the ANOVA.

In review of the results of the ANOVA and Post Hoc Tukey HSD, no significant differences were uncovered. In order to be significant, the F score would have to equal

2.26 in order to achieve a *p* value of less than .05. In analyzing all the results, the creating the profile phase ($F(5, 191) = 2.030$, $p = .076$) came closest. All ANOVA scores are summarizes in Table 29.

Table 29

Relationships between Years of Experience as Superintendent and School Improvement

Phases of School Improvement	**HOV >.05**	***df* Between**	***df* Within**	***F* >2.26**	**Sig. *p* value <.05**
Leadership Role	.203*	5	190	1.452	.208
Creating the Profile	.540*	5	191	2.030	.076
Setting the Goals	.271*	5	191	1.247	.289
Planning to Improve	.199*	5	191	1.682	.141
Implementing the Plan	.801*	5	191	0.983	.429
Evaluating the Plan	.733*	5	191	1.792	.116
Overall	.403*	5	191	1.704	.136

**Indicates a significant Homogeneity of Variance (HOV) Score*

Summary

This chapter presented data generated from a survey of Nebraska superintendents. The data attempted to measure their perceptions as to their own involvement with the school improvement process. Once this perception was converted to a quantitative score, the results were used to examine relationships between this quantitative score and factors that may affect their involvement. These factors included formal training in school improvement; advanced degree focused on curriculum, assessments, and/or instruction; advanced degree focused on school improvement and/or accountability; external team leader experience; external review team experience; student enrollment at the superintendent's district; experience in education; and experience as a superintendent.

The phases of school improvement were defined by the Nebraska Model for School Improvement. The phases of school improvement included leadership role, creating the profile, setting the goals, planning to improve, implementing the plan, and evaluating the plan.

The survey was distributed via e-mail using Zoomerang to 244 Nebraska superintendents in March 2009. Of the 244 surveys delivered via Zoomerang, 197 surveys were returned, which was a return rate of 80.7%.

The data generated by this survey provided insight into the perceptions of Nebraska superintendents concerning their involvement with the school improvement phases according to the Nebraska Model for Continuous Improvement. Overall, it appeared that the majority of superintendents perceived that they delegated the leadership of the school improvement process; however, they did participate and were fully aware of all activities of the school improvement process. It also appeared that several factors affected the perceptions of superintendents as to their involvement with the school improvement process.

As with any descriptive quantitative study, it is imperative that the results be used appropriately. The study was limited to Nebraska superintendents. While the school improvement process continues to be cited as an important practice for educational leaders, this study described the practices of one group of leaders. Chapter 5 presents a summary of the findings, discussion, and interpretation of the results.

Chapter 5

Summary, Discussion, and Recommendations

The results of this study suggest that superintendents should be knowledgeable of the school improvement process obtained through preparatory course work prior to becoming a superintendent, serve on at least one external review team for another school district, attend annual training focused on school improvement, and become highly involved with the development of the school profile in their school districts. The school profile refers to the collection, analysis, and summarization of the student, school, and community data that is necessary to make informed decisions concerning a school district.

Summary

The research questions that guided the study focused on examining the relationships between superintendents' perceptions of their involvement in the school improvement process and factors that may affect their involvement. The questions are related directly to the phases/steps of the Nebraska Model for Continuous Improvement. The research questions included:

Superintendents' Involvement

1. To what extent are Nebraska superintendents involved in building understanding and commitment to the purpose and process of school improvement including establishing committees and a timeline?
2. To what extent are Nebraska superintendents involved in creating and analyzing the data?
3. To what extent are Nebraska superintendents involved in determining and

establishing the school improvement goal as targeted by the data?

4. To what extent are Nebraska superintendents involved in developing an action plan that contains research-based strategies?
5. To what extent are Nebraska superintendents involved in overseeing the implementation of the school improvement action plan?
6. To what extent are Nebraska superintendents involved in recognizing the progress of the school improvement plan and affirming the success to all stakeholders?

Along with seeking the extent to which Nebraska superintendents are involved in the school improvement process, this dissertation also addressed these three additional research questions:

7. Is there a relationship between the superintendents' perceptions of their involvement with the school improvement process and their opinion of the relative importance of these roles for a superintendent?
   (a) Providing educational leadership to the school district
   (b) Ensuring quality staff relations
   (c) Providing community leadership
   (d) Maintaining a working relationship with the Board of Education
   (e) Providing financial direction
   (f) Managing of facilities, grounds, and equipment
8. Is there a relationship between the superintendents' perceptions of their involvement with the school improvement process and their opinion of the relative importance of the phases of the school improvement process?

(a) Building understanding and commitment to the purpose and process of school improvement including establishing committees and timeline

(b) Creating and maintaining the district's profile including gathering, disaggregating, and analyzing the data

(c) Determining and establishing the school improvement goal as targeted by the data

(d) Developing an action plan that contains research-based strategies

(e) Overseeing the implementation of the school improvement action plan

(f) Recognizing the progress of the plan and affirming the success to all stakeholders

9. Is there a relationship between superintendents' perceptions of their involvement with school improvement and each of these factors?

(a) formal training in school improvement

(b) advanced degree focused on curriculum, instruction, and/or assessments

(c) advanced degree focused on school improvement and/or accountability

(d) external team leader experience

(e) external review team experience

(f) student enrollment

(g) experience in education

(h) experience as a superintendent

The survey population consisted of all superintendents employed in the state of Nebraska during the 2008-2009 school year who had a valid e-mail address. This group included 244 individuals. This population was selected because of their familiarity with

the Nebraska Model for Continuous Improvement, which was used as the basis for this study. The superintendents were invited via e-mail to participate in the survey by utilizing the Zoomerang website. Of the 244 surveys delivered via Zoomerang, 197 surveys were returned, for a return rate of 80.7%.

The web-based survey consisted of 16 questions that asked about the degree of involvement of a Nebraska superintendent in each phase of the school improvement process according to the Nebraska Model for Continuous Improvement. All of these questions were scored using a 4-point Likert Scale: “Led and facilitated the process” (4), “Delegated the leadership of the process, but was a participant of the process and fully aware of all activities” (3), “Delegated the leadership of the process, but was only somewhat of a participant within the process” (2), and “Delegated the entire process to someone else in the district” (1). The summed score for these 16 questions ranged from 16 to 64, with a higher score indicating a stronger involvement by the superintendent in the school improvement process. The overall mean score for these 16 questions was 2.836.

In addition, the survey contained two questions in which the superintendent rank ordered his/her roles as superintendent and rank ordered his/her involvement in each phase of the school improvement process.

The survey also collected some additional school improvement information concerning the participants. This additional information included their formal training associated with the school improvement process; completion of an advanced degree in curriculum, assessments and instruction; completion of an advanced degree in school improvement and/or accountability; number of schools for which the participate served as

a school improvement external team leader; number of schools for which the participate served on a school improvement external review team; K-12 enrollment of their school district as of September, 2008; number of years served in education; and number of years served as a superintendent.

Discussion

Perceptions of Involvement

The data generated from this survey's results provided insight about the perceptions of Nebraska superintendents concerning their involvement within the school improvement phases according to the Nebraska Model for Continuous Improvement. The data also provided a method to examine the relationships between these perceptions and factors that may affect their involvement. Overall, it appeared that the majority of superintendents perceived that they delegated the leadership of the school improvement process; however, they did participate and were fully aware of all activities of the school improvement process.

Research Question #1 asked the extent to which Nebraska superintendents were involved in building understanding and commitment to the purpose and process of school improvement including establishing committees and a timeline. For the most part, the superintendents indicated that they either led and facilitated the process, or delegated the process, but did participate in the process and were fully aware of all activities that support the school improvement process. This particular phase generated the highest mean score of all the phases of school improvement with a mean score of 3.023.

In establishing and working with a steering committee, 23% of the respondents indicated that they led this process, while 59% of the respondents indicated that they

delegated this process but were involved in the process and aware of the activities. This is mirrored when asked about building understanding and commitment to the purpose and process including building a timeline; 27% indicated that they led the process, while 53% indicated that they delegated this process but were involved within the process and aware of the activities.

Research Question #2 sought to describe the extent to which Nebraska superintendents were involved in creating and analyzing the data. This question was broken down into building a school profile, disaggregating the data, and communicating the findings. Communicating the results to stakeholders ranked relatively high, with 26% leading the process and 57% delegating the leadership but participating in the process and being aware of the activities.

Determining the type of data to include within the profile according to the data becomes a little more challenging; 28% of superintendents delegated the leadership, and either were only somewhat involved or not involved in the process. Once the profile was complete, 57% of the superintendents either led or participated in the process by being fully aware of all activities dealing with disaggregating the results, meaning that 43% either were only somewhat or not involved in the process.

Research Question #3 sought to define the extent to which Nebraska superintendents were involved in determining and establishing the school improvement goals as targeted by their data. Most of the respondents were able to target and prioritize the areas of need for their districts' school improvement plan, for 24% led and facilitated the process while 57% participated in the process by being fully aware of all activities associated with selecting areas of need.

In writing goals and researching strategies to reach goals, at least 32% of the respondents indicated that they only participated somewhat or did not participate in this process. This means that at least 64% of the respondents either led and facilitated, or delegated the leadership but participated and were fully aware of all activities associated with targeting action plan goals along with researching accommodating strategies.

Research Question #4 sought to determine the extent to which Nebraska superintendents were involved in developing an action plan that contains research-based strategies. This phase received the lowest mean score of 2.667, which indicates that superintendents were at least involved in this process.

The planning to improve phase of school improvement includes developing action plan strategies; identifying and recommending support activities that will help all staff implement the strategies and interventions; specifying on the action plan who is responsible to assure tasks are completed, identifying resources, establishing dates for completion, identifying professional development needs, and determining how the progress will be measured and evaluated; and establishing baseline/post-intervention evaluation data. The data would indicate that the superintendents' involvement starts to decrease once the action plan is developed, with the minimum involvement in establishing baseline/post-intervention evaluation data which produced an involvement mean score of 2.549.

Research Question #5 asked the extent to which Nebraska superintendents were involved in overseeing the implementation of the school improvement action plan. This phase tied for the second highest mean score of 2.857. At least 70% of respondents

indicated that they helped all staff develop an understanding of the goals and strategies, and monitored the implementation of the action plan to ensure the desired results.

Research Question #6 sought to determine the extent to which Nebraska superintendents were involved in recognizing the progress of the plan and affirming the success to all stakeholders. In determining effectiveness of the interventions, the mean score for the sixth phase of school improvement was similar to the overall mean score.

In contrast, superintendents' involvement again rises in recognizing progress of the plan and affirming the plan's success to their stakeholders. As noted in phase 2, superintendent involvement tends to increase when communications with stakeholders are involved. Combining mean scores of recognizing the progress of the plan and affirming the success to all stakeholders gives this phase a mean score of 2.858. Figure 4 illustrates the average score for each phase of school improvement.

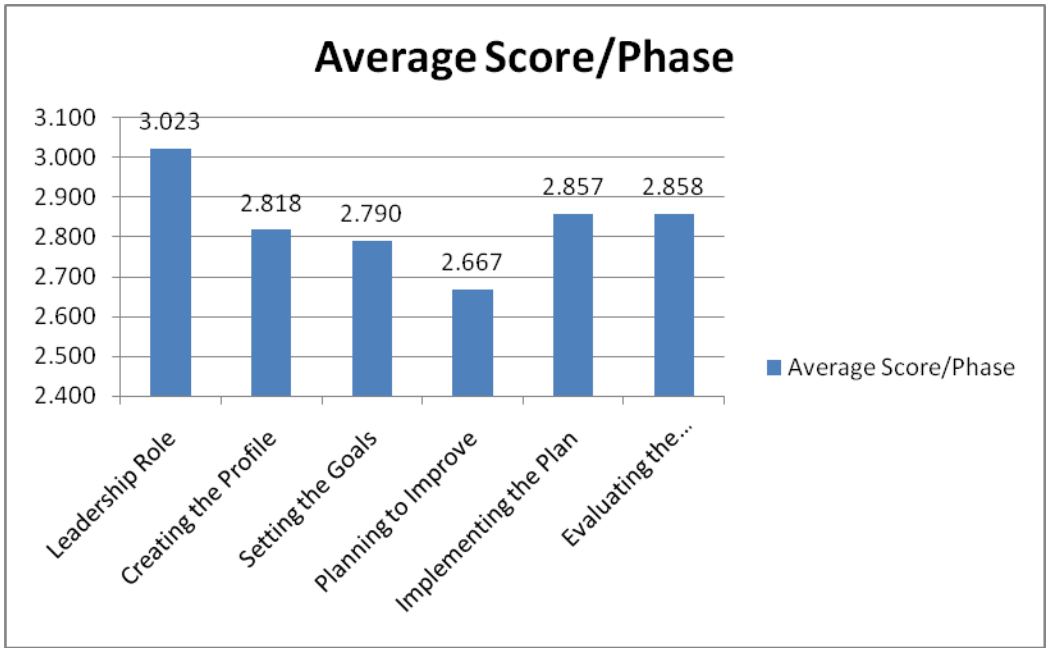

Figure 4. Average score for each phase.

Rank Order

Research Question #7 sought to determine if a relationship existed between the superintendents' perceptions of their involvement with the school improvement process and their opinion of the relative importance of providing educational leadership to the school district, ensuring quality staff relations, providing community leadership, maintaining a working relationship with the board of education, providing financial direction, or managing of facilities, grounds and equipment. Because participants of the survey had difficulty in responding correctly to the corresponding question that matches this research question, no valid relationship could be identified.

Research Question #8 sought to determine if a relationship existed between the superintendents' perceptions of their involvement with the school improvement process and their opinion of the relative importance of the six phases of the school improvement process according to the Nebraska Model for Continuous Improvement. The majority of the identified correlations were connected to how a superintendent ranked the response, "Creating and maintaining the district's profile including gathering, disaggregating, and analyzing the data." Since this was an inverse correlation, this would indicate that a smaller rank for this response would result in a higher perception of involvement with the school improvement process score. One could conclude that if a superintendent is actively involved with the profile and understands the profile's purpose, then he or she is more likely to be involved with the whole school improvement process.

Testing for Relationships

Research Question #9 sought to determine if a relationship existed between the superintendents' perceptions of their involvement with the school improvement process

and their school improvement formal training, external leader experience, external review team experience, student enrollment, experience in education, or experience as a superintendent. The results would indicate that having school improvement training facilitated by the Nebraska Department of Education and/or a regional accreditation agency increased a superintendent's involvement with the school improvement process.

Continuing with Question #9, a preparation program focused on school improvement and/or accountability has a positive affect upon the involvement in the school improvement process. However, having a degree in curriculum, assessments, and instructions does not have an affect upon the superintendent's involvement in the process.

Both having experience on an external school improvement team and/or having experience as an external team leader positively affect the involvement of a Nebraska superintendent. Both of these experiences raise the awareness and involvement with the superintendent's home district.

When examining the size of district, the researcher focused on two groups, 300 or fewer students compared to more than 300 students. The results of the study would indicate that superintendents who work in districts with 300 or fewer student are more likely to have a higher involvement rate in school improvement.

The results of the survey would indicate that superintendents having fewer than 26 years of experience had a significantly higher mean rating than those with experience of 26 or more years. In contrast, experience as a superintendent could not validate growth in the superintendent's involvement with the school improvement process.

Recommendations

This descriptive quantitative study was designed to examine the relationships between superintendents' perceptions of their involvement in school improvement and factors that may affect their involvement. Given the fact that accountability is becoming a household term in the field of education and federal passage of No Child Left Behind, there will be many groups who may find the results of this study valuable including future and current school superintendents, school board members, regional educational agencies, state department of education officials, higher education, and policy makers. Findings suggest four possible recommendations for practice.

Recommendation One

Potential superintendents need training in the school improvement process prior to becoming a district's superintendent. The data indicated that 87% of respondents received training from the Nebraska Department of Education, Regional Accreditation Institution, or both. Yet, 14% indicated that they had no training. Either way, more training is needed prior to becoming a superintendent.

As school leaders are held accountable for the academic achievement of their students, college institutions need to incorporate into their superintendency preparatory course work specific classes on the school improvement process. These classes would provide the framework for school improvement and emphasize the importance of a superintendent to remain focused through the complete cycle of school improvement.

Recommendation Two

The results of this study would indicate that 67% of Nebraska superintendents who responded had not served as an external school improvement leader, and 52% had

not served on an external school improvement review team. The results also show that the superintendents' perceptions of their involvement across all phases tend to increase as the number of external school visits they record. Based upon the results of this study, the superintendents' perceptions of involvement increased up to 3 external school improvement review teams. Therefore, a recommendation of this study would be to have superintendents either serve on or lead at least one external review team per academic year.

Recommendation Three

Annual school improvement training for superintendents needs to be mandated. The purpose of this mandated training would be to emphasize the importance of all phases of school improvement along with a round table discussion of practices that work. Superintendents understand that a school needs a process to improvement and that they are the starting force of this process. They also understand that the process cycles to an external review before starting a new process. The data of this study would support this, since superintendents' perceptions of involvement increase on both ends of the process. However, annual training would help superintendents focus on their responsibilities through the middle phases of the process.

Recommendation Four

Superintendents need to be involved with the development of the profile. The results of this study would indicate that superintendents who help develop and understand the purpose of the profile are more likely to be involved with all phases of school improvement. The profile would help the superintendent understand which areas actually

need improvement, write action plans that address identified needs, ensure the implementation of the action plan, and evaluate the effectiveness of the plan.

Future Research

No Child Left Behind mandated that states develop state standards and state assessments. The state of Nebraska implemented their STARS programs. This approach focused on districts developing their own assessment of the state standards. By using this method, student assessment scores could not be compared across school districts since the assessments were not exact. In other words, even though the assessments all measured the same standards, individual district's assessments contained different content, ability levels, and proctor directions.

Beginning in the 2009-2010 academic school years, districts within the state of Nebraska will be administrating common state level assessments in reading. During ensuing years, the state will begin to develop and implement common state level assessments in math and social studies as well. Once these student assessment results are compiled and available, it would be interesting to determine if a correlation exists between a superintendent's perception of their involvement in school improvement and their district's student results.

This study could be simulated at other levels within school districts. For example, it would be interesting to determine the perceived degree of involvement of Nebraska principals for each phase of the school improvement process according to the Nebraska Model for Continuous Improvement. And, if common state level assessment data is available, is there a correlation between the perceived data versa the actual student results?

Finally, it would be interesting to see if the perceptions of superintendents in other states parallel that of Nebraska superintendents. Comparisons between states could be made concerning the emphasis of the school improvement process at the superintendent level.

Conclusions

School improvement is the vehicle for gains in student achievement. The level of involvement of the superintendent dictates the perceived importance of the process in the school district. If a superintendent assists in the collecting, analyzing, disaggregating, and displaying of student, school, and community data, he/she is more likely to understand the relevance of the process and the impact it can have upon student achievement. As the superintendent understands the information contained in the school district's profile and what mechanisms are necessary to achieve student academic growth, the school district's culture will then reflect the importance of the school improvement process.

An appropriately organized school improvement process is both systemic and systematic. Superintendents should be able to think through the overall change process, enabling them to start the process right. They should also be able to understand the importance of establishing effective communication with all stakeholders of the school district. They need to be forward-thinking and pro-active, and accountable for student achievement. And superintendents need to understand that when kids fail, so do school districts including the superintendent.

References

Abourezk, K. (2008, April 2). *Education commissioner Christensen resigns*. Retrieved June 20, 2008, from http://www.journalstar.com/news/local/article_6934a257-251c-5f40-8c80-195c854025db.html

AdvancED. (n.d.). Retrieve January 15, 2008, from www.advanc-ed.org.

A Guide to Education and No Child Left Behind. (n.d.). Retrieved January 15, 2008, from http://www.ed.gov/nclb/overview/intro/guide/guide.pdf

Aitken, A. J. (2001). *Superintendents' leadership in Alberta schools: Influencing school improvement?* Doctoral dissertation, University of Montana. Retrieved March 25, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 3010737).

Alonso, A. A. (2006). *Leadership in the superintendency: Influence and instruction in a context of standards-based reform*. Doctoraldissertation, Harvard University, Massachusetts. Retrieved March 25, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 3221581).

American Association of School Administrators, National Superintendent of the Year Program. (2006). *Leadership for change national superintendent of the year forum.* Arlington, VA: Author.

Behrens, R. L. (1992). *The rural superintendent: The missing link in school improvement.* Retrieved January 15, 2008, from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/14/04/f6.pdf

Bernhardt, V. L. (1999). *The school portfolio: A comprehensive framework for school improvement* (2nd ed.). Larchmont, NY: Eye on Education.

Boone, M. J. (2001). *The role of the superintendent in improving student achievement*. Doctoral dissertation, The College of William and Mary, Virginia. Retrieved March 25, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 3036297).

Bryant, M. T. (2004). *The portable dissertation advisor.* Thousand Oaks, CA: Corwin.

Cambron-McCabe, N., Cunningham, L., Harvey, J., & Koff, R. (2005). *The superintendent's fieldbook: A guide for leaders of learning.* Thousand Oaks, CA: Corwin.

Conzemius, A., & O'Neill, J. (2001). *Building shared responsibility for student learning.* Alexandria, VA: ASCD.

Creswell, J. W., & Shope, R. (2006). *EDPS 900K Course Packet* (PowerPoint slides). Lincoln, NE.

Davidson, F. D. (2005). *Superintendent and principal perceptions of superintendent instructional leadership practices in improving school districts*. Doctoral dissertation, The University of Arizona. Retrieved March 25, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 3159881).

DuBois, L. A. (2007). *No child left behind who's accountable?* (Vol. 76, No. 1, pp. 14-20). Nashville, TN: The Peabody Reflector, Office of Advancement Communications.

Dufour, R. (2007). In praise of top-down leadership. *The School Administrator, 64*(10), 38-42.

Edwards, C. A. (2006). *An analysis of the relationship of superintendent instructional leadership behaviors and district performance outcomes.* Doctoral dissertation,

Tarleton State University, Texas. Retrieved March 25, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 3259616).

Forsyth, J., & Turner, J. (2004). *Does district leadership really matter?* Arlington, VA: Educational Research Service.

Fullan, M. (2004). *Leading in culture of change.* San Francisco, CA: Jossey-Bass.

Fullan, M. (2006). *Turnaround leadership.* San Francisco, CA: Jossey-Bass.

Fullan, M., Hill, P., & Crevola, C. (2006). *Breakthrough.* Thousand Oaks, CA: Corwin.

Garmston, R., & Wellman, B. (2002). *The adaptive school developing and facilitating collaborative groups.* El Dorado Hills, CA: Four Hats Seminars.

Glanz, J. (2002). *Finding your leadership style: A guide for educators.* Alexandria, VA: ASCD.

Houston, P. D. (2007). *From custodian to conductor*. Retrieved October 10, 2008, from http://www.aasa.org/publications/saarticledetail.cfm?ItemNumber=8437

Improving Data Quality for Title I Standards, Assessments, and Accountability Reporting. (2006). Retrieved January 15, 2008, from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1b/f3/e8.pdf

Killion, J. (2002a). *What works in the elementary school results-based staff development?* Oxford, OH: National Staff Development Council.

Killion, J. (2002b). *What works in the high school results-based staff development?* Oxford, OH: National Staff Development Council.

Kowalski, T. J. (2006). *The school superintendent: Theory, practice, and cases*. Thousand Oaks, CA: Sage.

Lingstrom, P., & Speck, M. (2004). *The principal as professional development leader: Building capacity for improving student achievement.* Thousand Oaks, CA: Corwin.

Marx, G. (2006). *An overview of sixteen trends, their profound impact on our future: Implications for students, education, communities, and the whole of society.* Alexandria, VA: Educational Research Service.

Marzano, R., Pickering, D., & Pollock, D. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement.* Alexandria, VA: ASCD.

Marzano, R., & Waters, T. (2006). *School district leadership that works: The effect of superintendent leadership on student achievement.* Retrieved January 15, 2008, from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/27/f6/04.pdf

Marzano, R., & Waters, T. (2007). The primacy of superintendent leadership. *The School Administrator, 64*(3), 10-16.

National Study of School Evaluation. (2003). *System-wide improvement: Focusing on student learning.* Schaumburg, IL: Author.

National Study of School Evaluation. (2005). *Breakthrough school improvement.* Schaumburg, IL: Author.

Nebraska Department of Education Accreditation & School Improvement. (n.d.). Retrieved January 15, 2008, from http://www.nde.state.ne.us/APAC/SchoolImprovement2.htm

Nebraska Department of Education Statewide Assessments. Retrieved January 15, 2008, from http://www.nde.state.ne.us/stars/index.html

Nebraska Framework for School Improvement - A Guide to Continuous Improvement in Nebraska Schools (The). (n.d.). Retrieved January 15, 2008, from http://www.nde.state.ne.us/APAC/Pub/FRAMEWORK2006.pdf

Reeves, D. (2002). *The leader's guide to standards: A blue print for educational equity and excellence.* San Francisco, CA: Jossey-Bass.

Riverbark, B., & Wheeler, J. (2008, Spring). Craven County Schools' approach to system thinking . . . A natural fit with the accreditation process. *The AdvancED Source Newsletter*. Retrieved August 5, 2008, from https://www.ncacasi.org/about_us/news/advanced_source/docs/advanced_source_newsletter_2008_spring.pdf

SACS CASI. (2008, Winter). *The AdvancED source.* Decatur, GA: Author.

School-based Teacher-led Assessment and Reporting Systems. (2006, June). Retrieved August 20, 2008, from http://www.nde.state.ne.us/assessment/documents/STARSbooklet.2006.pdf

Thompson, M. M. (1997). *The leadership of a superintendent: Purposefully moving the school district toward a vision of improved teaching and learning*. Doctoral dissertation, University of Northern Colorado. Retrieved March 25, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 9729079).

Whitaker, T. (2003). *What great principals do differently – fifteen things that matter most.* Larchmont, NY: Eye on Education.

Appendix A

Survey Letters and Instrument

Pre-Survey Letter

October 23, 2009

Dear Nebraska Superintendent:

My name is Michael Sieh and I am the Superintendent of the Stanton Community Schools. I am currently enrolled in the Doctoral Program at the University of Nebraska at Lincoln. My dissertation titled *Examining the Relationships Between Superintendents' Perceptions of Their Involvement within School Improvement and Factors that May Affect Their Involvement* focuses on the degree of involvement of Nebraska Superintendents with regard to all phases of the school improvement process.

Tomorrow, you will receive via an email a request to fill out a brief on-line questionnaire concerning your involvement in the school improvement process. Your answers will provide the necessary data for my research study. This study could also aid the Nebraska Department of Education in planning future school improvement professional development opportunities.

I am writing in advance because I know people like to know ahead of time that they will be contacted. Thank you for your time and consideration. It's only with the generous help of people like you that research can be successful.

Sincerely,

Michael J. Sieh
Superintendent
Stanton Community Schools
PO Box 749
Stanton, NE 68779
(402) 439-2233
msieh@esu8.org

Survey Letter

STANTON COMMUNITY SCHOOLS

1007 KINGWOOD P.O. BOX 749 STANTON, NE 68779
402-439-2250 FAX 402-439-2270

March 24, 2009

IRB#2009029623 EX

Dear Nebraska Superintendent:

My name is Michael Sieh and I am the Superintendent of the Stanton Community Schools. I currently am enrolled in the Doctoral Program at the University of Nebraska at Lincoln. My dissertation titled *Examining the Relationships Between Superintendents' Perceptions of Their Involvement within School Improvement and Factors that May Affect Their Involvement* focuses on the degree of involvement of Nebraska Superintendents with regard to all phases of the school improvement process.

You are being asked to complete an on-line questionnaire concerning your involvement in the school improvement process. Your answers will provide the necessary data for my research study. Information gathered from this study will be shared with the Nebraska Department of Education and could be useful in determining future professional development opportunities for Superintendents. You also can rest assured that all responses will be kept confidential and there are no known risks involved. This will take about 20 minutes to complete.

You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. Please call the investigator at any time, office phone, (402) 439-2233, or after hours (402) 439-2385; or email the investigator at msieh@esu8.org. Also, please contact the investigator if you want to voice concerns or complaints about the research, or in the event of a research related injury.

Please contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965 for the following reasons: you wish to talk to someone other than the research staff to obtain answers to questions about your rights as a research participant; to voice concerns or complaints about the research, or to provide input concerning the research process; or in the event the study staff could not be reached.

You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the investigator or with the University of Nebraska-Lincoln. Your completion of the survey will signify your consent to participate in the study after having read and understand the information presented above. Please keep a copy of this email for your records. To access the questionnaire, please click on the link below and follow the directions.

Sincerely,

Michael J. Sieh
Superintendent
Stanton Community Schools
PO Box 749
Stanton, NE 68779
(402) 439-2233
msieh@esu8.org

Dr. Donald Uerling
University of Nebraska-Lincoln
134 TEAC
University of Nebraska-Lincoln
Lincoln, NE 68588-0360
(402) 472-0970
duerling1@unl.edu

Survey Instrument

DIRECTIONS:
This questionnaire is designed to determine the degree of involvement of Nebraska Superintendents for each phase of the school improvement process. Select the choice that best describes your participation.

The Leadership Role – Who and What

1. In establishing and working with a steering committee composed of representative stakeholders of the district for the school improvement process, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

2. In building understanding and commitment to the purpose and process of school improvement which includes developing a timeline and revising the mission statement, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

Creating the Profile

3. In determining the type of data to include within the school profile, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

4. In disaggregating the results of student performance and school effectiveness data according to my district's student sub-groups, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

5. In communicating the results of student performance and school effectiveness data to all stakeholders, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

Setting the Goals

6. In targeting and prioritizing the areas of need for the district's school improvement plan, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

7. In determining and writing quality school improvement goals, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

8. In researching effective practices for the district's school improvement goals, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

Planning to Improve

9. In developing school improvement action plan strategies, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

10. In identifying and recommending support activities that will help all staff implement the strategies and interventions, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

11. In writing an action plan that specifies who will be responsible to assure the tasks are completed, the resources needed, the target dates for completion, professional development needs, and when and how the progress will be measured and evaluated, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

12. In establishing baseline/post-intervention evaluation data, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

Implementing the Plan

13. In helping all staff develop an understanding of the goals and strategies, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

14. In monitoring the implementation of the action plan to ensure the desired results, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

Evaluating the Effectiveness of the Plan

15. In determining effectiveness of the interventions on student performances, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

16. In recognizing progress of the plan, and affirming success to stakeholders, I

    a) Led and facilitated the process.
    b) Delegated the leadership of the process, but was a participant of the process and fully aware of all activities.
    c) Delegated the leadership of the process, but was only somewhat of a participant within the process.
    d) Delegated the entire process to someone else in the district.

Role of the Superintendent

17. Rank order your roles as Superintendent, with one being the highest and six being the lowest. (Please rank order all roles.)

    _____ Providing educational leadership to the school district
    _____ Ensuring quality staff relations
    _____ Providing community leadership
    _____ Maintaining a working relationship with the Board of Education
    _____ Providing financial direction
    _____ Managing of facilities, grounds, and equipment

18. Rank order your involvement in each phase of the school improvement process, with one being the highest and six being the lowest. (Please rank order all roles.)

    _____ Building understanding and commitment to the purpose and process of school improvement including establishing committees and timeline
    _____ Creating and maintaining the district's profile including gathering, disaggregating, and analyzing the data
    _____ Determining and establishing the school improvement goal as targeted by the data
    _____ Developing an action plan that contains research-based strategies
    _____ Overseeing the implementation of the school improvement action plan
    _____ Recognizing the progress of the plan and affirming the success to all stakeholders

Additional School Improvement Information

19. What formal training have you had on the school improvement process?

    0 No Training
    0 Attended training facilitated only by the Nebraska Department of Education
    0 Attended training facilitated only by a Region Accreditation Institution
    0 Attended trainings facilitated by both the Nebraska Department of Education and a Region Accreditation Institution

20. Did any of your advanced degrees focus on curriculum, assessments, and/or instruction?

    0 Yes
    0 No

21. Did any of your advanced degrees focus on school improvement and/or accountability?

    0 Yes
    0 No

22. How many schools do you serve as the School Improvement External Team Leader?

    0 0
    0 1
    0 2
    0 3
    0 4 or more

23. How many schools do you serve on the School Improvement External Review Team?

    0 0
    0 1
    0 2
    0 3
    0 4 or more

24. What was your school's September 2008 K-12 fall enrollment? (select only one)

    0 1-300
    0 301-600
    0 601-900
    0 901-1,200
    0 1,201-2,500
    0 2,501-10,000
    0 More than 10,000

25. How many years, including the 2008-2009 school year, have you served in education?

    0 1-5
    0 6-10
    0 11-15
    0 16-20
    0 21-25
    0 26 or more

26. How many years, including the 2008-2009 school year, have you served as a superintendent?

    0 1-5
    0 6-10
    0 11-15
    0 16-20
    0 21-25
    0 26 or more

Post Survey Letter

March 29, 2009

Dear Nebraska Superintendent:

My name is Michael Sieh and I am the Superintendent of the Stanton Community Schools. I am currently enrolled in the Doctoral Program at the University of Nebraska at Lincoln. My dissertation titled *Examining the Relationships Between Superintendents' Perceptions of Their Involvement within School Improvement and Factors that May Affect Their Involvement* focuses on the degree of involvement of Nebraska Superintendents with regard to all phases of the school improvement process.

Last week, I emailed you an on-line questionnaire seeking your input regarding your degree of involvement in all phases of the school improvement. Because the study focused on Nebraska Superintendent, you were selected.

If you have already completed the on-line questionnaire, please accept my sincere thanks. If not, please do so today. I am especially grateful for your help because with this information, all Nebraska schools will benefit by future school improvement professional development opportunities that focus on our areas of need.

To access the on-line questionnaire, please click on the link below and follow the directions.

Sincerely,

Michael J. Sieh
Superintendent
Stanton Community Schools
PO Box 749
Stanton, NE 68779
(402) 439-2233
msieh@esu8.org

Post Survey First Stronger Letter

April 5, 2009

Dear Nebraska Superintendent:

My name is Michael Sieh and I am the Superintendent of the Stanton Community Schools. I am currently enrolled in the Doctoral Program at the University of Nebraska at Lincoln. My dissertation titled *Examining the Relationships Between Superintendents' Perceptions of Their Involvement within School Improvement and Factors that May Affect Their Involvement* focuses on the degree of involvement of Nebraska Superintendents with regard to all phases of the school improvement process.

About two weeks ago, I sent you via an email an on-line questionnaire concerning your involvement in the school improvement process. To the best of my knowledge, it has not been returned.

I am especially grateful for your help because with this information, all Nebraska schools will benefit by future school improvement professional development opportunities that focus on our areas of need. The results of others have been very informative concerning the degree of involvement of Nebraska Superintendents with regard to all phases of the school improvement process.

I hope that you will complete the on-line questionnaire soon. Again, to access the on-line questionnaire, please click on the link below and follow the directions.

Sincerely,

Michael J. Sieh
Superintendent
Stanton Community Schools
PO Box 749
Stanton, NE 68779
(402) 439-2233
msieh@esu8.org

Post Survey Second Stronger Letter

April 9, 2009

Dear Nebraska Superintendent:

My name is Michael Sieh and I am the Superintendent of the Stanton Community Schools. I am currently enrolled in the Doctoral Program at the University of Nebraska at Lincoln. My dissertation titled *Examining the Relationships Between Superintendents' Perceptions of Their Involvement within School Improvement and Factors that May Affect Their Involvement* focuses on the degree of involvement of Nebraska Superintendents with regard to all phases of the school improvement process.

About eighteen days ago, I sent you via an email an on-line questionnaire concerning your involvement in the school improvement process. To the best of my knowledge, it has not been returned yet.

The results of others have been very informative concerning the degree of involvement of Nebraska Superintendents with regard to all phases of the school improvement process. I believe the results are going to be very useful to Nebraska Superintendents and the future of the school improvement process.

I hope that you will sincerely consider completing the on-line questionnaire within the next three days for the timeline for completing the survey will expire. Again, to access the on-line questionnaire, please click on the link below and follow the directions.

Sincerely,

Michael J. Sieh
Superintendent
Stanton Community Schools
PO Box 749
Stanton, NE 68779
(402) 439-2233
msieh@esu8.org

Appendix B

Institutional Review Board Approval

University of Nebraska Lincoln

February 17, 2009

Michael Sieh
Department of Educational Administration
56452 836 1/2 Rd Stanton, NE 68779

Donald Uerling
Department of Educational Administration
134 TEAC UNL 68588-0360

IRB Number: 2009029623 EX
Project ID: 9623
Project Title: EXAMINIG THE RELATIONSHIPS BETWEEN SUPERINTENDENTS' PERCEPTIONS OF THEIR INVOLVEMENT WITHIN SCHOOL IMPROVEMENT AND FACTORS THAT MAY AFFECT THEIR INVOLVEMENT

Dear Michael:

This letter is to officially notify you of the approval of your project by the Institutional Review Board (IRB) for the Protection of Human Subjects. It is the Board's opinion that you have provided adequate safeguards for the rights and welfare of the participants in this study based on the information provided. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46) and has been classified as exempt.

You are authorized to implement this study as of the Date of Final Approval: 02/17/2009. This approval is Valid Until: 02/16/2010.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:
• Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
• Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
• Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
• Any breach in confidentiality or compromise in data privacy related to the subject or others; or
• Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

This project should be conducted in full accordance with all applicable sections of the IRB Guidelines and you should notify the IRB immediately of any proposed changes that may affect the exempt status of your research project. You should report any unanticipated problems involving risks to the participants or others to the Board. For projects which continue beyond one year from the starting date, the IRB will request continuing review and update of the research project. Your study will be due for continuing review as indicated above. The investigator must also advise the Board when this study is finished or discontinued by completing the enclosed Protocol Final Report form and returning it to the Institutional Review Board.

If you have any questions, please contact the IRB office at 472-6965.

Sincerely,

Mario Scalora, Ph.D.
Chair for the IRB