THE PERCEPTIONS OF HIGH SCHOOL ADMINISTRATORS AND SUPERINTENDENTS REGARDING SPECIFIC ASPECTS OF THE PROCESS OF CONTINUOUS IMPROVEMENT

by

Sandra J. DiBacco-Tusinac

Submitted in Partial Fulfillment of the Requirements for the Degree of EdD in the Educational Administration Program

SCHOOL OF GRADUATE STUDIES
YOUNGSTOWN STATE UNIVERSITY
May, 2000
The Perceptions Of High School Administrators and Superintendents

Regarding Specific Aspects Of The Process Of

Continuous Improvement

Sandra J. DiBacco-Tusinac

I hereby release this dissertation to the public. I understand this dissertation will be housed at the Circulation Desk of the University library and will be available for public access. I, also, authorize the University or other individuals to make copies of this dissertation as needed for scholarly research.

Signature:

Sandra J. DiBacco-Tusinac  
Student  
5-16-00  
Date

Approvals:

Lisa Wess

Dissertation Advisor  
May 16, 2000  
Date

Committee Member  
May 16, 2000  
Date

Denise A. McRae

Committee Member  
May 16, 2000  
Date

Committee Member  
May 16, 2000  
Date

Dean of Graduate Studies  
June 8, 2000  
Date
ABSTRACT

The continuous improvement process has become important to all Ohio School districts as a result of Senate Bill 55 which was enacted to make schools accountable for the quality outcomes of students. This doctoral study investigated the perceptions of high school principals and superintendents regarding specific aspects of continuous improvement: a viable mission statement, the principal’s leadership role and philosophy, the change process, the use of collaborative decision-making, and methods of collecting and disseminating data.

Data were collected by using a quantitative survey. To triangulate the data, an unsuccessful attempt was made to schedule focus groups to obtain data for qualitative research. As an alternative, a questionnaire was sent electronically to all the superintendents and principals who participated in the quantitative survey.

Based on the results of the study, the principals and superintendents appear to be aware of the continuous improvement process. The data indicated, there was little consistency in the perceptions of all the specific aspects of continuous improvement, indicating a potential fragmentation in the implementation of the process. Comparisons of perceptions of the district superintendent and the respective principal were made to determine if the perceptions of the key administrators were the same. Many of these comparisons indicated discrepancies. Overall, the results indicate districts are engaged in the continuous improvement process; however, there seems to be a lack of integration of the specific aspects of continuous improvement identified in this study.
ACKNOWLEDGMENTS

Sincere appreciation is expressed to the researcher’s committee members, especially the doctoral committee chair, Dr. Linda Wesson, for their expertise and support. A special thanks to Dr. Denise DaRos for sharing her qualitative research expertise.

The researcher is grateful to have had a circle of friends and colleagues who constantly encouraged her throughout her doctoral support. Special appreciation to the family of the researcher, especially her father, Sam DiBacco for always encouraging the researcher to further her education. A special thank-you to her husband, Larry Tusinac, for his unconditional patience and love.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th>viii</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHAPTER</strong></td>
<td></td>
</tr>
<tr>
<td>1. THE PROBLEM</td>
<td>1</td>
</tr>
<tr>
<td>- Introduction</td>
<td>1</td>
</tr>
<tr>
<td>- Statement of the Problem</td>
<td>4</td>
</tr>
<tr>
<td>- Purpose of the Study</td>
<td>5</td>
</tr>
<tr>
<td>- Significance of the Study</td>
<td>6</td>
</tr>
<tr>
<td>- Limitations and Delimitations</td>
<td>7</td>
</tr>
<tr>
<td>- Definitions</td>
<td>7</td>
</tr>
<tr>
<td>2. REVIEW OF THE LITERATURE</td>
<td>9</td>
</tr>
<tr>
<td>- Introduction</td>
<td>9</td>
</tr>
<tr>
<td>- The Bureaucratic School</td>
<td>9</td>
</tr>
<tr>
<td>- School Culture</td>
<td>11</td>
</tr>
<tr>
<td>- The Need for Change</td>
<td>13</td>
</tr>
<tr>
<td>- Total Quality Management as a Foundation for Continuous Improvement</td>
<td>16</td>
</tr>
<tr>
<td>- Education and Deming’s Fourteen Points</td>
<td>19</td>
</tr>
<tr>
<td>- Theory and Practice</td>
<td>26</td>
</tr>
<tr>
<td>- The Change Process</td>
<td>27</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Implications and Recommendations for Further Study</td>
<td>88</td>
</tr>
<tr>
<td>REFERENCE LIST</td>
<td>91</td>
</tr>
<tr>
<td>APPENDIXES</td>
<td>98</td>
</tr>
<tr>
<td>A. Senate Bill 55</td>
<td>98</td>
</tr>
<tr>
<td>B. Human Subjects Review Letter</td>
<td>100</td>
</tr>
<tr>
<td>C. Survey for Principals</td>
<td>101</td>
</tr>
<tr>
<td>D. Survey Superintendents</td>
<td>104</td>
</tr>
<tr>
<td>E. Gender Tables</td>
<td>107</td>
</tr>
<tr>
<td>F. Administrative Experience of Principals and Superintendents</td>
<td>108</td>
</tr>
<tr>
<td>G. Education</td>
<td>109</td>
</tr>
<tr>
<td>H. District Demographics</td>
<td>110</td>
</tr>
<tr>
<td>I. Qualitative Questions</td>
<td>111</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLES</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Individual Responses of Superintendents and Principals Regarding Change</td>
<td>63</td>
</tr>
<tr>
<td>2. Summary of Paired Leaders Regarding Change</td>
<td>63</td>
</tr>
<tr>
<td>3. Individual Responses of Superintendents and Principals Regarding the Principal as a Change Agent</td>
<td>64</td>
</tr>
<tr>
<td>4. Summary of Paired Leaders Regarding the Principal as a Change Agent</td>
<td>64</td>
</tr>
<tr>
<td>5. Individual Responses of Superintendents and Principals Regarding the Mission Statement</td>
<td>65</td>
</tr>
<tr>
<td>6. Summary of Paired Leaders Regarding Whether a School Should Have a Mission Statement</td>
<td>66</td>
</tr>
<tr>
<td>7. Individual Responses of Superintendents and Principals Regarding Specific Aspects of Continuous Improvement</td>
<td>66</td>
</tr>
<tr>
<td>8. Summary of Paired Leaders Regarding Specific Aspects of Continuous Improvement</td>
<td>67</td>
</tr>
<tr>
<td>9. Individual Responses of Superintendents and Principals Regarding School Culture</td>
<td>68</td>
</tr>
<tr>
<td>10. Summary of Paired Leaders Regarding School Culture</td>
<td>68</td>
</tr>
<tr>
<td>11. Individual Responses of Superintendents and Principals Regarding the Role of the Principal</td>
<td>69</td>
</tr>
<tr>
<td>12. Individual Responses of Superintendents and Principals Regarding Leadership Philosophy</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Title</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>13.</td>
<td>Summary of Paired Leaders Regarding the Role of the Principal and Leadership Philosophy</td>
</tr>
<tr>
<td>14.</td>
<td>Comparisons of Individual Superintendent’s Responses Regarding Leadership Philosophy and the Role of the Leader</td>
</tr>
<tr>
<td>15.</td>
<td>Comparisons of Individual Principal’s Responses Regarding Leadership Philosophy and the Role of the Leader</td>
</tr>
<tr>
<td>16.</td>
<td>Individual Responses of Superintendents and Principals Regarding Collaborative Decision-Making</td>
</tr>
<tr>
<td>17.</td>
<td>Individual Responses of Superintendents and Principals Regarding Sharing Data With Staff</td>
</tr>
<tr>
<td>18.</td>
<td>Summary of Paired Leaders Regarding Collaborative Decision-Making and Sharing Data With Staff</td>
</tr>
</tbody>
</table>
CHAPTER 1

THE PROBLEM

Introduction

The United States has changed dramatically from an agrarian economy, to an industrial economy, to a service and information oriented economy. Frederick Taylor and scientific management marked the industrial age, characterized by a bureaucratic structure of governance. As the economy changed, business and industry recognized the need to move from Taylorism to a system that would facilitate change and incorporate a process that would allow the organization to maintain effectiveness (achievement of goals) and efficiency (cost-effective use of resources), achieve quality outcomes, and maintain a competitive edge (Pinchot & Pinchot, 1993).

Schools, like businesses and industries, have been modeled after Frederick Taylor’s industrial management model: a hierarchical structure (Pinchot & Pinchot, 1993). As businesses and industries have changed in this country, schools have remained unchanged, though the public has voiced its discontent with the educational system. Outcries for quality education from town halls, to state capitals, to Washington, D.C., have created a constant demand for change in the educational system. There has been a new reform movement each decade since the 1960s. The 60s called for the New Progressive Era, the 70s called for School Effectiveness Studies, and the 80s called for School Reform (Bailey, 1992). According to Bailey (1992), these movements each focused on a particular concern, none addressing the problems of the 90s such as demographic changes, new federal and state demands, increased community expectations,
fiscal crises, collective bargaining, a decrease in the number of quality teachers, and a sense of declining efficiency. Bailey (1992) suggests that most of the movements did not focus on systemic change or on a process to change that would affect the effectiveness and the efficiency of how schools are managed and led. Fullan (1991), Bailey (1992), Pinchot and Pinchot (1993), Bradley (1993), and Payzant and Gardner (1994) suggest that these reform movements have not worked. Freeston (1993) points out “We (educators) are the victims of our own scattered and disjointed attempts to change.” Typically, schools take a year-to-year approach to planning, which is very short range. Consequently, the result is not improvement but closure (Freeston, 1993).

Historically, public schools have been monopolistic (Bailey, 1992). The average American family sent its children to the local public schools. Private schools were a luxury available only to the wealthy. One of the current reform movements, Public Schools by Choice, was initiated in 1989 at a national invitational conference in Minnesota attended by educators from thirty-eight states (Bailey, 1991). School choice applies the principles of free enterprise and competition. Public school by choice eliminates the geographic boundaries of a school district. Enrollment in a particular school is no longer dependent upon where a child lives but what school the parent or guardian chooses for the child (Fullan, 1991; Geiger, 1998; Moredock, 1998; Nathan & Rothstein, 1998). Initially, the choice movement did not make a strong impact on schools. However, approaching the twenty-first century, choice is gaining momentum, along with charter schools and privatization of schools. Charter schools are independent, results-oriented, publicly funded schools. These schools are run by teachers or others under
contract with a public sponsor. A charter school, similar to a private school, has independence with free-market accountability. However, charter schools, unlike private schools, cannot screen students, charge tuition, or have a religious force (Buehler, 1997; Corwin, 1999; Finn & Manno, 1998; Lewis, 1999; Snow, 1999). The major differences between a charter school and a private school are funding mechanisms and profit status. Private schools are not publicly funded and may be for-profit. As previously stated, private schools may screen students, may charge tuition, and may have a religious force. These alternatives - public school by choice, charter schools, and privatization of schools - respond to the demands of the twenty-first century: increased accountability, increased efficiency, shared decision-making, the need for professionalism, and the need for structural change (Bailey, 1992).

Glasser (1992) suggests that with competition as a variable, it is critical that public schools respond to the demands of the customer by ensuring a quality product. Quality must be planned and marketed. It is dynamic (Deming, 1986). To respond to competition and ensure quality, there are many (Blankstein, 1996; Bonstingl, 1993; Bradley, 1993; Deming, 1986; Glasser, 1992; Perry & Quaglia, 1994) who believe that a process of continuous improvement needs to be implemented in public schools. According to Deming (1986), to maintain quality, a process of continuous improvement must be implemented. Glasser (1992) supports Deming by suggesting that quality cannot survive in a traditional bureaucratic structure based on antiquated management theories and concepts.

The focus of the secondary level of public schools is preparing students to make
either a school-to-work or school-to-post-secondary school transition. These transitions move the student from the public school system into a world that among many things, focuses on quality (Deming, 1986). As the instructional leader of the school, the building administrator plays a critical role in ensuring the resources are available to prepare the students to make these successful transitions. Ohio has placed demands for quality education through Senate Bill 55. Senate Bill 55 was enacted to make schools accountable for the quality outcomes of the students. It mandates a local report card that is based on quality standards set for each school district including results of the Ohio Proficiency Tests, attendance, and graduation rates. In addition to the local report card, Senate Bill 55 raises the standards by increasing the requirements for obtaining a high school diploma. These standards are intended to raise not only the number of requirements but the quality of the requirements as well. Based on these standards, Senate Bill 55 addresses the need for schools to engage in a continuous improvement process.

Statement of the Problem

The problem of this study is to determine how key school administrators - superintendents and high school principals- perceive change as it is defined by specific aspects of continuous improvement. A survey questionnaire of secondary school principals and their superintendents will be conducted. The survey will provide information indicating the perceptions of the administrators regarding the specific aspects of the continuous improvement process and how these specific aspects affect systemic change and school improvement in their districts. In order to triangulate the data, focus
groups will be schedule with the superintendents and high school principals will be conducted to provide data for qualitative research.

Continuous improvement requires visionary leaders who are willing and able to move to a new method of leading and become the catalysts for change (Colon, 1994; Gainey, 1994; Glasser, 1992; Greenfield, 1995; Peterson & Solsrud, 1996; Pigford, 1995). This movement poses a dramatic change for the school administrator, usually the building principal. Colon (1994) suggests school administrators, traditionally, have been the “keepers of the keys.” Their basic charge was the daily operation of the school building. Using continuous improvement as a catalyst for change requires that administrators step out of the traditional practices of managing under a bureaucratic structure (Bradley, 1993).

The survey is designed to determine the perceptions of the superintendents and high school principals regarding specific aspects of continuous improvement. The specific aspects of continuous improvement and change identified in this study are a viable mission statement, the principal’s leadership role and philosophy, an understanding of the change process, the use of collaboration in decision-making, and methods of collecting and disseminating data.

**Purpose of the Study**

The intent of this dissertation study is to explore the perceptions of superintendents and high school principals regarding these specific aspects of continuous improvement as restricted in this study. The following questions will be addressed:

1. How do administrators view change and the change process?
2. How do administrators perceive the specific aspects of continuous improvement identified in this study: a viable mission statement, the principal’s leadership role and philosophy, an understanding of the change process, the use of collaboration in decision-making, and methods of collecting and disseminating data?

**Significance of the Study**

Understanding the concept of change is not easy. According to the literature, striving for quality requires a paradigm shift, a change in the basic conceptual framework in which many school administrators have been trained (Bradley, 1993; Fullan, 1991; Holt, 1993; Williams, 1994). Although continuous improvement concepts used by business have rarely been applied to schools because of the perceived differences between schools and businesses, a review of the literature indicates that the same specific concepts—a mission statement, collaborative decision-making, data analysis, facilitative leadership, and cultural change—are applicable to schools. Bradley (1993), Bond and Woodall (1993), Bonstingl (1993), and Blankstein (1996) make comparisons between schools and businesses. These comparisons are discussed in Chapter 2. Key administrators were surveyed to see how they perceived specific aspects of continuous improvement that are applicable for school improvement.

The results provide information relevant to principals, locally and statewide, that clarify how the key administrators perceive the specific aspects of continuous improvement relative to school improvement. In addition, the results provide superintendents and high school principals with useful information which may be used to determine areas of professional development.
Limitations and Delimitations

A survey was sent to superintendents and secondary principals. The limitations of the study were those common to any survey research: respondents’ willingness to express their feelings, respondents’ understanding of the questions, and respondents’ desire to maintain anonymity (Jaeger, 1988). The same limitations were applicable to the electronic surveys and would have been applicable to the focus groups.

The study was delimited to superintendents and secondary public school building administrators in northeastern Ohio. Northeastern Ohio was defined to include Ashtabula, Trumbull, Mahoning, and Columbiana counties. The study was delimited to the specific common aspects of continuous improvement identified by the researcher.

Definition of Terms

The following definition of terms are used in this study. These definitions come from the continuous improvement literature.

Quality - Knowing what to do and doing it best (Deming 1986). The best that everyone in an organization can achieve, both separately and collectively (Glasser, 1992).

Quality management - A holistic theory of management based on fourteen points for improvement of quality and productivity (Deming 1986).

Continuous improvement - Constantly looking for ways to improve and simplify the processes in an organization in order to maintain quality (Deming, 1986). A process of examining “what is” and comparing it to “what ought to be” (Bramson & Buckner, 1995).
Primary customer - The student and the parent (Daugherty, 1996; Glasser, 1992).

Facilitator - A change maker, a leader, often in school settings the building principal (Chamley, Caprio, & Young, 1994; Gainey, 1994; Glasser, 1992).
CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

This chapter reviews the literature regarding the application of continuous improvement to schools. It begins with a discussion of the bureaucratic school, the current structure of most school districts. The literature illustrates that the bureaucratic structure worked when the United States was a leader in industrial production. In the 21st century, however, there are some who find the fast pace of social and economic changes has made the bureaucratic structure ineffective (Bailey, 1992; Bradley, 1993; Payzant & Gardner, 1994; Pinchot & Pinchot, 1993). The literature review traces the use of continuous quality improvement as a means for systemic change. As part of the review the following topics are discussed because of their relevance to continuous improvement in schools: school culture, the need for change, the philosophy and foundation of Deming’s total quality management and continuous improvement, the change process, restructuring schools, the application of continuous quality improvement to schools, and leadership.

The Bureaucratic School

Traditionally, a centralized bureaucracy has governed schools. A bureaucratic structure focuses on specialization, uniformity through standards and procedures, and a hierarchal chain of command. The bureaucratic structure was useful when the goals of education were to teach obedience, punctuality, and the ability to sit and do repetitive work (Pinchot & Pinchot, 1993). According to Payzant and Gardner (1994), demographic
changes brought on by society, the economy, politics, and the environment have caused people to consider different ways to look at governing schools. Poverty is now the single most important factor in why children do not do well in school (Payzant & Gardener, 1994). In 1991, 14.3 million, or one of every four children, was poor, four million more than in 1979. From 1980 to 1991, the number of single-parent homes increased from eleven million to thirteen million (Payzant & Gardener, 1994). Crawford, Bodine, & Hoglund (1993) suggest these dramatic statistics, coupled with problems of child abuse, drugs, and crime, have altered the responsibilities of the educational system. Obedience, punctuality, and the ability to sit and do repetitive work will not prepare children to compete in a global economy (Pinchot & Pinchot, 1993). The 21st century requires a work force capable of creative problem solving and flexibility (Crawford, Bodine, & Hoglund, 1993).

Glickman (1992) suggests the bureaucratic structure emphasizes standards and short term outcomes, ignoring the teaching and learning process. For example, if improved test scores are the desired outcomes, practicing for the test through rote learning becomes the method for achieving the outcome. Learning and teaching activities that assist students in developing a thinking process are ignored. Teachers are forced to become number or score counters. This practice is analogous to executives whose only concern is outcomes and profits and not quality (Holt, 1993).

Many authors (Bailey, 1992; Bradley, 1993; Crawford et al., 1993; Holt, 1993) state that another problem of a bureaucracy is its inability to bring about change in schools. Currently, schools are functionally oriented and very structured. A child enters
kindergarten at approximately age five. After 180 days of school, the child is promoted to the first grade provided he/she completed all of the kindergarten competencies. This structure assumes that all children learn the same way and will master skills at the same rate, which is contrary to the knowledge that human growth and development is even. The bureaucratic structure promotes uniformity, ignoring the varying needs of today’s heterogeneous population (Crawford et al., 1993).

School Culture

Changing the bureaucratic structure requires a change in culture. A culture is the basic assumptions, patterns of belief, and expectations of an organization (Alley, 1997). Culture is the shared values, rules, and ideology of an organization (Alley, 1997). Simply, culture is the way the organization does things, what it represents, and what it shares with the world. The culture of a school is the foundation for school improvement (Sapher & King, 1995). Sapher and King (1995) suggest an academically effective school is distinguished by its culture, and schools cannot improve unless the culture changes. According to Sapher and King (1995), culture is often the barrier to change. Alley (1997) theorizes cultural change is dramatic for people because it involves new roles and expectations. When a culture changes, the behaviors of people in the organization change (Alley, 1997).

According to Sapher and King (1995), culture should be a clear, articulated vision of what the school represents. It is a vision that embodies core values and purposes. They (Sapher & King, 1995) propose there are twelve norms of school culture: collegiality, experimentation, high expectations, trust and confidence, tangible support, reaching out
to the knowledge bases, appreciation and recognition, caring, celebration and humor, involvement in decision-making, protection of what is important, traditions, and honest, open communication. As a new culture evolves within a school, it is important that a mission or vision of what the school hopes to represent and achieve is developed. Glickman (1992) writes, “In order for a school to be successful, it must be a community of professionals working toward a common vision of teaching and learning” (p. 25). Glickman (1992) asked a cross section of educators and community and business leaders, “What should learning look like in an optimal educational environment?” Based on the answers, he outlined the following elements: Learning should be an active process that is both an individual and cooperative venture. It should be goal-oriented and connected to the real world, yet personalized. Learning should occur in a comfortable and attractive physical environment with an atmosphere of support and respect (Glickman, 1992). This kind of vision of teaching and learning is difficult in a bureaucratic model.

Many (Bradley, 1993; Glickman, 1992; Sapher & King, 1995) see shared decision-making as a major component of this kind of culture. Shared decision-making allows all stakeholders, administrators, teachers, students, and community members, to take ownership of the vision. The process of shared decision-making becomes the foundation on which to restructure the current bureaucratic school governance structure (Bailey, 1992; Glickman, 1992). In a bureaucratic structure with the pyramid intact, decisions are made at the top and pass through the hierarchical chain of command. This structure with the power to make decisions only at the top, a rigid hierarchy of roles, and tightly structured procedures cannot dominate school governance in a culture based on a
shared vision of teaching and learning. The pyramid is the enemy of this kind of restructuring, causing dependency, which slows decision-making, bottlenecks communications, isolates individuals, encourages micro-management, depersonalizes higher levels of the pyramid, and creates goal displacement (Bailey, 1992; Bradley, 1993).

Bailey (1992), Pinchot and Pinchot (1993), and Bradley (1993) concur the pyramid is intact in traditionally governed bureaucratic schools. Bailey (1992) writes there is no dispersion of power to decide. The power to decide is in the hands of a few: the board of education and the superintendent. Depending on the power of the superintendent, the decision-making power may very well be in the hands of one. In the new culture with teaching and learning based on shared-decision-making as the foundation, the pyramid will flatten. According to Bradley (1993), as the pyramid flattens and restructuring begins using this focus, greater autonomy, accountability, and assessment throughout the school district will occur. The culture will change to one typified by shared decision-making, collaboration, and open communication.

The Need for Change

Gainey (1994) proposes the United States economy has moved from agrarian to industrial to informational and schools have basically stayed the same. The school bureaucracy has been systemically unchanged (Gainey, 1994; Pinchot & Pinchot, 1993), resulting in non-substantive changes. These non-substantive changes are illustrated by the first wave of educational reform in the 1980s as states responded to “A Nation At Risk” (Wirt & Kirst, 1992). The changes focused on higher standards for teachers and students
and lengthening instructional time by increasing the length of the school year and school day. Their failure can be attributed to two key elements: the lack of teacher support for the reform and a top-down prescriptive model (Holt, 1993).

Fullan (1991) proposes that American education is not getting worse. It is just not improving fast enough. Schools are not producing the educational results that are necessary for the current needs of this country. Fullan (1991) has proposed two perspectives on educational change. The first perspective, the fidelity approach, states that an innovation already exists and the task is to implement it faithfully as intended by its developers. A mutual adaption approach is the second perspective. This approach is evolutionary. Change is a result of adaptations and decisions taken by individual implementers as they work with new policies and programs. New programs are transformed and altered through implementation. Fullan (1991) concludes that the fidelity approach is what has been followed in education. A new reform is mandated by legislators and implemented by the schools. Fullan (1991) believes that these educational reforms have produced no substantive change, merely transitions from one reform to another. Bradley (1993) also states that excellence, reform, or improvements have been mandated by arbitrary measures determined by state and federal legislators. These measures include but are not limited to norm-referenced tests, attendance percentages, dropout rates, and other narrow instruments compared with the American educational aims (Bradley, 1993).

The second wave of education reform, school restructuring, follows Fullan’s mutual adaption approach. Bradley (1993) proposes school restructuring requires teacher
involvement and a cultural change. The premise of the second wave is to give individual schools the freedom to develop a vision that enables schools to decide the methods but not the purposes of education (Holt, 1993). As Holt (1993) points out, legislators continue to hold title to the purposes of education, and these eventually turn into standards. As legislators continue to legislate education through standards, the management of education remains in a hierarchical structure that does not allow schools to become autonomous. Restructuring, according to Holt (1993), can only be successful if a transformation, not a transition, is made from the current practice of restrictive freedom to a new model. Transformation requires continuous change in the way educators think and act, including culture, processes, and structures. Transformational change is necessary for continuous quality improvement (Herman & Herman, 1995). Herman & Herman (1995) believe that schools that transform through successful implementation of a continuous quality improvement process will realize many advantages: administration, employees, and customers focus on producing the highest educational quality services and products, there is a focus on improving each milestone’s quality, data collection and feedback are continual, internal and external stakeholders are involved in providing feedback, and formative and summative evaluations are used to determine the quality impact.

Bradley (1993) writes that education is in need of reform. The reforms need to bring about substantive change that is transformational and systemic (Bradley, 1993). Holtzman (1993) outlines five ways to understand the term systemic. Systemic means working with school systems to affect change, working with every school in a system,
working with every aspect of the school system, working systematically, and most importantly systemic means fundamental change. It seems systemic change involves a shift from a traditional educational system to one that emphasizes interconnectedness, active learning, shared decision-making, and higher levels of achievement for all students (Anderson, 1993). Based on the ideas of Holtzman (1993) and Anderson (1993), it appears that a system that reinforces local schools should emerge because of systemic change. The systemic change needs to focus on a process that will enable local schools to continually change to achieve quality. A process of quality management will help facilitate the change and ensure continuous improvement (Deming, 1986).

**Total Quality Management As a Foundation for Continuous Improvement**

Deming, Shewhart, and Juran initiated total quality management (TQM) in the 1950s (Summer, 1996). Total quality management is a management philosophy and operating methodology in which a structured and disciplined approach to identifying and solving problems is incorporated to ensure continuous improvement (Summer, 1996). There is no one approach to TQM. TQM has evolved, been refined, and matured for decades (Deming, 1986). Total quality management is a comprehensive process that requires continual change and improvement to maintain a quality organization with emphasis on teamwork (Deming, 1986). Total quality management examines inputs (what an organization uses), processes (what an organization does), products (what an organization produces), outputs (what an organization delivers), and outcomes (the consequences for external customers) (Kaufman, 1995). No matter what type of continuous quality improvement program is implemented in an organization, all quality
efforts have some basic features. The basic features of continuous quality improvement are a focus on customer requirements, a strategic effort to promote quality throughout the organization, and a commitment to quality (Kaufman, 1995).

Deming’s management philosophy has been used extensively in adapting the concepts of continuous improvement through quality management. Deming’s philosophy for organizational improvement and systemic change is based on his System of Profound Knowledge. The System of Profound Knowledge consists of four interrelated components: appreciation for a system, knowledge about variation, theory of knowledge, and psychology (Horine, Yvarra, & Lindgren, 1994). Understanding Deming’s System of Profound Knowledge, requires an understanding of variation and the ability to employ statistical data and methodologies to know and reduce variation. According to Deming (1986), appropriate data produce accountability and avoid quick fixes to complex problems. The data enable the organization to have a deep understanding of itself. Deming believes this understanding optimizes the system because it allows all parts to work in synergy (Schenkat, 1993).

Deming (1986) proposes that the theory of knowledge component is management of a system. Theory of knowledge is action based on prediction. Deming sees any plan as a prediction of conditions, behavior, performance of people, procedures, equipment, or materials. According to Deming (1986), the prediction is based on theory and builds knowledge through systematic revision and extension of theory. Deming (1986) believes that to understand the theory of knowledge, one must have a basic knowledge of the philosophical principles of mathematics and an understanding of both deductive and
inductive reasoning. Deming’s theory is applicable to schools if the educators are able to
differentiate between deductive and inductive reasoning, yet link the two to apply a theory
of knowledge and build a framework for change. Theorists (Horine, et al., 1994) suggest
that building a framework for continuous improvement requires a change in philosophy.
Such a philosophy has two aims: (1) it gives the organization a unifying view of itself,
and (2) it helps the organizational members to become critical thinkers and sharpen their
ability to think clearly and concisely (Horine et al., 1994).

Deming (1986) cautions that without this kind of a change in philosophy, schools
will continue to focus on the day’s crisis and quotas, ignoring systems and processes.
Deming (1986) theorizes in any process that two types of variables exist, random and
assignable. Random variables are natural phenomena in a system or process. Assignable
variables are special phenomena that occur in a system (Deming, 1986). If teachers and
principals are asked to explain random variables caused by normal variation, there will be
a program of the month with no constancy of purpose. Consequently, teachers and
principals will become frustrated and feel powerless to change (Bradley, 1993). Their
focus needs to shift to assignable variables for continuous improvement to be achieved.

Deming outlined fourteen points necessary for an organization to improve
continually. The fourteen points are interconnected and must be used in combination with
Deming’s System of Profound Knowledge (Brandt, 1992). The fourteen points have
become a foundation for most organizations that have moved toward a continuous
improvement model. Continuous improvement organizations embrace the points as the
fundamental principles behind everything done within the organization. Each of the fourteen points and its relevance to education is listed below.

**Education and Deming’s Fourteen Points**

1. **Create constancy of purpose.** Deming (1986) explains constancy of purpose as the reason for the existence of the organization. Constancy of purpose requires the organization to move away from short-term planning. According to Deming (1986), a company without constancy of purpose does not think beyond quarterly profits and has no long-range plans for survival or growth. In comparing America and Japan, Deming (1986) states, “More American executives think they are in business to make money, rather than products and services.... The Japanese corporate credo, on the other hand, is that a company should become the world’s most efficient provider of whatever products and services it offers. Once it becomes the world leader and continues to offer good products, profits follow” (p. 99). The organization needs to determine what its purpose is and how to focus on the purpose when solving current problems and planning for the future. In a school setting, constancy of purpose is lifelong learning, not just preparing students to pass tests (Crawford et al., 1993). Currently, teachers are responsible for the curriculum for the current year and for the performance of the students on achievement tests. Regardless of the diversity of the students, the focus is fitting the students into an existing system, ignoring the results in the future. By incorporating constancy of purpose, the focus will shift to maximizing the potential of each student (Floyd, 1993).

2. **Adopt the new philosophy.** Deming’s second point is that quality becomes the new mission. Quality means giving the customer what he or she expects (Deming, 1986).
Crawford et al. (1993) suggest school leaders must accept quality as the mission for the school. Excuses for student failure must be abandoned. Each student is different and can experience quality learning if the school develops a culture with the underlying belief that all students can learn (Crawford et al., 1993).

3. Cease dependence on mass inspection. According to Deming (1986), “Quality comes not from inspection but from the improvement of the process” (p. 25). Inspection of the end product is too late. End inspection fails to improve the process. Blankstein (1993) suggests that in a school, testing is the inspection process, and testing does not contribute to quality. Schools need to become proactive instead of reactive. Becoming proactive requires using data to improve the entire system as the process progresses (Blankstein, 1993).

4. End the practice of awarding business on the basis of price alone. Awarding business on the basis of price only without considering quality can increase costs in other areas (Deming, 1986). Quality standards must be considered when purchases are made. If the materials used in a process do not meet quality standards, the result may be an inferior product. Producing inferior products results in costly rework or scrap, both increasing costs. In education, one of the most significant school expenditures is in the area of human resources. Crawford et al. (1993) suggests hiring the teacher who would cost the least does not ensure that the correct person is hired. Job descriptions including criteria, expectations, and hiring practices should be specific. Class size is often determined in terms of student-to-teacher ratio. The larger the class size, the lower the costs. However, in a large class, students may not receive the attention that they need, resulting in poor
performance. No costs are saved if a quality product, student learning, does not result (Crawford et al., 1993).

5. **Improve constantly and forever the system of production and service.** Deming developed an approach to process analysis and improvement by adapting Shewhart’s (1938) pipeline model: (1) formulate the hypothesis (specification), (2) perform an experiment (production), and (3) analyze the results of the experiment (inspection). In this model, each step is independent of every other step. Deming’s model, Plan, Do, Study, Act, (PDSA Model), expands Shewhart’s model to develop an interdependent cycle (Bradley 1993). The PDSA cycle constantly defines and redefines the customer’s needs and wants, leading to redesign and improvement (Deming, 1986). Current school processes follow the Shewhart model but not the PDSA Model. The state sets guidelines. Schools produce by following the guidelines. The inspection is based on whether the students pass or fail. Thus, a student must fail before improvement is considered. Instead of improving the process or developing or engaging in strategic planning to achieve systemic change, the current school practice is to put out the fire. Using the PDSA cycle will enable educators to examine their mission and analyze the teaching and learning process (Crawford et al., 1993). Floyd (1993) suggest that the PDSA cycle will encourage teachers and students toward continuous improvement.

6. **Institute training.** Deming believes that continuous improvement is dependent on a team effort. Each member of the team must be trained in continuous improvement processes. Leaders must understand and practice quality management concepts. Leaders must be committed to the training and development of all team members to build a
foundation of common knowledge (Deming, 1986). In a school setting, the leaders are the administrators, who must provide opportunities for all staff members to be a part of training and development. The training needs to include team building, group problem-solving, and quality management concepts (Deming, 1986).

7. **Institute leadership.** According to Deming (1986), the leader is the primary agent for improvement of the system. Deming (1986) and Glasser (1992) agree a bureaucracy is typified by a boss management leader who limits both the quality and productivity of the workers. A boss manager sets the tasks and the standards for the workers, using coercion if necessary to get the job done (Glasser, 1992). Glasser (1992) suggests that boss management must be replaced with lead management. Lead management plays a critical role in promoting quality. According to Glasser (1992), a lead manager needs to do the following: build trust and encourage everyone to improve, have a keen understanding of continuous quality improvement because he or she is the primary agent for change and improvement, not judge the performance of his or her workers but judge his or her own performance by observing the workers to determine what he/she needs to do to improve quality, and create an environment where the workers experience pride in their work. According to Crawford et al. (1993), in a school, lead management means that the principal must create an environment where teachers take pride in their work. In turn, the teachers must create an environment in the classroom where the students can take pride in their learning.

8. **Drive out fear.** Deming (1986) states that people can only perform quality work when they feel secure. If the employees are working under fear, their performance is
impaired, resulting in a loss of quality (Deming, 1986). In a school setting, fear is
promoted by performance appraisals, reprimands, evaluations, grades, punishments, and
competitive reward systems. Administrators and teachers need to understand and value
intrinsic motivation to eliminate fear. Fear can be eliminated through self-evaluations and
self-assessments (Crawford et al., 1993). The focus needs to be on the improvement of
the learning process instead of punitive activities (Brandt, 1992).

9. **Break down barriers between departments.** Barriers between departments are
broken down by teamwork. Once a mission is established, the focus of all that is done
within the organization is the mission (Deming, 1986). Schools are separated because of
the segmented subject matter approach. Teachers teach in isolation. In order for learning
to be relevant to the students, there must be a connection to the world. Curriculum needs
to be integrated to break down the barriers in a school. Teamwork among everyone--
teachers, counselors, secretaries, custodians, librarians, aides, and cafeteria workers--must
be encouraged by the principal (Crawford et al., 1993).

10. **Eliminate slogans, exhortations, and targets for the work force.** Deming
(1986) believes that slogans, exhortations, and targets are usually directed at the wrong
people. This point assumes that improvement is dependent on individual efforts rather
than improvement to the system. The burden of improvement rests on the shoulders of
management (Deming, 1986). Crawford et al. (1993) suggest that in a school, slogans,
exhortations, and targets focus on teachers and students, not the system that produces
quality learning and should be the focus for continuous activity.

11. **Eliminate numeric quotas and goals.** Quotas focus on the end goal rather than
the process to achieve the goal. According to Deming (1986), quotas and goals usually do not include “any trace of a system by which to help anyone do a better job” (p. 71).

Educators have been pressured to use quantitative goals. The goals are based on average output. Once the average is attained, the goal becomes a constraint. Quotas lead to marginal work. In addition, schools often have mutually exclusive goals. For example, a superintendent may want to show higher test scores, while the teachers want to foster higher-order thinking skills. The reward system will force the teachers to focus on the numeric goal instead of striving for continuous improvement (Blankstein, 1993).

12. **Remove barriers to pride and workmanship.** Deming (1986) states that workers need to be involved in the decision-making process. They need to be active participants in determining what needs to be achieved. Managers need to understand the jobs the workers are performing and listen to the input provided by the workers. When teachers are prevented from making decisions about the school, the students, and the instructional programs, they feel no ownership, thus no pride in their workmanship. The same is true for the students. Once these barriers are removed, pride in workmanship will empower both teachers and students to manage themselves and commit to the goal of quality learning (Crawford et al., 1993).

13. **Institute a vigorous program of education and self-improvement for everyone.** This point is similar to point six, institute training. Deming (1986) suggests that the purpose of training is to institute a foundation of common knowledge and to encourage continuous learning. Deming (1986) states that a worker’s self-improvement is directly linked to the company’s ability to improve the system As the system improves, it is
important that the workers are continually trained to understand the new system. Critical to quality and innovation is continuous learning and a sense of improving (Schmoker & Wilson, 1993). In a school setting, each group of students will have diverse learning styles, skills, and knowledge bases. It becomes critical for teachers continually to acquire new skills, methods, and strategies to meet the needs of the individual students (Crawford et al., 1993).

14. Put everyone in the organization to work on the transformation. Deming believes that the first milestone on the road to quality is when a critical mass of the employees understands the fourteen points and decides how to apply them. The employees begin to take action that leads to transformation. The managers should understand change and commit to change their management style to lead management (Deming, 1986). In a school, education centers on the principal and teachers agreeing that the mission of the school is quality learning and decide to implement Deming’s fourteen points, to improve student learning (Crawford et al., 1993) and original performance (Bonstingl, 1992).

Today, the company that makes the best product is the one with a competitive edge (Freeston, 1993 July/August). According to Deming (1986), quality has become the benchmark for success, and the customer defines quality. In order for a business, industry, or school to move in the direction of continuous quality improvement, systemic change is critical. Once the change begins, maintaining a continual quality improvement management process is critical.
Theory and Practice

Continuous quality improvement is a way of doing things based on knowledge. Knowledge comes from theory (Deming, 1986). McKeon (1952) in his discussion of continuous improvement links theory and practice, identifying four modes of linking theory and practice. Two of the modes, logistic mode and deliberative or problematic mode, have application to the discussion of educational reform.

Currently, education reform approaches theory and practice from a logistic mode (Holt, 1993). A logistic mode separates theory and practice. Theory becomes the province of experts and is joined to practice only by some “science of human action.” In a deliberative or problematic mode, inquiry brings theory and practice together. Solving problems is a task for all. According to McKeon (1952), using a deliberative mode sets a framework for involvement of all people in an organization. If an organization begins to function from a deliberative mode, transformation can occur. The use of a deliberative mode framework will require a paradigm shift (Williams, 1994). The current educational paradigm is a hierarchical order with clear superordinate and subordinate functions. A clear division of labor exists, with delegation from an authoritative figure (Bonstingl, 1992). If paradigm shifts do not occur, no systemic change can occur within the organization.

Rhodes (1992) suggests the philosophy driving educational reform has focused on continual short term gains. All problems appeared to have been a direct result of the inability of the student to perform. It appears that the focus of improvement has been on the students, not the process, as suggested by Deming (1986). According to Rhodes...
(1992), a paradigm shift must occur. Teachers must begin to see things through the eyes of the student. The eyes of the student will provide information that will enable the school to become responsive to the customer’s needs and improve the system (Rhodes, 1992).

The Change Process

Change is a way of facilitating continuous improvement, not merely a practice of innovation (Deming, 1986). Changes should be improvements that promote quality. According to Deming (1986), continuous quality improvement is a process, not a result. The literature suggests that continuous improvement calls for us to think differently about change and the change process. Gainey (1994) alludes that a school engaged in continuous improvement is continually engaged in change. He further implies that the school itself is the unit for change and the principal is the change agent. Glasser (1992) and Chamley, Caprio, and Young (1994) agree with Gainey (1994) by identifying the principal as the facilitator of change in a school. As the facilitator, it is important that the principal develops ownership among the key stakeholders, garners support for the change effort from the top, engages in site-based management, and is willing to delegate leadership (Chamley et al., 1994).

Chamley et al. (1994) suggest a facilitative principal should realize that change is both a social and personal phenomenon. The principal should be a role model, demonstrating traits and behaviors that he or she wishes the staff to have. The staff has varying strengths and weaknesses. Therefore, the uniqueness of individuals should be taken into account when establishing an atmosphere of cooperation. There are three responsibilities related to the principal’s role of decision-maker: to serve as a monitor, to
provide a setting where decision-making can occur, and to serve as a transactional agent among and between groups (Chamley, et al., 1994).

According to Fullan (1982), the most common reaction to change is resistance. In most schools, the greatest resistors to change are the teachers (Fullan, 1982). The teachers are more likely to be the implementers of the change, thus a high risk is involved. Chamley, et al. (1994) suggest that the teachers and any other stakeholders will change more easily when the change helps them to solve problems they think are real.

According to Chamley, et al. (1994) staff resistance to change must be managed. Chamley, et al. suggest that to manage staff resistance effectively, the principal must address two important questions: Who is initiating the change? How will the change be implemented? A facilitative principal can answer these questions and reduce staff resistance by creating conditions necessary for change. Fullan (1982) proposes three basic phases to creating these conditions: Phase I requires the facilitator to break the vision of change into small tasks and push forward for short-term action. Change does not occur overnight. If the change is too rapid, a likelihood of ambiguity, exaggeration, and over-expectations exists. Phase II requires the facilitator to identify and mobilize important constituents including board members, the superintendent, key teachers, parents, and community leaders. Phase III requires the facilitator to manage resistance by listening to all views, encouraging creativity, and identifying the source, type, and method of change (Fullan, 1982). Conflict and disagreement are inevitable and are fundamental to successful change. However, it is important to identify, manage, resolve, and monitor the conflict and disagreement during the change (Chamley et al., 1994).
When an organization seems successful, there is often a denial for the need for change. Gainey (1994) suggests that if the organization maintains a status quo position, there will be no improvement made to the current structure. If an organization continues to do what it has always done, it will get what it has always gotten. In these cases, and others, creating a change-sensitive organization is important. Chamley, et al. (1994) suggest strategies for creating a change-sensitive organization including launching employee involvement, establishing "skunk works" or informal and unstructured groups that are encouraged to create new products and new ways of doing things, resisting the temptation to promote from within by bringing new blood into the organization, formalizing "crystal balling" or posing "what if" and "why not" scenarios about new technologies and systems, and encouraging constructive dissent and innovation.

Comparing Schools and Businesses

As the economy has changed, business and industry have realized the need to change to maintain a competitive edge (Pinchot & Pinchot, 1993). In the twenty-first century, schools are now faced with competition and the need to change (Bailey, 1992). Consequently, comparing business and industry to schools may assist schools in changing from the bureaucratic structure to a system of change and continuous improvement. Bradley (1993) compares schools and businesses by making the following analogies. In a school, students are the workers and the product. The difference between success and failure of the school depends on the quality of work of the students, just like a business depends on its workers for quality. In a business, quality depends on the front-line or first level supervisor or manager. Teachers can be compared with the front-line or first level
supervisor. The administrative staff is the middle management level. Upper management is the central office. Overseeing the administrative staff is the board of education that can be compared with the board of directors of a business. Therefore, based on the literature (Bailey, 1992; Bradley, 1993; Deming, 1986; Pinchot & Pinchot, 1993) borrowing the tools of business to ensure the success of the school is logical. The most important tool to borrow is continuous quality improvement. Bond and Woodall (1993) further support the similarities between schools and business by comparing commonalities. Both schools and business need to be accountable, have employee involvement, make a commitment to performance, and ensure customer satisfaction.

Bradley (1993) believes the idea of continuous improvement for "quality schools" is feasible and viable because all children are different, mentally, emotionally, intellectually, and physically. However, fixed standards impede continuous improvement. According to Bradley (1993), continuous improvement is feasible only if the following two assumptions are accepted: (a) given raw material and proper equipment, material, training, and time, a product can be turned out that is consistently high in quality and (b) it is reasonable and feasible to correlate educational standards with industrial standards in relation to the performance of the operation. Bradley (1993) defines the operation in education as the teaching and learning process. For assumption two to be workable, schools need to say that all students are being held to continuous improvement. With this idea in mind, baseline data would be established and results based on improvement from the base. Each school needs to establish baseline data from which they choose to measure improvement. There are many types of data that can be used, for example, norm-
referenced tests, criterion referenced tests, staff and student attendance figures, parental involvement, follow-up student data, and staff turnover (Bradley, 1993).

Bradley (1993), Deming (1986), and Fullan (1991) support Bradley’s second assumption. They believe that a critical element of continuous improvement is data collection relative to what the school has defined as a quality characteristic; for example, curriculum, program policies, facilities, procedures, services, or personnel. Schmoker and Wilson (1993) believe a lack of data analysis accounts for the failure of past school reforms. A critical need to gather data about processes and outcomes to ensure that changes made will affect learning outcomes exists. Use of data and feedback has received corroboration from the field of psychology. Csíkszentmihályi (1990) studied human motivation and happiness and confirmed that feedback and assessment of meaningful activity are integral to improvement and enjoyment. Based on this literature, data are an important aspect of continuous improvement. The data enable the organization to see where it is and where it wants to be.

Although there are similarities between businesses and schools, there are differences. Kaufman and Hirumi (1992) point out that schools, unlike businesses, have social and environmental concerns. They believe these social and environmental concerns must be integrated into the continuous improvement model.

Bonstingl (1993) proposes that the difference between schools and businesses is the nature of the work. Bonstingl (1993) hypothesizes that in a continuous quality improvement school, teachers and students, together, need to learn how to create collaborative, trusting environments in which failure is but a temporary step on the road
to continued improvement. If these elements exist it appears a “yearning for learning” should evolve and can become a vision for the school. Based on this concept, Bonstingl suggests that students assess their own work to create benchmarks to note their individual improvement. The assessment helps in developing skills of constructive metacognition and learning to cultivate their innate abilities to build new meaning. A focus on quality empowers not only the teachers but the students (Bonstingl, 1993).

Perry and Quaglia (1994) believe that continuous quality improvement management cannot survive alone. According to Perry and Quaglia (1994), three factors need to be in place for continuous quality improvement management to survive: stability, time, and individual involvement at all levels. These factors are difficult to ensure in educational settings. The educational system has been stable, but not the educational environment. Stability and functioning schools are disparate terms. The educational environment must foster both creativity and productivity for its students who are the clients. Time restrains schools from improvement. Administrators, teachers, students, and community members have little time to meet because of the time limitations, contractual limitations, and additional cost for salaries. Consequently, a commitment to quality from the board of education and administrators to change will help to ensure these factors are available.

Restructuring Schools

According to Payzant and Gardner (1994), school restructuring, like continuous quality improvement management, is not a program or product but a process. They theorize restructuring begins at the bottom where teaching and learning take place and
calls for a variety of changing roles and responsibilities. Enabling, facilitating, and collaborating behaviors should replace controlling, blocking, and competing behaviors. Payznat and Gardner (1994) propose that success will be determined by what makes a positive difference in the lives of children. The whole must become greater than the sum of the parts.

According to Reavis and Griffith (1992), shifting to continuous quality improvement management will require a restructuring of the basic management philosophy and a complete change in culture, organizational assumptions, leadership, curriculum, instructional approach, and accountability (Reavis & Griffith, 1992). Bailey (1992) agrees restructuring is necessary if the current system, in the case of a school a bureaucracy, cannot accommodate this type of change. The process of restructuring cannot be approached as a philosophical statement or the trendy thing to do. Improvement is a human endeavor and will only happen if the people involved choose to improve. To improve the “how” and “what,” the “who” must be recognized (Foley, 1996).

Abbott (1995) outlines three components that the California Center for Restructuring considers necessary for restructuring. The first component is to create learning communities. Shareholders engage collaboratively in lifelong learning to resolve issues. The second component is to invent an authentic accountability model. The model needs to answer the following questions: What are we trying to accomplish? How is it to be done? What resources are required to get it done? How are we measuring success? To answer these questions, effective assessment tools must be used incorporating hard logic; for example, classroom and curriculum, including academic achievement data and
learning program scope data as well as fuzzy logic; for example, culture and community, including school climate data and human resource and corporate data. Abbot (1995) outlines the third component necessary for restructuring as celebrating success with protocol presentations. Protocol is a continuous quality improvement feedback tool. The feedback comes when we analyze, reflect, and refocus on student work. Systemic change must come from within and must have student achievements as the clear objective (Payzant & Gardner, 1994).

Moore (1993) believes restructured schools actively engage in the curriculum to develop a healthy learning and teaching environment where teachers are excited about teaching, and children are excited about learning.

Moore (1993) has identified commonalities in successfully restructured schools. The commonalities are:

1. Behavior and beliefs are altered. Transforming behaviors improve student learning and faculty teaching.

2. There is pride in the profession and the work. All work is valued. The faculty holds itself to high levels of performance.

3. Decision-making is shared. There is visionary leadership that celebrates success with everyone.

4. Institutional goals are clear. Students are valued and student needs are a focus.

5. A trust bond is formed between the staff and students.

6. Students engage in behaviors that support learning and do not interfere with the
attempts of others to acquire new knowledge. Students show respect, safety, and support of learning.

7. The staff believes they are the best.

8. Exemplary teaching is emphasized and recognized. Diversity of learning and teaching styles is valued. Evaluations focus on improvement of instruction.

9. A nurturing environment exists. Success of individuals is celebrated. The school recognizes that when one succeeds, all succeed.

10. Creativity is valued.

11. Home school partnerships develop.

12. There is collective fiscal responsibility; thus there is no requirement of new fiscal resources. (pp. 25-26)

Continuous Quality Improvement in Schools

Defining quality is not a simple task. Defining quality schools is even more complex. The term quality is constantly evolving. Deming (1986) defines quality as a way of doing business. Quality is the basis for simplifying processes in an organization to improve continuously (Deming, 1986).

Glasser (1992) defines quality as a product of warm, caring relationships, always useful in some way. He considers quality as the best that everyone in the organization can achieve. Continual improvement and an alertness to improvement represent quality. The continual improvement is why the vision changes. According to Glasser, quality always feels good and the greater the quality, the longer the good feeling.

To produce quality in schools, Glasser (1992) identified four vital processes. The
first process is continuing education to increase the quality of the work and the lives of the workers. Everything taught must be applied. Continuing education needs to be useful or enjoyable, either now or the near future. Lead managing is the second vital process necessary in continuous quality improvement schools. A lead manager continually emphasizes quality, establishing a fair, friendly workplace. Everyone in the organization needs to self-evaluate. Quality can only be achieved through self-evaluation. The third process is to understand and use control theory principles instead of stimulus-response. According to Glasser (1992), all behavior is internally motivated, satisfying the basic needs of love, power, fun, freedom, and survival. A continuous quality improvement organization is a need satisfying organization. Lastly, all those that work in the organization are professionals, assuming that once they learn to do their work, they usually know as much or more about how to do it as well as anyone else. As professionals, it is assumed they will be open to learning to do better.

From a continuous quality improvement aspect, Bramson and Buckner (1995) list two appropriate measures of excellence as the following: (a) the proportion of students meeting their individual graduation requirements and (b) the proportion of students who successfully pass the assessments necessary to make the next transition whether post-secondary, military, occupational, vocational, or any other area. A quality system would be improving continuously and graduates would be well prepared to perform at the next level (Bramson & Buckner, 1995).

The literature supports the mission statement as an important aspect of continuous improvement. Bond and Woodall (1993) believe that moving to a continuous quality
improvement model begins with the development of a mission. The mission statement helps the organization to establish constancy of purpose, Deming’s first quality point (Freeston, 1992). Hoglund (1994) supports Freeston by defining the mission as a combination of philosophy and purpose. According to Bramson and Buckner (1995), the mission functions to define priorities clearly. It answers the question, why am I doing this?. They identify two components of a mission. One, it is a short inspirational vision of the organization’s intent, and two, it is derived by process control teams representing the entire district.

Based on the belief that major improvements in quality can be made in schools, Daugherty (1996) developed the concept of Total Quality Education (TQE). TQE gives educators a vision of an autonomous, collective, and intellectually challenging work environment. Similar to Deming’s TQM, TQE requires a commitment from top management. Daugherty suggests that top management must demonstrate the leadership necessary to make changes in an organization and create a vision of what continuous quality improvement can mean. The entire organization should know how quality is being defined. Long range strategic plans are the blueprints for TQE. Key elements necessary for TQE are top management commitment, strategic planning, employee empowerment, total involvement, training, teamwork, customer value, continuous improvement, rational-based decision-making, and cultural change (Daugherty, 1996). Total quality education, like TQM, strives to surpass the prevailing standards and continuously improve. A set of comprehensive quality standards applicable to all schools should be developed including criteria for leadership, information and analysis systems,
strategic planning, human resource development and management, and customer satisfaction. The standards serve as benchmarks or guidelines to gauge improvement (Daugherty, 1996).

An alternative to TQM and TQE is the Aspirations School Improvement Project (ASIP) developed by Perry and Quaglia (1994) at the University of Maine. This alternate approach begins with increasing self-efficacy of all school personnel and students. Personal empowerment encourages all individuals to set high expectations for self. The personal and professional commitment of every staff member is articulated to meet the cognitive and affective needs of everyone in the school. Perry and Quaglia (1994) outline five components that need to be in place for the ASIP model. First, individuals must identify their individual aspirations. Perry and Quaglia define an aspiration as a specific personal, educational, vocational, social, or a lifestyle goal in which people are willing to invest their personal resources to attain. The second component is effective communication. Communication is defined as more than the transmission of information. Communication establishes a sense of community where people are valued for their opinions, creating a collaborative school environment. The third component is commitment. Commitment is defined as the state of being obligated or emotionally impelled to a cause (Merriam & Webster, 1991). Psychologists define commitment as a psychological attachment. A shared belief system is the fourth component. People will behave according to their beliefs. The fifth component is collegiality or the shared responsibility of meeting the needs of all students. It is teamwork, mutual respect, and the
belief that all individuals in the organization can contribute to the vision held for students (Perry & Quaglia, 1994).

Scott and Palmer (1994) outlined eight principles necessary for continuous quality improvement management and the relationship of the principal to schools. First, the organization must be customer-driven. According to Scott and Palmer, the school’s primary customer is the student, but parents, and community participants are customers as well.

The second principle outlined by Scott and Palmer (1994) is participation by senior management in the way of commitment and participation. In a school, senior staff members should become masters and mentors. Principle three is employee involvement and team empowerment that translates to schools as site-based management. According to Scott and Palmer, this principle implies a flattening of the hierarchical pyramid and enabling those closer to the students to make decisions and be accountable for the results.

Training in continuous quality improvement is the fourth principle, resulting in production of lifelong learners. According to Scott and Palmer (1994), there is a direct relationship between investment in people and productivity. The teacher is key to quality. The fifth principle is improving the process, product, and service. In schools, the process, product, and service are learning which are measured by student assessment. Sixth, there should be valid measures of success of the organization or in the school, performance-based assessment. Every operation should be a process that can be recorded and measured. This measurement tells how well the needs of the customer (student) are being met. The seventh principle is speed and cycle time reduction. Students need to be
spending time on the right “tasks.” Time should be analyzed, taking into account efficiency, adeptness, and engaged times, not only, the actual time students spend on achieving the objective, but the teacher’s use of time that affects student achievement. The last principle of continuous quality improvement management is to simplify systems. For schools, this simplification equates to a return to the essential elements of education. Schools need to reflect on what they are doing and stop teaching nonessentials (Scott & Palmer, 1994).

Deming (1986) and Glasser (1992) agree that in order for quality work to be accomplished, three major conditions must exist: one, an environment that is warm, friendly, non-coercive, and comfortable, that enables individuals to take a risk; two, expectations that are made clear to all through actions and dialogue of the leaders; and three, self-evaluation. Each of the three conditions, environment, expectations, and evaluation, can be placed on a continuum. Environment can range from coercive to inconsistent to trusting and supportive. Expectations can be set by others, shared, or self-directed. Evaluations may be conducted by others, concurrent, or self-evaluations. Hoglund (1994) suggests that successful organizations will fall to the far right of the continuum; trusting and supporting, self-directed expectations, and self-evaluation.

Holt (1993) writes that in a Deming school, the customer is the student not the parent. Parents are sponsors or personal agents of the customers. The customer determines the course of study. What Deming is proposing is that students should have a voice in the course of study. Deming theorizes that the only way to improve the product, which is learning, is to attend to the process. Tests for accountability are rejected by
Deming. Deming postulates that formal assessment is unavoidable and should be used minimally even in schools (Holt, 1993).

Before embarking on the road to continuous improvement, Hoglund (1994) suggests that three key evaluative questions should be addressed. The questions are as follows: Is what we are doing good for the learner? Are we offering every learner an opportunity for quality learning? Are we working hard to insure that every learner grasps the opportunity? It appears Hoglund suggests these questions to focus on the students and the process of educating the students.

Bonstingl (1992) outlined four pillars of continuous quality improvement management and their relationship to education. First, the organization must focus primarily on its suppliers and customers. Everyone is a customer and a supplier. In a school, the primary customer is the student; however, the teachers, administrators and community members are customers and suppliers as well. The second pillar is everyone in the organization must be dedicated to continuous improvement, personally and collectively. The focus can not be on student limitations. Basically, each accomplishment, no matter how great or small, should be viewed as continuous improvement (Bonstingl, 1992).

The third pillar is the organization must be viewed as a system and the work people do within the system must be seen as ongoing processes (Bonstingl, 1992). Deming (1986) says more than 85% of the things that go wrong in an organization are because of the system which is made up of processes. The system, not the end result
should be the focus. For example, in schools, the process is the learning and the grades are the end result.

Lastly, the fourth pillar is the success of continuous quality improvement management is the responsibility of top management. Leaders should focus on the context in which students can best achieve their potential. Potential is best achieved by continuous improvement of teachers’ and students’ work (Bonstingl, 1992).

According to Bramson and Buckner (1995), there are general guidelines when developing a continuous quality improvement school. First, set realistic expectations. Develop realistic plans and make sure that there are people capable of implementing the plan. Follow a quality model recognized by auditing and standards organizations. Avoid the quick fix mentality. The focus is continual improvement. Work assigned to staff members should have a focus on the development of quality. Last, but very important is learn to benchmark.

Hoglund (1994) suggests that for continuous quality improvement to be successful, a long term commitment must be established. Workers acting alone cannot accomplish quality. Top management is needed for support and to provide effective leadership. A commitment to training must be made by all to ensure that an understanding of the concepts and processes involved in quality exists. Transformation must be internal, not predetermined or led by a consultant or total replication of someone else’s model. All must make a personal and professional pledge to help and support that includes a don’t give up attitude. Nidds and McGerald (1996) offer further suggestions. They feel to develop a quality educational system multicultural education, cooperative learning, and
group dynamics must be incorporated into the curriculum. Teachers need to recognize and build on the strengths of individuals. Emphasis should be placed on efforts, not grades. Leadership skills should include high ethical standards, a sense of obligation to family, community, and others in the workplace. Leading will replace bossing. Students need to learn how to become good listeners, inspire others, and have a lifelong desire to learn (Nidds & McGerald, 1996). The guidelines and suggestions presented by Hoglund and Nidds and McGerald appear to parallel Deming’s fourteen quality points.

Bonstingl (1992) believes there are many benefits to continuous quality improvement management. The most critical benefit is people take greater pride in their work because they feel better about themselves (Bonstingl, 1992). Relationships are more honest and open, administrators are less isolated, productivity goes up, there is personal and professional growth, pride, and joy, and it brings out the best qualities in individuals. This idea is parallel to Glasser’s (1992) Control Theory, which states that human behavior is needs driven. People will continue to behave in a manner that satisfies their needs.

Continuous Quality Improvement Schools

George Westinghouse Vocational and Technical High School in Brooklyn, New York, Newtown Public Schools, Newtown, Connecticut, the City of Burlington Public Schools, Burlington, New York, and Kate Sullivan Elementary School, Tallahassee, Florida have implemented continuous quality improvement utilizing many of Deming’s concepts. Although each district used a variation of Deming’s concepts, all reported an improvement in the current system with opportunities to continue on a pathway of
continuous improvement (Abernethy & Serfass, 1992; Duden, 1993; Freeston, 1992; Rappaport, 1996).

George Westinghouse Vocational and Technical High School, an inter-city minority school in Brooklyn, New York with a student population of eighteen hundred, began implementing a continuous quality improvement management program in 1990. Rappaport (1996), the principal, reported the process came about because of the school’s extensive networking with the business community during the 1980s which included the initiation of an annual scholarship and a staff recognition and reward program. A decision was made by the school business coordinator and Rappaport that the key to successful change was continuous quality improvement management. After studying the literature extensively, Rappaport and the coordinator began implementing a continuous quality improvement program at Westinghouse.

According to Rappaport (1996), the process was done incrementally in three phases to involve all of the stakeholders, staff, parents, and students. Each one of the phases focused on engaging one of the stakeholder groups in the process of continuous improvement. Working in phases allowed George Westinghouse to custom the needs of the school using industry as a benchmark.

One important fact that George Westinghouse Vocational and Technical High School discovered is the process is continual; one phase does not stop as another starts. All phases are ongoing at different levels and different times. Rappaport (1996) has made a commitment to maintain continuous quality improvement at George Westinghouse Vocational and Technical High School. He feels that implementing continuous quality
improvement has resulted in a focus on student achievement, an emphasis on critical thinking, decision-making, listening, test taking, and team building skills, parent participation, and increased community involvement through new and expanded partnerships (Rappaport, 1996).

Newtown Public Schools, Newtown, Connecticut, under the direction of Kenneth Freeston, developed the Newtown Success Oriented School Model. Freeston (1992) began with the mission: All children can and will learn well, where students are the customers, learning is the product, and teaching is the service provided by the Newtown Public Schools. The Newtown Model, similar to Glasser’s Control Theory and Reality Theory, is the interaction of four circles: what the stakeholders want, what the stakeholders believe, what the stakeholders know based on research, and the action that will result. Each school decision is made on the model. Freeston believes that the results of using the model are and continue to be quality outcomes. According to Freeston (1992), the move to continuous improvement through the Newtown Success Oriented Model has resulted in a new culture where the student is the customer, learning is the process, and teaching is the service provided.

The City of Burlington Public Schools, Burlington, New York, began using continuous quality improvement management in March 1992 when it was one of six districts chosen by Quality New Jersey, a group formed in 1988 to encourage the use of Total Quality Management, to participate in a pilot program. Each district selected formed a Quality Improvement Leadership (QIL) Team. Each team and the members made a two-year commitment. Training for the teams was structured around the
principles of TQM. Five training events per year were held. Monthly, facilitators from the business sponsors visited the local QIL (Abernethy & Serfass, 1992).

According to Abernethy and Serfass (1992), the QILs employed a seven-step process to apply continuous quality improvement management principles: determine a reason for the improvement, investigate the current situation, conduct an analysis, develop countermeasures and/or potential solutions, review results, standardize, and make future plans. The teams were trained to use many total quality management tools as used by Deming including block diagrams, Pareto charts, and fishbone diagrams. Abernethy and Serfass (1992) report that as a result of the QIL, the City of Burlington Schools has been convinced that the total quality management process presents valuable opportunities to bring about systemic change. The process of continuous improvement has become the norm for all activities.

Duden (1993), the principal at Kate Sullivan Elementary School, Tallahassee, Florida, reports that the school moved from being an effective school to what she calls a quality learning environment. The question -will this help our students become lifelong readers, writers, and problem solvers- became the focus from which all decisions were made at Kate Sullivan. According to Duden (1993), the first step in the transformation was to learn how to change. Once the idea of change was accepted and a vision developed, there needed to be a constancy of purpose. The constancy of purpose, individuals are valued, teachers are professional educators and team members, parents are partners, and decision-making is shared, was and is still used for all restructuring efforts.

Duden (1993) found that utilizing continuous quality improvement has had a
positive impact on the school. The climate changed, encouraging students to engage in cooperative learning, replacing competition with cooperation, parents are now viewed as customers and suppliers, and the principal’s role shifted from an instructional leader to change facilitator. The results of the transformation from an effective to a quality-oriented school have resulted in more parental involvement, standardized test scores have remained high, teachers have become facilitators instead of directors, and instructional decisions are based on student performance (Duden, 1993). Although each of the schools is different, commonalities in their approach to continuous improvement are evident. Common threads emerge including a mission or focus, the use of data and research, a cultural change, systemic change, and a commitment to continuous improvement.

Leadership

According to Gainey (1994), the school itself is the unit for change. Change cannot come from the school board and superintendent. Administrators, teachers, parents, and students must share a common purpose for the outcomes of the educational process. A cooperative team effort is required to achieve such a purpose. The team needs a visionary leader, the principal. Staying the same is a plan for failure. The difference between a mediocre school and a good school is the principal (Gainey, 1994).

Greenfield (1995) defined effective school administration as

...a condition wherein successful and appropriate teaching and learning are occurring for all students and teachers in the school; the morale of the students, teachers, and other school members is positive; and parents, other community members, and the school district’s administration judge the school to be
effectively fulfilling both the letter and the spirit of local, state, and federal laws and policies. (p. 61)

School leadership involves a complex set of influences, processes, and activities (Greenfield, 1995). Peterson and Solsrud (1996) write a school administrator needs to know when to initiate, act, and lead, and, also, when to pull back. It is crucial that the school administrator knows where the school came from and the direction it is going. Colon (1994) and Pigford (1995) agree the administrator of a restructuring school cannot function as the keeper of the keys or a record keeper, roles that traditionally typified a building administration. The building administrator no longer functions as a director but as a facilitator.

Peterson and Solsrud (1996) outlined six leadership themes in a restructuring school. First, the principal is important but not always. The principal becomes the cheerleader and visionary initiating, supporting, and leading the change efforts. Leadership can be widely dispersed and sustained through empowered members. The second theme is the sharing of power is fragile and smooth transitions between leaders are critical to maintaining momentum. Principal changes can inhibit momentum. Third, leadership and power are often dispersed by new decision-making structures but some approaches seem to spread it further. Having shared decision-making does not mean that leadership and power will be shared. Fourth, changes in decision-making structures may improve instruction but not necessarily. The fifth theme is the redistribution of power may foster greater identification and commitment to the school. Unfortunately, it may also foster greater conflict. Conflict can be positive if it is dealt with in an effective
manner. However, if conflict is not dealt with effectively, it can become an obstacle to successful restructuring. Lastly, a shared mission and purpose can affect feelings of commitment, levels of conflict, and focus on restructuring. A shared mission is not a panacea but a framework from which the restructuring develops.

These themes outlined by Peterson and Solsrud (1996) create a change in the context of the school administrator. Pigford (1995) states, "...the type of principal needed to lead today's schools can not survive under current conditions, an insensitive, inflexible system" (p. 53). According to Pigford, a principal must be empowered. Restructuring dialogue often includes empowering teachers but not empowering the principal. There must be a commitment by the board of education and superintendent to allow the principal to function beyond the traditional role of keeper of the keys to the new role of facilitator. Shifting from the traditional role requires the principal to take a risk. Consequently, the principal needs to feel supported. The principal needs the right and the responsibility to make decisions and must be a leader, not just a manager. However, efficiency is generally what is rewarded, not effectiveness. A visionary leader should be rewarded. There must be time for the principal to be thoughtful and reflective. Always in the middle between teachers and students, parents and the central office, the principal needs time to get together with colleagues away from the office to relax and share concerns, to develop personally and professionally (Pigford 1995).

According to Greenfield (1995), three distinctions between school leaders and leaders in non-school environments exist. First, schools have a unique moral character. Second, the workforce in a school is highly educated, autonomous, and permanent. Third,
in a school there are regular and unpredictable threats to the organization’s stability (Greenfield 1995).

Greenfield (1995) outlined five situational imperatives of a school administrator. All five demands are interrelated and are influenced by the above three conditions. The first is moral, a mix of competing and conflicting standards of goodness. The second demand is social and interpersonal. Instructional is the third demand. The fourth demand is managerial, the technical aspects of the job which include day-to-day planning, coordination, control, operation of the school, and scheduling teachers and students. Lastly, is the political demand. Micro-political influence and use of power may exist. These distinctions and imperatives create a demand environment for the school leader (Greenfield, 1995).

Colon (1994) and others (Bennis, 1994; Kouzes & Posner, 1987; Greenfield, 1995; Pigford, 1995) have made distinctions between effective and ineffective leaders. Colon (1994) uses the Iceberg Model to illustrate the differences. Observable behaviors are the part of the iceberg that is visible above the waterline. An ineffective leader has no foundation below the waterline. Below the waterline of an effective leader is a foundation of vision, philosophy, and knowledge base.

Although design is important in developing a continuous quality improvement model for schools, based on the work of Greenfield (1995), Gainey (1994), Peterson and Solsrud (1996), Pigford (1995), and Colon (1994), the key to a successful model is an effective, facilitative leader. This idea is further supported by Bond and Woodall (1993) who write that continuous quality improvement management requires clear
organizational goals, expectations for effective employee performance, standards of quality that satisfy the customer, high employee morale, and staff involvement in decision-making. It appears these requirements need one common element, a visionary and flexible leader.

Glasser (1992) proposes that moving to quality requires replacing boss management with lead management. Change comes from commitment not authority. In any organization where management is by control, the organization loses credibility (Hoglund, 1994). Glasser (1992) and Hoglund (1994) agree that lead management forces the organization to rethink its mission, curriculum, and management styles. It focuses on vision, quality, and cooperation promoting system wide change. Boss management limits both the quality of the work and the productivity of the worker.

Glasser (1992) outlines four basic elements to a boss management style and to a lead management style. The basic elements of boss management are the following: the boss sets the task and the standards for what the workers (students) are to do; the boss tells rather than shows. The boss or someone designates, inspects, and grades the work with no worker involvement; and when workers resist, the boss uses coercion, almost exclusively, to try to make them do as they are told.

The boss manager is concerned with the needs of the boss rather than the workers (Glasser, 1992). School administrators tend to see the students as subordinates (Greenfield, 1995). This situation typifies boss management that is traditional of school settings and generally accepted. According to Glasser (1992), there are two reasons why there has been no move from boss management or little effect on its ineffectiveness in
schools: (a) school managers do not know control theory and do not know why lead management works, and (b) school managers do not realize what Deming has taught, quality is the key to increased productivity. Educators worry that if there is too much concern about quality, students will cover less ground. In other words, provide lots of instruction and information and do not worry if the students are learning the information (Glasser, 1992). For Glasser, this practice focuses on the end product and the not the process, thus distracting from continuous improvement.

According to Glasser (1992), many school administrators deal with student problems by using a coercive management style. Coercive management usually uses punishment to get results. In a threatening environment, the student will perform but will not perform quality work. Coercive factors place sanctions and limitations on the students. Consequently, the message the students receive is to do the work and follow the rules, resulting in no creativity. Hoglund (1994) agrees that the atmosphere a boss manager creates is coercive. Simply, do your job as directed and nothing more. Glasser (1992) suggest that coercion can result in a vicious cycle. It may lead to resistance, then punishment, and consequently to poor quality work. Similarly, Hoglund (1994) suggests that a boss manager spends too much time trying to find out who was responsible for the poor quality work. Boss management is ineffective and the most ineffective when the job is not satisfying to the workers or in the case of a school when the learning process is not satisfying to the students (Glasser, 1992). Based on this literature, it appears if a student is struggling or unhappy with school or the learning process, a boss management
administrator will compound the problem and inhibit learning, thus inhibiting continuous improvement.

Glasser (1992) outlines the basic elements of lead management as follows: the leader engages the worker in the discussion of the quality of work to be done and the time needed to do it; the leader models the job; the leader asks the workers to inspect and evaluate their own work for quality; and the leader provides the workers with the best tools and workplace needed to accomplish the job.

A lead manager needs to discuss, explain, show, model, and suggest. Glasser (1992) states, "Successful managing is the art of persuading subordinates to do what the manager wants them to do and to do it well even when, initially they may not want to do it" (p. 258). The manager must be able to persuade the worker to do the work and do it well. High quality performance that workers are capable of achieving is stressed by lead managers. A lead manager asks workers to evaluate their own work for quality, understanding that consistent, quality performance cannot be forced (Glasser, 1992). According to Hoglund (1994), a lead manager will study a process to prevent reoccurrence of a problem, not assign blame.

According to Glasser (1992), a lead manager spends all of his or her time and energy figuring out how to run the system so that workers will see that it is to their benefit to do quality work. Hoglund (1994) claims that a lead manager will establish well-defined procedures and send the message help me, help you do your job to the workers. Deming (1986) believes that the major responsibilities of a manager are for consistency of purpose and continuity of the organization and to ensure the workers work in a system.
This literature (Deming, 1986; Glasser, 1992; Hoglund, 1994) suggests that the manager should work on the system, realizing people work in the system.

Glasser (1992) theorizes that the critical difference between a boss manager and a lead manager is how they understand motivation. A boss manager believes in extrinsic motivational factors, a stimulus-response theory. Behavior is a result of a stimulus outside the individual. A lead manager believes in the concepts of control theory that individuals attempt to control their own behavior. Control theory is a paradigm shift from stimulus-response. The control theory was developed by Glasser (1992) and some associates. Basically, the theory proposes people do things that they think are beneficial to them. Stimuli exist outside the individual, however, what the individual wants at the particular time or moment or what will be of benefit is why he or she behaves in a particular manner. Outside events do not cause behavior. They merely provide information to the individual. It is what the individual wants at the moment that is the cause. The individual evaluates the reward and behaves accordingly. Using these definitions of lead and boss manager, the continuous improvement literature (Glasser, 1992) suggests that for the continuous improvement process to work in an organization, that organization must have a lead manager. In essence, the literature (Deming, 1986; Freeston, 1992; Glasser, 1992; Hoglund, 1994) indicates that a lead manager is important to the success of the continuous improvement process.

Summary

Commonalities begin to emerge that become the foundation for building an integrated model for continuous quality improvement in a school setting. Regardless of
the model examined, Deming’s Total Quality Management, Daugherty’s concept of Total Quality Education, the Aspirations School Improvement Project developed at the University of Maine, or Glasser’s quality school, the change process, open communication, leadership style, leadership philosophy, a mission statement, and commitment by stakeholders to shared decision-making are fundamental to continuous quality improvement.

In summary, the critical elements in the continuous improvement process are an understanding of the change process, a facilitative leader, a change in culture, a viable mission statement, and shared decision-making.

Based on the literature, the importance of the perceptions of the leader regarding continuous improvement is useful in determining if the leader is capable of implementing a continuous improvement model. It appears that the leader is a key to the success of the continuous improvement process.
CHAPTER 3
METHODOLOGY

Design of Study

The study consisted of two parts, a quantitative section employing survey research and a qualitative part that involved a discussion of the survey results with focus groups. The survey was reviewed by the Human Subjects Review Committee (Appendix B). It was the intent of the researcher to assess whether administrators are using specific aspects of continuous improvement to develop their school improvement plans as mandated by Ohio Senate Bill 55. Based on the review of the literature, common threads emerged concerning specific aspects of the process of continuous improvement. These specific aspects of continuous improvement are leadership, leadership philosophy, the change process, the mission statement, decision-making, and data. The survey addressed these specific aspects of continuous improvement.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>ASPECT</th>
<th>LITERATURE SUPPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2, 3, 4, 5, 6</td>
<td>Demographic information</td>
<td>Jaeger (1988).</td>
</tr>
<tr>
<td>7, 8</td>
<td>Leadership and Philosophy</td>
<td>Deming (1986); Glasser (1992); Duden (1993).</td>
</tr>
</tbody>
</table>
for improvement are a result of the mission.

Decision-making and Data
Continuous improvement requires shared decision-making to ensure that all stakeholders are actively involved in the process. Decisions need to be made based on data. Data need to be shared with the teachers and anyone who will be affected.

Change
Continuous improvement is necessary in order for a school or any organization to maintain quality. Maintaining status quo will hinder continuous improvement.

Change
The major stakeholders in the continuous improvement process are teachers, who need to become empowered and feel they are part of the change process. People who are intrinsically motivated are more apt to accept the change and empowerment.

Change
In order for a school to actively engage in
continuous improvement, professional development is vital for both the administrators who will become the facilitators of change and the teachers who will be affected by the change.

22

**Change**
As an organization changes, there is a change in the culture. Cultural change is an important element of continuous improvement.

23, 24

**Change**
In order for a school to actively engage in continuous improvement, systemic change is necessary. Without systemic change, schools will maintain the status quo.

25

**Data Dissemination**
A feedback loop is needed to ensure that any plans implemented are evaluated.

Serfass (1992); Duden (1993).

Alley (1997); Sapher & King (1995); Reavis & Griffith (1992); Glickman (1992).

Deming (1986); Fullan (1991); Reavis & Griffith (1992); Holt (1993);
Blankstein (1996); Chamley, Caprio, & Young (1996).

Deming (1986); Bonstingl (1993); Moore (1993);
Duden (1993); Bradley (1993); Schmoker & Wilson (1995); Daugherty (1993); Perry & Quaglia (1993); Bailey (1992);
Floyd (1993); Crawford, Bodine, Hoglund (1993);

All questions were multiple choice. The demographic questions were relative to
the administrator's gender, tenure, educational level, school enrollment, and grade structure of the building.

The specific aspects of continuous improvement, leadership and philosophy, the change process, the mission statement, decision-making, and data, emerged from the review of the literature. As indicated above, each question was relative to the perception of the administrators in regard to the specific aspects of continuous improvement identified in this study. The leadership and philosophy and change questions addressed the role of the principal, his or her management style and philosophy, and his or her feelings regarding change. The decision-making questions included methods of collecting data to make decisions and the level at which decisions are made. Critical to the process of continuous improvement is whether the school has a viable mission statement. Questions regarding the mission statement included whether a mission statement existed, when it was developed, and the groups involved in developing the mission.

Population and Sample

The population of the study consisted of secondary public school building administrators and the district superintendents in northeast Ohio. Northeast Ohio included Ashtabula, Trumbull, Mahoning, and Columbiana counties. All subjects in the population were surveyed.

Data Collection

Data were collected using a survey questionnaire mailed to the secondary public school building administrators and the district superintendents. A cover letter explained why the survey was being conducted and that the individual results would be confidential.
Self-addressed, stamped return envelopes were enclosed to increase the response rate. All surveys were coded to permit follow-up. Respondents were asked to complete the survey within a two week time period. After the two-week period, telephone calls were made to non-respondents until an 80% return rate was achieved.

After the surveys were completed, the researcher scheduled focus group meetings. The purposes of the focus groups were to probe for further information, to document survey results, and to triangulate the findings.

Data Analysis

The quantitative data were reported using descriptive statistics. All questions were tallied. Measures of central tendency were used for the demographic questions. All comparisons were made by total population and by county using measures of variability and illustrations. Comparisons were made among superintendents, among principals, and between superintendents and principals in the same district. Comparisons were made to determine if the length of tenure of the administrator affected his or her answers regarding the specific aspects of continuous improvement identified in this study.

The researcher attempted to collect additional data for qualitative research by scheduling focus groups. However, due to a lack of response to participate, five (10%) superintendents and no principals, an alternate method to collect data for qualitative research was selected. Open-ended questions were mailed to the superintendents and high school principals who responded to the original quantitative study. The questions focused on two specific areas: the change process and the specific aspects of the continuous improvement process: the mission statement, data collection, the use of collaboration in
decision-making, and the continuous improvement model. The data for qualitative research were collected through electronic mail.

The results of the survey provide evidence of the perceptions of superintendents and secondary administrators regarding the specific aspects of continuous improvement identified in this study. The results of the quantitative and qualitative parts of the study were integrated to identify emerging themes.
CHAPTER 4

RESULTS

Surveys (Appendixes C and D) were sent to all superintendents and high school principals in Ashtabula, Columbiana, Mahoning, and Trumbull counties. Fifty-one superintendent surveys were mailed and 44 or 86.2% were returned. Fifty-four high school principal surveys were mailed and 52 or 96.3% were returned. Data collected were nominal. Demographic data, which included gender, tenure, and educational level of the superintendents are illustrated in Appendixes E, F, and G. Data relating to the districts including size of the district, high school grade structure, and total high school enrollment are illustrated in see Appendix H. This survey was designed to collect data which reflected the perceptions of superintendents and high school principals regarding specific aspects of continuous improvement reported as: Mission Statement, the Continuous Improvement Process, the Change Process, Culture, Leadership, and Decision-Making, and Data.

The intent of the survey was to determine the following:

1. How do administrators view change and the change process?

2. How do administrators perceive the specific aspects of continuous improvement identified in this study: a viable mission statement, the principal’s leadership role and philosophy, an understanding of the change process, the use of collaboration in decision-making, and methods of collecting and disseminating data?

The respondents were asked to indicate which of the following statements best described change: 1. Change is necessary, however, it should be approached with caution.
2. Change is a dynamic process that is necessary for continual growth and improvement of an organization. 3. Change is too disruptive to implement in a school. 4. Generally, change causes chaos within an organization and is not necessary if the organization is functioning well.

Table 1  Individual Responses of Superintendents and Principals Regarding Change.

<table>
<thead>
<tr>
<th>Change is necessary, however it should be approached with caution.</th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P  S</td>
<td>P  S</td>
<td>P  S</td>
<td>P  S</td>
<td></td>
</tr>
<tr>
<td>Change is necessary for the continual growth and improvement of the organization</td>
<td>6 4</td>
<td>6 8</td>
<td>13 13</td>
<td>15 16</td>
<td>40 41</td>
</tr>
<tr>
<td>Change is too disruptive to implement in a school.</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Generally, change causes chaos within an organization and is not necessary if the organization is functioning well.</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>No Answer</td>
<td>0 0</td>
<td>0 0</td>
<td>1 0</td>
<td>0 1</td>
<td>1 1</td>
</tr>
<tr>
<td>Total</td>
<td>8 5</td>
<td>9 8</td>
<td>16 13</td>
<td>19 18</td>
<td>52 44</td>
</tr>
</tbody>
</table>

Note. P represents principals, S represents superintendents.

Table 1 summarizes the perceptions of the superintendents and principals regarding change. Ninety-three percent of the superintendents indicated that change is a dynamic process, necessary for the continual growth and improvement of the organization. Seventy-six percent of the principals indicated the same answer.

Table 2  Summary of Paired Leaders Regarding Change.

<table>
<thead>
<tr>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=5</td>
<td>n=7</td>
<td>n=13</td>
<td>n=16</td>
<td>n=41</td>
</tr>
<tr>
<td>#  %</td>
<td>#  %</td>
<td>#  %</td>
<td>#  %</td>
<td>#  %</td>
</tr>
<tr>
<td>Agree</td>
<td>0 0</td>
<td>4 57</td>
<td>10 77</td>
<td>11 69</td>
</tr>
</tbody>
</table>
Table 2 compares the perceptions of the district superintendent and the respective high school principal regarding change. Overall, 61% of the perceptions of the district superintendent and the respective high school principal were the same. The largest discrepancies regarding the perceptions of the superintendents and respective principals regarding change occurred in Ashtabula and Columbiana counties. Not one superintendent and the respective high school principal in Ashtabula county shared the same perception of change.

Table 3  Individual Responses of Superintendents and Principals Regarding the Principal as a Change Agent

<table>
<thead>
<tr>
<th></th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P  S</td>
<td>P  S</td>
<td>P  S</td>
<td>P  S</td>
<td>P  S</td>
</tr>
<tr>
<td>Agree</td>
<td>8  5</td>
<td>9  8</td>
<td>16  12</td>
<td>18  17</td>
<td>51  42</td>
</tr>
<tr>
<td>Disagree</td>
<td>0  0</td>
<td>0  0</td>
<td>0  1</td>
<td>0  0</td>
<td>0  1</td>
</tr>
<tr>
<td>Undecided</td>
<td>0  0</td>
<td>0  0</td>
<td>0  0</td>
<td>1  0</td>
<td>1  0</td>
</tr>
<tr>
<td>No answer</td>
<td>0  0</td>
<td>0  0</td>
<td>0  0</td>
<td>0  1</td>
<td>0  1</td>
</tr>
<tr>
<td>Total</td>
<td>8  5</td>
<td>9  8</td>
<td>16  13</td>
<td>19  18</td>
<td>52  44</td>
</tr>
</tbody>
</table>

Note. P represents principals, S represents superintendents.

Table 3 summarizes the responses of the superintendents and principals regarding the principal as an agent of change. Ninety-five percent of the superintendents and 98% of the high school principals perceived the high school principal as an agent of change.

Table 4  Summary of Paired Leaders Regarding the Principal as a Change Agent

<table>
<thead>
<tr>
<th></th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#  %</td>
<td>#  %</td>
<td>#  %</td>
<td>#  %</td>
<td>#  %</td>
</tr>
<tr>
<td></td>
<td>n=5</td>
<td>n=7</td>
<td>n=13</td>
<td>n=16</td>
<td>n=41</td>
</tr>
<tr>
<td>Agree</td>
<td>5  100</td>
<td>7  100</td>
<td>10  77</td>
<td>14  88</td>
<td>36  88</td>
</tr>
</tbody>
</table>

Overall, 88% of the perceptions of the district superintendent and the respective
high school principal were the same regarding the principal as a change agent. The largest discrepancy occurred in Mahoning county. One hundred percent of the superintendents and respective high school principals in Ashtabula and Columbiana counties perceived the high school principal as a change agent.

The first specific aspect of continuous improvement is the mission statement. The respondents were asked if they felt a school should have a mission statement and how often the mission statement should be reviewed.

Table 5  Individual Responses of Superintendents and Principals Regarding the Mission Statement.

<table>
<thead>
<tr>
<th></th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P  S</td>
<td>P  S</td>
<td>P  S</td>
<td>P  S</td>
<td></td>
</tr>
<tr>
<td>A school should have a highly functional mission statement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>8  5</td>
<td>8  8</td>
<td>13 13</td>
<td>15 16</td>
<td>44 42</td>
</tr>
<tr>
<td>Disagree</td>
<td>0  0</td>
<td>1  0</td>
<td>2  0</td>
<td>4  2</td>
<td>7  2</td>
</tr>
<tr>
<td>No answer</td>
<td>0  0</td>
<td>0  0</td>
<td>1  0</td>
<td>0  0</td>
<td>1  0</td>
</tr>
<tr>
<td>Within how many years should a mission statement be reviewed?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 1 year</td>
<td>1  0</td>
<td>4  3</td>
<td>2  6</td>
<td>1  4</td>
<td>8  13</td>
</tr>
<tr>
<td>2 - 3 years</td>
<td>1  2</td>
<td>4  3</td>
<td>9  3</td>
<td>11 8</td>
<td>25 16</td>
</tr>
<tr>
<td>4 - 5 years</td>
<td>5  3</td>
<td>0  2</td>
<td>4  4</td>
<td>5  5</td>
<td>14 14</td>
</tr>
<tr>
<td>5+ years</td>
<td>1  0</td>
<td>1  0</td>
<td>1  0</td>
<td>2  1</td>
<td>5  1</td>
</tr>
</tbody>
</table>

Note.  P represents principals, S represents superintendents.

Table 5 summarizes the perceptions of the superintendents and principals regarding the mission statement and how often the mission should be reviewed. Ninety-five percent of the superintendents and 84.6% of the principals agreed that a school should have a highly functional mission statement. Sixty-six percent of the superintendents and 63.5% of the high school principals felt the mission statement should be reviewed within 0 to 3 years.
Table 6  Summary of Paired Leaders Regarding Whether a School Have a Functional Mission Statement.

<table>
<thead>
<tr>
<th></th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>5</td>
<td>7</td>
<td>13</td>
<td>16</td>
<td>41</td>
</tr>
<tr>
<td>Agree</td>
<td>5 (100%)</td>
<td>7 (100%)</td>
<td>10 (77%)</td>
<td>12 (75%)</td>
<td>34 (83%)</td>
</tr>
</tbody>
</table>

Table 6 compares the perceptions of the district superintendent and the respective high school principal regarding the mission statement. Overall, 83% of the views of the district superintendents and respective principals were the same. The largest discrepancies were in Mahoning and Trumbull counties. All the superintendents and the respective high school principals in Ashtabula and Columbiana counties agreed that a highly functional mission statement is necessary.

Table 7  Individual Responses of Superintendents and Principals Regarding Specific Aspects of Continuous Improvement.

<table>
<thead>
<tr>
<th>Continuous improvement is beneficial to schools</th>
<th>Ashtabula P</th>
<th>Ashtabula S</th>
<th>Columbiana P</th>
<th>Columbiana S</th>
<th>Mahoning P</th>
<th>Mahoning S</th>
<th>Trumbull P</th>
<th>Trumbull S</th>
<th>Total P</th>
<th>Total S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>7</td>
<td>4</td>
<td>9 (8)</td>
<td>16 (13)</td>
<td>17 (15)</td>
<td>49 (40)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>0</td>
<td>0</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (2)</td>
<td>2 (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>1</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (1)</td>
<td>1 (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School improvement and student learning are a continuous process</th>
<th>Ashtabula P</th>
<th>Ashtabula S</th>
<th>Columbiana P</th>
<th>Columbiana S</th>
<th>Mahoning P</th>
<th>Mahoning S</th>
<th>Trumbull P</th>
<th>Trumbull S</th>
<th>Total P</th>
<th>Total S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>7</td>
<td>5</td>
<td>9 (8)</td>
<td>16 (13)</td>
<td>17 (17)</td>
<td>49 (43)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>0</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>2 (0)</td>
<td>3 (0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
<td>0</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (1)</td>
<td>0 (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: P represents principals, S represents superintendents.

Table 7 summarizes the responses of the superintendents and principals regarding specific aspects of continuous improvement. The specific aspects of continuous improvement were: continuous improvement is beneficial to schools and school improvement and student learning are a continuous process. Eighty-six percent of the
superintendents and 94% of the high school principals felt that continuous quality improvement is beneficial to schools. Ninety-eight percent of the superintendents and 94% of the high school principals felt that school improvement and student learning are a continuous process. In addition, the superintendents and principals were asked if the school improvement process has begun in their districts. Ninety-three percent of the superintendents and 98% of the high school principals indicated that the school improvement process had begun.

Table 8  Summary of Paired Leaders Regarding Specific Aspects of Continuous Improvement

<table>
<thead>
<tr>
<th></th>
<th>Ashtabula</th>
<th></th>
<th>Columbiana</th>
<th></th>
<th>Mahoning</th>
<th></th>
<th>Trumbull</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Continuous improvement is beneficial to schools</td>
<td>n=5</td>
<td></td>
<td>n=7</td>
<td></td>
<td>n=13</td>
<td></td>
<td>n=16</td>
<td></td>
<td>n=41</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>4</td>
<td>80</td>
<td>7</td>
<td>100</td>
<td>13</td>
<td>100</td>
<td>13</td>
<td>81</td>
<td>37</td>
<td>90</td>
</tr>
<tr>
<td>School improvement and student learning are a continuous process.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>4</td>
<td>80</td>
<td>6</td>
<td>86</td>
<td>13</td>
<td>100</td>
<td>15</td>
<td>94</td>
<td>38</td>
<td>93</td>
</tr>
</tbody>
</table>

Table 8 compares the perceptions of the district superintendent and the respective high school principal regarding continuous improvement. Overall, 90% of the district superintendents and the respective high school principals agreed that continuous improvement is beneficial to schools and 93% of the views of the district superintendents and respective principals agreed that school improvement and student learning are a continuous process.

Culture is one of the specific aspects of continuous improvement that was identified in this study. Sapher and King (1995) indicated that a school engaged in continuous improvement should be identified by a culture based on high expectations, trust, and confidence. The survey asked the superintendents and principals to indicate
their perceptions of a culture engaged in continuous improvement from the following: 1.

School culture is based on ensuring that yearly goals are met and students move to the
next grade level. 2. School culture is based on high expectations, trust, and confidence. 3.

School culture is based on the premise of maintaining a sound educational environment.

Table 9  Individual Responses of Superintendents and Principals Regarding School Culture.

<table>
<thead>
<tr>
<th>School culture is based on ensuring that yearly goals are met</th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>S</td>
<td>P</td>
<td>S</td>
<td>P</td>
<td>S</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School culture is based on high expectations, trust, and confidence.</th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>S</td>
<td>P</td>
<td>S</td>
<td>P</td>
<td>S</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture should be based on the premise of maintaining a sound educational environment.</th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>S</td>
<td>P</td>
<td>S</td>
<td>P</td>
<td>S</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No answer</th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>S</td>
<td>P</td>
<td>S</td>
<td>P</td>
<td>S</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Note.  P represents principals, S represents superintendents.

Table 9 summarizes the perceptions of superintendents and principals regarding
the culture of a school engaged in the continuous improvement process. Seventy percent
of the superintendents and 50% of the high school principals responded that the culture of
a school engaged in continuous improvement is based on high expectations, trust, and
confidence.

Table 1C  Summary of Paired Leaders Regarding Culture.

<table>
<thead>
<tr>
<th></th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>n=5</td>
<td>n=7</td>
<td>n=13</td>
<td>n=16</td>
<td>n=41</td>
<td></td>
</tr>
</tbody>
</table>

Comparisons of the perceptions of the superintendents the respective high school
principal regarding the culture of a school engaged in continuous improvement are shown in Table 10. Overall 51% of the superintendents and respective high school principals shared the same perception. Columbiana had the largest percentage, 86%, of superintendents and high school principals sharing the same perception and Mahoning county had the smallest, 38%.

The leadership philosophy of a school engaged in continuous improvement is to facilitate change (Chamley, Caprio, & Young, 1994; Fullan, 1982; Glasser, 1992). Consequently, the role of the principal changes from the traditional “keeper of the keys” to a facilitator of change (Glasser, 1992). The survey addressed two questions regarding leadership. The first question asked the respondents to indicate the role of the principal from the following answers: 1. Administrator in charge. 2. Director of operations. or 3. Facilitator.

Table 11  Individual Responses of Superintendents and Principals Regarding the Role of the Principal.

<table>
<thead>
<tr>
<th></th>
<th>Ashtabula</th>
<th></th>
<th>Mahoning</th>
<th></th>
<th>Trumbull</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P  S</td>
<td>P  S</td>
<td>P  S</td>
<td>P  S</td>
<td>P  S</td>
<td>P  S</td>
<td></td>
</tr>
<tr>
<td>Administrator in charge</td>
<td>1  2</td>
<td>3  3</td>
<td>2  3</td>
<td>8  6</td>
<td>14 11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director of operations</td>
<td>3  0</td>
<td>0  0</td>
<td>1  8</td>
<td>2  1</td>
<td>6  4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitator</td>
<td>3  3</td>
<td>5  5</td>
<td>11 2</td>
<td>9  9</td>
<td>28 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invalid</td>
<td>1  0</td>
<td>1  0</td>
<td>2  0</td>
<td>0  2</td>
<td>4  4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Answers were considered invalid if the respondent indicated more than one answer. P represents principals, S represents superintendents.

Table 11 summarizes the perceptions of the superintendents and principals regarding the role of the principal. Overall, 57% of the superintendents and 54% of the principals indicated the role of the principal is to be a facilitator.

The second question regarding leadership asked the respondents to indicate their
leadership philosophy from the following choices: 1. The leadership role is to facilitate. 2. If all things are running smoothly, maintain a status quo. or 3. Organizations with take charge leaders are the most effective and efficient.

<table>
<thead>
<tr>
<th>Table 12</th>
<th>Individual Responses of Superintendents and Principals Regarding Leadership Philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ashtabula</td>
</tr>
<tr>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td>P  S</td>
</tr>
<tr>
<td>To facilitate</td>
<td>5  3</td>
</tr>
<tr>
<td>Status quo</td>
<td>0  1</td>
</tr>
<tr>
<td>Take charge</td>
<td>2  1</td>
</tr>
<tr>
<td>Invalid</td>
<td>1  0</td>
</tr>
</tbody>
</table>

Note: Answers were considered invalid if the respondent indicated more than one answer. P represents principals, S represents superintendents.

Table 12 summarizes the perceptions of the individual superintendents and principals regarding leadership philosophy. Sixty-six percent of the superintendents and 57.8% of the principals indicated that the leadership role was to facilitate change.

<table>
<thead>
<tr>
<th>Table 13</th>
<th>Summary of Paired Leaders Regarding the Role of the Principal and Leadership Philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ashtabula</td>
</tr>
<tr>
<td></td>
<td>#  %</td>
</tr>
<tr>
<td>Role</td>
<td>n=5</td>
</tr>
<tr>
<td>Agree</td>
<td>0  0</td>
</tr>
<tr>
<td>Philosophy Agree</td>
<td>2  40</td>
</tr>
</tbody>
</table>

Table 13 compares the views of the district superintendents and the respective principal regarding the role of the high school principal and leadership philosophy.

Overall, 32% agreed on the role of the principal and 54% of the district superintendents and respective principals shared the same leadership philosophy. The largest discrepancies were in Ashtabula and Columbiana counties in both leadership philosophy and the role of the principal.

To determine if the answers were consistent, comparisons were made between the
responses regarding leadership philosophy and the role of the principal for the superintendents and the principals. A match indicates that the individual’s responses to leadership philosophy and the role of the principal were the same. The three leadership philosophy and role of the principal matches were as follows: 1. The leadership philosophy that the leadership role is to facilitate matched with the role of the principal being facilitator, 2. The leadership philosophy that if all things are running smoothly, maintain a status quo with the role of principal being director of operations, and 3. The leadership philosophy that organizations with take charge leaders are the cost effective and efficient matched with the role of principal being administrator in charge.

Table 14  **Comparisons of Individual Superintendent’s Responses Regarding Leadership Philosophy and the Role of the Principal.**

<table>
<thead>
<tr>
<th></th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># %</td>
<td># %</td>
<td># %</td>
<td># %</td>
<td># %</td>
</tr>
<tr>
<td>Match</td>
<td>3 60</td>
<td>7 88</td>
<td>9 69</td>
<td>11 61</td>
<td>30 68</td>
</tr>
<tr>
<td>Invalid</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
<td>1 6</td>
<td>1 2</td>
</tr>
</tbody>
</table>

**Note.** Answers were considered invalid if the respondent indicated more than one answer.

Table 15  **Comparisons of Individual Principal’s Responses Regarding Leadership Philosophy and the Role of the Principal.**

<table>
<thead>
<tr>
<th></th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># %</td>
<td># %</td>
<td># %</td>
<td># %</td>
<td># %</td>
</tr>
<tr>
<td>Match</td>
<td>5 63</td>
<td>6 67</td>
<td>12 75</td>
<td>17 89</td>
<td>40 77</td>
</tr>
<tr>
<td>Invalid</td>
<td>1 12</td>
<td>1 11</td>
<td>3 19</td>
<td>0 0</td>
<td>5 10</td>
</tr>
</tbody>
</table>

**Note.** Answers were considered invalid if the respondent indicated more than one answer.

Tables 14 and 15 summarize the comparisons of the individual superintendents and individual high school principals regarding leadership philosophy and the role of the principal. Sixty-eight percent of the superintendents and 77% of the principals matched the philosophy with the appropriate role.
Decision-making was one of the specific aspects of continuous improvement identified in this study. The literature supports collaborative decision-making and the sharing of data in order to engage in the process of continuous improvement (Bailey, 1992; Deming, 1986; Glasser, 1992; Glickman, 1992). The survey addressed both collaborative decision-making and sharing data.

Table 16  **Individual Responses of Superintendents and Principals Regarding Collaborative Decision-Making.**

<table>
<thead>
<tr>
<th></th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P S</td>
<td>P S</td>
<td>P S</td>
<td>P S</td>
<td>P S</td>
</tr>
<tr>
<td>Agree</td>
<td>7 5</td>
<td>9 8</td>
<td>15 12</td>
<td>17 17</td>
<td>48 42</td>
</tr>
</tbody>
</table>

Tables 16 summarizes the answers of the superintendents and principals regarding collaborative decision-making. Ninety-five percent of the superintendents and 92% of the high school principals felt that major decisions affecting a building should be made collaboratively.

Table 17  **Individual Responses of Superintendents and Principals Regarding Sharing Data With Staff.**

<table>
<thead>
<tr>
<th></th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P S</td>
<td>P S</td>
<td>P S</td>
<td>P S</td>
<td>P S</td>
</tr>
<tr>
<td>Share all data</td>
<td>6 5</td>
<td>8 8</td>
<td>15 13</td>
<td>17 15</td>
<td>46 41</td>
</tr>
<tr>
<td>Share no data</td>
<td>1 0</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
<td>1 0</td>
</tr>
<tr>
<td>Share data selectively</td>
<td>1 0</td>
<td>1 0</td>
<td>1 0</td>
<td>2 0</td>
<td>5 2</td>
</tr>
<tr>
<td>No answer</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
<td>0 1</td>
<td>0 1</td>
</tr>
</tbody>
</table>

**Note:** P represents principals, S represents superintendents.

Table 17 summarizes the answers of the superintendents and principals regarding sharing data with staff. Ninety-one percent of the superintendents and 88% of the high school principals felt that data should be shared with the staff.
Table 18  Summary of Paired Leaders Regarding Collaborative Decision-making and Sharing Data.

<table>
<thead>
<tr>
<th></th>
<th>Ashtabula</th>
<th>Columbiana</th>
<th>Mahoning</th>
<th>Trumbull</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># %</td>
<td># %</td>
<td># %</td>
<td># %</td>
<td># %</td>
</tr>
<tr>
<td>Collaborative decision-making</td>
<td>n=5</td>
<td>n=7</td>
<td>n=13</td>
<td>n=16</td>
<td>n=41</td>
</tr>
<tr>
<td>Agree</td>
<td>5 100</td>
<td>7 100</td>
<td>11 84.6</td>
<td>14 87.5</td>
<td>37 90</td>
</tr>
<tr>
<td>Sharing data</td>
<td>4 80</td>
<td>7 100</td>
<td>12 93</td>
<td>13 81</td>
<td>36 88</td>
</tr>
</tbody>
</table>

Table 18 compares the responses of the superintendents and the high school principals regarding collaborative decision-making and sharing data with staffs. Overall, 90% of the district superintendents and respective principals agreed that decisions should be made collaboratively and 88% agreed that data should be shared with the staffs.

The researcher used triangulation or multiple-data collection methods in order to promote trustworthiness (Glesne & Peshkin, 1992). In order to triangulate the data, the researcher scheduled focus groups for the superintendents and high school principals who responded to the original survey. Due to a lack of response to participate, only five superintendents (10%) and no high school principals agreed to participate in the focus groups, an alternate method was used to collect data for qualitative research. Open-ended questions were mailed to the superintendents and high school principals who responded to the original qualitative study. The questions are included in Appendix I. Electronic mail was used to send the questions. The questions focused on two specific areas: the change process and the specific aspects of the continuous improvement process: the mission statement, data collection, the use of collaboration in decision-making, and the continuous improvement model. This focus was based on the purpose of the study which was to explore the perceptions of the superintendents and high school principals.
regarding change and the specific aspects of continuous improvement identified in the study: the mission statement, the continuous improvement process, culture, leadership style, leadership philosophy, decision-making, and data collection. Six responses were received from superintendents and no responses were received from the high school principals. To maintain anonymity, the superintendents’ responses are coded by number.

The change process questions addressed a change that had been implemented in the district, the implementers of the change, the groups affected by the change, roadblocks to the change, and methods to overcome the roadblocks. Five of the six superintendents discussed curricular changes, four directly and one indirectly. The direct curricular changes included curriculum delivery, block scheduling, and curriculum alignment through mapping. The indirect curricular change, class size reduction through Title VI-R which resulted in physical classroom changes, was reported by Superintendent Two. Superintendent Two stated it was not the impact on students or the instructional delivery of the class size reduction change that concerned the teachers. Rather, the teachers viewed the change as surrendering classrooms that they had occupied for many years. The move to another room impacted the teachers. Superintendent Five did not refer to a specific change but a change in the way the district operates. Superintendent Five explained, "The most noticeable change is how the continuous improvement process has become our way of operation. The leadership team which is made up of building administrators and other key personnel use the process once an item or problem has been defined to make a decision on how to address the issue."

Even though the data were limited, two categories important to the change process
emerged: 1.) attitudes, perceptions, feelings, and emotions of the stakeholders and 2.) communications. Regardless of the magnitude of the change, each superintendent indicated that attitudes, perceptions, feelings, and emotions, both positive and negative, had an impact on the implementation of the change. Superintendent Two stated, "I have found that even minute change sometimes can create very unusual responses." The attitudes, perceptions, feelings, and emotions ranged from abandonment, willingness and unwillingness to change, lack of ownership to the change, surrendering of autonomy, and emotional instead of logical reasoning. Some of the unwillingness to change was attributed by Superintendent Three to the age of the staff members. He felt the older staff members were generally reluctant to change. Superintendent Two indicted that seniority became an issue when change was made. The feeling that the more senior staff members should have preference to less senior colleagues appeared to be the perception of many. Superintendent Two indicated the receptiveness of the building administrator where the change occurred was helpful in implementing the change. The positive attitude of the principal leading the implementation of the change helped to overcome the obstacles. Conversely, Superintendent Five felt that the change in operations was inhibited by emotions. He stated "... members of the team had to give up autonomy of their particular domain. That proved to be very difficult for some building administrators." Superintendent Three indicated that the change was successfully implemented because, "It was very much teacher directed once they took ownership." Conversely, Superintendent One indicated that there was staff resistance to the change because of a lack of input. Once the staff became involved, the resistance subsided. Gainey (1994),
Gasser (1992), and Chamley, Caprio, and Young (1994) support the need for a facilitative principal to garner support for the change because change is a social and personal phenomenon (Chamley et al., 1994). The findings of the research also indicate attitudes and emotions of the stakeholders of the change process can positively or negatively affect the implementation process. The positive attitude and receptiveness of the principal leading the implementation of the change further supports the need for the leader to be a facilitator of change.

Each of the six superintendents indicated that communication was critical to the change process. Superintendent One supports this by stating, "Make sure everyone understands the process before presenting." All indicated that the communications needed to be two-way and continual before, during, and after the change. Superintendent Six indicated that the communication process went well before and during the change; however, he felt informational meetings should have continued at least the first year after implementation. Superintendent Five supports this concept, "You can never provide too much information. Keep people talking and usually problems get resolved." He adds, "Communications of change to all stakeholders is the key to any successful change." The methods of communications used included group discussions, informational meetings, staff meetings, in-service, and targeting the communications to the groups that will be impacted by the change. An analysis of these data indicates the need communications, an important aspect of continuous improvement (Sapher & King, 1995; Chamley et al., 1994). The quantitative survey results support this analysis. Ninety-five percent of the superintendents who responded to the quantitative survey agreed that collaborative
decision-making was important and 77% of the superintendents surveyed indicated that the culture of an organization engaged in continuous improvement should be based on high expectation, trust, and confidence.

The continuous improvement process questions used for the qualitative research focused on: whether the district was engaged in the continuous improvement process, at what level did the process begin, what model if any were the districts using, how did the district begin the process, and who were the stakeholders? All but one of the responses of the superintendents indicated that the continuous improvement process began at the district level. Once the district plan was developed, the individual buildings began the process at the building level based on the district plan. This method, beginning at the district level, is prescribed by the Ohio Department of Education. Three of the districts used the Effective Schools Model. The others did not use a specific model.

Superintendent Five stated, "Consensus on all items was important." Having "... something that was ours," was important to Superintendent Two. All of the superintendents indicated that committees were formed to develop the plan including the mission statement. Although the membership of the committees was not identical in each district, most had good representation from the central office, administrators, staff, support staff, students, and different sectors of the community. All used data from the Local Report Card. Some included student demographic data and district profile data. Superintendents One and Three used Phi Delta Kappa survey data. All of the superintendents indicated that the districts were engaged in the continuous improvement process.
Although the districts are engaged in continuous improvement, the researcher concludes that the perceptions of the superintendents and principals may be inhibiting the progress because of a lack of commitment to the process. This lack of commitment is indicated by the quantitative research findings regarding the mission statement. The mission statement establishes a constancy of purpose or a focal point for all improvement and should be viewed annually to continuously improve (Bond & Woodall, 1993; Deming, 1986). However, 34% of the superintendents and 36.5% of the high school principals felt the mission statement needed to be reviewed every four or more years. Further, the lack of commitment is indicated by the contradictory results when the superintendent’s response was compared to the respective high school principal’s response regarding culture and leadership role and philosophy. Forty-six percent of the superintendents and respective high school principals did not share the same view on culture. Forty-six percent of the superintendents and respective high school principal differed on leadership philosophy and sixty-eight percent differed on the role of the principal. The qualitative research indicate all six of the districts are working on a continuous improvement plan. However, the researcher is concerned that without a commitment to the continuous improvement plan, the plan may be developed only to respond to Senate Bill 55. Implementation of the plan may not become a reality. Without implementation and a continued commitment to review and revise the plan, achieving quality may be inhibited.
CHAPTER 5

DISCUSSION, IMPLICATIONS, LIMITATIONS, AND RECOMMENDATIONS

Introduction

The intent of the study was through quantitative and qualitative research to determine the perceptions of superintendents and high school principals regarding specific aspects of the continuous improvement process. The specific aspects of continuous improvement were reported as: the change process, mission statement, the continuous improvement process, the culture, leadership, decision-making, and data. This chapter will discuss the findings of the study, how the findings support current research, and if the findings of the study did determine the perceptions of the superintendents and principals regarding each of the specific aspects of continuous improvement. Further, the limitations, overall implications of the study, and recommendations for further research will be discussed.

The Change Process

Change is a dynamic process. A school engaged in continuous improvement is continually engaged in change (Gainey, 1994). Chamley, Capiro, and Young (1994), Gainey (1994), and Glasser (1992) concur that the school itself is the unit for change and the principal is the facilitator of change. The results of the study indicate that a large number of both the superintendents and the high school principals, 93% and 76% respectively, perceive change as a dynamic process and necessary for continuous improvement. These results indicate that the administrators have a perception of change that should help facilitate the continuous improvement process. However, when
comparing the responses of the district superintendent to the respective high school principal, only 61% share the same perception of change. The principal in most cases is the facilitator of change (Chamley et al., 1994; Gainey, 1994; Glasser, 1992). However, if the superintendent and the principal do not share the same perception of change, moving through the change process will be very difficult. Key stakeholders in the change process may become frustrated by the lack of consistency between the superintendent and principal, which may result in a resistance to the change (Chamley et al., 1994).

Change must be managed (Chamley et al., 1994). For principals to implement change, there are three conditions necessary: break the vision of change into smaller parts, identify and mobilize important constituents including board members, the superintendent, key teachers, parents, and community leaders, and manage resistance (Fullan, 1982). The discrepancy in the perception of change between the superintendent and respective principal may inhibit the principal from facilitating change, which may also result in a resistance to change and conflict among stakeholders.

A large percentage of the superintendents and the high school principals, 95% and 98% respectively, perceive the principal as a change agent. Eighty-eight percent of the superintendents and the district high school principals agree that the principal is an agent of change. This statistic indicates that most superintendents and principals understand that the principal is an agent of change. When looking at the comparative results of the superintendents and principals in regard to the perception of change and the principal as an agent of change, the matched percentages of the district superintendent and high school principal, 61% and 88%, vary considerably. With the large comparative
percentage agreeing that the principal is an agent of change, the discrepancy in the perception of change may cause role conflicts for the principal. The principal may understand the need for change but may not understand his/her role as the facilitator of change. The principal may feel isolated if he/she is not receiving support from the superintendent.

Change is a social and personal phenomenon (Chamley et al., 1994). This phenomenon is supported by the data collected through the qualitative research. The responses of the superintendents indicate that the attitudes of the stakeholders affected the implementation of change both positively and negatively. The data indicate that in situations where the principal was receptive to change, the implementation process was easier. Further, in one of the districts where the principals were reluctant to move from a position of autonomy or control over their building to a facilitator of change, the change process was inhibited.

**Mission Statement**

The development of the mission statement is the first step in the continuous improvement process (Bond & Woodall, 1993; Freeston, 1992; Hoglund, 1994). The mission statement helps in establishing constancy of purpose and to become a focal point for continuous improvement (Deming, 1986). The literature supports the mission statement as the focal point for all change; therefore, it is important that the mission statement is continually reviewed, as often as annually, to ensure that it is viable (Bond & Woodall, 1993; Deming, 1986). A substantial percentage of the individual superintendents and principals, as well as the district comparisons of superintendents and
principals, indicate that a school should have a mission statement. However, well over 50% of both the superintendents and the principals do not feel it is necessary to review the mission statement annually. Collectively, over 35% of the superintendents and principals do not feel it is necessary to review the mission statement within three years, and 29% feel the mission statement should be reviewed every four to five years. These findings may indicate that the mission statement is not the focal point for change within the districts. These findings may further indicate that the perception of the superintendents and high school principals regarding the mission statement is that the mission statement is merely a statement, not representative of the focus of the district. If the mission statement is the focal point for change in these districts, the reluctance to change the focus may result in the district maintaining the status quo or merely changing for the sake of change with no systematic change or improvement.

The Continuous Improvement Process

In order for the continuous improvement process to be successful, a long term commitment must be established (Deming, 1986; Hoglund, 1994; Rappaport, 1996). Top management needs to support the process (Deming, 1986; Hoglund, 1994; Nidds & McGerald, 1996). Eighty-six percent of the superintendents, and 94% of the principals perceive the continuous improvement process as valuable for schools. Further, 98% of the superintendents and 94% of the principals perceive student learning and school improvement as a continuous improvement process. These results indicate that the superintendents and the principals are receptive to the continuous improvement process because they perceive two of their key responsibilities, student learning and school
improvement, as a continuous improvement process and perceive the process as valuable to schools. However, considering the perceptions of the superintendents and the principals regarding the other specific aspects of continuous improvement vary considerably, most notably the mission statement and the change process, perhaps there is a lack of understanding of the importance and relationship of the specific aspects of the continuous improvement process.

The qualitative research indicates that all six of the districts are engaged in the continuous improvement process. However, the engagement appears to be a result of mandates of Senate Bill 55 and not a constancy of purpose, which Deming (1986) reports is necessary for a district to be engaged in continuous improvement. Without constancy of purpose, the districts may be engaging in continuous improvement, not for the sake of quality, but as a response to a mandate. Continuous improvement has become the method of operation in one of the districts; however, as reported by Bradley (1993) and Holtzman (1993) continuous improvement should be the method of operation in a district to ensure transformation and systemic change.

**Culture**

According to Sapher and King (1995), the culture of a school is its foundation and an important aspect of the continuous improvement process. A school engaged in continuous improvement should be identified by a culture based on high expectations, trust, and confidence (Sapher & King, 1995). The results of the survey regarding culture are very interesting. A much larger percentage of the superintendents, 75%, than the principals, 50%, indicate that a school engaged in the continuous improvement process
should be based on high expectations, trust, and confidence. Thirty-five percent of the principals indicate that culture should be based on the premise of maintaining a sound education environment or the implication of maintaining the status quo. According to Gainey (1994), maintaining the status quo is contrary to the continuous improvement process. Thus, these results may indicate that these principals are not committed to the continuous improvement process.

Only 54% of the superintendents and their respective high school principals share the same perceptions of culture. The discrepancy of these results has some interesting implications. The discrepancy between superintendents and principals regarding culture makes change difficult because the culture of the school represents a clear, articulated vision that embodies the core values and purposes of the school (Sapher & King, 1995). If the values and purposes of the school are not clear and consistent in the eyes of both the superintendents and principals, the continuous improvement process may not be viable for the district. Further, this discrepancy, combined with the low percentage of principals, 50%, who responded that schools engaged in the continuous improvement process should have a culture based on high expectations, trust and confidence may indicate the principals lack trust or confidence in either the superintendent or the system. Consequently, the mistrust and lack of confidence may cause a breakdown in communications which would be detrimental to the continuous improvement process.

The qualitative research clearly indicates that communication is critical to the change process. All six superintendents indicate that the communications needs to be continual before, during, and after a change. Of the six superintendents participating in
the qualitative research, two (33%) perceive the culture should be based on the premise of maintaining a sound education environment or the implication of maintaining the status quo. The remaining superintendents perceive that the culture should be based on high expectations, trust, and confidence. Comparing the responses of these six superintendents and the respective high school principals, only two (33%) agree on the culture. Of the two that agreed, one perceived that the culture should be based on the premise of maintaining a sound education environment or the implication of maintaining the status quo. These results coupled with the quantitative results imply that the culture of these districts may be inhibiting the continuous improvement process.

Leadership

The leader in a school engaged in the continuous improvement process needs to function as a facilitator of change and no longer as a director or the keeper of the keys (Colon, 1994; Pigford, 1995). Sixty-six percent of the superintendents and fifty-seven percent of the principals indicate that their leadership philosophy is to facilitate change; only 57% of the superintendents and 54% of the principals perceive the role of the principal to be a facilitator of change. Considering the importance of the role of the principal engaged in continuous improvement is to be a facilitator of change (Chamley et al., 1994; Gainey, 1994; Glasser, 1992), this statistic indicates that the superintendents and principals may not understand the shift in the role and the responsibility of the principal. This lack of understanding of the shift in the role and responsibility of the principal may lead to a lack of consistency in leadership, which may cause confusion for other stakeholders including teachers, students, parents, and community members. This lack of
understanding of the shift in the role and responsibility of the principal is further supported by the comparisons that were made to determine if the respondent was consistent in answering the two questions regarding philosophy and role. For example, if the respondent answered that his/her philosophy was to facilitate change, the matching role was facilitator of change. Seventy-seven percent of the principals and only 68% of the superintendents answered the role and philosophy of the principal consistently.

As the researcher reviewed the results regarding leadership, demographics may be a variable that influenced the results. Fifty-two percent of the principals and only 18% of the superintendents have held their respective roles for eleven or more years. In addition, 10% of the principals and 30% of the superintendents were enrolled in doctoral programs. The combination of these two variables, tenure and doctoral study, may have affected the leadership views. Considering the long tenure of the principals and the lack of participation in a doctoral program, many of the principals may have been schooled in the traditional bureaucratic methodologies. Conversely, the shorter tenure and larger participation in doctoral programs of the superintendents may contribute to his group having a more contemporary perception of leadership and a clearer understanding of the changing role of school leaders. An implication of these results is the importance of professional development to ensure that the school leaders are knowledgeable on new leadership philosophies and styles and how these philosophies and styles will impact change and continuous improvement in a school district.

Decision-making and Data

Collaborative decision-making and data sharing are needed for a district engaged
in continuous improvement (Bailey, 1992; Deming, 1986; Glasser, 1992; Glickman, 1992). The results of the study regarding decision-making and data sharing indicate that both the superintendents and the principals perceive collaborative decision-making and the sharing of data as important aspects of continuous improvement. When comparing the perceptions of the superintendents and their respective principals, the results indicate that the perceptions matched. Ninety percent of the superintendents and their respective high school principals agree that decisions should be made collaboratively and 88% agree that data should be shared with staffs. Interestingly, these results are somewhat contrary to the results regarding culture, because shared decision-making and reliance on data require high degrees of trust and confidence, yet 50% of the principals do not feel that the school culture should be based on high expectations, trust, and confidence.

**Limitations of the Study**

At the onset of the study, the limitations identified were those common to any survey: the willingness of the respondents to express their feelings, the respondents understanding of the questions, and the respondents desire to maintain anonymity (Jaeger, 1988). These elements may have affected the overall study in the attempt to triangulate the data. The response rate to the quantitative survey was very high, 86.2% of the superintendents and 96.3% of the high school principals. However, the unwillingness to participate in a focus group may imply that the perception of the participants may be that the research would not remain anonymous or time constraints. This concern, that the research would not remain anonymous, may be further supported by the lack of response to the electronic mail survey even though it was clearly indicated that all responses would
be confidential. In addition, the researcher met separately with the superintendents and principals of two of the four counties. Summaries of the results of the survey were presented to these groups. The groups, then, had the opportunity to ask questions, voice concerns, or make general comments. In all groups, there were no comments or concerns. The only question that was asked was by a principal. The principal wanted to see his superintendent’s answers.

The continuous improvement process is being mandated by Senate Bill 55. The political nature of the mandate may be the cause of the reluctance of superintendents and principals to engage in research about continuous improvement. Consequently, the generalizability of the results may be limited.

**Implications and Recommendations for Further Research**

Transformational change is necessary for continuous improvement (Herman & Herman, 1995). Transformation requires a change in the way educators think, and act including culture, processes, and structure (Herman & Herman, 1995). For continuous improvement to be effective, transformational and systemic change is needed (Bradley, 1993; Holt, 1993). A commitment to all aspects of continuous improvement needs to be made for successful implementation of continuous improvement. The overall results of the study have several implications regarding the perceptions of the specific aspects of continuous improvement identified in the study.

First, the superintendents and principals appear to be aware of the continuous improvement process. However, as stated earlier, a long term commitment must be established for continuous improvement to be successful (Deming, 1986; Hoglund, 1994;
Rappaport, 1996). The results of the study regarding the perceptions of the superintendents and principals regarding the specific aspects of continuous improvement: the change process, mission statement, the continuous improvement process, the culture, leadership, decision-making, and data indicate an understanding of the aspects but lack a commitment to the implementation and the dependance of one aspect to another.

Perceiving one aspect as important and another as not important will result in a fragmented implementation. A key example is the results regarding the mission statement. Well over 50% of the superintendents and principals did not feel it was necessary to review the mission statement annually. Yet, 86% of the superintendents and 94% of the principals perceived the continuous improvement process as valuable to school. These two results are contradictory.

Second, the discrepancies in the comparative results between the superintendents and respective district principals regarding culture may indicate a lack of collaboration and communication, which would inhibit the continuous improvement process. If the culture of the district remains unchanged, the continuous improvement process can not be successful in the district. Anderson (1993) and Holtzman (1993) support the need for systemic change to achieve continuous improvement. Comparatively, only 61% of the superintendents and respective principals share the same views regarding change.

Third, the findings of the study indicate that nearly 34% of the superintendents and 42.2% of the principals did not view the role of the principal to be a facilitator, and 27% of the superintendents and 20% of the principals indicated that a take charge leader was most effective. These findings indicate that the perceptions of these superintendents
and the principals regarding leadership are contrary to the literature that indicates the leader needs to be a facilitator of change (Chamley et al., 1994; Fullan, 1982; Glasser, 1992). These findings seem to indicate a clear need to reevaluate the professional development of the administrators.

Finally, districts may be engaging in the process of continuous improvement; however, if the district is not integrating all of the specific aspects of continuous improvement, then it is not engaged in systemic change. The results imply the need for administrators to review the specific aspects of continuous improvement and how to integrate the specific aspects.

The results of the study open the door for continued qualitative research by studying a particular district as it develops and implements the district’s continuous improvement process. The research would involve close work with the superintendent or individual who is spearheading the development of the continuous improvement plan. As the plan evolves, the stakeholders would need to provide their reactions to the specific aspects of continuous improvement: the change process, the development and importance of the mission statement, the continuous improvement process, the change in culture, reactions to the style and philosophy of the leader, how decisions are made, and what data are used and why. Once the plan is developed, a second phase of the research would involve the implementation of the plan.
REFERENCES


Alley, R. (1996, November). *School climate and culture*. Presented at the Trumbull County Educational Service Center Leadership Academy, Youngstown, OH.


APPENDIX A

Highlights of Senate Bill 55

The Education Accountability and Reform Act
1. Fourth grade guarantee.

2. Raising the Bar. The 9th grade will be raised to a 10th grade test.

3. High school graduation credits will be increased to a minimum of 21 in 2002.

4. 12th Grade Proficiency Test Scholarships. Any senior passing all five parts of the 12th grade proficiency test will receive a minimum $500 scholarship to any school in Ohio.

5. Social Promotion. Schools may pass a policy to retain 4th and 6th graders who fail to pass three or more of the proficiency tests.


7. Deregulation of Effective Schools.

8. Public/Private Student Assistance.

9. Tougher Discipline.

10. Alternative Schools

11. Open Enrollment.


13. Parent-Teacher Site-Based Schools.


15. Proficiency tests to be public.
16. Higher Education. This section addresses improving access to high education.

17. All Day Kindergarten.
APPENDIX B

Human Research Committee Approval
October 13, 1998

Ms. Sandra J. DiBacco-Tusinac  
c/o Dr. Linda Wesson  
Department of Educational Administration,  
Research & Foundations  
Youngstown State University  
CAMPUS

RE: HSRC Protocol #10-99

Dear Ms. DiBacco-Tusinac:

Based on an expedited review of the above referenced protocol, I am writing to inform you that the protocol has been determined to be exempt from full committee review and is hereby approved with the following conditions:

(1) that the student investigator provide the Human Subjects Research Committee [HSRC] with a revised solicitation letter that requests (rather than enjoin) subject participation, possibly by employing language that indicates the subjects’ right not to respond to the solicitation;

(2) that the student investigator provide the HSRC with a statement that no coercion will be used to achieve a predetermined response rate;

(3) that the student investigator provide the HSRC with further information concerning the general nature of the focus group inquiries, or, if possible, the specific questions to be asked;

(4) that the student investigator provide the HSRC with information about how data will be recorded and maintained so as to ensure the anonymity/confidentiality of subject responses;

(5) that the student investigator utilize an informed consent form that indicates subjects’ written agreement to participate in the study.

Please provide the above information at your earliest convenience as approval is conditioned upon Committee receipt of your responses. Best wishes with the success of your study.

Sincerely,

[Signature]

Eric C. Lewandowski  
Administrative Co-chair

cc: Dr. Linda Wesson
SCHOOL IMPROVEMENT PLANNING PROCESS

Please complete the questions below by checking the one answer that best fits unless indicated otherwise.

1. Gender       _____Male   _____Female

2. Are you presently enrolled in a doctoral program?        _____Yes   _____No

3. How many years have you been a high school assistant principal or principal?
   _____a. 0 - 5       _____b. 6 - 10       _____c. 11 - 15       _____d. 16 - 20
   _____e. 21 or more years

4. What is the current enrollment of the school district?
   _____a. 0 - 500       _____b. 501 - 1000       _____c. 1001 - 1500       _____d. 1501 - 2000
   _____e. 2001 or more

5. What is the current enrollment of your building?
   _____a. 0 - 100       _____b. 101 - 300       _____c. 301 - 600
   _____d. 601 - 1000       _____e. 1001 or more

6. What grades are housed in your building?
   _____a. 7 - 12       _____b. 8 - 12       _____c. 9 - 12       _____d. 10 -12
   _____e. Other (Please indicate ________)

7. The principal’s leadership philosophy should be:
   _____a. The leadership role is to facilitate
   _____b. If all things are running smoothly, maintain a status quo.
   _____c. Organizations with take charge leaders are the most effective and efficient.

8. The role of the building principal should be
   _____a. administrator in charge
   _____b. director of operations
   _____c. facilitator

9. A school should have a highly functional mission statement
   _____a. Strongly agree       _____b. Agree       _____c. Undecided        _____d. Disagree
   _____e. Strongly disagree

10. Within how many years should a school review its mission statement?
   _____a. 0-1 year       _____b. 2-3 years       _____c. 4-5 years
    _____d. more than 5 years
11. Who should be involved in developing the mission statement? (Mark all that apply)
   ___ a. Central Office  ___ b. Board of Education  ___ c. Building Administrators
   ___ d. Teachers  ___ e. Students  ___ f. Community Leaders
   ___ g. Parents  ___ h. Other (Please list) ____________________

12. What methods of data collection should be used to assist in planning, making decisions, and implementing change in your building? (Mark all that apply)
   ___ a. formal reports  ___ b. parent surveys  ___ c. community surveys
   ___ d. student surveys  ___ e. staff surveys  ___ f. other (Please indicate) ________________

13. To what degree should data be shared with staff?
   ___ a. All data and information should be shared with the staff.
   ___ b. Data and information should not be shared with the staff.
   ___ c. Administrators should selectively share data and information with staff.

14. Major decisions that affect a building should be made collaboratively.
   ___ a. Strongly agree  ___ b. Agree  ___ c. Undecided  ___ d. Disagree
   ___ e. Strongly disagree

15. Has your school begun to develop a school improvement plan?
   ___ a. Yes  ___ b. No

16. School improvement and student learning are a continuous process.
   ___ a. Strongly agree  ___ b. Agree  ___ c. Undecided  ___ d. Disagree
   ___ e. Strongly disagree

17. A continuous quality improvement process is beneficial to schools.
   ___ a. Strongly agree  ___ b. Agree  ___ c. Undecided  ___ d. Disagree
   ___ e. Strongly disagree

18. Teachers are intrinsically motivated.
   ___ a. Strongly agree  ___ b. Agree  ___ c. Undecided  ___ d. Disagree
   ___ e. Strongly disagree

19. Have you been involved with any professional development that deals with continuous quality improvement and change?
   ___ a. Yes  ___ b. No
20. Have you provided professional development for your staff that deals with continuous improvement and change?
   a. Yes   b. No

21. What statement best describes the culture of a school engaged in continuous improvement?
   a. School culture is based on ensuring that yearly goals are met and students move to the next grade level.
   b. School culture is based on high expectations, trust and confidence.
   c. School culture is based on the premise that maintaining a sound educational system and environment.

22. What statement best describes change?
   a. Change is necessary, however, it should be approached with caution.
   b. Change is a dynamic process that is necessary for continual growth and improvement of an organization.
   c. Change is too disruptive to implement in a school.
   d. Generally, change causes chaos within an organization and is not necessary if the organization is functioning well.

23. A high school principal should be an agent of change.
   a. Strongly agree   b. Agree   c. Undecided   d. Disagree   e. Strongly disagree

24. Student programming should be based on learner outcomes.
   a. Strongly agree   b. Agree   c. Undecided   d. Disagree   e. Strongly disagree

THANK YOU FOR YOUR COOPERATION AND INPUT!
APPENDIX D

Survey for Superintendents
SCHOOL IMPROVEMENT PLANNING PROCESS

Please complete the questions below by checking the one answer that best fits unless indicated otherwise.

1. Gender
   _____Male  _____Female

2. Are you presently enrolled in a doctoral program?  _____Yes  _____No

3. How many years have you been a superintendent?
   _____a. 0 - 5  _____b. 6 - 10  _____c. 11 - 15  _____d. 16 - 20
   _____e. 21 or more years

4. What is the current enrollment of the school district?
   _____a. 0 - 500  _____b. 501 - 1000  _____c. 1001 - 1500  _____d. 1501 - 2000
   _____e. 2001 or more

5. The principal’s leadership philosophy should be:
   _____a. The leadership role is to facilitate
   _____b. If all things are running smoothly, maintain a status quo.
   _____c. Organizations with take charge leaders are the most effective and efficient.

6. The role of the building principal should be
   _____a. administrator in charge
   _____b. director of operations
   _____c. facilitator

7. A school should have a highly functional mission statement
   _____a. Strongly agree  _____b. Agree  _____c. Undecided  _____d. Disagree
   _____e. Strongly disagree

8. Within how many years should a school review its mission statement?
   _____a. 0-1 year  _____b. 2-3 years  _____c. 4-5 years
   _____d. more than 5 years

9. Who should be involved in developing the mission statement? (Mark all that apply)
   _____a. Central Office  _____b. Board of Education
   _____c. Building Administrators
   _____d. Teachers  _____e. Students
   _____f. Community Leaders  _____g. Parents
   _____h. Other (Please list)  

   ____________________________
10. What methods of data collection should be used to assist in planning, making decisions, and implementing change in your building? (Mark all that apply)
   ___a. formal reports ___b. parent surveys ___c. community surveys
   ___d. student surveys ___e. staff surveys
   ___f. other (Please indicate)______________

11. To what degree should data be shared with staff?
   ___a. All data and information should be shared with the staff.
   ___b. Data and information should not be shared with the staff.
   ___c. Administrators should selectively share data and information with staff.

12. Major decisions that affect a building should be made collaboratively.
   ___a. Strongly agree ___b. Agree _____c. Undecided ___d. Disagree
   ___e. Strongly disagree

13. Has your school begun to develop a school improvement plan?
   ___a. Yes _____b. No

14. School improvement and student learning are a continuous process.
   ___a. Strongly agree ___b. Agree _____c. Undecided ___d. Disagree
   ___e. Strongly disagree

15. A continuous quality improvement process is beneficial to schools.
   ___a. Strongly agree ___b. Agree _____c. Undecided ___d. Disagree
   ___e. Strongly disagree

16. Teachers are intrinsically motivated.
   ___a. Strongly agree ___b. Agree _____c. Undecided ___d. Disagree
   ___e. Strongly disagree

17. Have you been involved with any professional development that deals with continuous quality improvement and change?
   _____a. Yes _____b. No

18. Have you provided professional development for your staff that deals with continuous improvement and change?
   ___a. Yes _____b. No

19. What statement best describes the culture of a school engaged in continuous improvement?
   ___a. School culture is based on ensuring that yearly goals are met and students move to the next grade level.
   ___b. School culture is based on high expectations, trust and confidence.
c. School culture is based on the premise that maintaining a sound educational system and environment.

20. What statement best describes change?
   _____ a. Change is necessary, however, it should be approached with caution.
   _____ b. Change is a dynamic process that is necessary for continual growth and improvement of an organization.
   _____ c. Change is too disruptive to implement in a school.
   _____ d. Generally, change causes chaos within an organization and is not necessary if the organization is functioning well.

21. A high school principal should be an agent of change.
   _____ a. Strongly agree _____ b. Agree _____ c. Undecided _____ d. Disagree
   _____ e. Strongly disagree

22. Student programming should be based on learner outcomes.
   _____ a. Strongly agree _____ b. Agree _____ c. Undecided _____ d. Disagree
   _____ e. Strongly disagree

THANK YOU FOR YOUR COOPERATION AND INPUT!
APPENDIX E

Gender Table
Table E1 Gender Principals

Table E2 Gender Superintendents
APPENDIX F

Administrative Experience of Principals and Superintendents
Table F1 Administrative Experience of Principals

Table F2 Administrative Experience of Superintendents
APPENDIX G

Education
Table G1 Education Principals

Table G2 Education Superintendents
APPENDIX H

District Demographics
QUALITATIVE QUESTIONS

The Change Process

1. Describe a change that has occurred in your district/building including implementation strategies, who was affected directly and indirectly by the change.

2. What roadblocks were thrown up by those who had to implement the change?
   (For example the building principal implementing a change in the type of schedule.)

3. What roadblocks were thrown up by those who the change affected?
   (Using the schedule change: teachers, students, parents.)

4. Had you anticipated the roadblocks?

5. What strategies to overcome the roadblocks?

6. Based on the results of the process used, what might you do differently when implementing the next change?

The Continuous Improvement Process

1. How did you begin the continuous improvement process in your district?

2. Who were the stakeholders involved in the continuous improvement process and how were they selected?

3. How did you develop the mission statement?

4. What data were used in developing the continuous improvement plan?

5. Did you use a specific model when developing the continuous improvement plan?
   Which model?
6. How did the group determine the goals and strategies for the plan?
7. Has each building in the district begun to develop a building plan?